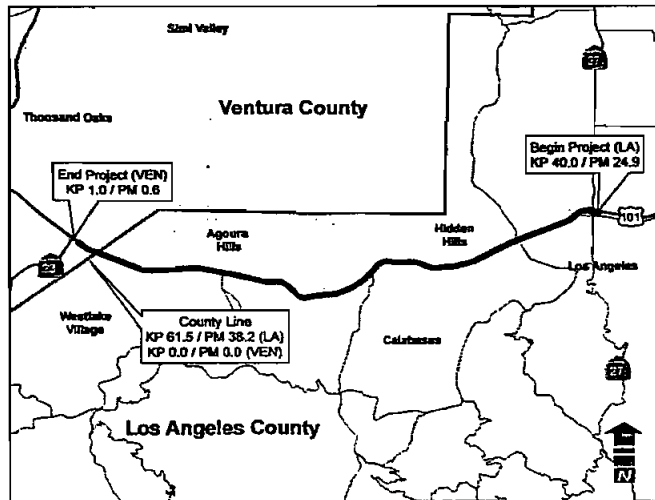


**PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)**

This document can be used to program only the Engineering and Environmental Support for Project Approval and Environmental Document component. The remaining support and capital components of the project are preliminary estimates and are not suitable for programming purposes. Either a Supplemental PSR or a Project Report will serve as the programming document for the remaining support and capital components of the project.



On Route 101  
 Between the Vicinity of Canoga Avenue  
 And the Vicinity of the LA/Ventura County Line

I have reviewed the right of way information contained in this Project Study Report (Project Development Support) and the Right of Way Data Sheet attached hereto, and find the data to be in conformance with current applicable State standards and practices.

*Andrew P. Nierenberg*  
 ANDREW P. NIERNBERG, Right of Way Project Delivery Manager

SUBMITTED BY: *Brian Lin*  
 BRIAN LIN, LACMTA

APPROVAL RECOMMENDED BY: *Ravi Ghate*  
 RAVI GHATE, Project Manager

CONCURRED BY: *Rose Ann Casey* 10/3/05  
 ROSE ANN CASEY, Deputy District Director, Planning, Public Transportation and Local Assistance

*William H. Reagan* 10/11/05  
 WILLIAM H REAGAN, Deputy District Director, Division of Design

APPROVED: *Douglas R. Failing* 10/11/05  
 DOUGLAS R. FAILING, District Director DATE

07-LA-101 KP 40.0/61.5 (PM 24.9/38.2)  
07-VEN-101 KP 0.0/1.0 (PM 0.0/0.6)

This Project Study Report (Project Development Support) has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

*Frederick C. Pearson*

Frederick C. Pearson  
Registered Civil Engineer

*Sept. 22, 2005*  
Date



Prepared by:  
Parsons Brinckerhoff  
444 South Flower Street, Suite 3700  
Los Angeles, CA 90071

## TABLE OF CONTENTS

1.0	Introduction.....	1
2.0	Background.....	2
3.0	Need and Purpose .....	3
4.0	Alternatives.....	6
5.0	System and Regional Planning .....	22
6.0	Environmental Determination and Environmental Issues .....	25
7.0	Right of Way.....	27
8.0	Funding/Scheduling .....	28
9.0	Federal Involvement .....	29
10.0	Programming Recommendation .....	29
11.0	District Contacts .....	30

## LIST OF TABLES

Table 1.1	Estimated Capital Cost Ranges .....	1
Table 4.1	Proposed Projects on Route 101, Los Angeles County .....	8
Table 4.2	Structure Improvements in Alternative 2 .....	10
Table 4.3	Ramps to be Modified in Alternative 2 .....	10
Table 4.4	Non-Standard Features Alternative 2 .....	12
Table 4.5	Locations of Non-Standard Stopping Sight Distance (SSD) Alternative 2 .....	15
Table 4.6	Ramps to be Modified in Alternative 3 .....	17
Table 4.7	Non-Standard Features Alternative 3 .....	19
Table 4.8	Locations of Non-Standard Stopping Sight Distance (SSD) Alternative 3 .....	21
Table 7.1	Right of Way Acquisition Requirements .....	27
Table 8.1	Capital Outlay Support Estimate for PA/ED .....	28
Table 8.2	Capital Outlay Estimate .....	28
Table 8.3	Preliminary Project Development Schedule .....	29

## LIST OF ATTACHMENTS

- A. Vicinity Map and Project Limits
- B. Strip Maps, Alternatives 2 and 3
- C. Typical Cross Sections
- D. Cost Estimates
- E. Design Scoping Checklists
- F. Division of Engineering Services Scoping Checklists
- G. Preliminary Environmental Assessment Report and Preliminary Noise Study Report
- H. Geotechnical Review Summary
- I-1 Traffic Forecasting, Analysis and Operations Checklists
- I-2 Traffic Impact Analysis
- I-3 TASAS Table B
- J. Right of Way Data Sheets
- K. Transportation Management Plan
- L. Work Plan
- M. FHWA Involvement
- N. Project Evaluation Checklist
- O. Storm Water Data Report (SWDR) Signature Sheet and NPDES Information Submittal
- P. Project Risk Management Plan

## LIST OF REFERENCES ON FILE

- Initial Site Assessment (ISA)
- Preliminary Geotechnical Data Report
- Storm Water Data Report (SWDR)

## PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

07-LA-101  
KP 40.0/61.5 (PM 24.9/38.2)  
07-VEN-101  
KP 0.0/1.0 (PM 0.0/0.6)  
07-186 EA 24920K  
Program Identification:  
20.xx.075.613  
From the vicinity of Canoga  
Avenue to the vicinity of the  
LA/Ventura County Line

### 1.0 INTRODUCTION

The purpose of this Project Study Report (Project Development Support) document is to evaluate improvement alternatives for Route 101 from the vicinity of Canoga Avenue in Los Angeles County to the vicinity of the Los Angeles/Ventura County Line. The project will add one mixed-flow lane in each direction to the current basic section of four lanes in each direction.

This PSR(PDS) analyzes a total of three alternatives, consisting of one "No-Build" and two "Build" alternatives:

- Alternative 1: No Build Alternative
- Alternative 2: Non-Standard Lane Widths Alternative
- Alternative 3: Full Standard Lane Widths Alternative

The Build alternatives proposed in this document for further consideration are both viable alternatives. The capital cost estimates for Alternatives 2 and 3 are presented in Table 1.1 below (see also Attachment D).

<b>Alternatives</b>	<b>Cost Range (2010 Dollars in Millions)</b>
Alternative 1: No Build	0
Alternative 2: Non-Standard Lane Widths	\$242 - \$296
Alternative 3: Full Standard Lane Widths	\$428 - \$523

This PSR(PDS) is prepared for the purpose of programming project development support costs for the Project Approval / Environmental Document (PA/ED) phase of the project. A total estimated cost of \$10.23 million is estimated for PA/ED development. Project funding is expected to be provided through the State Transportation Improvement Program (STIP) program. The resources needed to complete the proposed program components and proposed funding are presented in Section 8.0, Funding/Scheduling. Construction completion is tentatively scheduled for November 2016, based on prioritization of project development and availability of project funding at key milestones.

## **2.0 BACKGROUND**

The project was initiated through collaborative efforts of the Los Angeles County Metropolitan Transportation Authority (Metro), the California Department of Transportation (Caltrans), Southern California Association of Governments (SCAG), Las Virgenes-Malibu Council of Governments (LVMCOG), and the City of Los Angeles Department of Transportation (LADOT) based on findings from the US-101 Freeway Corridor Improvement Study conducted between 2001 and 2003, subsequent public outreach, and feedback from elected officials and other stakeholders along the corridor.

Route 101, within the County of Los Angeles, serves as a principal transportation connection between the Los Angeles Central Business District and the westerly County communities, as well as the primary link to Ventura County and the Central California Coast. It plays a critical role in the regional, statewide, and national transportation system, linking cities along the west coast of the United States. The US-101 Freeway Corridor Improvement Study was initiated by Metro, Caltrans, SCAG, and LVMCOG to identify potential transportation improvements on Route 101 to alleviate chronic congestion, delays, traffic spillover into neighborhoods, and accidents along this facility. The limits of the study extended from SR 110 in downtown Los Angeles to SR 23 North in Ventura County.

Following the comprehensive freeway corridor needs analysis, the Metro Board of Directors adopted a resolution on June 26, 2003 supporting the recommendations of the US-101 Corridor Study Steering Committee and directing staff to take implementing actions to include potential short- and mid-range mobility improvement projects in the appropriate subregional section(s) of the Short Range Transportation Plan (SRTP) subject to further community review and refinement, and modification by the affected agencies. In 2004, after extensive public outreach and based on the feedback from elected officials and local agencies having jurisdiction within the limits of the Study, over 200 possible short-

range or mid-range projects were identified along the corridor. Further technical and feasibility evaluations led to selection of four near-term improvement projects, including the addition of one mixed-flow lane in each direction along the approximately 14-mile segment of the corridor between the vicinity of Canoga Avenue and the vicinity of the LA/Ventura County Line. The proposed project limits are identified in the vicinity map shown in Attachment A.

Route 101, a predominantly urban freeway within the project limits, currently has four continuous mixed-flow lanes in each direction west of Canoga Avenue. In addition, there are auxiliary lanes between Topanga Canyon Boulevard and Ventura Boulevard/Shoup Avenue and between Woodlake Avenue and Valley Circle Boulevard in the northbound direction, and between all subsequent interchanges west of Las Virgenes Road in both directions. In the southbound direction, there is also a deceleration lane provided on the approach to the Parkway Calabasas off-ramp. The mixed-flow lane widths range from 3.35 to 3.66 meters and the outside shoulder width is 3.05 meters. The median width varies from 1.82 to 11 meters and includes paved shoulders. The topography of the project area is generally rolling terrain in much of the corridor.

### **3.0 NEED AND PURPOSE**

Route 101 currently carries between 175,000 and 233,000 vehicles per day and experiences peak period traffic congestion along the mainline in both directions. According to Caltrans 2002 congestion maps, vehicle speeds are reduced to below 60 km/h (35 mph) for extended periods during the AM and/or PM peak periods in both directions, with several southbound segments experiencing more than three hours of reduced speeds during the PM peak period. Increased traffic volumes along the Route 101 corridor over the next 25 years, due to future growth and development in the region, will worsen traffic conditions and extend the periods of congestion. This proposed Route 101 Freeway Widening Project, between the vicinity of Canoga Avenue and the vicinity of the LA/Ventura County Line, has three main objectives: reduce traffic congestion, accommodate future traffic growth, and improve traffic safety.

#### Reduce Traffic Congestion

According to the Traffic Impact Analysis dated September 2005 (Attachment I-2), existing 2005 freeway mainline volumes in the northbound direction range from approximately 6,100 to 9,000 vehicles per hour (vph) in the AM peak hour and from 6,800 to 8,700 vph in the PM peak hour. In the southbound direction, estimated existing freeway mainline volumes range from approximately 6,500 to 8,300 vph in the AM peak hour and range from approximately 5,800 to 8,700 vph in the PM peak hour.



Northbound Route 101 currently operates at Level of Service (LOS) F between Canoga Avenue and Parkway Calabasas during the AM peak hour and at LOS F on portions of the freeway between Canoga Avenue and Las Virgenes Road during the PM peak hour (Attachment I-2, Table 2a).<sup>1</sup> Southbound Route 101 operates at LOS F on portions of the freeway between Canoga Avenue and Las Virgenes Road during the AM peak hour and at LOS F on portions of the freeway between Canoga Avenue and Valley Circle Boulevard during the PM peak hour (Attachment I-2, Table 2b). Field observations conducted in February and March 2005 confirmed peak period traffic congestion along the freeway mainline.

Both build alternatives would improve traffic flow within the project limits by widening the freeway from four lanes to five continuous mixed-flow freeway lanes in each direction. The proposed improvements would provide additional capacity, ease congestion, and provide lane continuity throughout the corridor.

#### Accommodate Future Traffic Growth

According to 2003 Caltrans traffic counts, the Average Daily Traffic (ADT) volume on Route 101 within the project limits range from approximately 175,000 vehicles per day (vpd) on the west end to approximately 233,000 vpd on the east end near Canoga Avenue (see Traffic Impact Analysis in Attachment I-2). The percentage of trucks traveling through this area is approximately 4.3 percent. The majority of these trucks are 2-axle and 3-axle trucks; however, a large portion is comprised of 5-axle trucks (approximately 39 percent).

As part of the Traffic Impact Analysis (Attachment I-2), existing (2005) peak period traffic volumes were projected from 2003 Caltrans traffic counts by applying an annual growth rate of 1.06 percent per year compounded. The 1.06 percent annual growth rate is based on 2025 SCAG model forecasts from the US-101 Freeway Corridor Improvement Study, and was also used to estimate 2030 traffic volumes. The forecasts produced a total traffic growth of approximately 30 percent from existing 2005 volumes to the forecast year of 2030. Unless freeway improvements are made, the projected 2030 traffic volumes are expected to result in LOS F, during the AM and PM peak hours, along almost all segments of Route 101 within the project limits in both directions (see Attachment I-2).

With the freeway improvements proposed in Build Alternatives 2 and 3, the number of LOS F locations along Route 101 would be substantially reduced as a result of widening to five lanes. In addition,

---

<sup>1</sup> LOS is a measure of traffic conditions which ranges from LOS A, representing free-flow conditions, to LOS F, representing forced or unstable conditions.

volume-to-capacity ratios at all LOS F locations would be improved with the proposed freeway widening compared to 2030 No Build conditions.

#### Improve Traffic Safety

The accident history for the existing Route 101, during the three-year period from January 1, 2001 to December 31, 2003, is summarized in the Traffic Impact Analysis (Attachment I-2). This summary is based on Caltrans Traffic Accident Surveillance and Analysis System (TASAS) and Table B. TASAS Table B data shown in Attachment I-3 provides a summary of the Route 101 fatal and injury accident rates compared to statewide average accident rates for similar facilities. Overall, the Route 101 accident rate was 0.49 accidents per million vehicle miles (MVM) in the northbound direction and 0.61 accidents per MVM in the southbound direction within the project limits, compared to the statewide average accident rate of 0.99 accidents per MVM for similar facilities.

This segment of the Route 101 freeway experienced a total of 649 accidents in the northbound direction and a total of 806 accidents in the southbound direction during the three-year time period analyzed. The most frequent type of collisions was rear end collisions, which accounted for approximately 38 percent of collisions in the northbound direction and approximately 62 percent of collisions in the southbound direction. Rear end accidents are considered to be congestion-related accidents. Therefore, the proposed improvements to widen Route 101, and thus reduce congestion, are expected to help to reduce this type of accidents on Route 101 in the future.

#### Controversial Issues

A number of potentially controversial issues may affect the approval of the project and support by other agencies. These issues include the following:

- High Occupancy Vehicle (HOV) lane alternatives will need to be considered
- Project limits may be expanded to address HOV options
- Environmental document may be expanded due to additional impact issues
- Public participation and project support will need to be augmented
- Right of way requirements may be increased to provide additional mitigation

These issues will be acknowledged and addressed on an ongoing basis throughout the project development process, especially during the PA/ED phase (see Attachment P, Project Risk Management Plan).

#### 4.0 ALTERNATIVES

Based on the analysis of existing and projected traffic demand along the Route 101 corridor, it was determined that near-term freeway capacity improvements were needed to improve mobility and alleviate congestion. Addition of a fifth mixed-flow lane in each direction along Route 101 between the vicinity of Canoga Avenue and the vicinity of the LA/Ventura County Line was considered a viable interim improvement project that would improve traffic conditions until a long-range major improvement project is implemented. See Attachment A for the project limits.

Three alternatives are being studied for the PSR(PDS); the No Build Alternative 1 and two Build Alternatives. Alternative 2 (the Non-Standard Lane Widths Alternative) will add the fifth lane by restriping and/or widening where feasible to minimize right of way impacts and costs. Alternative 3 (the Full Standard Lane Widths Alternative) will add the fifth lane widening as required to provide full standard freeway lane widths. Analysis of HOV lanes on Route 101 will be considered at the PA/ED phase, consistent with discussions and consultation conducted in the initial phases of the project. See Section 5.0 for discussion of HOV lanes previously considered.

This improvement project will expand the Route 101 Freeway from its present basic four lanes in each direction to a continuous five lane section in each direction, plus auxiliary lanes as appropriate. The improvements will be accomplished by a combination of median construction, restriping and outside widening, depending upon space available in the existing medians. Bridge structures, pedestrian crossings and drainage structures will be modified or reconstructed as necessary to accommodate the proposed five lane section. Interchange ramps will be modified as necessary to accommodate the wider freeway mainline section, while maintaining existing ramp termini locations, to minimize impact on properties adjacent to the freeway. The proposed CCTV communications system programmed for construction in 2005 will be modified as required to accommodate the freeway widening. Existing overhead sign structures will be replaced as required by Caltrans sign policy and current standards. A program of public involvement will be undertaken at the PA/ED phase as part of the environmental process.

Attachment B provides schematic alignment maps for Alternatives 2 and 3, including locations where right of way acquisition will be required. Attachment C shows typical cross-sections for seven representative segments of the Route 101 project. Each typical section sheet includes the existing freeway

cross section, proposed Alternative 2 (Non-Standard Lane Widths Alternative) cross section, and proposed Alternative 3 (Full Standard Lane Widths Alternative) cross section.

#### **4.1 Alternative 1: No Build Alternative**

The No-Build Alternative 1 includes only the existing freeway facilities and the currently proposed improvements along Route 101. Table 4.1 identifies the currently proposed projects along Route 101. No additional freeway lanes would be constructed as part of this alternative. Existing freeway congestion and delay problems would not be solved with this alternative, and the problems will increase as corridor traffic demand grows in future years.

**Table 4.1: Proposed Projects on Route 101, Los Angeles County  
(from the Vicinity of Canoga Avenue to the Vicinity of the LA/Ventura County Line)**

EA	Co-Rte-PM	Location	Type of Work	Current Status	Construction starts
14130	LA -101 -11.9 /27.0	IN LA FR 0.1N RTE 170/0.1N WOOD-LAKE AV & ON LA 134:0.4/1.1	Modify Lighting & Sign Illumination to Multi-Circuits	Design on hold	Not Programmed at present
12088	LA -101 -25.3 /38.2	IN LA WLKV FR RTE 27/101 TO RTE 23/101 In VEN CO and @ VAR LOC	From Route 27/101 separation to Route 23/101 separation, install CCTV Communication System.	Design completed, awaiting PS&E review in HQ	Programmed 04/05
24230	LA -101 -31.9 /31.9	IN LA CITY IN CALABASAS AT LOST HILLS ROAD INTERCHANGE	Improve Interchange	City of Calabasas coordinating their PSR with Caltrans (65% level)	Local Project, Caltrans Oversight
24600	LA -101 -32.2 /38.2	IN LA CNTY FR 0.3 MLS N OF LST HLLSOC -LAVENT CNTY LN,	Pavement Rehabilitation	Planning	
24680	LA -101 -32.8 /33.8	IN LA CNTY IN AGRA HILLS NR LIBERTYCNYN RD	Wild Life Habitat Conservation. Project proposes to construct an access tunnel under the freeway for wild life crossing.	PR phase will start May 05.	Summer 07
18810	LA -101 -34.2 /38.2	LA CNTY N/O LEWIS RD TO S/O W LAKE VILLAGE & N TO VEN CNTY LINE	Construct concrete median barrier	Design (20% level)	Summer 06
1965U	LA -101 -34.4 /35.3	IN AGRH FR .5N CHESEBRO CR/.3N KANAN RD	Improve interchange – new N/B and S/B loop ramps, relocated N/B and S/B off-ramps, and Medea Creek Bridge widening.	Design (Near complete)	Local Project, Caltrans Oversight. Const. Summer 05
24020	LA -101 -36.1 /36.3	IN AGOURA HILLS ON RTE 101 @ REYES ADOBE RD IC	Modify Reyes Adobe Interchange by widening Overcrossing from 3 to 6-lane roadway and modify ramps and signals	PR phase (75% completion level)	Local Project, Caltrans Oversight
12016	LA -101 -37.0 /38.0	IN WESTLAKE VILLAGE @LINDERO CYN RD I1	Modify Interchange by restriping Lindero Canyon Road from 4 to 6-lanes by reducing median and reconstructing sidewalk and bike path and widen N/B on-ramp to 2 lanes.	No modifications to structure Design (50% level)	Local Project with Caltrans Oversight Const. Summer 06

Source: Caltrans, March 14, 2005

Note: Proposed Caltrans Project EA 195201 will add one mixed-flow lane in each direction to Route 101 from the vicinity of the LA/Ventura County Line to SR 23 North in Ventura County. The Project Report and Environmental Document for this project have been completed.

#### **4.2 Alternative 2: Non-Standard Lane Widths Alternative**

This alternative will add a fifth mixed-flow lane in both directions by restriping and/or widening, connecting the existing five-lane freeway east of SR 27 with the proposed five lane improvement near Westlake Boulevard in Ventura County. This will bring the entire freeway segment to five continuous mixed-flow lanes in each direction, plus auxiliary lanes where they exist today. Portions of the project will have three non-standard lanes (3.35 m) and non-standard left shoulder (0.6 m) in both directions to minimize impacts. The outside two lanes will be standard width (3.66 m) with standard right shoulder (3.05 m) throughout the project. This alternative would also include related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements as necessary.

For both Alternatives 2 and 3, six existing freeway bridge structures will require widening and nine structures will require replacement, as shown in Table 4.2. The structure improvements for Alternative 2 were assumed to match those for Alternative 3 to insure a conservative estimate of program resources for the PA/ED phase. In locations where non-standard lane widths could not be accommodated within the existing constraints of the structure carrying Route 101 traffic, the proposed improvements assumed widening to full standard structure widths. This provides the flexibility to restripe the widened structure to full standard lane widths at a later date without having to rebuild newly improved bridge portions to a slightly wider footprint. The actual lane widths on the widened structures for Alternative 2 will be striped to match the adjacent non-standard lane widths, while the widened bridge structures will have an overall width that could accommodate a full standard section. Additionally, the replaced structures spanning Route 101 will provide space for standard lane widths that are the same as Alternative 3. As a result, the structures costs for Alternative 2 and Alternative 3 are the same.

<b>Table 4.2</b>				
<b>Structure Improvements in Alternatives 2 and 3</b>				
<b>KM Post</b>	<b>Bridge No.</b>	<b>Bridge Name</b>		<b>Improvements</b>
40.78	53	1064	Rte 101/27 SEP UC	Widening
41.52	53	1065	Ventura Blvd UC	Widening
41.65	53	1095	Shoup Ave UC	Widening
42.13	53	1163	Sale Ave PUC	Widening
42.57	53	1066	Fallbrook Ave UC	Widening
42.94	53	1162	Del Valle St POC	Replacement
45.53	53	1680	Parkway Calabasas OC	Replacement
46.77	53	1681	Mureau Rd OC	Replacement
50.05	53	1442	Las Virgenes Rd OC	Replacement
51.35	53	1730	Lost Hills Rd. OC	Replacement
52.75	53	1731	Liberty Canyon Rd UC	Widening
54.22	53	1678	Palo Comado Canyon Rd OC	Replacement
54.57	53	755	Chesebro Creek	Replacement
56.04	53	2	Medea Creek	Replacement
58.23	53	1726	Reyes Adobe Rd OC	Replacement

As a result of adding the fifth lane, ramp gore point modifications will be needed at approximately 19 locations as shown in Table 4.3.

<b>Table 4.3</b>	
<b>Ramps to be Modified in Alternative 2</b>	
<b>Location</b>	
<b>Northbound</b>	<b>Southbound</b>
<b>Topanga Canyon Blvd Interchange</b>	
NB On ramp	SB On ramps (2)
NB Off ramp	
<b>Ventura Blvd Interchange</b>	
NB On ramp	SB On ramp
NB Off ramp	
<b>San Luis Ave/Fallbrook Ave</b>	
	SB Off ramp
<b>Woodlake Ave Interchange</b>	
NB On ramp	
NB Off ramp	
<b>Valley Circle Blvd Interchange</b>	
NB On ramps	SB On ramps (2)
NB Off ramp	
<b>Parkway Calabasas Interchange</b>	
NB Off ramp	SB On ramps (2)
NB On ramp	SB Off ramp

Alternative 2 is intended to minimize costs and right of way impacts. At several locations, where the existing right of way abuts an adjacent frontage road or developed property, retaining walls are proposed to minimize or avoid right of way impacts. The new right of way required for Alternative 2 includes partial acquisition of seven residential and commercial parcels, totaling 3,370 square meters. Preliminary right of way and utility relocation cost estimates are included in Attachments D and J.

This alternative will provide additional freeway capacity to address existing traffic congestion and projected growth. Potential environmental impacts are identified in Attachment G, and will be addressed with the appropriate level of environmental analysis and documentation at the PA/ED phase.

Proposed non-standard design features in Alternative 2 are summarized in Tables 4.4 and 4.5. All proposed non-standard features will be fully analyzed and justified prior to the approval of a design exception fact sheet in the PA/ED phase. Concurrence by the Project Development Coordinator for further study of the viable alternatives included in this PSR(PDS) does not constitute approval of any non-standard features identified currently as per Chapter 21 of the Caltrans Project Development Procedures Manual.

Implementation of the proposed project is expected to result in positive operational improvements on Route 101, including reduced peak period congestion and an improved level of service. The improvements will provide a continuous fifth lane in each direction, linking the existing five lane section to the east with the proposed five lane section to the west.

#### Estimated Costs for Alternative 2

Estimated costs for Alternative 2 range between approximately \$242 and \$296 million (in 2010 dollars), of which approximately \$4 million represents right of way costs. Alternative 2 will require approximately three to four years to complete the construction phase. See Section 8.0 for the preliminary project development schedule.



**Table 4.4  
 Non-Standard Features  
 Alternative 2**

HDM	Std	Exist	Prop	Description	Design Feature			Location		
					Std	Exist	Prop	Sta	to Sta	SB/NB
<b>Topanga Cyn Blvd to Valley Circle Blvd Sta 407+00 to 439+60</b>										
304.1(e)	A	x	x	Minimum distance from ES to catch point	5.5	2 to 3	1	430+80	436+40	SB
310.2	A		x	Outer Separation to Adjacent Frontage Road	8	9.5	7	430+80	436+40	SB
304.1	A	x	x	Embankment Slope	1:4	1:2	1:2	Variable throughout segment		
304.1(e)	A		x	Minimum Distance ES to catch point	5.5	5	2	411+50	412+60	NB
305.1 (3)(a)	M	x	x	Median Width	6.6	1.8	1.8	407+00	439+60	
504.3 (9)	A	x	x	Distance between Successive On Ramps	300	200	200	Topanga Cyn SB On Ramps		
301.1	M	x	x	Traveled Way Width	3.6	3.35	3.35	407+00	439+60	
302.1	M	x	x	Shoulder Width (left/median)	3	0.6	0.6	407+00	439+60	
309.1 (3)(a)	M	x	x	Minimum Horizontal Clearance not achieved	1.2	0.6	0.6	407+00	439+60	
201.1	M	x	x	Stopping Sight Distance (see Table 4.5)	220					
<b>Valley Circle Blvd to Parkway Calabasas Sta 439+60 to 454+80</b>										
304.1(e)	A	x	x	Minimum distance from ES to catch point	5.5	4.5	3	445+00	450+00	SB
304.1(e)	A	x	x	Minimum distance from ES to catch point	5.5	4.5	3	449+00	451+50	NB
304.1	A	x	x	Embankment Slope	1:4	1:2	1:2	Variable throughout segment		
305.1 (3)(a)	M	x	x	Median Width	6.6	6.1	1.8	439+60	454+80	
301.1	M	x	x	Traveled Way Width	3.6	3.66	3.35	439+60	454+80	
302.1	M	x	x	Shoulder Width (left/median)	3	2.75	0.6	439+60	454+80	
309.1 (3)(a)	M		x	Minimum Horizontal Clearance not achieved	1.2	2.75	0.6	439+60	454+80	
201.1	M	x	x	Stopping Sight Distance (see Table 4.5)	220					

Table 4.4 Non-Standard Features Alternative 2										
HDM	Std	Exist	Prop	Description	Design Feature			Location		
					Std	Exist	Prop	Sta	to Sta	SB/NB
<b>Parkway Calabasas to Las Virgenes Road Sta 454+80 to 499+30</b>										
304.1	A	x	x	Embankment Slope	1:4	1:2	1:2	Variable throughout segment		
310.2	A		x	Outer Separation to Adjacent Frontage Road	8	8.5 to 11	6 to 8	476+40	477+10	NB
305.1 (3)(a)	M	x	x	Median Width	6.6	6.1	1.8	454+80	499+30	
203.2	M	x	x	Minimum Radius of Curve for a specific design speed not achieved (V=110km)	600	549	549	491+73	498+12	
301.1	M	x	x	Traveled Way Width	3.6	3.66	3.35	454+80	499+30	
302.1	M	x	x	Shoulder Width (left/median)	3	2.75	0.6	454+80	499+30	
309.1 (3)(a)	M		x	Minimum Horizontal Clearance not achieved	1.2	2.75	0.6	454+80	499+30	
201.1	M	x	x	Stopping Sight Distance (see Table 4.5)	220					
<b>Las Virgenes Road to Chesebro Road Sta 499+30 to 544+00</b>										
304.1	A	x	x	Embankment Slope	1:4	1:2	1:2	Variable throughout segment		
201.1	M	x	x	Stopping Sight Distance (see Table 4.5)	220			538+38	542+67	
203.2	M	x	x	Minimum Radius of Curve for a specific design speed not achieved (V=110km)	600	548	548	528+50	532+52	
302.1	M	x	x	Shoulder Width (left/median)	3	3.05	0.6	499+30	544+00	
305.1(3)(a)	M		x	Median Width	6.6	6.6	1.8	499+30	544+00	
309.1 (3)(a)	M		x	Minimum Horizontal Clearance not achieved	1.2	3.05	0.6	499+30	544+00	
301.1	M		x	Traveled Way Width	3.6	3.66	3.35	499+30	544+00	
<b>Chesebro Road to Kanan Road Sta 544+00 to 563+40</b>										
201.7	A	x	x	Minimum Decision Sight Distance for a	335	242	242	545+44	549+27	

<b>Table 4.4 Non-Standard Features Alternative 2</b>										
HDM	Std	Exist	Prop	Description	Design Feature			Location		
					Std	Exist	Prop	Sta	to Sta	SB/NB
				specific design speed not achieved (V=110km)						
304.1	A	x	x	Embankment slope is greater than 1:4	1:4	1:2	1:2	Variable throughout segment		
305.1(3)(a)	M		x	Median Width	6.6	11	3.7	544+00	563+40	
302.1	M		x	Shoulder Width (left/median)	3	3	1.54	544+00	563+40	
<b>Kanan Road to Reyes Adobe Road Sta 563+40 to 581+80</b>										
304.1	A	x	x	Embankment slope is greater than 1:4	1:4	1:2	1:2	563+40	581+80	
302.1	M		x	Recommended Shoulder Width (left/median)	3	3	1.34	563+40	581+80	
305.1(3)(a)	M		x	Median Width	6.6	9.5-10.6	3.3	563+40	581+80	
201.3	M	x	x	Stopping Sight Distance (see Table 4.5)	220					
<b>Reyes Adobe Road to LA/VEN County Line Sta 581+80 to 614+11</b>										
304.1	A	x	x	Embankment slope is greater than 1:4	1:4	1:2	1:2	Variable throughout segment		
302.1	M		x	Shoulder Width (left/median)	3	3	1 to 1.5	581+80	614+11	
305.1(3)(a)	M		x	Median Width	6.6	10.5	3.18	581+80	614+11	
309.1(3)(a)	M		x	Minimum Horizontal Clearance not achieved	1.2	4.69	1	581+80	614+11	
<b>LA/VEN County Line to Westlake Blvd Sta 0+00 to 10+17</b>										
304.1	A	x	x	Embankment slope is greater than 1:4	1:4	1:2	1:2	Variable throughout segment		
302.1	M		x	Shoulder Width (left/median)	3	3	1 to 1.5	0+00	10+17	
305.1(3)(a)	M		x	Median Width	6.6	10.5	3.18	0+00	10+17	
309.1(3)(a)	M		x	Minimum Horizontal Clearance not achieved	1.2	4.69	1	0+00	10+17	
M - Mandatory Design Standard A - Advisory Design Standard										

**Table 4.5**  
**Locations of Non-Standard Stopping Sight Distance (SSD)**  
**Alternative 2**

Stationing		Route 101 CL Radius	Median Shoulder		Width of Lane #1		Stopping Sight Distance	
BC	EC		Existing	Proposed	Existing	Proposed	Existing	Proposed
416+33	418+98	762.00	0.6	0.6	3.35	3.35	117.98	117.98
454+80	457+12	1524.00	2.75	0.6	3.66	3.35	236.72	166.69
465+12	469+20	1524.00	2.75	0.6	3.66	3.35	236.72	166.69
473+67	476+49	609.60	2.75	0.6	3.66	3.35	150.13	105.58
479+58	481+98	609.60	2.75	0.6	3.66	3.35	150.13	105.58
484+60	486+06	609.60	2.75	0.6	3.66	3.35	150.13	105.58
487+45	490+48	609.60	2.75	0.6	3.66	3.35	150.13	105.58
491+73	498+12	548.64	2.75	0.6	3.66	3.35	142.50	100.19
502+07	504+84	914.40	3.05	0.6	3.66	3.35	189.54	129.20
509+90	513+28	1524.00	3.05	0.6	3.66	3.35	244.38	166.69
517+78	520+70	914.40	3.05	0.6	3.66	3.35	189.54	129.20
523+46	525+55	1828.80	3.05	0.6	3.66	3.35	267.62	182.57
528+51	530+61	548.64	3.05	0.6	3.66	3.35	147.14	100.19
532+53	533+65	914.40	3.05	0.6	3.66	3.35	189.54	129.20
538+38	542+67	609.59	3.05	0.6	3.66	3.35	155.01	105.58
572+36	576+10	1523.5	4.44	0.79	3.66	3.66	277.11	178.88
572+98	579+90	914.05	5.2	1.54	3.66	3.66	227.77	157.33

1. Design Speed = 110 km/hr
2. Design SSD = 220 meters
3. Highlighted rows indicate areas where the proposed design would result in a non-standard stopping sight distance at locations which currently meet stopping sight distance standards.

#### **4.3 Alternative 3: Full Standard Lane Widths Alternative**

This alternative will add a fifth mixed-flow lane in both directions by widening for the freeway throughout the length of the project, connecting the existing five-lane freeway east of SR 27 with the proposed five lane improvement near Westlake Boulevard in Ventura County. This will bring the entire freeway segment to five continuous mixed-flow lanes in each direction, plus auxiliary lanes where they exist today. The proposed improvements include full standard lane widths (3.66 m), shoulders (3.05 m) and other feasible full standard design features. This alternative would also include related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements as necessary. For both Alternatives 2 and 3, six freeway structures will require widening and nine structures will require replacement, as shown in Table 4.2. As a result of adding the fifth lane, ramp gore point modifications will be needed at approximately 52 locations, as shown in Table 4.6.

<b>Table 4.6</b>	
<b>Ramps to be Modified in Alternative 3</b>	
<b>Location</b>	
<b>Northbound</b>	<b>Southbound</b>
<b>Topanga Canyon Blvd Interchange</b>	
NB On ramp	SB On ramps (2)
NB Off ramp	
<b>Ventura Blvd Interchange</b>	
NB On ramp	SB On ramp
NB Off ramp	SB Off ramp
<b>San Luis/Fallbrook Interchange</b>	
	SB Off ramp
<b>Woodlake Ave Interchange</b>	
NB On ramp	
NB Off ramp	
<b>Valley Circle Blvd Interchange</b>	
NB On ramp	SB On ramps (2)
NB Off ramp	SB Off ramp
<b>Parkway Calabasas Interchange</b>	
NB On ramp	SB On ramps (2)
NB Off ramp	SB Off ramp
<b>Las Virgenes Rd Interchange</b>	
NB On ramp	SB On ramps (2)
NB Off ramp	SB Off ramp
<b>Lost Hills Rd Interchange</b>	
NB On ramp	SB On ramp
NB Off ramp	SB Off ramp
<b>Liberty Canyon Rd Interchange</b>	
NB On ramp	SB On ramp
NB Off ramp	SB Off ramp
<b>Palo Comado Canyon Rd/ Chesebro Rd Interchange</b>	
NB On ramp	SB On ramp
NB Off ramp	SB Off ramp
<b>Kanan Rd Interchange</b>	
NB On ramp	SB On ramp
NB Off ramp	SB Off ramp
<b>Reyes Adobe Rd Interchange</b>	
NB On ramp	SB On ramp
NB Off ramp	SB Off ramp
<b>Lindero Canyon Rd Interchange</b>	
NB On ramps (2)	SB On ramps (2)
NB Off ramp	SB Off ramp

Alternative 3 utilizes full standard freeway lanes and shoulders. At several locations, where the existing right of way abuts an adjacent frontage road or developed property, retaining walls are proposed to minimize or avoid right of way impact. The new right of way required for Alternative 3 includes the partial acquisition of 34 residential and commercial parcels plus one full parcel acquisition, totaling approximately 23,500 square meters. Preliminary right of way and utility relocation cost estimates are included in Attachments D and J.

This alternative will provide additional freeway capacity to address existing traffic congestion and projected growth. Potential environmental impacts are identified in Attachment G, and will be addressed in the environmental analysis and documentation at the PA/ED phase.

Potential non-standard design features in Alternative 3 are summarized in Tables 4.7 and 4.8. All proposed non-standard features will be fully analyzed and justified prior to the approval of a design exception fact sheet in the PA/ED phase. Concurrence by the Project Development Coordinator for further study of the viable alternatives included in this PSR(PDS) does not constitute approval of any non-standard features identified currently as per Chapter 21 of the Caltrans Project Development Procedures Manual.

Implementation of the proposed project is expected to result in positive operational improvements on Route 101, including reduced peak period congestion and an improved level of service. The improvements will provide a continuous fifth lane in each direction, linking the existing five lane section to the east with the proposed five lane section to the west.

#### Estimated Costs for Alternative 3

Estimated costs for Alternative 3 range between approximately \$428 and \$523 million (in 2010 dollars), of which approximately \$27 million represents right of way costs. Alternative 3 will require approximately three to four years to complete the construction phase. See Section 8.0 for the preliminary project development schedule.

<b>Table 4.7 Non-Standard Features Alternative 3</b>										
HDM	Std	Exist	Prop	Description	Design Feature			Location		
					Std	Exist	Prop	Sta	to Sta	NB/SB
<b>Topanga Cyn Blvd to Valley Circle Blvd Sta 407+00 to 439+60</b>										
304.1(e)	A	x	x	Minimum distance from ES to catch point	5.5	2 to 3	1	430+80	436+40	SB
310.2	A		x	Outer Separation to Adjacent Frontage Road	8	9.5	4	430+80	436+40	SB
201.1	M	x	x	Stopping Sight Distance (see Table 4.8)	220					
<b>Valley Circle to Parkway Calabasas Sta 439+60 to 454+80</b>										
304.1(e)	A	x	x	Minimum distance from ES to catch point	5.5	4.5	3	445+00	450+00	SB
304.1(e)	A	x	x	Minimum distance from ES to catch point	5.5	4.5	3	449+00	451+50	NB
201.1	M	x	x	Stopping Sight Distance (see Table 4.8)	220					
<b>Parkway Calabasas to Las Virgenes Road Sta 454+80 to 499+30</b>										
203.2	M	x	x	Minimum Radius of Curve for a specific design speed not achieved (V=110km)	600	549	549	491+73	498+12	
310.2	A		x	Outer Separation to Adjacent Frontage Road	8	8.5 to 11	6 to 8	476+40	477+10	NB
310.2	A	x	x	Outer Separation to Adjacent Frontage Road	8	7 to 8	7	475+00	476+00	SB
201.1	M	x	x	Stopping Sight Distance (see Table 4.8)	220					
<b>Las Virgenes Road to Chesebro Road Sta 499+30 to 544+00</b>										
201.1	M	x	x	Stopping Sight Distance (see Table 4.8)	220	151	151	538+38	542+67	
203.2	M	x	x	Minimum Radius of Curve for a specific design speed not achieved (V=110km)	600	548	548	528+50	532+52	
<b>Chesebro Road to Kanan Road Sta 544+00 to 563+40</b>										
201.7	A	x	x	Minimum Decision Sight Distance for a specific design speed not achieved (V=110km)	335	242	242	545+44	549+27	



Table 4.7 Non-Standard Features Alternative 3										
HDM	Std	Exist	Prop	Description	Design Feature			Location		
					Std	Exist	Prop	Sta	to Sta	NB/SB
Kanan Road to Reyes Adobe Road Sta 563+40 to 581+80										
				None						
Reyes Adobe Road to LA/VEN County Line Sta 581+80 to 614+11										
310.2	A		x	Outer Separation to Adjacent Frontage Road	8	8.6	7	608+55	614+11	NB
LA/VEN County Line to Westlake Blvd Sta 0+00 to 10+17										
				None						
M - Mandatory Design Standard A - Advisory Design Standard										

**Table 4.8**  
**Locations of Non-Standard Stopping Sight Distance (SSD)**  
**Alternative 3 Full Standard Lane Widths**

Stationing		Route 101 CL Radius	Median Shoulder		Width of Lane #1		Stopping Sight Distance	
BC	EC		Existing	Proposed	Existing	Proposed	Existing	Proposed
416+33	418+98	762.00	0.6	3.05	3.35	3.66	117.98	173.14
473+67	476+49	609.60	2.75	3.05	3.66	3.66	150.13	155.02
479+58	481+98	609.60	2.75	3.05	3.66	3.66	150.13	155.02
484+60	486+06	609.60	2.75	3.05	3.66	3.66	150.13	155.02
487+45	490+48	609.60	2.75	3.05	3.66	3.66	150.13	155.02
491+73	498+12	548.64	2.75	3.05	3.66	3.66	142.50	147.14
502+07	504+84	914.40	3.05	3.05	3.66	3.66	189.54	189.54
517+78	520+70	914.40	3.05	3.05	3.66	3.66	189.54	189.54
528+51	530+61	548.64	3.05	3.05	3.66	3.66	147.14	147.14
532+53	533+65	914.40	3.05	3.05	3.66	3.66	189.54	189.54
538+38	542+67	609.59	3.05	3.05	3.66	3.66	155.01	155.01
2+98	5+90	914.05	5.2	3.05	3.66	3.66	227.77	189.51

1. Design Speed = 110 km/hr
2. Design SSD = 220 meters
3. Highlighted rows indicate areas where the proposed design would result in a non-standard stopping sight distance at locations which currently meet stopping sight distance standards.

## **5.0 SYSTEM AND REGIONAL PLANNING**

The proposed Route 101 Freeway Widening Project was developed based on findings from the Route 101 Freeway Corridor Improvement Study (2003), which examined the need to improve traffic flow and ease congestion on Route 101, from SR 110 in downtown Los Angeles to SR 23 in Ventura County. To address needed improvements on the west end of the Route 101 corridor, this PSR(PDS) includes two build alternatives that will add one mixed-flow lane in each direction between the vicinity of Canoga Avenue and the vicinity of the LA/Ventura County Line.

### **5.1 Air Quality Conformance**

The proposed project is not currently identified in the SCAG 2004 Regional Transportation Plan (RTP) that received federal approval on June 7, 2004. The project is however, identified in the Los Angeles County Metropolitan Transportation Authority's (LACMTA) 2004 Congestion Management Program (CMP) for Los Angeles County Highway and Roadway System.

The project is not currently listed in the federally approved (October 4, 2004) 2004 Regional Transportation Improvement Program (RTIP) for fiscal years 2004/2005 – 2005/2009. Inclusion in the RTIP is essential to federal funding.

The proposed project is located in the South Coast Air Basin (SCAB) which is a federally designated non attainment area. As such, the proposed project is subject to both a Carbon Monoxide (CO) hot spot analysis as well as a particulate matter less than 10 microns in diameter (PM<sub>10</sub>) analysis in order to determine localized emissions effects.

Until this project is identified in an approved RTP and RTIP, it does not conform to the federal Clean Air Act Amendment of 1990.

### **5.2 Consideration of HOV Lanes**

Metro, Caltrans, SCAG, and LVMCOG conducted the Route 101 Freeway Corridor Improvement Study between 2001 and 2003. The City of Los Angeles, Federal Highway Administration (FHWA), and elected officials at the local, State and Federal levels were also involved with the study throughout the entire process. The Study Technical Advisory Committee (TAC) recommended, as a long-range

improvement element, implementation of two HOV lanes in each direction between SR 23 and SR 134/SR 170. The new HOV lane(s) would require the potential acquisition of new right of way, which raised much concern among the local residents and elected officials, resulting in stakeholders' unwillingness to adopt the recommendation. As a result, the Study Steering Committee recommended that only short- and mid-range improvement projects be pursued at this time and the consideration of implementation of the long-range components (HOV lanes) be postponed until the right of way impacts are clearly identified and approved by the stakeholders. Caltrans management, the Metro Board, and other decision makers supported the Steering Committee's recommendations in June 2003. In the absence of a right of way assessment study showing acceptable right of way impacts, a decision in support of new HOV lanes on this freeway may not be reached at this time.

California Vehicle Code Article 21655.6 (a) states: "Whenever the Department of Transportation authorizes or permits exclusive or preferential use of highway lanes for high-occupancy vehicles on any highway located within the territory of a transportation planning agency, as defined in Section 99214 of the Public Utilities Code, or a county transportation commission, the department shall obtain the approval of the transportation planning agency or county transportation commission prior to establishing the exclusive or preferential use of the highway lanes." Article 21655.6 (b) of this Code further states: "If the Department authorizes or permits additional exclusive or preferential use of highway lanes for high-occupancy vehicles on that portion of State Highway Route 101 located within the boundaries of the City of Los Angeles, the department shall obtain the approval of the Los Angeles County Transportation Commission by at least a two-thirds majority vote of the entire membership eligible to vote prior to establishing the additional exclusion or preferential use of the highway lanes."

This language is subject to legal interpretation to identify whether it applies to future exclusive use of the "existing" lanes (conversion from mixed-flow lanes to HOV lanes) or it would also apply to creating a future exclusive use (new HOV lanes). Under the first scenario, the fifth mixed-flow lane, if built, may not be converted to an HOV later. Therefore, provisions for providing the added width for shoulders, buffers, and other design features would not be feasible at this time. Under the second scenario, the new HOV lanes along this stretch may not be built without a two-thirds majority vote of the Metro Board and this approval will not be granted unless right of way impacts for the improvements are acceptable to the local residents, elected officials, the agencies having jurisdiction over the corridor within the limits of the project, and other stakeholders. Therefore, studying the HOV lane as an "alternative" in the PSR(PDS) would not be appropriate, and the consideration of HOV lanes will be deferred to the PA/ED phase.

Metro, Caltrans, SCAG/LVMCOG, and LADOT continued identification of feasible short- and mid-range improvement projects in 2004 and collectively agreed on preparing Project Initiation Documents (PIDs) for three auxiliary lane projects in the City of Los Angeles and one project to add a fifth mixed-flow lane between the vicinity of Canoga Avenue and SR 23. During the initial agency coordination for preparation of the PIDs, it was determined that a Caltrans Project Report was already in progress for adding a fifth mixed-flow lane between SR 23 and the vicinity of the LA/Ventura County Line. Therefore, the limits of the current project were adjusted to between the vicinity of Canoga Avenue and the vicinity of the LA/Ventura County line for an approximate length of 14 miles.

The freeway east of Canoga Avenue has five mixed-flow lanes in each direction. The Project Report being prepared by Caltrans would provide five mixed-flow lanes in each direction west of the County line in Ventura County. Ventura County does not support HOV lanes on Route 101 within its jurisdiction. Consideration of an isolated HOV lane between the vicinity of Canoga Avenue and the vicinity of the County line would not provide the operational benefits of HOV lane continuity. Based on traffic pattern studies along the corridor, there are not enough major generators within this 14-mile segment to justify an HOV lane. Carpoolers would merge in and out of mixed-flow lanes to use the HOV lane without realizing significant time savings. Due to heavy congestion on the mixed-flow lanes in both directions, the HOV lane would potentially experience back-up as a result of discontinuity of the facility and merging into the mixed-flow lanes at the termini of the HOV lanes. This traffic backup would further compromise the functionality of the HOV lanes. The Metro HOV Performance Program Evaluation Report published in 2002 addressed this effect as a contributor to inefficient performance of the HOV lanes.

Analysis of HOV lanes on Route 101 will be considered at the PA/ED stage for this proposed project. An HOV lane alternative will be considered as part of preparation of the environmental document, in conformance with FHWA regulations. The 2004 SCAG Regional Transportation Plan, Destination 2030, includes a placeholder for high occupancy toll (HOT) lanes on Route 101 between SR 23 and SR 134/SR 170, identifying HOT lanes as a potential "User-Fee-Backed Capacity Enhancement" for the corridor. The 1999 Caltrans Transportation Concept Report for Route 101 includes a continuous HOV lane between I-10 and SR 23 South as part of the concept selected to provide substantial congestion relief over the 20-year planning period.

The proposed mixed-flow freeway improvements studied for this project are intended to provide near-term relief from growing traffic congestion and delays along the Route 101 corridor. The PSR(PDS) document identifies the project development support resources needed to advance the project through the PA/ED phase.

The Freeway Widening Project includes coordination with the proposed Caltrans project on Route 101 in Ventura County which will add one lane in each direction from near the LA/Ventura County Line to SR 23 North in Ventura County, and thus achieve continuous five-lane freeway operations over a 33.5 mile segment.

## **6.0 ENVIRONMENTAL DETERMINATION AND ENVIRONMENTAL ISSUES**

A Preliminary Environmental Assessment Report (PEAR) has been developed for this project (see Attachment G). The purpose of the PEAR is to determine the appropriate environmental document to be prepared in the PA/ED phase, identify environmental issues and resources early in the planning stage, and assist the project development process. Environmental analyses are completed to make a preliminary determination if any project impacts are likely to be significant. In addition, preliminary costs for mitigation and hours for personnel to complete the environmental document are assessed.

Due to a range of issues identified in the PEAR, various technical studies addressing possible environmental impacts will be needed. During the PA/ED phase of the project, an EIR/EIS is anticipated to be the appropriate environmental document for compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). However, this determination is subject to change during the PA/ED phase due to design changes and results of technical studies.

### *Summary of Issues*

1) Likely impacts include the following:

Hazardous materials; noise impacts to adjacent residential and commercial uses; aesthetics; biological resources; hydrology/water quality; transportation/traffic; air quality; and geology and soils.

Biological resource agency permits will be needed from the Army Corps of Engineers (404 Permit), Regional Water Quality Control Board (401 Certification), and the California Department of Fish and

Game (1602 Agreement). These permits and agreements will take approximately 6 to 12 months or longer to obtain.

2) Impacts requiring additional investigation include:

Noise, aesthetics, biological resources, transportation/traffic, hydrology/water quality, cultural resources, wetlands, hazardous wastes/materials; air quality; population/housing; relocation; recreation; utilities; and seismic and geologic hazards.

3) No impacts are anticipated to the following:

Agriculture; mineral resources; land use planning; and public resources.

4) Project mitigation is anticipated for the following:

Hydrology/water quality, aesthetics, biological resources, traffic, air quality, floodplain encroachment, hazardous materials, and cultural resources. The total cost estimate for environmental mitigation and compliance (permits and agreements) would be approximately \$27.7 million for Alternative 2 and approximately \$29.6 million for Alternative 3. The cost for the construction of soundwalls is not included in the environmental mitigation; it is included in the construction costs.

*Summary of Conclusions*

- An Environmental Impact Report/Environmental Impact Statement (EIR/EIS) is the expected environmental document (although the environmental document may change during the PA/ED phase as noted previously)
- The following technical studies are recommended to address the impacts of the proposed project during the PA/ED phase:
  - Noise (Traffic Noise Impact Report)
  - Land Use/Socioeconomic/Environmental Justice [Community Impact Assessment (CIA)]
  - Right of Way Relocations [Draft Relocation Impact Report (DRIR)]
  - Aesthetics [Visual Impact Assessment (VIA)]
  - Biological Report [Natural Environment Study (NES)]
  - Air Quality Report [conformity with carbon monoxide (CO), ozone, oxides of nitrogen, and particulate matter less than 10 microns in diameter (PM<sub>10</sub>) standards]

- Cultural Resources Studies [Cultural Impact Assessment Report with Historical Property Survey Report (HPSR), Historical Architectural Survey Report (HASR), and Archaeological Survey Report (ASR)]
- Traffic Study Report
- Water Quality Assessment
- Drainage Report
- Floodplain Encroachment Report and Location Hydraulic Study
- Preliminary Geotechnical Report (PGR) and Preliminary Foundation Reports (PFRs)
- Site Investigation

## 7.0 RIGHT OF WAY

Alternatives 2 and 3 will require right of way acquisition for the addition of a fifth mixed-flow freeway lane in each direction, as summarized in Table 7.1.

<b>Alternative</b>	<b>No. of Partial Parcel Takes</b>	<b>No. of Full Parcel Takes</b>
Alternative 2	7	0
Alternative 3	34	1

Alternative 2 utilizes non-standard freeway lane and shoulder widths, with the objective of reducing right of way acquisition impacts and costs. A total of seven partial parcel takes were identified for this alternative, including both residential and commercial properties in the eastern portion of the corridor (see Attachment J, Right of Way Data Sheets). Potential acquisitions include front yard portions of apartment building parcels, portions of commercial parking areas, and church parking and landscaping area.

Alternative 3 utilizes full standard freeway lane and shoulder widths, and requires an estimated 34 partial parcel takes, plus one full parcel take (see Attachment J, Right of Way Data Sheets). The right of way acquisitions include both residential and commercial properties, including five commercial buildings. Potential acquisitions include front yard portions of apartment building parcels, portions of commercial parking areas, and church parking and landscaping area.

The estimated 2010 right of way acquisition costs range from \$1.1 to \$13.9 million for Alternatives 2 and 3, respectively. Total right of way costs including utility relocation and other costs range from



approximately \$4 million to \$27 million for Alternatives 2 and 3, respectively. See Attachment J, Right of Way Data Sheets.

### 8.0 FUNDING/SCHEDULING

This PSR(PDS) is prepared for the purpose of programming capital outlay support resources for PA/ED, as summarized in Table 8.1. The estimated PA/ED support cost of \$10.23 million is based on the Capital Outlay Estimate range of \$428 million to \$523 million for Alternative 3, as summarized in Table 8.2.

<b>Table 8.1 Capital Outlay Support Estimate for PA/ED</b>				
<b>Fiscal Year</b>	<b>STIP PY's/\$'s</b>		<b>Other Funding Sources PY's/\$'s</b>	
	<b>PY's</b>	<b>\$'s</b>	<b>PY's</b>	<b>\$'s</b>
05/06	11	1,210,000	N/A	N/A
06/07	23	2,530,000	N/A	N/A
07/08	36	3,960,000	N/A	N/A
08/09	23	2,530,000	N/A	N/A
<b>Total Support Cost</b>	<b>93</b>	<b>10,230,000</b>	<b>N/A</b>	<b>N/A</b>

Note: Additional funding sources other than STIP funds will be investigated at the PA/ED phase.

<b>Table 8.2 Capital Outlay Estimate (2010 Dollars in Millions)</b>			
	<b>Range for Total Cost</b>	<b>STIP Funds</b>	<b>Other Funding Sources</b>
Alternative 1	0	0	
Alternative 2	\$242 - \$296	\$242 - \$296	N/A
Alternative 3	\$428 - \$523	\$428 - \$523	N/A

Note: The level of detail available to develop these capital cost estimates is only accurate to within the above ranges and are useful for long range planning purposes only. The capital cost estimates should not be used to program or commit capital funds. The Project Report will serve as the appropriate document from which the remaining support and capital components of the project will be programmed. Additional funding sources other than STIP funds will be investigated at the PA/ED phase.

The anticipated preliminary project development schedule is shown in Table 8.3.

<b>Milestone</b>	<b>Anticipated Completion Date</b>
Circulate Draft PR and ED	August 2008
Public Hearing	November 2008
PA/ED Approval	February 2009
PS&E	August 2012
Right of Way Certification	January 2013
Ready to List (RTL)	January 2013
Construction Completion	November 2016

Note: Schedule assumes prioritization of project development and availability of project funding at key milestones.

## **9.0 FEDERAL INVOLVEMENT**

Route 101 is a Non-Interstate National Highway System freeway. The project construction costs are in excess of \$1 million. If federal funding is used, the project would be defined as a Certification Acceptance (CA) project and Caltrans would assume responsibility for the development and implementation of the project and compliance with applicable federal statutes and Executive Orders. It is anticipated that FHWA will be invited to participate in the environmental process for compliance with the National Environmental Policy Act (NEPA). However, per Attachment M, FHWA Involvement, the project is exempt from FHWA review and oversight.

## **10.0 PROGRAMMING RECOMMENDATION**

Based on this PSR(PDS) document, it is recommended that a project development support cost of \$10.23 million for PA/ED be programmed in the next State Transportation Improvement Program (STIP) cycle. Programming of resources is based on Alternative 3, with the expectation that Alternative 2 and possibly other options, including HOV lanes, will be considered in the PA/ED phase.

## 11.0 DISTRICT CONTACTS

The following individuals may be contacted for information or questions pertaining to this PSR(PDS) document:

<u>Name</u>	<u>Unit or Title</u>	<u>Phone Number</u>
<b>Caltrans</b>		
Ravi Ghate	Project Manager	(213) 897-5593
Albert A. Andraos	Senior, Project Engineer	(213) 897-4921
Hassan H. Zadeh	Project Engineer	(213) 897-4160
Saleh Kibria	Project Studies	(213) 897-5328
Nancy Tran	Project Studies	(213) 897-5726
John Fujimoto	HQ, DES, Structures Oversight	(916) 227-8757
Jim DeLuca	HQ, Design	(916) 653-4067
Robert Chapman	HQ, Design	(916) 653-0831
Dan Dunn	Right of Way	(213) 897-4811
Aziz Elattar	Environmental Planning	(213) 897-0686
<b>Metro</b>		
Brian Lin	Project Manager	(213) 922-3036
<b>Parsons Brinckerhoff, Consultants</b>		
Farid Naguib	Project Manager	(213) 362-9470

**Attachment A**

**Vicinity Map and Project Limits**

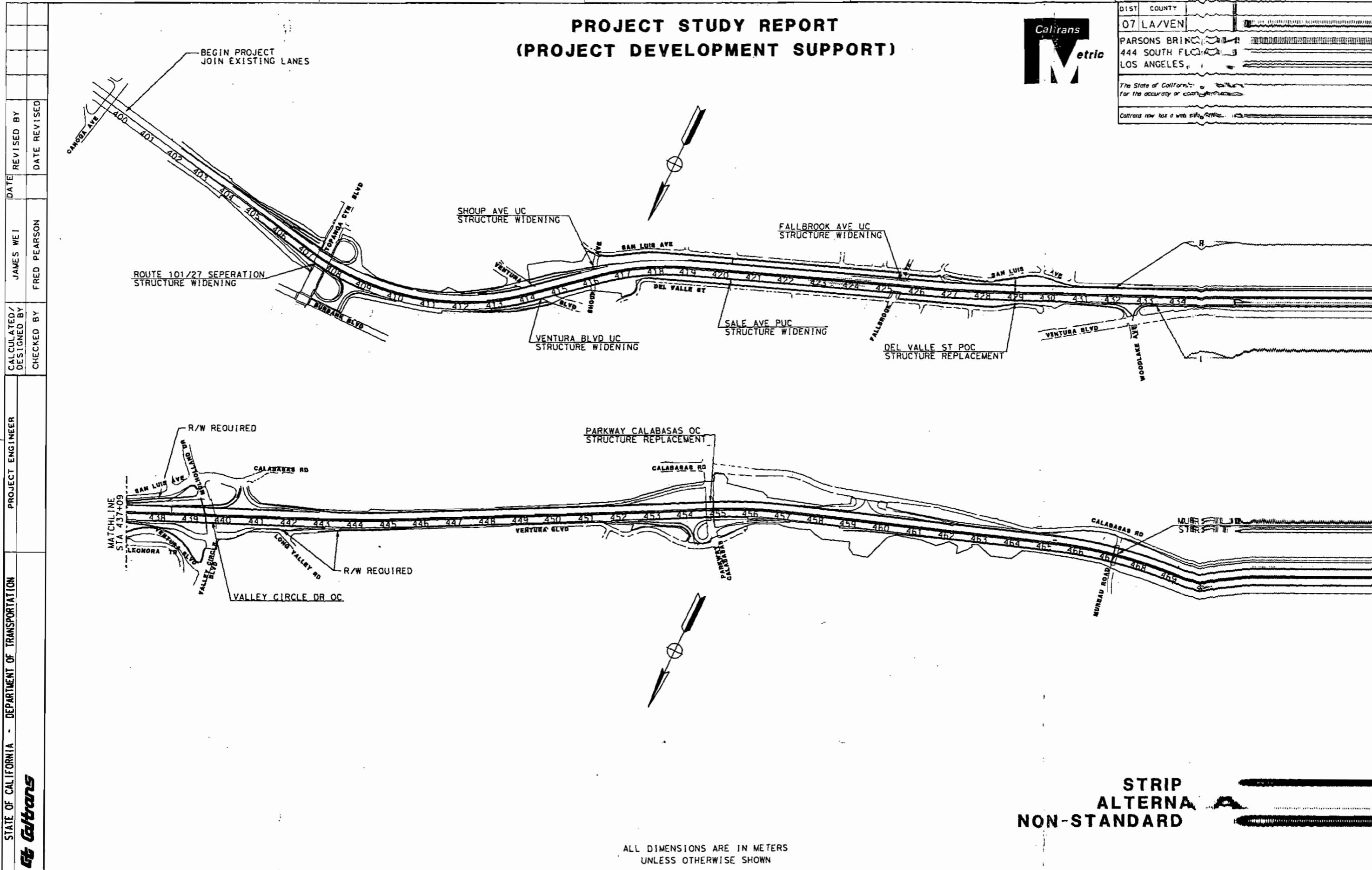
**Attachment B**

**Strip Maps, Alternatives 2 and 3**

# PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)



DIST	COUNTY
07	LA/VEN
PARSONS BRINCKERHOFF	
444 SOUTH FLORISSANT AVE	
LOS ANGELES, CA 90007	
The State of California	
For the accuracy or correctness of the	
Caltrans now has a web site at: <a href="http://www.caltrans.ca.gov">www.caltrans.ca.gov</a>	



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	CALCULATED/DESIGNED BY	CHECKED BY	JAMES WEI	DATE	REVISOR	DATE
Caltrans				FRED PEARSON			

**STRIP ALTERNATIVE A**  
**NON-STANDARD**

ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE SHOWN

# PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

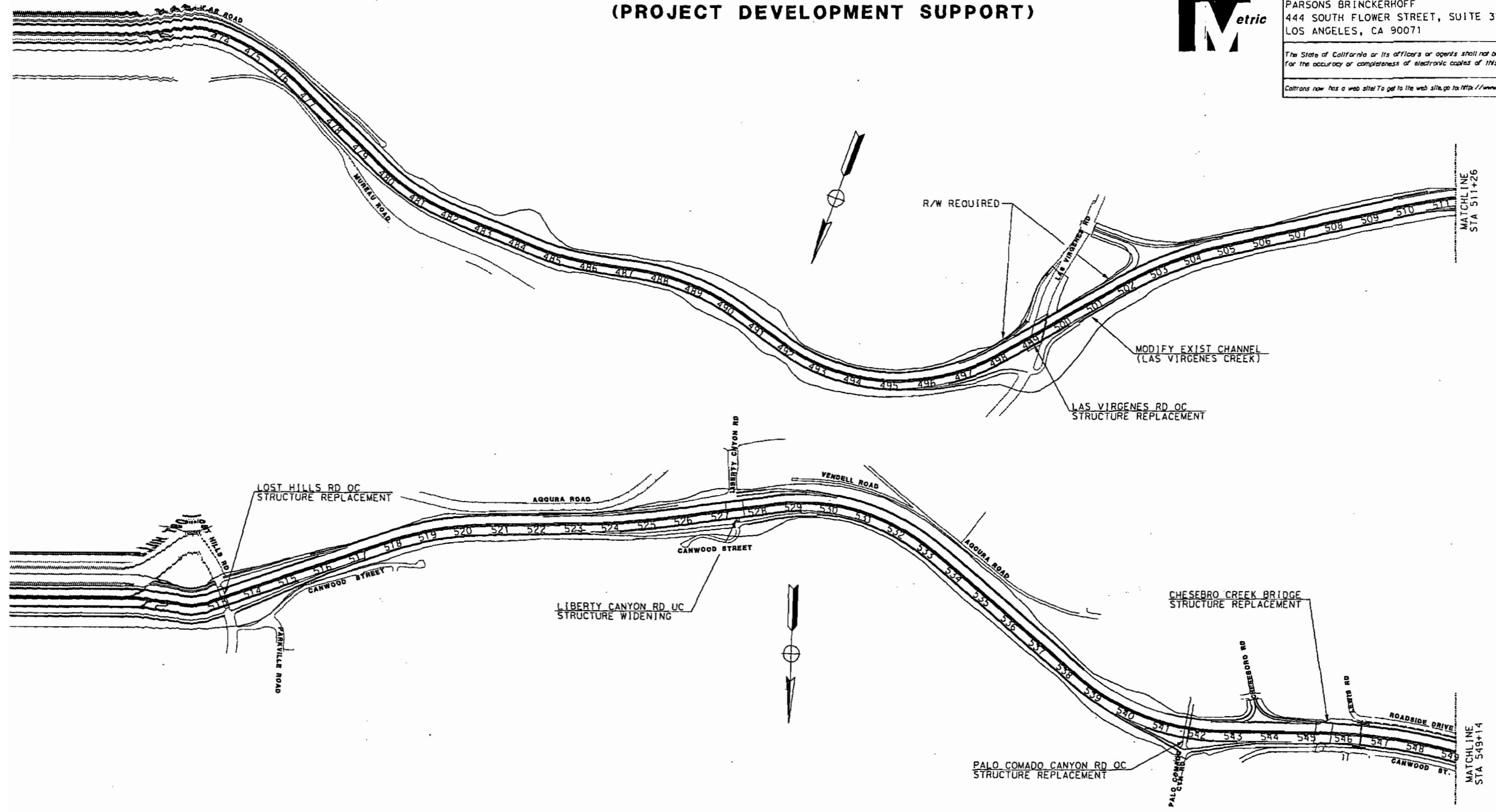


DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT
07	LA/VEN	101	KP 40.0/61.5 (L.A.) KP 0.0/1.0 (VEN.)

PARSONS BRINCKERHOFF  
444 SOUTH FLOWER STREET, SUITE 3700  
LOS ANGELES, CA 90071

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to <http://www.dot.ca.gov>

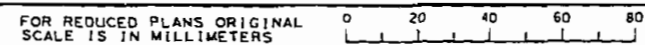


## ALTERNATIVE 2 NON-STANDARD LANE WIDTHS

1:10000

**B-2**

ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE SHOWN



USERNAME => browne  
DGN FILE => ... \al12\_b2.dgn

CU

EA 24920K

LAST REVISION: 00-00-00  
 DATE PLOTTED => 8/18/2005  
 TIME PLOTTED => 10:04:27 AM  
 USERNAME: => browne

# PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

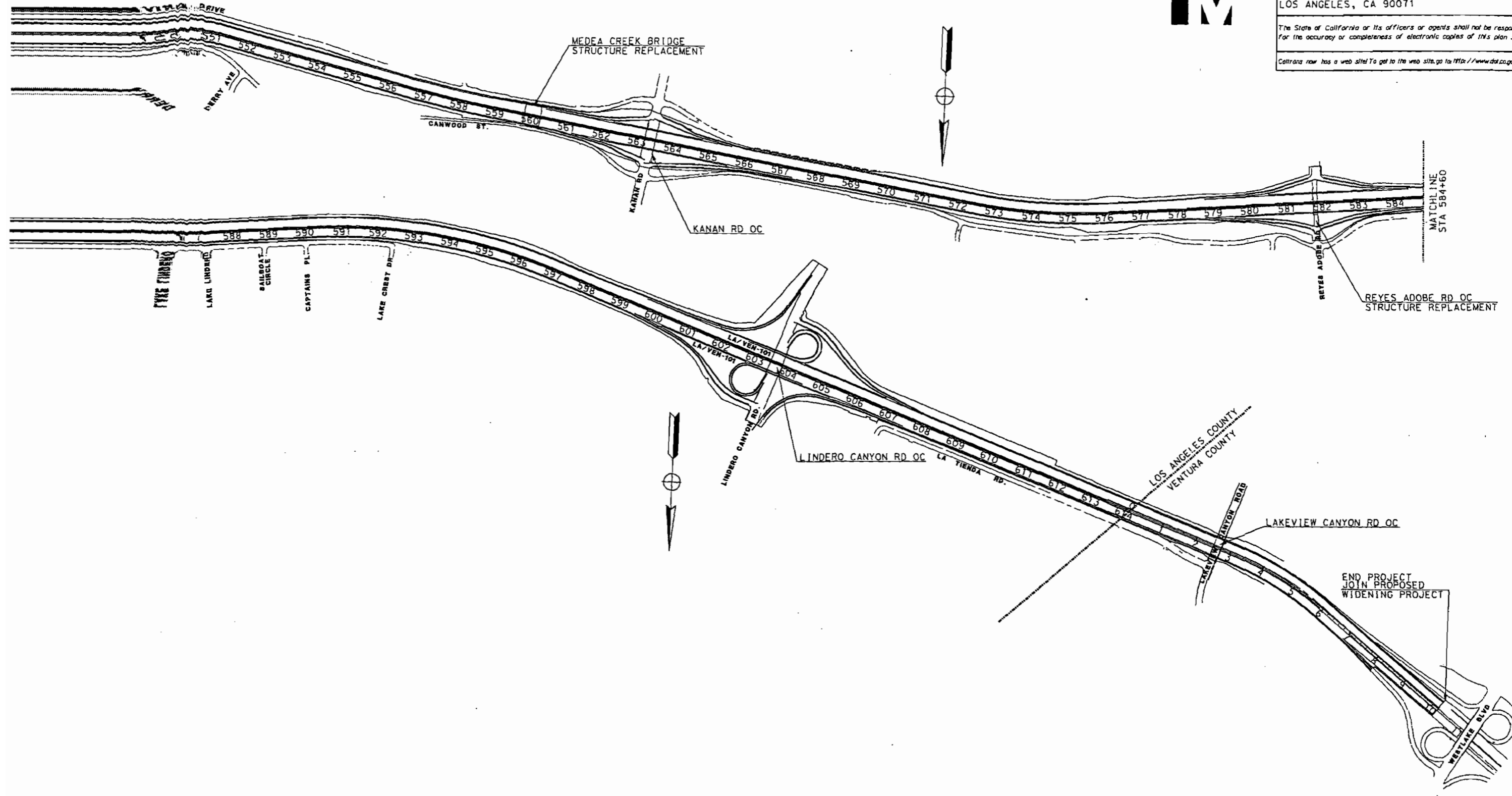


DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT
07	LA/VEN	101	KP 40.0/61.5 (L.A.) KP 0.0/1.0 (VEN.)

PARSONS BRINCKERHOFF  
444 SOUTH FLOWER STREET, SUITE 3700  
LOS ANGELES, CA 90071

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to <http://www.dot.ca.gov>



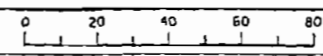
## ALTERNATIVE 2 NON-STANDARD LANE WIDTHS

1:10000

**B-3**

ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL  
SCALE IS IN MILLIMETERS



USERNAME => browne  
DGN FILE => ... \a1t2\_b3.dgn

CU

EA 24920K

LAST REVISION: DATE PLOTTED => 8/18/2005  
00-00-00 TIME PLOTTED => 10:05:42 AM  
USERNAME: => browne



# PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

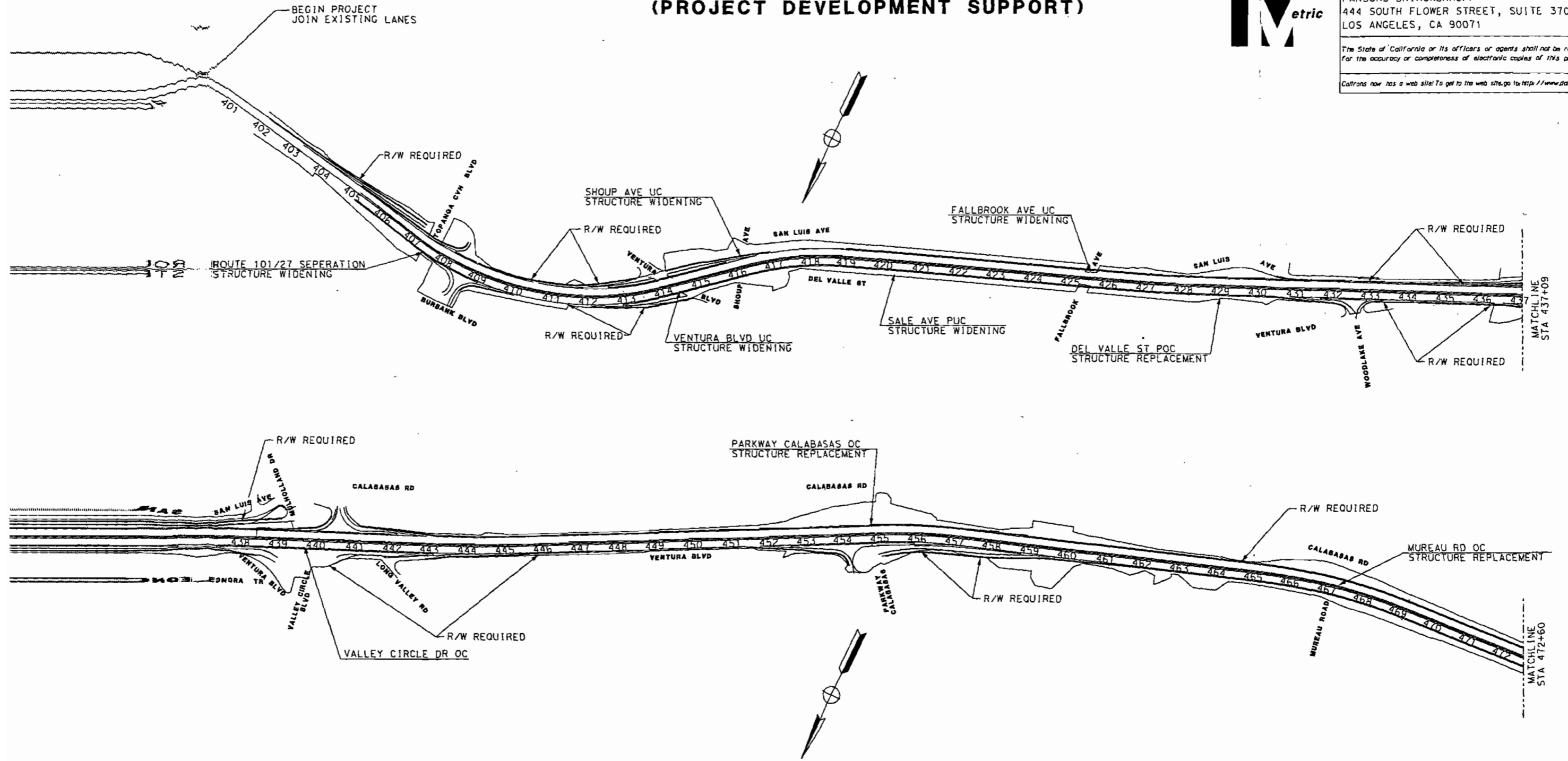


DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT
07	LA/VEN	101	KP 40.0/61.5 (L.A.) KP 0.0/1.0 (VEN.)

PARSONS BRINCKERHOFF  
444 SOUTH FLOWER STREET, SUITE 3700  
LOS ANGELES, CA 90071

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site go to <http://www.tsd.ca.gov>



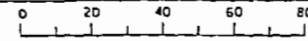
**ALTERNATIVE 3  
FULL STANDARD LANE WIDTHS**

1:10000

**B-4**

ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL  
SCALE IS IN MILLIMETERS



USERNAME => #USER  
DCN FILE => #REQUEST

CU

EA 24920K

USERNAME: => #USER

CASE REVISION: DATE PLOTTED => #DATE  
00-00-00 TIME PLOTTED => #TIME

# PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

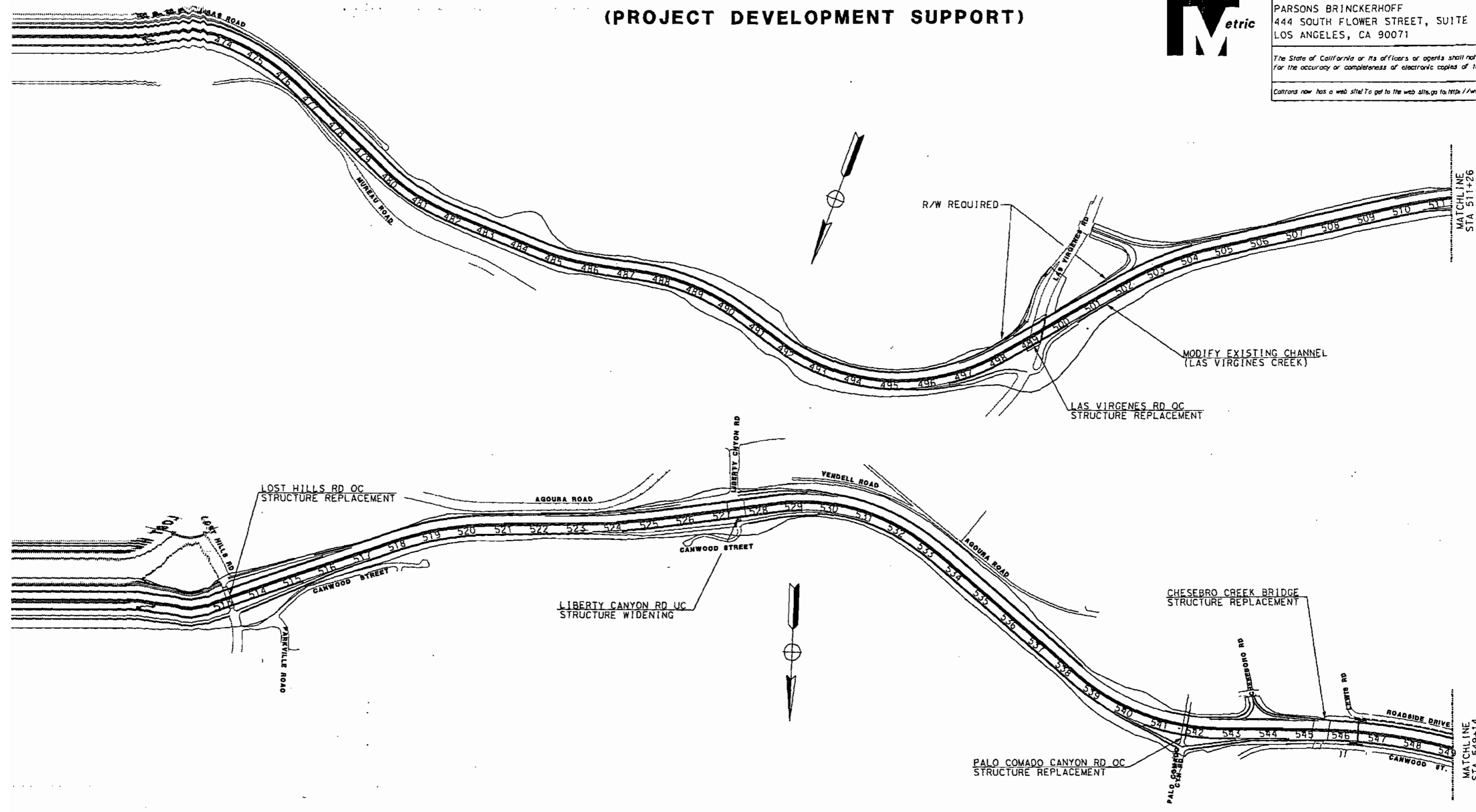


DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT
07	LA/VEN	101	KP 40.0/61.5 (L.A.) KP 0.0/1.0 (VEN.)

PARSONS BRINCKERHOFF  
444 SOUTH FLOWER STREET, SUITE 3700  
LOS ANGELES, CA 90071

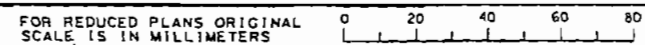
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

*Caltrans now has a web site! To get to the web site, go to: <http://www.dgs.ca.gov>*



**ALTERNATIVE 3  
FULL STANDARD LANE WIDTHS**  
1:10000  
**B-5**

ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE SHOWN



USERNAME => browne  
DGN FILE => ... \d13\_b2.dgn

CU EA 24920K

USERNAME: => browne

LAST REVISION: 00-00-00 DATE PLOTTED => 8/18/2005 TIME PLOTTED => 10:08:10 AM

# PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

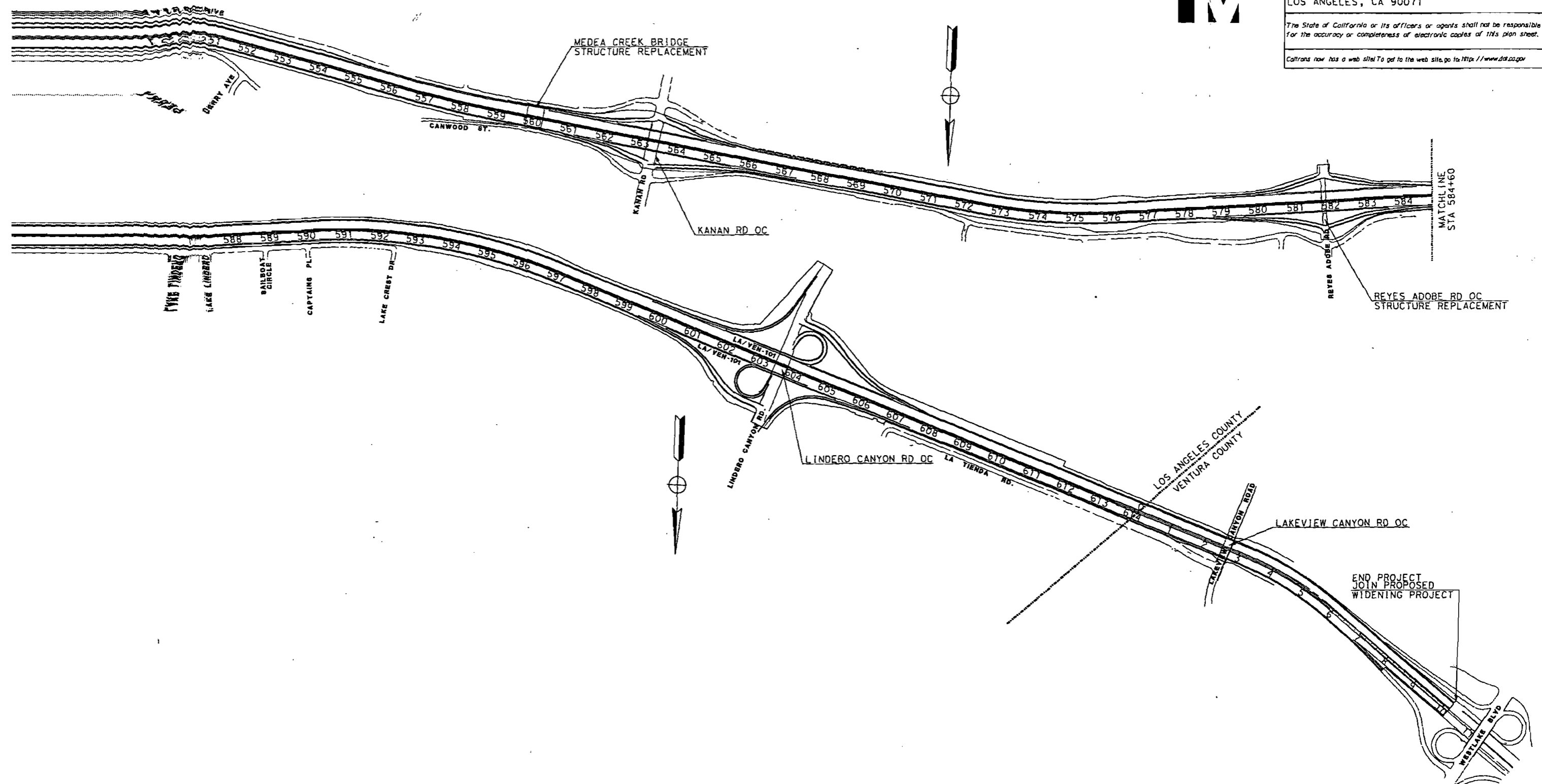


DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT
07	LA/VEN	101	KP 40.0/61.5 (L.A.) KP 0.0/1.0 (VEN.)

PARSONS BRINCKERHOFF  
444 SOUTH FLOWER STREET, SUITE 3700  
LOS ANGELES, CA 90071

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to <http://www.dot.ca.gov>

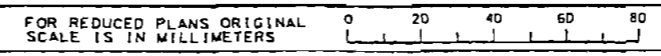


## STRIP MAP ALTERNATIVE 3 FULL STANDARD LANE WIDTHS

1:10000

**B-6**

ALL DIMENSIONS ARE IN METERS  
UNLESS OTHERWISE SHOWN



USERNAME => browne  
DGN FILE => ...\\a1f3\_b3.dgn

CU EA 24920K

USERNAME: => browne

LAST REVISION DATE PLOTTED => 8/18/2005  
00-00-00 TIME PLOTTED => 10:09:18 AM

**Attachment C**

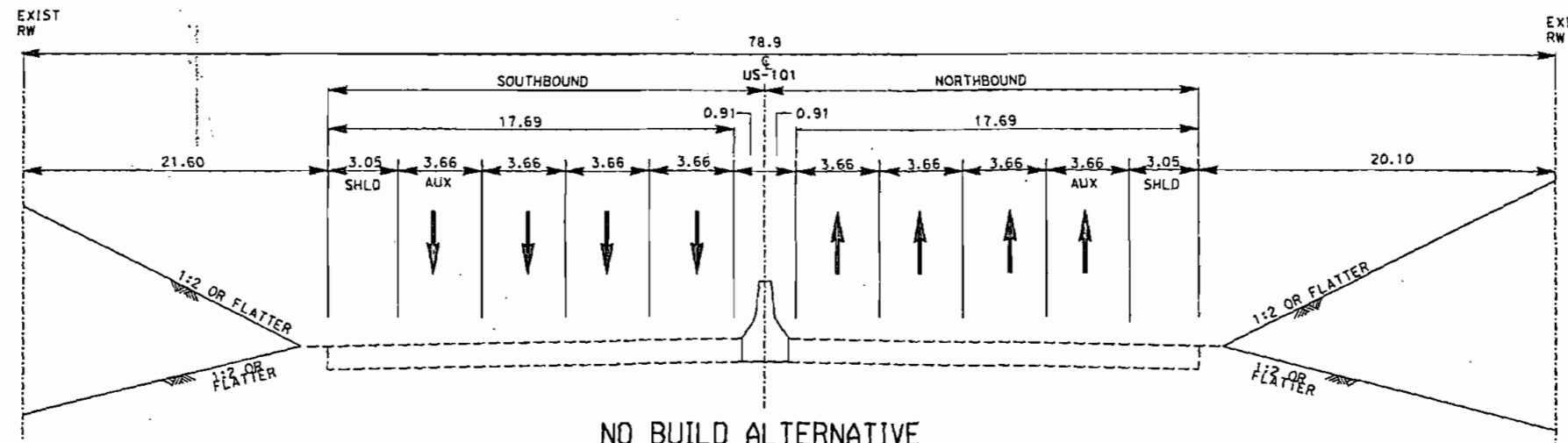
**Typical Cross Sections**



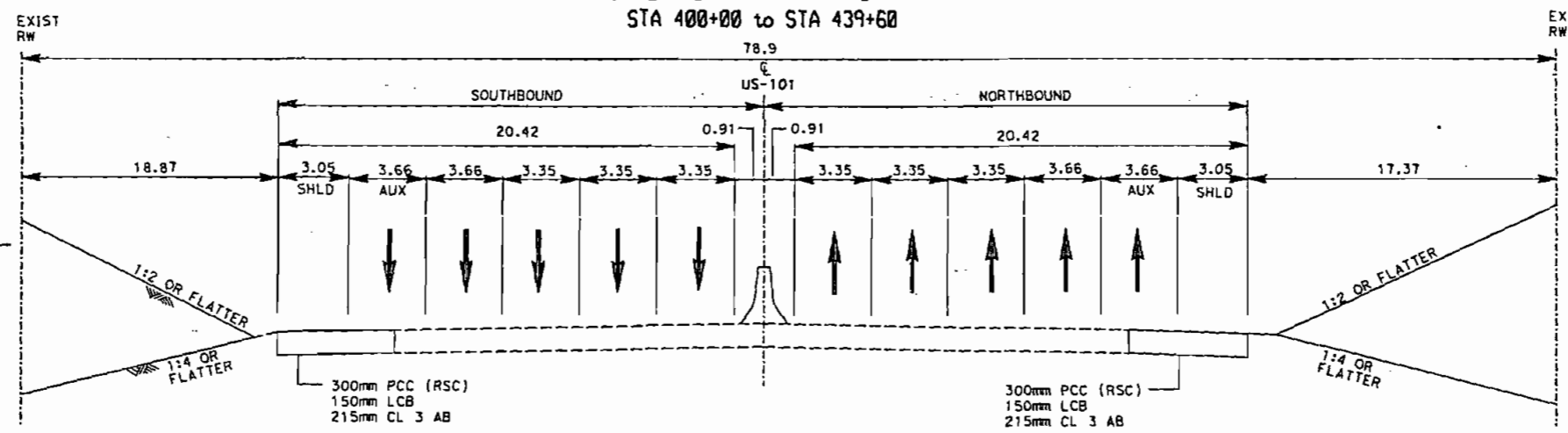
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	40.0/61.5(LA) 0.0/1.00 (Ven)		

**HNTB**  
1845 BUSINESS CENTER DRIVE  
SUITE 208  
SAN BERNARDINO, CALIFORNIA 92408

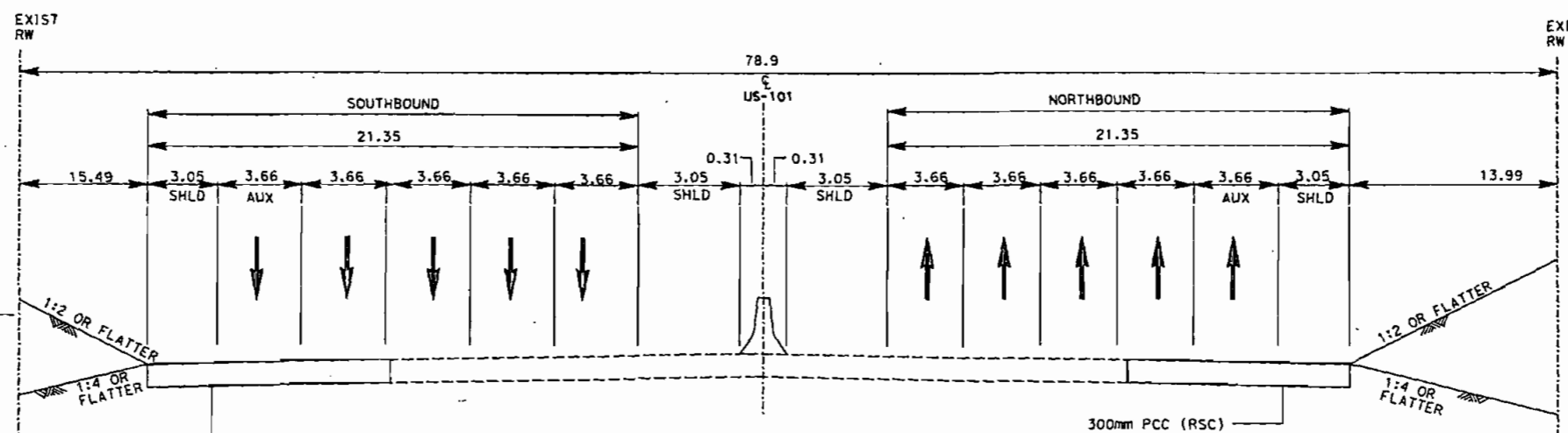
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



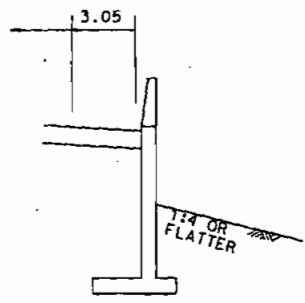
**NO BUILD ALTERNATIVE**  
Topanga Cyn Blvd to Valley Circle  
STA 400+00 to STA 439+60



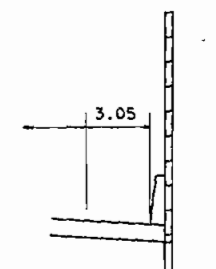
**NON-STANDARD ALTERNATIVE**  
Topanga Cyn Blvd to Valley Circle  
STA 400+00 to STA 439+60



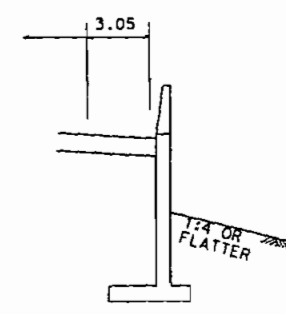
**FULL-STANDARD ALTERNATIVE**  
Topanga Cyn Blvd to Valley Circle  
STA 400+00 to STA 439+60



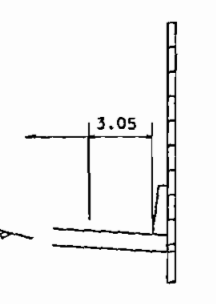
Retaining Wall Limits  
NB 417+30 to 425+10



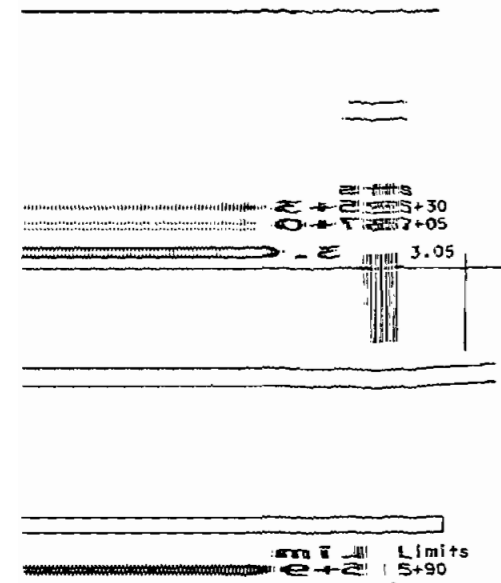
Soundwall Limits  
NB 409+80 to 413+00  
NB 426+20 to 428+60



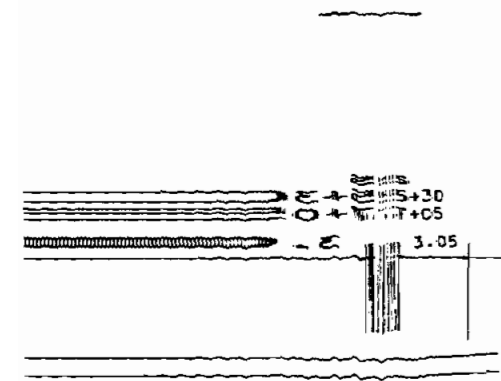
Retaining Wall Limits  
NB 415+00 to 415+90  
NB 417+20 to 425+10  
NB 425+65 to 426+35  
NB 429+05 to 430+50



Soundwall Limits  
NB 409+80 to 413+00  
NB 426+20 to 428+60



Limits  
S+90



Limits  
S+80

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

USERNAME => \*\*\*\*\*USER\*\*\*\*\*  
\*\*\*\*\*SDGNSPEC\*\*\*\*\*

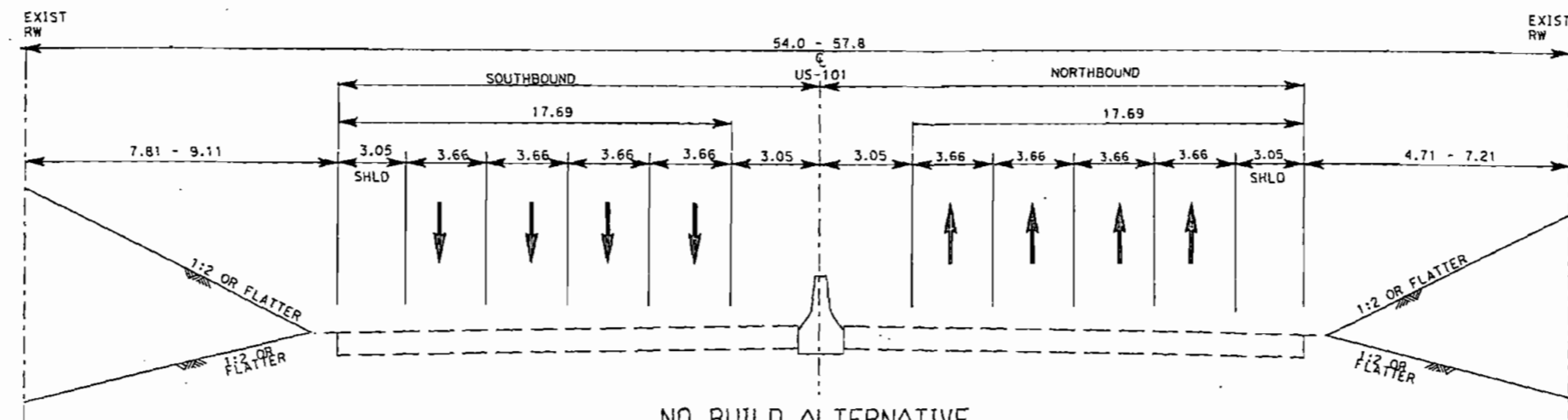
CU EA

**TYPICAL SECTION**  
NO SCALE X-1

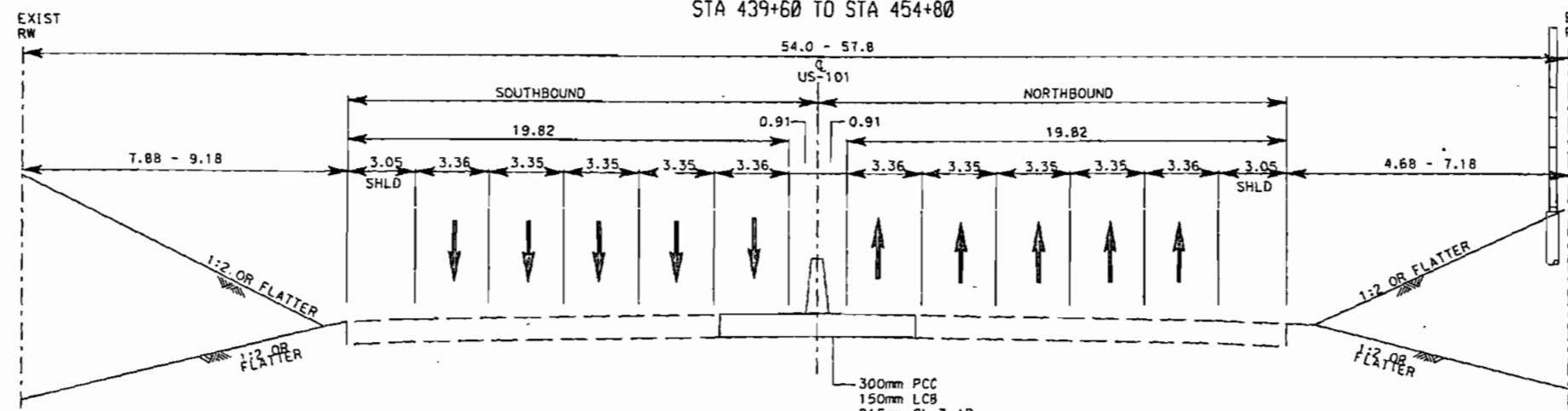
TIME PLOTTED => \*\*\*\*\*SYTIME\*\*\*\*\*  
LAST REVISION: 00-00-00

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	101	47.7451 (54.8)		

**HNTB**  
 1845 BUSINESS CENTER DRIVE  
 SUITE 208  
 SAN BERNARDINO, CALIFORNIA 92408  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

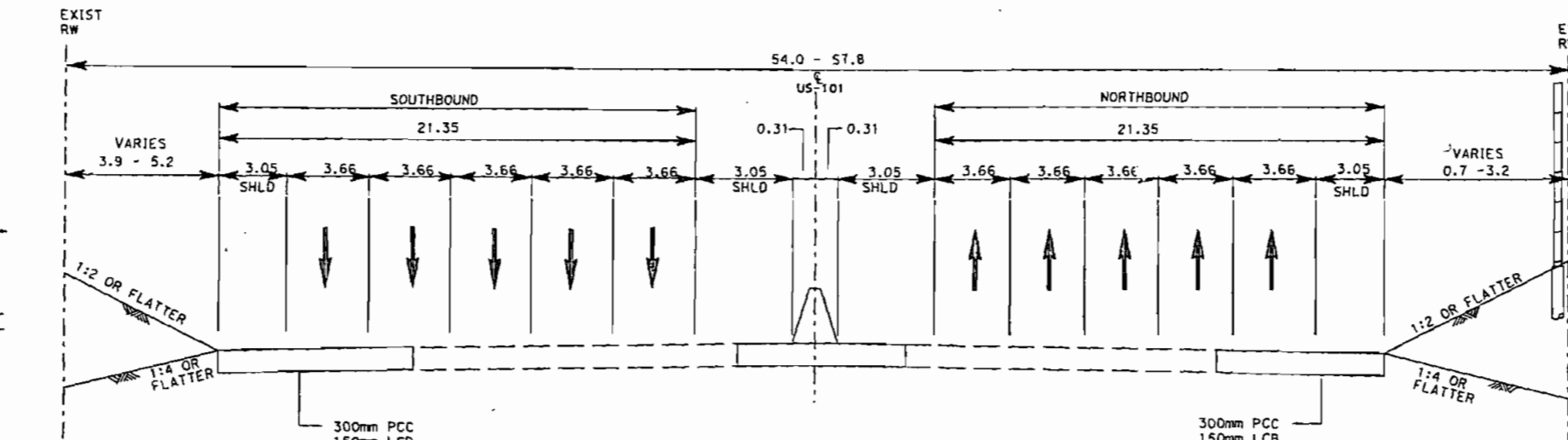


**NO BUILD ALTERNATIVE**  
 VALLEY CIRCLE TO PKWY CALABASAS  
 STA 439+60 TO STA 454+80



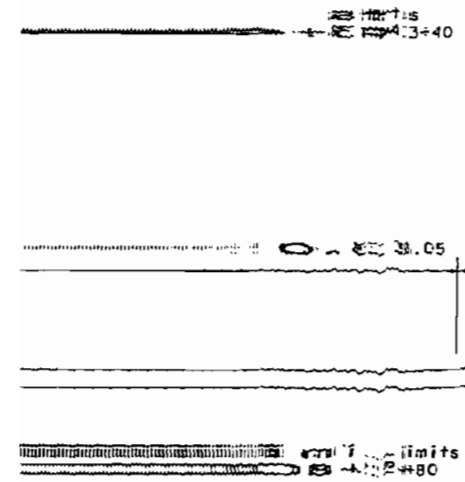
**NON-STANDARD ALTERNATIVE**  
 VALLEY CIRCLE TO PKWY CALABASAS  
 STA 439+60 TO STA 454+80

Soundwall Limits  
NB 442+30 to 447+70

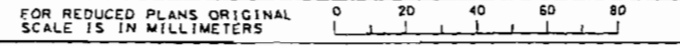


**FULL-STANDARD ALTERNATIVE**  
 VALLEY CIRCLE TO PKWY CALABASAS  
 STA 439+60 TO STA 454+80

Soundwall Limits  
NB 442+30 to 447+70



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN



USERNAME => \$\$\$\$\$\$USER\$\$\$\$\$\$  
 \$\$\$\$\$\$SDGNSPEC\$\$\$\$\$

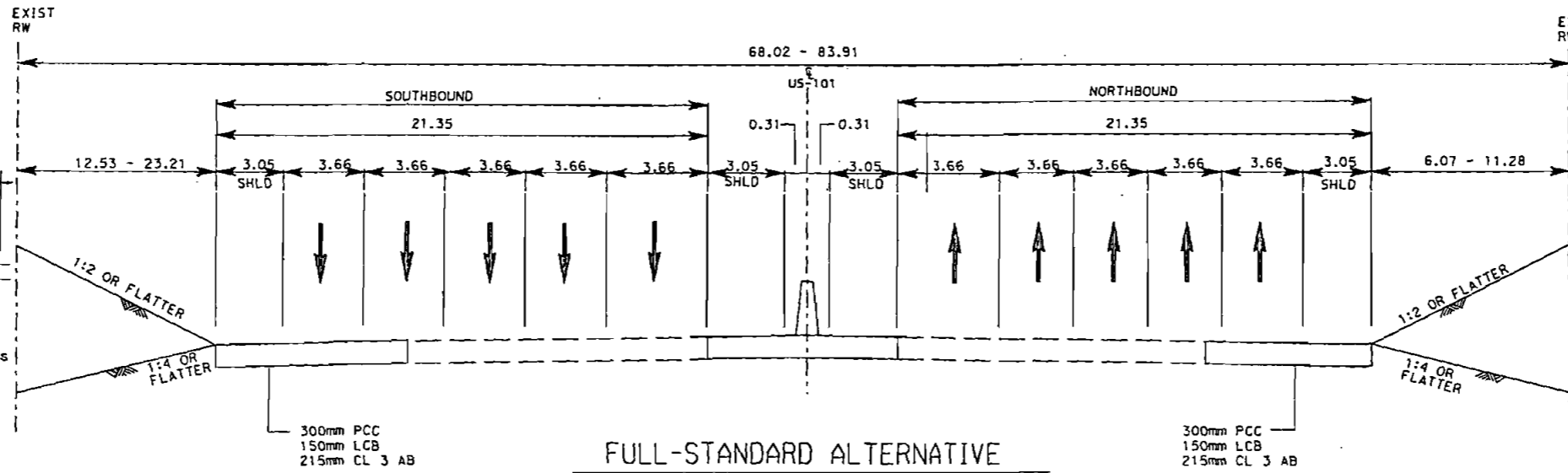
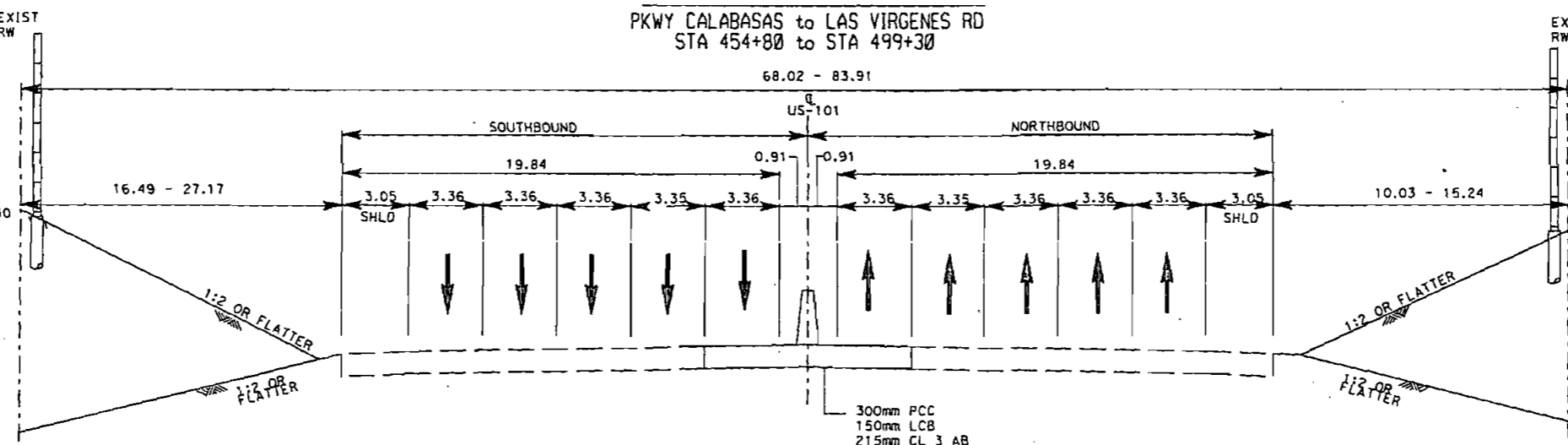
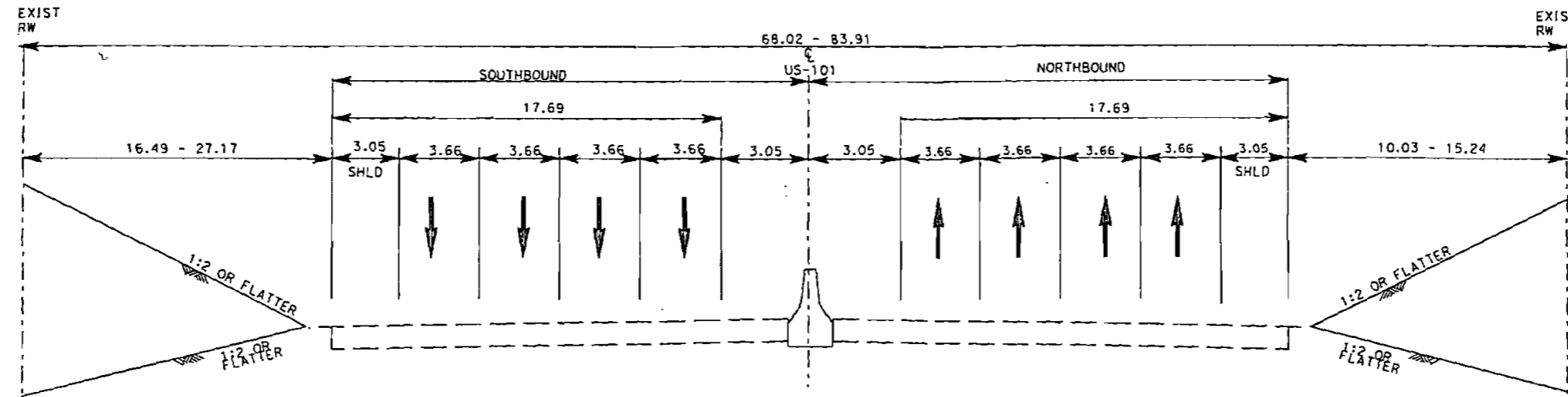
CU EA

**TYPICAL SECTION**  
 NO SCALE  
**X-2**

TIME PLOTTED => \$\$\$\$\$\$SYTIME\$\$\$\$\$\$  
 LAST REVISION 00-00-00

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	101	40.00 (2.12)		

**HNTB**  
 1845 BUSINESS CENTER DRIVE  
 SUITE 208  
 SAN BERNARDINO, CALIFORNIA 92408  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



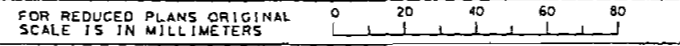
Soundwall Limits  
 NB 467+30 to 468+55

Soundwall Limits  
 NB 467+30 to 468+55

Retaining Wall Limits  
 NB 463+00 to 466+25  
 NB 467+35 to 468+65  
 NB 469+90 to 473+65  
 NB 474+30 to 476+10  
 NB 476+50 to 478+25  
 NB 482+60 to 484+25

**TYPICAL SECTION**  
 NO SCALE  
**X-3**

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN



FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

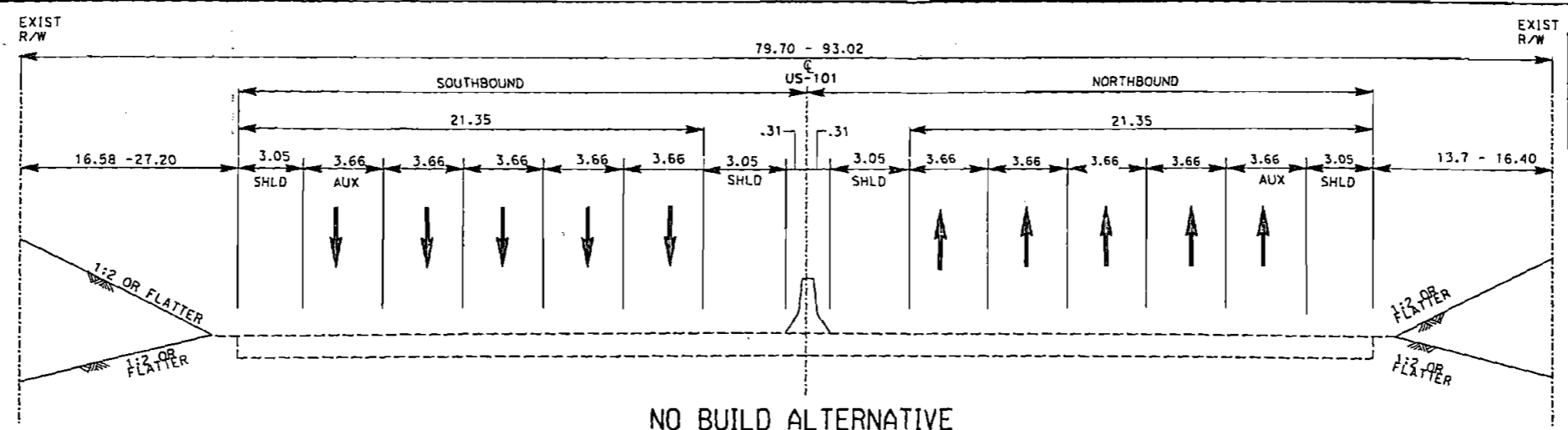
USERNAME => \$\$\$\$\$\$USER\$\$\$\$\$\$  
 \$\$\$\$\$\$SDGNSPEC\$\$\$\$\$\$\$\$

CU EA 24920K

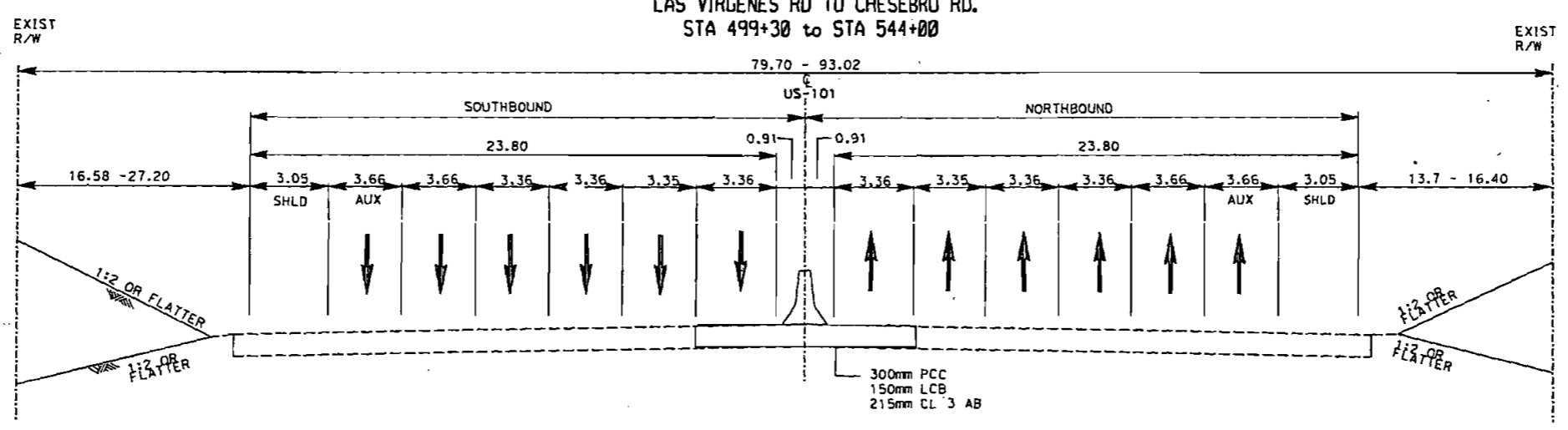
TIME PLOTTED => \$\$\$\$\$\$SYTIME\$\$\$\$\$\$  
 00-00-00

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	40.0/61.5(LA) 0.0/1.00 (Ven)		

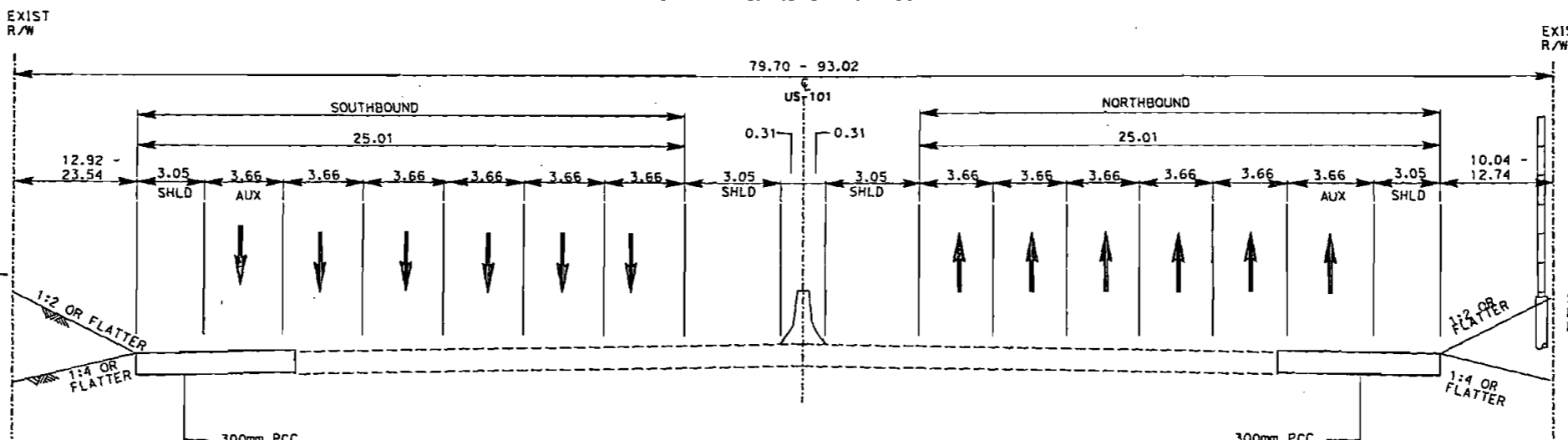
**Metric**  
**INTB**  
 1845 BUSINESS CENTER DRIVE  
 SUITE 208  
 SAN BERNARDINO, CALIFORNIA 92408  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



**NO BUILD ALTERNATIVE**  
 LAS VIRGENES RD TO CHESEBRO RD.  
 STA 499+30 to STA 544+00



**NON-STANDARD ALTERNATIVE**  
 LAS VIRGENES RD TO CHESEBRO RD.  
 STA 499+30 to STA 544+00

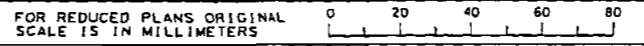


**FULL-STANDARD ALTERNATIVE**  
 LAS VIRGENES RD TO CHESEBRO RD.  
 STA 499+30 to STA 544+00

Soundwall Limits  
 NB 513+40 to 520+70  
 NB 524+00 to 527+20

Soundwall Limits  
 NB 535+30

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN



USERNAME => \$\$\$\$\$\$USER\$\$\$\$\$\$  
 \$\$\$\$\$\$\$DGN\$SPEC\$\$\$\$\$\$\$\$\$\$

CU EA 24920K

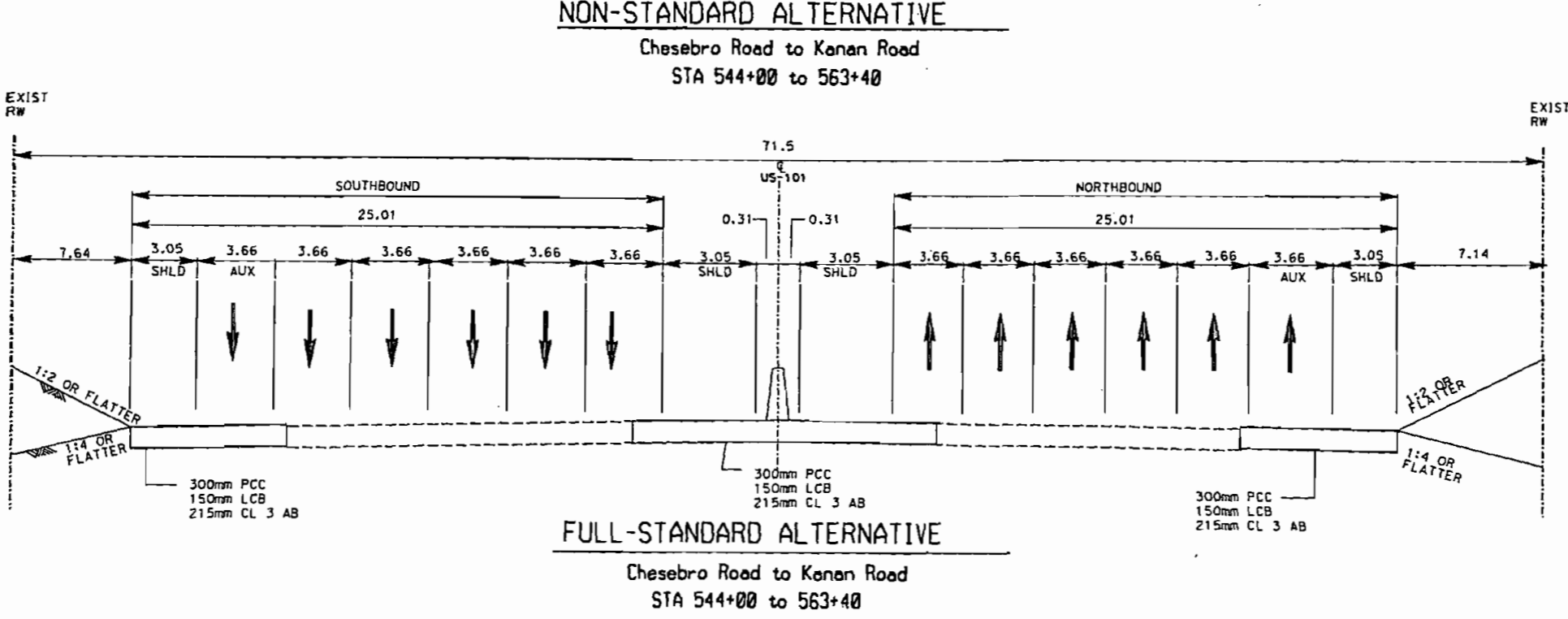
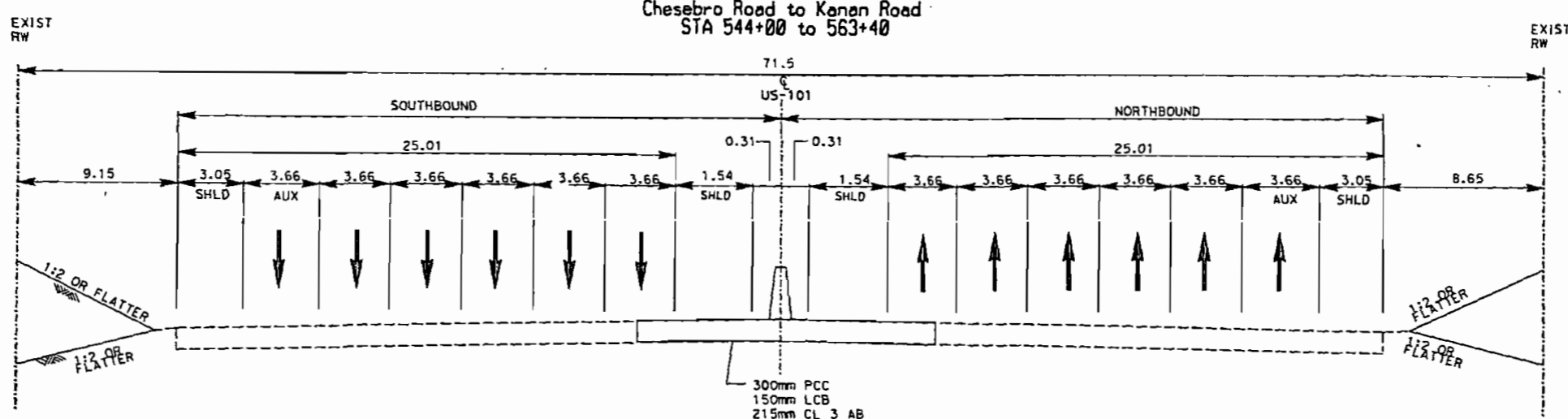
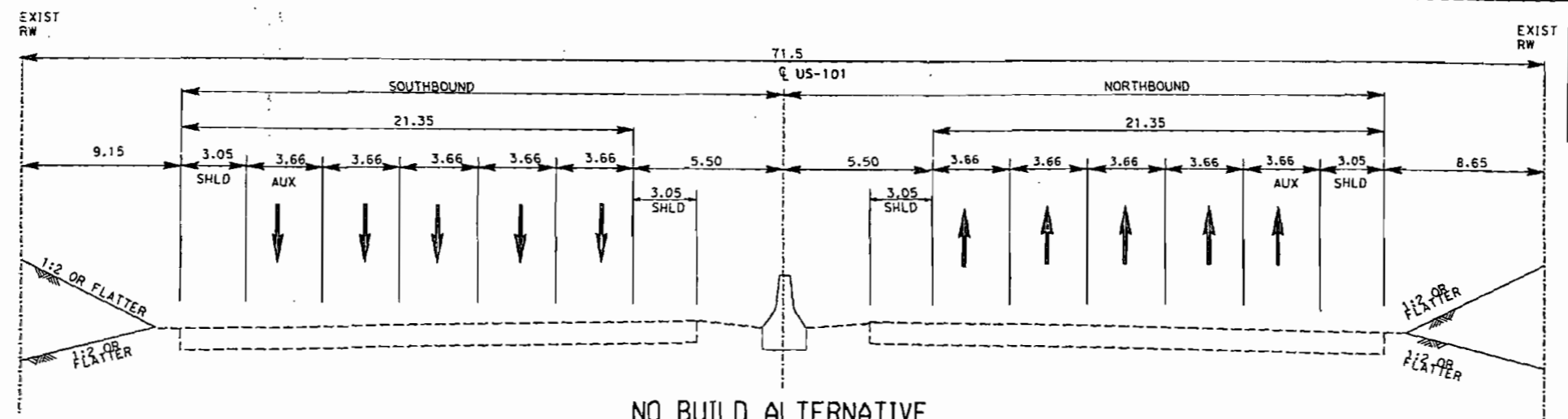
**TYPICAL SECTION**  
 NO SCALE X-4

TIME PLOTTED => \$\$\$\$\$\$SYTIME\$\$\$\$\$\$  
 LAST REVISION 00-00-00



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	101	40.0/61.5 (LA) 0.0/11.00 (Ven)		

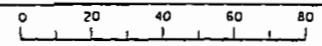
**HNTB**  
 1845 BUSINESS CENTER DRIVE  
 SUITE 208  
 SAN BERNARDINO, CALIFORNIA 92408



**TYPICAL SECTION**  
 NO SCALE X-5

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS



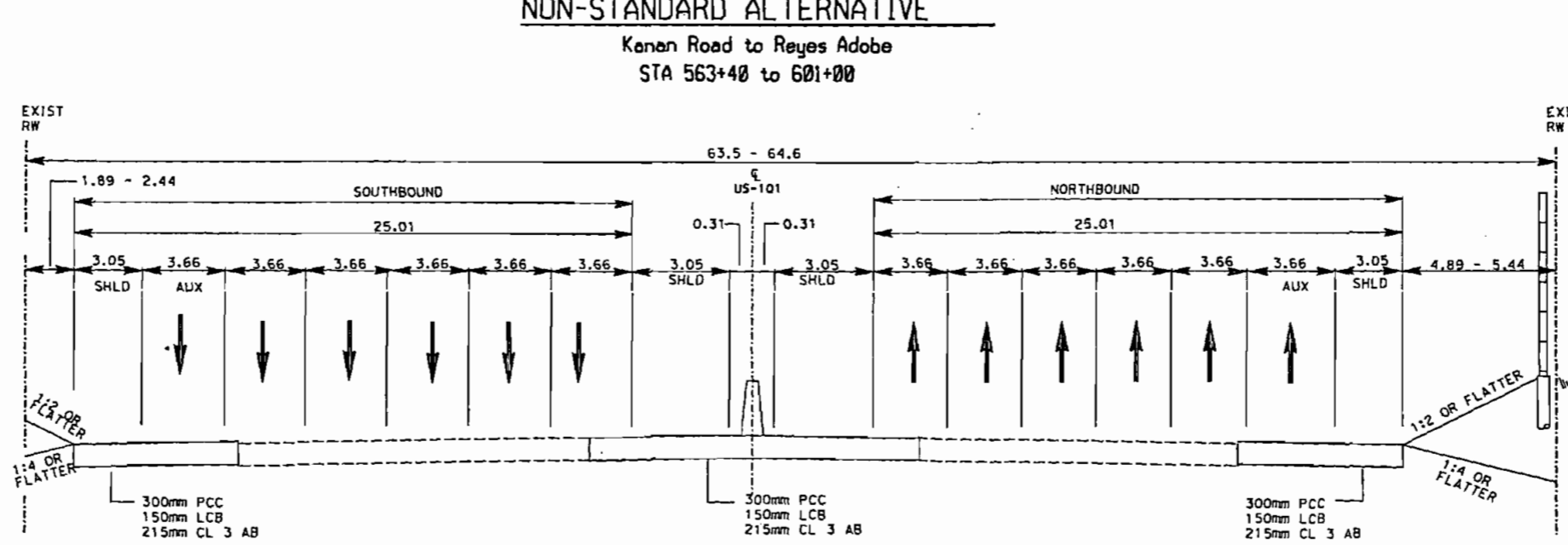
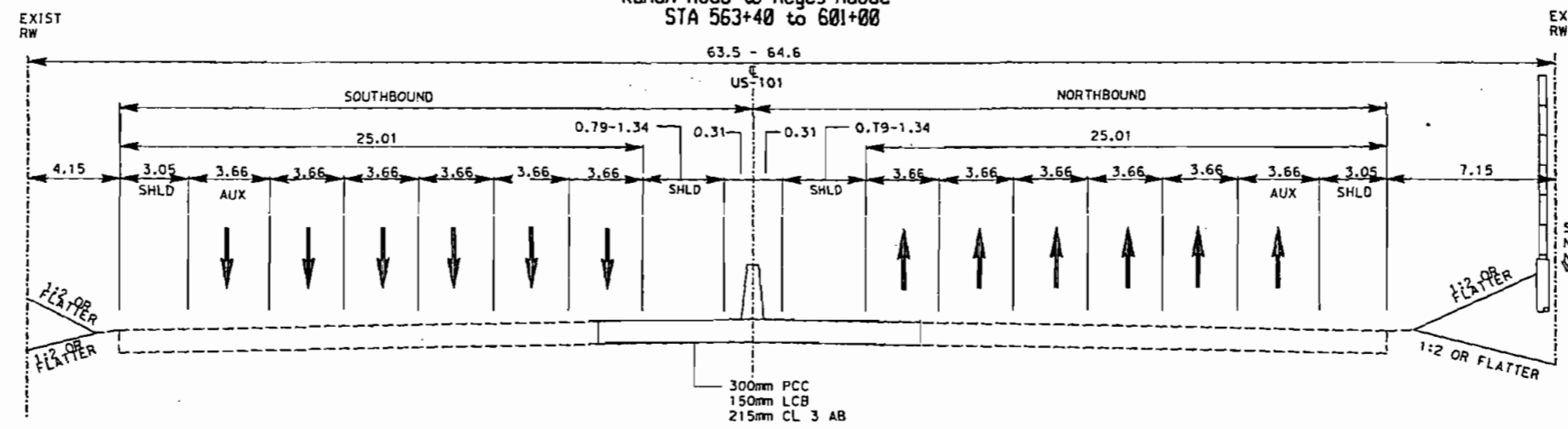
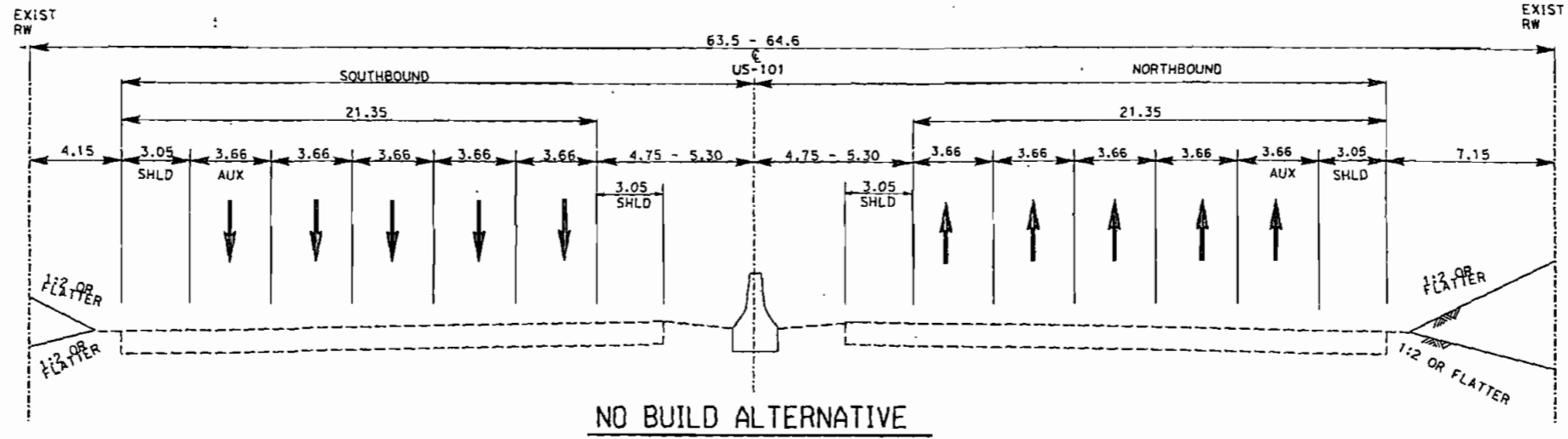
USERNAME => sssssusersssss  
 ssssssssdgnspecsssssssss

CU EA

LAST REVISION 00-00-00 TIME PLOTTED => sssssSYTIMEsssss

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	40.0761.5(LA) 0.0/1.00 (Ver)		

**Metric**  
**HNTR**  
 1845 BUSINESS CENTER DRIVE  
 SUITE 208  
 SAN BERNARDINO, CALIFORNIA 92408  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



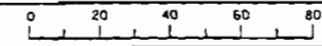
Soundwall Limits  
NB 567+90 to 581+60  
NB 587+40 to 588+60

Soundwall Limits  
NB 567+90 to 581+60  
NB 587+40 to 588+60

**TYPICAL SECTION**

NO SCALE **X-6**

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN  
FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS



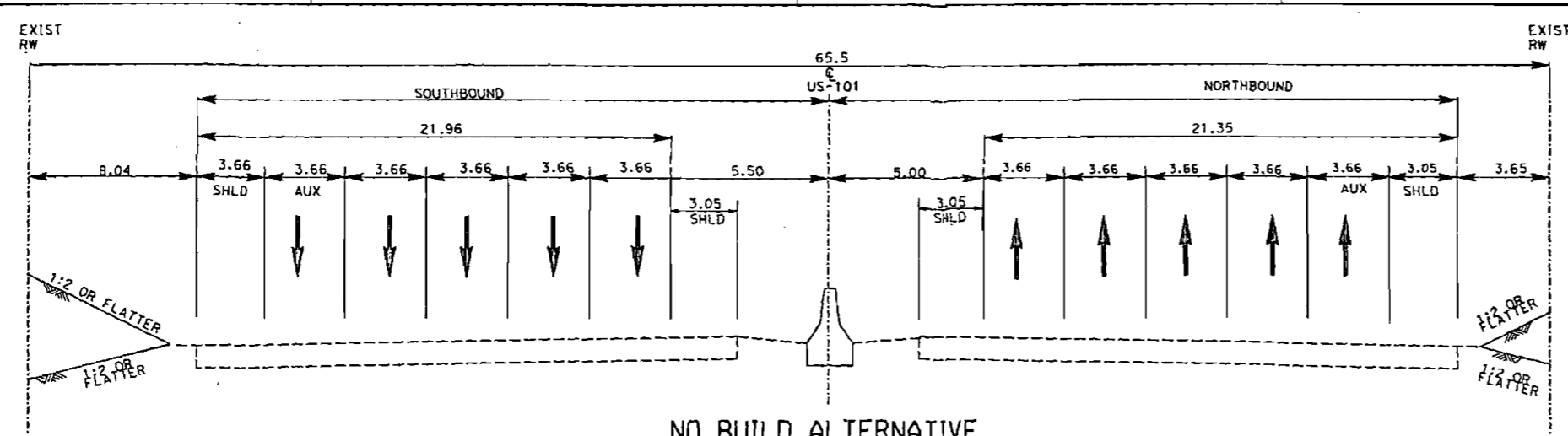
USERNAME => \*\*\*\*\*USER\*\*\*\*\*  
\*\*\*\*\*SOGN\*\*\*\*\*

CU EA

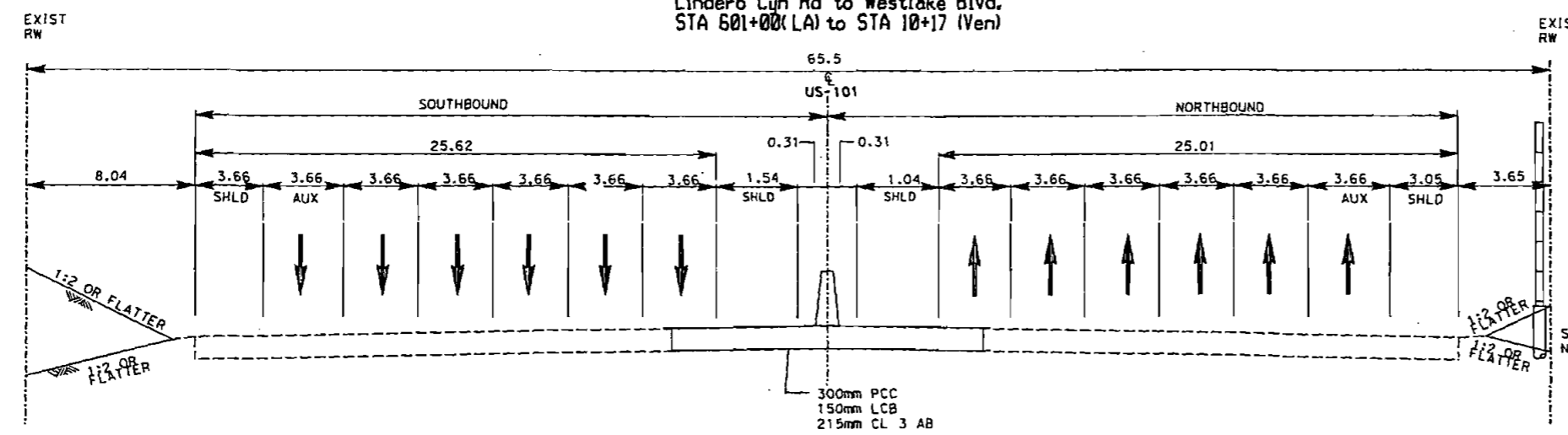
TIME PLOTTED => \*\*\*\*\*  
LAST REVISION  
00-00-00

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**

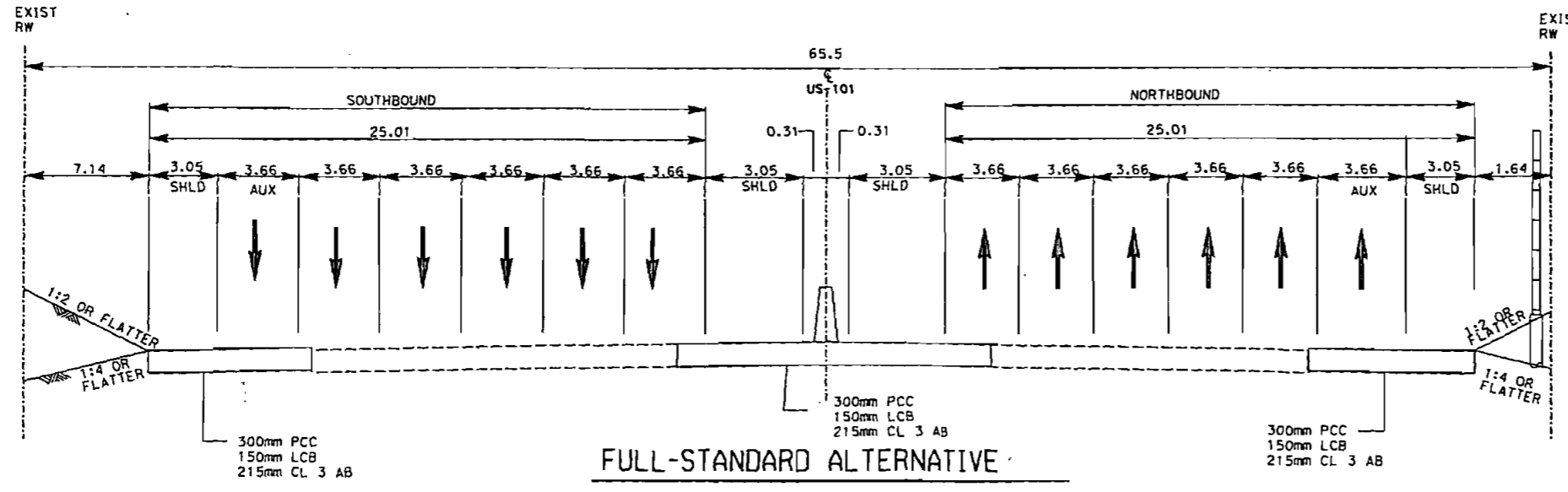
OVERSIGHT ENGINEER  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 DATE  
 REVISED BY  
 DATE REVISED



**NO BUILD ALTERNATIVE**  
 Lindero Cyn Rd to Westlake Blvd.  
 STA 601+00(LA) to STA 10+17 (Ven)



**NON-STANDARD ALTERNATIVE**  
 Lindero Cyn Rd to Westlake Blvd.  
 STA 601+00(LA) to STA 10+17 (Ven)



**FULL-STANDARD ALTERNATIVE**  
 Lindero Cyn Rd to Westlake Blvd.  
 STA 601+00(LA) to STA 10+17 (Ven)

**Caltrans**  
**Metric**

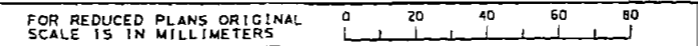
DIST COUNTY  
 07 LA

**HNTB**  
 1845 BUSINESS CENTER  
 SUITE 208  
 SAN BERNARDINO COUNTY  
 THE STATE OF CALIFORNIA  
 FOR THE OCCASION OF CONTRACTING

Soundwall Limits  
 NB 606+50 to 613+45

Soundwall Limits  
 NB 606+50 to 613+45

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN



USERNAME => #####USER#####  
 #####\$DGN\$SPEC#####

CU

**Attachment D**

**Cost Estimates**



## Project Study Report – Project Development Support Cost Estimate

District-County-Route 07-LA/Ven-101  
 KP(PM) 40.0/61.5 (24.9/38.2) (LA)  
0.0/1.0 (0.0/0.6) (Ven)  
 EA 24920K  
 Program Code 20.xx.075.613

### PROJECT DESCRIPTION:

Limits: Los Angeles and Ventura Counties on Route 101 from vicinity of Canoga Avenue to vicinity of Los Angeles/Ventura County Line.

Proposed Improvement (Scope): The project will add one mixed-flow lane in each direction to the current basic section of four lanes in each direction. Improvement includes structure widening and replacements, retaining walls and soundwalls.

Alternative: Alternative 2 – Non-Standard Lane Widths Alternative

### SUMMARY OF PROJECT COST ESTIMATE

(in 2010 \$)

TOTAL ROADWAY ITEMS	\$	<u>143 M</u>
TOTAL STRUCTURE ITEMS	\$	<u>40 M</u>
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$	<u>28 M</u>
 SUBTOTAL CONSTRUCTION COSTS	\$	<u>211 M</u>
 TOTAL RIGHT OF WAY ITEMS	\$	<u>4 M</u>
 TOTAL CONTINGENCY COST (25% of Total)	\$	<u>54 M</u>
 TOTAL PROJECT CAPITAL OUTLAY COSTS	\$	<u>269 M</u>

For range, use \$269M ±10%. Use \$242M to \$296M.

Note: The summary cost estimates above have been rounded up to the nearest one million dollars.

I. ROADWAY ITEMS

	<u>Average Cost per Lane KM</u>	<u>Number of KMs</u>	<u>Total Cost</u>
Total Cost of Lane KMs	\$ 3,162,000	45.0	\$142.3 M

Explanation: The average cost per lane KM includes the cost of the new pavement section, pavement demolition, striping, signage, excavation and backfill, retaining wall (concrete, steel, structural excavation, and structural backfill), median barrier, and erosion control. The costs for earthwork and pavement were based on the latest Caltrans Contract Cost Data District 7. Other items added to the roadway costs include replacement of the CCTV Project (EA 12088), estimated cost to implement the TMP, and interchange improvements. Unit cost and quantities for pavement, roadway, excavation, backfill, retaining wall, and pavement demolition were determined. The total costs were divided by the total alternative Lane KM. Finally the costs were escalated to the year 2010 using a 2.2 percent per year escalation. See Table 1 in this attachment for itemized quantities and roadway costs in 2005 and 2010 dollars.

II. STRUCTURES ITEMS

PM	KP	Bridge No.	Bridge Name	Demo (\$)	Retrofit (\$)	New (\$)	Widen (\$)	Total (\$)
25.34	40.54	53 1064	Rte 101/27 SEP	\$15,050	\$1,641,735	\$0	\$906,100	\$2,562,885
25.80	41.19	53 1065	Ventura Blvd UC	\$18,490	\$1,691,995	\$0	\$1,152,600	\$2,863,085
25.88	41.65	53 1095	Shoup Ave. UC	\$8,170	\$440,450	\$0	\$558,000	\$1,006,620
26.45	42.57	53 1066	Fallbrook Ave UC	\$10,330	\$1,602,398	\$0	\$896,000	\$2,508,728
26.68	42.69	53 1162	Del Valle St POC	\$37,215	\$0	\$224,900	\$0	\$262,115
28.29	45.53	53 1680	Parkway Calabasas OC Widening & Extension (formerly Craftsman Rd. OC)	\$411,400	\$0	\$2,295,600	\$0	\$2,707,000
29.06	46.50	53 1681	Mureau Road OC	\$161,975	\$0	\$1,380,400	\$0	\$1,542,375
31.10	50.05	53 1442	Las Virgenes Rd. OC	\$554,295	\$0	\$7,330,100	\$0	\$7,884,395
31.91	51.35	53 1730	Lost Hills Rd. OC	\$160,590	\$0	\$1,269,900	\$0	\$1,430,490
32.78	52.45	53 1731	Liberty Canyon Rd UC	\$21,070	\$427,040	\$0	\$741,200	\$1,189,310
33.69	54.22	53 1678	Palo Comado Canyon Rd. OC (formerly Chesebro Rd. OC)	\$188,925	\$0	\$1,659,200	\$0	\$1,848,125
33.91	54.26	53 755	Chesebro Creek	\$472,785	\$2,984,000	\$0	\$0	\$3,456,785
34.82	55.71	53 2	Medea Creek	\$571,150	\$3,866,000	\$0	\$0	\$4,437,150
36.18	57.88	53 1726	Reyes Adobe Rd OC (Agoura Road OC)	\$175,470	\$0	\$1,450,100	\$0	\$1,625,570
Total=				\$2,806,915	\$12,653,618	\$15,610,200	\$4,253,900	\$35,324,633

BRIDGE STRUCTURE ITEMS	\$ 32,600,000
RETAINING WALL STRUCTURE ITEMS	\$ 0
STRUCTURE DEMOLITION/REMOVAL	\$ 2,900,000
TOTAL STRUCTURE ITEMS (Sum of Total Cost for Structures in 2005\$)	<u>\$ 35,500,000</u>
TOTAL STRUCTURE ITEMS (Escalated Structure Sum in 2010\$)	<u>\$ 39,600,000</u>

Bridge structure costs were based on the structural section of the Caltrans Comparative Bridge Costs, 2004. Quantities estimated were widening, demolition and replacement. The costs were escalated to the year 2010 (planned program year) using a 2.2 percent per year escalation.

III. ENVIRONMENTAL MITIGATION

A. Water Quality and Hydrology, Wetlands, including Floodplain Encroachment	\$ <u>17,400,000</u>
B. Aesthetics	\$ <u>500,000</u>
C. Biological Assessment	\$ <u>1,200,000</u>
D. Air Quality	\$ <u>500,000</u>
E. Hazardous Materials	\$ <u>5,000,000</u>
F. Cultural Resources, including Archeological, Paleontological, Cultural, or Historic Resources	\$ <u>200,000</u>

- \*. Geotechnical mitigation measures cannot be identified at this time.
- \*. Traffic mitigation measures cannot be identified at this time
- \*. The cost of the construction of soundwalls is included in the construction costs. No other noise mitigation is proposed at this time.
- \*. When escalated to the planned program year for the project (2010), a 2.2 percent per year is used.

TOTAL ENVIRONMENTAL MITIGATION COSTS (Current Value)	\$24,800,000
TOTAL ENVIRONMENTAL MITIGATION COSTS (Escalated Value)	\$ <u>27,650,000</u>
PLANNED PROGRAM YEAR FOR THE PROJECT (Date to which values are escalated)	<u>2010</u>



IV. RIGHT OF WAY ITEMS

A. Acquisition, including excess lands, title & escrow; damages to remainder(s) and Goodwill	\$ <u>838,700</u>
B. Utility Relocation (State share)	\$ <u>1,911,000</u>
C. Relocation Assistance	\$ <u>0</u>
D. Clearance/Demolition	\$ <u>50,000</u>
E. Title and Escrow	\$ <u>37,300</u>

TOTAL RIGHT OF WAY ITEMS \$2,837,000  
 (Current Value)

TOTAL RIGHT OF WAY ITEMS \$3,297,500  
 (Escalated Value)

Anticipated Date of Right of Way Certification 2010  
 (Date to which values are escalated)

The right of way items account for partial takes of 7 parcels. See Right-of-Way Data Sheets for assumptions made in estimating the total right-of-way cost. Utility relocation costs were derived from a cursory review of the available as-built plans and current topographic data to quantify all existing storm drain, water, gas, and electrical utilities. Best judgment was used to estimate the extent of the utility relocation necessary. The costs were adjusted to the year 2010 using a 5 percent per year for commercial and 10% per year for residential properties escalations.

TABLE 1: Quantities & Cost Estimate - Alternative 2

September 1, 2005

From the Vicinity of Canoga Avenue to Vicinity of the LA/Ventura County Line

	Unit	Quantity	Cost/unit	Year 2005 \$	Year 2010 \$	
<b>1.0 ROADWAY</b>						
1.1	PCC	m <sup>3</sup>	52,700	\$ 300	\$ 15,810,000	\$ 17,630,000
1.2	RSC	m <sup>3</sup>	10,200	\$ 1,200	\$ 12,240,000	\$ 13,650,000
1.3	LCB	m <sup>3</sup>	31,440	\$ 100	\$ 3,144,000	\$ 3,510,000
1.4	AB (Class 3)	m <sup>3</sup>	45,100	\$ 45	\$ 2,029,500	\$ 2,260,000
1.5	Drainage	lump sum			\$ 4,983,500	\$ 5,560,000
1.6	Electrical	lump sum			\$ 2,325,600	\$ 2,590,000
1.7	Traffic Control	lump sum			\$ 4,651,300	\$ 5,190,000
1.8	Staging Construction	lump sum			\$ 5,315,800	\$ 5,930,000
1.9	Concrete Barrier	M	15,600	\$ 120	\$ 1,872,000	\$ 2,090,000
1.10	Demolition	lump sum			\$ 2,325,600	\$ 2,590,000
1.11	EARTHWORK	m <sup>3</sup>	100,000	\$ 50	\$ 5,000,000	\$ 5,570,000
<b>2.0 SPECIALTY ITEMS</b>						
2.1	Retaining Walls	m <sup>2</sup>	2,763	\$ 500	\$ 1,381,500	\$ 1,540,000
2.2	Las Virgenes Creek/ RCB	lump sum			\$ -	\$ -
2.3	Sound Walls	M	6,395	\$ 1,900	\$ 12,150,500	\$ 13,550,000
2.4	Glare Screen	lump sum			\$ 1,200,000	\$ 1,340,000
3.0	RAMPS	lump sum			\$ 23,750,000	\$ 26,480,000
<b>4.0 CCTV/ITS</b>						
4.1	CCTV/Fiber Optics	lump sum			\$ 12,500,000	\$ 13,940,000
4.2	ITS-Traffic Signals	lump sum			\$ 150,000	\$ 170,000
5.0	TMP	(see Attachment K)			\$ 5,185,500	\$ 5,780,000
		ROADWAY CONTINGENCY (10%)			\$ 11,601,480	\$ 12,937,000
		<u>ROADWAY SUBTOTAL</u>			\$ 127,616,280	\$ 142,307,000
<b>6.0 STRUCTURE</b>						
6.1	Widening/Reconstruction	(see Attachment F Table 1)			\$ 32,600,000	\$ 36,350,000
6.2	Demolition	(see Attachment F Table 1)			\$ 2,900,000	\$ 3,230,000
		<u>STRUCTURAL SUBTOTAL</u>			\$ 35,500,000	\$ 39,600,000
					\$ 163,116,280	\$ 181,907,000
<b>TOTAL ESTIMATED COST</b>					\$ 163,000,000	\$ 182,000,000



## Project Study Report – Project Development Support Cost Estimate

District-County-Route 07-LA/Ven-101  
 KP(PM) 40.0/61.5 (24.9/38.2) (LA)  
0.0/1.0 (0.0/0.6) (Ven)  
 EA 24920K  
 Program Code 20.xx.075.613

### PROJECT DESCRIPTION:

Limits: Los Angeles and Ventura Counties on Route 101 from vicinity of Canoga Avenue to vicinity of Los Angeles/Ventura County Line.

Proposed Improvement (Scope): The project will add one mixed-flow lane in each direction to the current basic section of four lanes in each direction. Improvement includes structure widening, and replacements, retaining walls and soundwalls.

Alternative: Alternative 3 – Full Standard Lane Widths Alternative

### SUMMARY OF PROJECT COST ESTIMATE

(in 2010 \$)

TOTAL ROADWAY ITEMS	\$	<u>283 M</u>
TOTAL STRUCTURE ITEMS	\$	<u>40 M</u>
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$	<u>30 M</u>
SUBTOTAL CONSTRUCTION COSTS	\$	<u>353 M</u>
TOTAL RIGHT OF WAY ITEMS	\$	<u>27 M</u>
TOTAL CONTINGENCY COST (25% of Total)	\$	<u>95 M</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$	<u>475 M</u>

**For range, use \$475M ±10%. Use \$428M to \$523M.**

Note: The summary cost estimates above have been rounded up to the nearest one million dollars.

I. ROADWAY ITEMS

	<u>Average Cost per Lane KM</u>	<u>Number of KMs</u>	<u>Total Cost</u>
Total Cost of Lane KMs	\$ 6,278,000	45.0	\$282.5 M

Explanation: The average cost per lane KM includes the cost of the new pavement section, pavement demolition, striping, signage, excavation and backfill, retaining wall (concrete, steel, structural excavation, and structural backfill), median barrier, and erosion control. The costs for earthwork and pavement were based on the latest Caltrans Contract Cost Data District 7. Other items added to the roadway costs include replacement of the CCTV Project (EA 12088), estimated cost to implement the TMP, and interchange improvements. Unit cost and quantities for pavement, roadway, excavation, backfill, retaining wall, and pavement demolition were determined. The total costs were divided by the total alternative Lane KM. Finally the costs were escalated to the year 2010 using a 2.2 percent per year escalation. See Table 1 in this attachment for itemized quantities and roadway costs in 2005 and 2010 dollars.

II. STRUCTURES ITEMS

PM	KP	Bridge No.	Bridge Name	Demo (\$)	Retrofit (\$)	New (\$)	Widen (\$)	Total (\$)
25.34	40.54	53 1064	Rte 101/27 SEP	\$15,050	\$1,641,735	\$0	\$906,100	\$2,562,885
25.80	41.19	53 1065	Ventura Blvd UC	\$18,490	\$1,691,995	\$0	\$1,152,600	\$2,863,085
25.88	41.65	53 1095	Shoup Ave. UC	\$8,170	\$440,450	\$0	\$558,000	\$1,006,620
26.45	42.57	53 1066	Fallbrook Ave UC	\$10,330	\$1,602,398	\$0	\$896,000	\$2,508,728
26.68	42.69	53 1162	Del Valle St POC	\$37,215	\$0	\$224,900	\$0	\$262,115
28.29	45.53	53 1680	Parkway Calabasas OC Widening & Extension (formerly Craftsman Rd. OC)	\$411,400	\$0	\$2,295,600	\$0	\$2,707,000
29.06	46.50	53 1681	Mureau Road OC	\$161,975	\$0	\$1,380,400	\$0	\$1,542,375
31.10	50.05	53 1442	Las Virgenes Rd. OC	\$554,295	\$0	\$7,330,100	\$0	\$7,884,395
31.91	51.35	53 1730	Lost Hills Rd. OC	\$160,590	\$0	\$1,269,900	\$0	\$1,430,490
32.78	52.45	53 1731	Liberty Canyon Rd UC	\$21,070	\$427,040	\$0	\$741,200	\$1,189,310
33.69	54.22	53 1678	Palo Comado Canyon Rd. OC (formerly Chesebro Rd. OC)	\$188,925	\$0	\$1,659,200	\$0	\$1,848,125
33.91	54.26	53 755	Chesebro Creek	\$472,785	\$2,984,000	\$0	\$0	\$3,456,785
34.82	55.71	53 2	Medea Creek	\$571,150	\$3,866,000	\$0	\$0	\$4,437,150
36.18	57.88	53 1726	Reyes Adobe Rd OC (Agoura Road OC)	\$175,470	\$0	\$1,450,100	\$0	\$1,625,570
Total=				\$2,806,915	\$12,653,618	\$15,610,200	\$4,253,900	\$35,324,633

BRIDGE STRUCTURE ITEMS	\$	32,600,000
RETAINING WALL STRUCTURE ITEMS	\$	0
STRUCTURE DEMOLITION/REMOVAL	\$	2,900,000
<b>TOTAL STRUCTURE ITEMS</b>	\$	<b>35,500,000</b>
(Sum of Total Cost for Structures in 2005\$)		
<b>TOTAL STRUCTURE ITEMS</b>	\$	<b>39,600,000</b>
(Escalated Structure Sum in 2010\$)		

Bridge structure costs were based on the structural section of the Caltrans Comparative Bridge Costs, 2004. Quantities estimated were widening, demolition and replacement. The costs were escalated to the year 2010 using a 2.2 percent per year escalation.

III. ENVIRONMENTAL MITIGATION

A. Water Quality and Hydrology, including Floodplain Encroachment	\$ <u>17,400,000</u>
B. Aesthetics	\$ <u>600,000</u>
C. Biological Assessment	\$ <u>1,800,000</u>
D. Air Quality	\$ <u>500,000</u>
E. Hazardous Materials	\$ <u>6,000,000</u>
F. Cultural Resources, including Archeological, Paleontological, Cultural, or Historic Resources	\$ <u>200,000</u>

- \*. Geotechnical mitigation measures cannot be identified at this time.
- \*. Traffic mitigation measures cannot be identified at this time
- \*. The cost of the construction of soundwalls is included in the construction costs. No other noise mitigation is proposed at this time.
- \*. When escalated to the planned program year for the project (2010), a 2.2 percent per year is used.

TOTAL ENVIRONMENTAL MITIGATION COSTS (Current Value)	\$ <u>26,500,000</u>
TOTAL ENVIRONMENTAL MITIGATION COSTS (Escalated Value)	\$ <u>29,550,000</u>
PLANNED PROGRAM YEAR FOR THE PROJECT (Date to which values are escalated)	<u>2010</u>

IV. RIGHT OF WAY ITEMS

A. Acquisition, including excess lands, title & escrow; damages to remainder(s) and Goodwill	\$ <u>10,862,500</u>
B. Utility Relocation (State share)	\$ <u>10,140,000</u>
C. Relocation Assistance	\$ <u>250,000</u>
D. Clearance/Demolition	\$ <u>150,000</u>
E. Title and Escrow	\$ <u>632,800</u>

TOTAL RIGHT OF WAY ITEMS \$ 22,035,300  
 (Current Value)

TOTAL RIGHT OF WAY ITEMS \$ 26,229,200  
 (Escalated Value)

Anticipated Date of Right of Way Certification 2010  
 (Date to which values are escalated)

The right of way items account for 1 full parcel acquisition and partial takes of 34 parcels. See Right-of-Way Data Sheets for assumptions made in estimating the total right-of-way cost. Utility relocation costs were derived from a cursory review of the available as-built plans and current topographic data to quantify all existing storm drain, water, gas, and electrical utilities. Best judgment was used to estimate the extent of the utility relocation necessary. The costs were adjusted to the year 2010 using a 5 percent per year for commercial and 10% per year for residential properties escalations.

**TABLE 1: Quantities & Cost Estimate - Alternative 3**

September 1, 2005

From the Vicinity of Canoga Avenue to Vicinity of the LA/Ventura County Line

	Unit	Quantity	Cost/unit	Year 2005 \$	Year 2010 \$	
<b>1.0 ROADWAY</b>						
1.1	PCC	m <sup>3</sup>	97,250	\$ 300	\$ 29,175,000	\$ 32,530,000
1.2	RSC	m <sup>3</sup>	18,200	\$ 1,200	\$ 21,840,000	\$ 24,350,000
1.3	LCB	m <sup>3</sup>	57,710	\$ 100	\$ 5,771,000	\$ 6,430,000
1.4	AB (Class 3)	m <sup>3</sup>	82,750	\$ 45	\$ 3,723,750	\$ 4,150,000
1.5	Drainage	lump sum			\$ 9,076,500	\$ 10,120,000
1.6	Electrical	lump sum			\$ 4,235,700	\$ 4,720,000
1.7	Traffic Control	lump sum			\$ 8,471,400	\$ 9,450,000
1.8	Staging Construction	lump sum			\$ 9,681,600	\$ 10,790,000
1.9	Concrete Barrier	M	22,300	\$ 120	\$ 2,676,000	\$ 2,980,000
1.10	Demolition	lump sum			\$ 4,235,700	\$ 4,720,000
1.11	EARTHWORK	m <sup>3</sup>	125,000	\$ 50	\$ 6,250,000	\$ 6,970,000
<b>2.0 SPECIALTY ITEMS</b>						
2.1	Retaining Walls	m <sup>2</sup>	15,200	\$ 500	\$ 7,600,000	\$ 8,470,000
2.2	Las Virgenes Creek/ RCB	lump sum			\$ 7,086,600	\$ 7,900,000
2.3	Sound Walls	M	7,075	\$ 1,900	\$ 13,442,500	\$ 14,990,000
2.4	Glare Screen	lump sum			\$ 1,200,000	\$ 1,340,000
3.0	RAMPS	lump sum			\$ 78,000,000	\$ 86,970,000
<b>4.0 CCTV/ITS</b>						
4.1	CCTV/Fiber Optics	lump sum			\$ 12,500,000	\$ 13,940,000
4.2	ITS-Traffic Signals	lump sum			\$ 150,000	\$ 170,000
5.0	TMP	(see Attachment K)			\$ 5,185,500	\$ 5,780,000
		ROADWAY CONTINGENCY (10%)			\$ 23,030,125	\$ 25,677,000
		<u>ROADWAY TOTALS</u>			<u>\$ 253,331,375</u>	<u>\$ 282,447,000</u>
<b>6.0 STRUCTURE</b>						
6.1	Widening/Reconstruction	(see Attachment F Table 2)			\$ 32,600,000	\$ 36,350,000
6.2	Demolition	(see Attachment F Table 2)			\$ 2,900,000	\$ 3,230,000
		<u>STRUCTURAL SUBTOTAL</u>			<u>\$ 35,500,000</u>	<u>\$ 39,600,000</u>
					\$ 288,831,375	\$ 322,047,000
<b>TOTAL ESTIMATED COST</b>					<b>\$ 289,000,000</b>	<b>\$ 322,000,000</b>



# **Attachment E**

## **Design Scoping Checklists**



# PDS Design Scoping Checklist

## Project Information

District 7 County LA/VEN Route 101 LA KP 40.0/61.5 (PM 24.9/38.2), VEN KP 0.0/1.0 (PM 0.0/0.6) EA 24920K

### Description

Alternative 2 – Non-Standard Lane Widths Alternative. Re-stripe and/or widen Route 101 to provide one additional mixed-flow lane within the project limits.

Caltrans Project Manager Ravi Ghate Phone # (213) 897-5593

Caltrans Functional Manager Albert Andraos Phone # (213) 897-4921

Consultant Project Manager Farid Naguib Phone # (213) 362-9483

Caltrans Project Development Coordinator Jim DeLuca Phone # (916) 653-4067

## Project Screening

1. Project Description as noted in Regional Transportation Plan: Not included in the Regional Transportation Plan (RTP) as of this date. Once this PSR(PDS) is approved, the improvement may be included in the RTP.
2. Project Setting: Route 101, Los Angeles/Ventura County  
 Rural or Urban: Rural and Urban Los Angeles/Ventura County  
 Current land uses: Transportation/utilities, open space  
 Adjacent land uses: Corridor serves developed commercial and recreational properties, recreational areas and open space  
 Existing landscaping/planting: Landscaping in developed corridor segment
3. Route Adoption: Date 1909 Type of Facility: Freeway  
 Freeway Agreement: Yes Date: 1962 and 1969

## Description of the Transportation Problem

Route 101, within the project vicinity, currently provides four mixed-flow lanes in each direction. Route 101 currently carries between 175,000 and 233,000 vehicles per day and experiences peak period traffic congestion along the mainline in both directions. According to Caltrans 2002 congestion maps, vehicle speeds are reduced to below 60 km/h (35 mph) for extended periods during the AM and/or PM peak periods in both directions, with several southbound segments experiencing more than three hours of reduced speeds during the PM peak period. Increased traffic volumes along the Route 101 corridor over the next 25 years, due to future growth and development in the region, will worsen traffic conditions and extend the periods of congestion.

## Proposed Scope of Work

Alternative 2 - This alternative would re-stripe and/or widen Route 101 to add one mixed-flow lane in each direction within the project limits. The proposed improvements include restriping lanes where feasible and minimizing right of way impacts. Portions of the project will have three non-standard lanes (width 3.35 m) and non-standard left shoulder (0.6 m) in both directions to minimize impacts. The outside two lanes will be standard width lanes (3.66 m) with standard right shoulder (3.05 m) throughout the project. This alternative would also include related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements as necessary. The modified and new structures will provide space for full standard lane widths which are the same as Alternative 3.

## Design Criteria

Type of facility to be considered? Freeway

Design Speed for highway facilities within the project limit? 110 km/hr

Design Period: Construction Year is? 2010 Design Year is? 2030

Design Capacity: Level of Service to be maintained over the design period is?

Mainline D Ramp D Local Street N/A Weaving Sections N/A

Design Vehicle Selection?

STAA √ California \_\_\_\_\_ Bus \_\_\_\_\_

Forecasted Percent Truck Volume 4.3 %

**Proposed Roadbed and Structure Widths**

State highway	Roadbed Width			Structure Width		
	Existing	Proposed	Standard	Existing	Proposed	Standard
Lane widths	3.35 to 3.66	3.66	3.6	3.35 to 3.66	3.66	3.6
Left shoulder	varies 0.61 to 3.05	3.05	3.0	varies 0.61 to 3.05	3.05	3.0
Right shoulder	3.05	3.05	3.0	3.05	Min 3.05	3.0
Median widths	varies 1.8 to 11	6.7	6.6	varies 1.8 to 11	varies 6.7	6.6
Bicycle Lane	NA	NA	NA	NA	NA	NA

Note: Data is shown for the direction of travel where the new mixed-flow lane is introduced.

Median Barrier Existing Thrie Beam and Concrete Barrier  
Proposed (Concrete Barrier / Thrie Beam / Other) Concrete barrier

Route 101 – Existing (2005) AM and PM Peak Hour Traffic Volumes					
Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		NB	SB	NB	SB
25.3	Rte. 27, Topanga Canyon Boulevard	9,000	8,300	8,700	8,700
25.7	Ventura Boulevard	8,300	7,700	8,000	8,000
26.8	Woodlake Avenue	8,300	7,700	8,000	8,000
27.3	Valley Circle/Mulholland Drive	8,800	8,100	8,400	8,400
28.2	Parkway Calabasas	8,300	7,600	8,000	8,000
31.0	Las Virgenes Road	7,800	8,300	8,700	7,400
31.9	Lost Hills Road	6,800	7,300	7,600	6,500
32.7	Liberty Canyon Road	7,000	7,500	7,800	6,700
33.6	Chesebro/ Palo Comado Canyon Roads	7,200	7,700	8,000	6,800
35.0	Kanan Road	7,000	7,600	7,900	6,700
36.1	Reyes Adobe Road	6,900	7,400	7,700	6,600
37.5	Lindero Canyon Road	7,000	7,500	7,800	6,700
38.2	LA/Ventura County Line	6,100	6,500	6,800	5,800

Route 101 – 2030 AM and PM Peak Hour Traffic Volumes					
Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		NB	SB	NB	SB
25.3	Rte. 27, Topanga Canyon Boulevard	11,800	10,800	11,300	11,300
25.7	Ventura Boulevard	10,900	10,000	10,400	10,400
26.8	Woodlake Avenue	10,900	10,000	10,400	10,400
27.3	Valley Circle/Mulholland Drive	11,400	10,500	11,000	11,000
28.2	Parkway Calabasas	10,800	9,900	10,400	10,400
31.0	Las Virgenes Road	10,100	10,800	11,300	9,600
31.9	Lost Hills Road	8,900	9,500	9,900	8,400
32.7	Liberty Canyon Road	9,100	9,800	10,200	8,700
33.6	Chesebro/ Palo Comado Canyon Roads	9,300	10,000	10,400	8,800
35.0	Kanan Road	9,200	9,800	10,300	8,700
36.1	Reyes Adobe Road	9,000	9,600	10,100	8,500
37.5	Lindero Canyon Road	9,100	9,800	10,200	8,700
38.2	LA/Ventura County Line	7,900	8,500	8,800	7,500

## Roadway Design Scoping

### Mainline Operations

#### Mainline Highway Widening

Widen existing 8 lane facility to 10 lanes. R/W acquisition for widening to 10 lanes.  
Local street structures to span 10 lanes of highway (for future requirements).

Upgrade existing facility to:

- |                                                     |                                                       |
|-----------------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Expressway Standards       | <input checked="" type="checkbox"/> Freeway Standards |
| <input type="checkbox"/> Controlled Access Highway  | <input type="checkbox"/> Traversable Highway          |
| <input type="checkbox"/> Improve Vertical Clearance | <input type="checkbox"/> Adequate Falsework Clearance |

### Ramp / Street Intersection Improvements

- |                                                                                                              |                                                                           |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> New Signals                                                                         | <input type="checkbox"/> Modify Signals                                   |
| <input type="checkbox"/> Right Turn Lanes                                                                    | <input type="checkbox"/> Widening For Localized Through Lanes             |
| <input type="checkbox"/> Merging Lanes                                                                       | <input type="checkbox"/> Deceleration / Acceleration Lanes                |
| <input type="checkbox"/> Left Turn Lanes                                                                     | <input type="checkbox"/> > 300 VPH Left Turn (Requires Double Left Turn)  |
| <input type="checkbox"/> Interchange Spacing                                                                 | <input type="checkbox"/> Ramps Intersect Local Street < 4 % Grade         |
| <input type="checkbox"/> Intersection Spacing                                                                | <input type="checkbox"/> Exit Ramps > 1,500 VPH Designed As Two Lane Exit |
| <input type="checkbox"/> Single Lane Ramps Exceeding 300 M Widened To Two Lanes                              |                                                                           |
| <input checked="" type="checkbox"/> Other: <u>Modify impacted ramps as required to accommodate widenings</u> |                                                                           |

### Operational Improvements

#### Truck Climbing Lane

Sustained Grade Exceeding 2% And Total Rise Exceeds 15 M.

Other: \_\_\_\_\_

#### Auxiliary Lanes

When 600 M Between Successive On-Ramps.

Two Lane Exit Ramps Have 400 M Auxiliary Lane.

Weaving < 500 M between off-Ramp and on-Ramp.

Other:

### Right of Way Access Control

Existing access control extends at least 15 m beyond end of curb return, radius or taper.

New construction access control extends at least 30 m (urban areas) or 100 m (rural areas) beyond end of curb returns, radius or taper.

Other: Acquisition of new right of way for widening

### Highway Planting

Replacement

Median

Mitigation

### Safety

Off-Freeway Access

Maintenance Vehicle Pull-Out (location TBD)

### Roadside Management

Slope Paving

Gore Paving

Roadside Paving

### Stormwater

Erosion Control

Drainage

Slope Design

### Structures

New Bridge

Bridge Rehab

Retaining Wall

Other: Bridge Widening

On STRAIN list for \_\_\_\_\_

**Additional Studies**

---

---

Preliminary Evaluation provided by:

Consultant Project Manager Farid Naguib Date 9/14/05  
Farid Naguib, Parsons Brinckerhoff

Caltrans Functional Manager A. Andraos Date 9/15/05  
Albert Andraos

Design Concept approved by:

Caltrans Project Development Coordinator Jim DeLuca Date 9/15/05  
Jim DeLuca

*Conceptual approval in no way implies that any non-standard features currently identified or identified in the future will be approved. Non-standard features will need to be identified, fully analyzed and justified prior to approval (via a design exception fact sheet) of the selected alternative.*

Reviewed by:

Caltrans Project Manager Ravi Ghate Date 9/15/05  
Ravi Ghate



# PDS Design Scoping Checklist

## Project Information

District 7 County LA/VEN Route 101 LA KP 40.0/61.5 (PM 24.9/38.2), VEN KP 0.0/1.0 (PM 0.0/0.6) EA 24920K

### Description

Alternative 3 – Full Standard Lane Widths Alternative. Widen Route 101 to provide one additional mixed-flow lane within the project limits.

Caltrans Project Manager Ravi Ghatge Phone # (213) 897-5593

Caltrans Functional Manager Albert Andraos Phone # (213) 897-4921

Consultant Project Manager Farid Naguib Phone # (213) 362-9483

Caltrans Project Development Coordinator Jim DeLuca Phone # (916) 653-4067

## Project Screening

1. Project Description as noted in Regional Transportation Plan: Not included in the Regional Transportation Plan (RTP) as of this date. Once this PSR(PDS) is approved, the improvement may be included in the RTP.
2. Project Setting: Route 101, Los Angeles/Ventura County  
 Rural or Urban: Rural and Urban Los Angeles/Ventura County  
 Current land uses: Transportation/utilities, open space  
 Adjacent land uses: Corridor serves developed commercial and recreational properties, recreational areas and open space  
 Existing landscaping/planting: Landscaping in developed corridor segment
3. Route Adoption: Date 1909 Type of Facility: Freeway  
 Freeway Agreement: Yes Date: 1962 and 1969



## Description of the Transportation Problem

Route 101, within the project vicinity, currently provides four mixed-flow lanes in each direction. Route 101 currently carries between 175,000 and 233,000 vehicles per day and experiences peak period traffic congestion along the mainline in both directions. According to Caltrans 2002 congestion maps, vehicle speeds are reduced to below 60 km/h (35 mph) for extended periods during the AM and/or PM peak periods in both directions, with several southbound segments experiencing more than three hours of reduced speeds during the PM peak period. Increased traffic volumes along the Route 101 corridor over the next 25 years, due to future growth and development in the region, will worsen traffic conditions and extend the periods of congestion.

## Proposed Scope of Work

Alternative 3 - This alternative would widen Route 101 to add one mixed-flow lane in each direction within the project limits. The proposed improvements include full standard lane widths (3.66 m), shoulders (3.05 m) and other feasible full standard design features. This alternative would also include related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements as necessary.

## Design Criteria

Type of facility to be considered? Freeway

Design Speed for highway facilities within the project limit? 110 km/hr

Design Period: Construction Year is? 2010 Design Year is? 2030

Design Capacity: Level of Service to be maintained over the design period is?

Mainline D Ramp D Local Street N/A Weaving Sections N/A

Design Vehicle Selection?

STAA √ California \_\_\_\_\_ Bus \_\_\_\_\_

Forecasted Percent Truck Volume 4.3 %

**Proposed Roadbed and Structure Widths**

State highway	Roadbed Width			Structure Width		
	Existing	Proposed	Standard	Existing	Proposed	Standard
Lane widths	3.35 to 3.66	3.66	3.6	3.35 to 3.66	3.66	3.6
Left shoulder	varies 0.61 to 3.05	3.05	3.0	varies 0.61 to 3.05	3.05	3.0
Right shoulder	3.05	3.05	3.0	3.05	3.05	3.0
Median widths	varies 1.8 to 11	6.7	6.6	varies 1.8 to 11	varies 6.7	6.6
Bicycle Lane	NA	NA	NA	NA	NA	NA

Note: Data is shown for the direction of travel where the new mixed-flow lane is introduced.

Median Barrier Existing Thrie Beam and Concrete Barrier  
Proposed (Concrete Barrier / Thrie Beam / Other) Concrete barrier

Route 101 – Existing (2005) AM and PM Peak Hour Traffic Volumes					
Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		NB	SB	NB	SB
25.3	Rte. 27, Topanga Canyon Boulevard	9,000	8,300	8,700	8,700
25.7	Ventura Boulevard	8,300	7,700	8,000	8,000
26.8	Woodlake Avenue	8,300	7,700	8,000	8,000
27.3	Valley Circle/Mulholland Drive	8,800	8,100	8,400	8,400
28.2	Parkway Calabasas	8,300	7,600	8,000	8,000
31.0	Las Virgenes Road	7,800	8,300	8,700	7,400
31.9	Lost Hills Road	6,800	7,300	7,600	6,500
32.7	Liberty Canyon Road	7,000	7,500	7,800	6,700
33.6	Chesebro/ Palo Comado Canyon Roads	7,200	7,700	8,000	6,800
35.0	Kanan Road	7,000	7,600	7,900	6,700
36.1	Reyes Adobe Road	6,900	7,400	7,700	6,600
37.5	Lindero Canyon Road	7,000	7,500	7,800	6,700
38.2	LA/Ventura County Line	6,100	6,500	6,800	5,800

Route 101 – 2030 AM and PM Peak Hour Traffic Volumes					
Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		NB	SB	NB	SB
25.3	Rte. 27, Topanga Canyon Boulevard	11,800	10,800	11,300	11,300
25.7	Ventura Boulevard	10,900	10,000	10,400	10,400
26.8	Woodlake Avenue	10,900	10,000	10,400	10,400
27.3	Valley Circle/Mulholland Drive	11,400	10,500	11,000	11,000
28.2	Parkway Calabasas	10,800	9,900	10,400	10,400
31.0	Las Virgenes Road	10,100	10,800	11,300	9,600
31.9	Lost Hills Road	8,900	9,500	9,900	8,400
32.7	Liberty Canyon Road	9,100	9,800	10,200	8,700
33.6	Chesebro/ Palo Comado Canyon Roads	9,300	10,000	10,400	8,800
35.0	Kanan Road	9,200	9,800	10,300	8,700
36.1	Reyes Adobe Road	9,000	9,600	10,100	8,500
37.5	Lindero Canyon Road	9,100	9,800	10,200	8,700
38.2	LA/Ventura County Line	7,900	8,500	8,800	7,500

## Roadway Design Scoping

### Mainline Operations

#### Mainline Highway Widening

Widen existing 8 lane facility to 10 lanes. R/W acquisition for widening to 10 lanes.  
Local street structures to span 10 lanes of highway (for future requirements).

Upgrade existing facility to:

- |                                                     |                                                       |
|-----------------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Expressway Standards       | <input checked="" type="checkbox"/> Freeway Standards |
| <input type="checkbox"/> Controlled Access Highway  | <input type="checkbox"/> Traversable Highway          |
| <input type="checkbox"/> Improve Vertical Clearance | <input type="checkbox"/> Adequate Falsework Clearance |

### Ramp / Street Intersection Improvements

- |                                                                                                              |                                                                           |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> New Signals                                                                         | <input type="checkbox"/> Modify Signals                                   |
| <input type="checkbox"/> Right Turn Lanes                                                                    | <input type="checkbox"/> Widening For Localized Through Lanes             |
| <input type="checkbox"/> Merging Lanes                                                                       | <input type="checkbox"/> Deceleration / Acceleration Lanes                |
| <input type="checkbox"/> Left Turn Lanes                                                                     | <input type="checkbox"/> > 300 VPH Left Turn (Requires Double Left Turn)  |
| <input type="checkbox"/> Interchange Spacing                                                                 | <input type="checkbox"/> Ramps Intersect Local Street < 4 % Grade         |
| <input type="checkbox"/> Intersection Spacing                                                                | <input type="checkbox"/> Exit Ramps > 1,500 VPH Designed As Two Lane Exit |
| <input type="checkbox"/> Single Lane Ramps Exceeding 300 M Widened To Two Lanes                              |                                                                           |
| <input checked="" type="checkbox"/> Other: <u>Modify impacted ramps as required to accommodate widenings</u> |                                                                           |

**Operational Improvements**

## Truck Climbing Lane

 Sustained Grade Exceeding 2% And Total Rise Exceeds 15 M. Other: \_\_\_\_\_

## Auxiliary Lanes

 When 600 M Between Successive On-Ramps. Two Lane Exit Ramps Have 400 M Auxiliary Lane. Weaving < 500 M between off-Ramp and on-Ramp. Other:**Right of Way Access Control** Existing access control extends at least 15 m beyond end of curb return, radius or taper. New construction access control extends at least 30 m (urban areas) or 100 m (rural areas) beyond end of curb returns, radius or taper. Other: Acquisition of new right of way for widening**Highway Planting** Replacement Median Mitigation**Safety** Off-Freeway Access Maintenance Vehicle Pull-Out (location TBD)**Roadside Management** Slope Paving Gore Paving Roadside Paving**Stormwater** Erosion Control Drainage Slope Design**Structures** New Bridge Bridge Rehab Retaining Wall Other: Bridge Widening On STRAIN list for \_\_\_\_\_

Additional Studies

---

---

Preliminary Evaluation provided by:

Consultant Project Manager Farid Naguib Date 9/14/05  
Farid Naguib, Parsons Brinckerhoff

Caltrans Functional Manager A. Andraos Date 9/15/05  
Albert Andraos

Design Concept approved by:

Caltrans Project Development Coordinator Jim DeLuca Date 9/15/05  
Jim DeLuca

*Conceptual approval in no way implies that any non-standard features currently identified or identified in the future will be approved. Non-standard features will need to be identified, fully analyzed and justified prior to approval (via a design exception fact sheet) of the selected alternative.*

Reviewed by:

Caltrans Project Manager Ravi Ghate Date 9/15/05  
Ravi Ghate

**Attachment F**

**Division of Engineering Services  
Scoping Checklists**



## Division of Engineering Services PSR(PDS) Scoping Checklist

### Project Information

---

District 7    County LA/V    Route 101    Kilometer Post (Post Mile) PM LA 24.9, Ven 0.6

EA 24920K    Project Description:    Alternative 2 would restripe and/or widen Route 101 to add one mixed-flow lane in each direction within the project limits. The improvements include restriping lanes where feasible and minimizing right of way impacts. Portions of the project will have three non-standard lanes (3.35 m) and non-standard left shoulder (0.6 m) in both directions to minimize impact. The outside two lanes will be standard width lanes (3.66 m) with standard right width shoulder (3.05 m) throughout the project. This alternative would also include related ramp modifications as well as soundwall and retaining wall construction. The replaced structures spanning Route 101 will provide space for standard lane widths which are the same as Alternative 3. The modified structures carrying Route 101 traffic will be widened to the full standard width as well, but will be striped to match the adjacent roadway lane configuration of Alternative 2.

Project Manager Ravi Ghate

Phone # 213-897-5593

District Project Engineer Hassan H. Zadeh

Phone # 2138974160

DES Consultant Manager Engineer (if applicable)

DES Project Coordination Engineer John Cosmez (916) 227-8434

### Project Scope

---

Describe and identify in the following sections a general description of all improvements anticipated as part of the project scope that will require DES functional unit involvement. The project should be discussed in sufficient detail to accurately identify the involvement of DES to study the various alternatives. The PSR(PDS) is used to program support \$ for the Project Report and Environmental Document Phase of the project ONLY, and to commit to a schedule for the completion PR & ED phase.

**Check applicable boxes describing proposed scope of project.**

- |                                                                                      |                                                              |                                                   |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> New Expressway/Freeway on new alignment                     | <input type="checkbox"/> Other Roadway Realignment           | <input checked="" type="checkbox"/> Widen Highway |
| <input type="checkbox"/> Construct Interchange                                       | <input type="checkbox"/> Emergency/Storm Damage              | <input type="checkbox"/> Rockfall Project         |
| <input type="checkbox"/> Modify Interchange                                          | <input checked="" type="checkbox"/> Bridge Widening          | <input type="checkbox"/> Left-turn Pocket         |
| <input checked="" type="checkbox"/> Bridge Replacement                               | <input type="checkbox"/> Curve Correction                    | <input checked="" type="checkbox"/> Modify Slope  |
| (New alignment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No) | <input type="checkbox"/> Building Project                    | <input type="checkbox"/> Stabilize Subgrade       |
| <input type="checkbox"/> Bridge Rehabilitation                                       | <input type="checkbox"/> Median Barrier Retrofit             | <input type="checkbox"/> Stabilize Roadway        |
| <input type="checkbox"/> New Bridge                                                  | <input checked="" type="checkbox"/> Construct Passing Lane   | <input type="checkbox"/> Landslide/Slip-out       |
| <input type="checkbox"/> Bridge Seismic Retrofit                                     | <input checked="" type="checkbox"/> Soundwall/Retaining Wall |                                                   |
|                                                                                      | <input type="checkbox"/> Other Design: Explain:              |                                                   |

Proposed Scope of DES Design Work:

See Table 1 - Bridge Structures Data Matrix for Alternatives 2 and 3

The alternatives proposed are:

Alternative 1: No Build Alternative

Alternative 2: Non-Standard Lane Widths Alternative

Alternative 3: Full Standard Lane Widths Alternative

Alternative 4:

**Project Cost**

---

For PSR (PDS) projects, the following section is to be used for each alternative, provided that the scope is significantly different.

Alternative #2

<u>Project Cost Range (\$ 1000's)</u>		<u>Cost of Largest Structure (\$ 1000's)</u>
Roadway	\$142,300	\$8,000
Structure**	\$39,600	
Total	\$181,900	

\*\*Structure Cost Range to be provided by one of the following below:

- Consultant       Structure Design Technical Liaison.

**Project Scope Breakdown by DES Function**

---

**Bridge Design Services (check applicable boxes)**

**Design by:**

- Office of Structure Design  
 Structure Maintenance Design  
 Office of Structure Contract Management (Consultant Design Oversight)  
 Office of Special Funded Projects (Consultant Design Oversight)

**Bridge Information:**

<input type="checkbox"/> New Bridge(s)	Number	Bridge Name(s) & No(s).
<input checked="" type="checkbox"/> Bridge Replacement(s)	Number 9	Bridge Name(s) & No(s).Table 1
<input checked="" type="checkbox"/> Bridge Widening(s)	Number 6	Bridge Name(s) & No(s).Table 1
<input type="checkbox"/> Bridge Rail Replacement(s)	Number	Bridge Name(s) & No(s).

**Other DES functional units required for Structure Work**

- Structure Hydraulics (include if bridge is over or adjacent to water)  
 Geotechnical Services (Structure Foundations)

**Soundwall and/or Retaining Wall Design (non-district designed)**

<input checked="" type="checkbox"/> Soundwall(s)	Number 2	Estimated Max. Ht 4m	Estimated Total Length 1275
<input checked="" type="checkbox"/> Retaining walls(s)	Number1	Estimated Max. Ht 4m	Estimated Total Length 460m
<input type="checkbox"/> MSE walls(s)	Number	Estimated Max. Ht	Estimated Total Length

**Technical Specialist Design**



Anticipated insertable plan sheet(s) check below:

<input checked="" type="checkbox"/> Culvert(s)	Number 1
<input checked="" type="checkbox"/> Barrier(s)	Number 1
<input checked="" type="checkbox"/> Signs and Overhead Structures	Number 1
<input type="checkbox"/> Other Design:	Explain:

Transportation Architecture Design

<input type="checkbox"/> Design New Building(s)	Explain:
<input type="checkbox"/> Remodel Existing Buildings(s)	Explain:
<input checked="" type="checkbox"/> Bridge Aesthetics Evaluation	Explain: TBD at PA/ED Phase
<input type="checkbox"/> Build scale model	Explain:
<input type="checkbox"/> Other Aesthetics work	Explain:

Electrical, Mechanical, Water & Wastewater Design

<input type="checkbox"/> Pumping Plants	Explain:
<input type="checkbox"/> Movable bridge, drawbridg	Explain:
<input checked="" type="checkbox"/> Lighting control system for facilities	Explain: TBD at PA/ED Phase
<input type="checkbox"/> Sanitary Systems	Explain:

Materials Engineering & Testing Services

Pavement

<input type="checkbox"/> Rigid	<input type="checkbox"/> Flexible	Average Grade	Average Superelevation
<input type="checkbox"/> Deflection Studies Required	No. of Locations	Lane/miles to be tested	

Consultation and Inspection

<input type="checkbox"/> Loop detectors	<input type="checkbox"/> Signal & Lighting Products	<input type="checkbox"/> Changeable Message Signs, Closed Circuit TV
<input checked="" type="checkbox"/> Concrete Bridge	<input type="checkbox"/> Steel Bridge	

Corrosion Tests

<input type="checkbox"/> Soil	<input type="checkbox"/> Concrete	<input type="checkbox"/> Cathodic Protection System
-------------------------------	-----------------------------------	-----------------------------------------------------

Other

<input type="checkbox"/> Special Products:	Explain
--------------------------------------------	---------

DES Geotechnical Services

Is Oversight for consultant prepared geotechnical reports required?

Yes  No

Has the Geotechnical Design Liaison or other geotechnical person been contacted?

Yes  No If yes, who? Bhaskar/Joshi/Deh-Jeng Jang

Terrain:	<input type="checkbox"/> Flat	<input checked="" type="checkbox"/> Rolling	<input type="checkbox"/> Mountainous	
Cuts:	Est. Max Height (m) 3	Est. Volume (m <sup>3</sup> ):97,000	<input type="checkbox"/> New	<input checked="" type="checkbox"/> Widen
Fills:	Est. Max Height (m) 3	Est. Volume (m <sup>3</sup> ):43,650	<input type="checkbox"/> New	<input checked="" type="checkbox"/> Widen

Structures

<input checked="" type="checkbox"/> Retaining Walls	Number 1	Est. Max. Height 4m	Est. length (m) 460	<input checked="" type="checkbox"/> Cut	<input checked="" type="checkbox"/> Fill
<input checked="" type="checkbox"/> Soundwalls	Number 5	Est. Avg. Height 4m	<input checked="" type="checkbox"/> Standard Plan	<input type="checkbox"/> Non-Standard Plan	
<input checked="" type="checkbox"/> Overhead Sign Foundations			Number TBD		
<input type="checkbox"/> Changeable Message Sign Foundations			Number		

Other:

Other:

- Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.) Explain Slope stability and erosion at PA/ED phase
- Existing Maintenance Problems: Explain:

Engineering Technology\*

<input type="checkbox"/> Aerial Photography			
<input type="checkbox"/> Raster Imaging:	Est. Total Length (km)	Est. Avg. Width (m):	
<input type="checkbox"/> DTM Modeling (non-district):	Est. Total Length (km)	Est. Total Width (m):	
<input type="checkbox"/> Mapping:	Est. Total Length (km)	Est. Avg. Width (m)	Scale:

Note: A Photogrammetry Service Request (PSR/PDS) must be completed and submitted to DES Photogrammetry by the District Photogrammetry Coordinator.

Division of Engineering Services Workload Estimate for PSR(PDS)				
WBS	Alternative Number			
	1		2	
100			1.74	
150			0.71	
160			1.44	
165			∅	
175			0.85	
180			0.01	
Total PY's per Alternative			4.75	
			Total Project PY's	4.75

Additional Studies, Investigations or Research from DES

Preliminary Evaluation provided by:  
DES Project Coordination Engineer

*John R. Cosmez* 6-14-05  
John Cosmez (916) 271-8434

Reviewed by:  
Project Manager

*Ravi Ghate*

Date 9/26/05

# REQUEST FOR DES WORKLOAD ESTIMATE

Submit completed form to the appropriate Project Coordination Engineer.

## Type of Workload Estimate

- New Workload Estimate     Revised Workload Estimate    Request Date:  
 PSR(PDS) Workload Estimate

If revised workload estimate check applicable box(es) below.

- Cost Change                       Other: \_\_\_\_\_  
 Scope Change  
 Schedule Change

## Project Information

District 7    County LA/V    Route 101    Kilometer Post (Post Mile) PM LA 24.9, Ven 0.6  
EA 24920K

Project Description: Alternative 2 would restripe and/or widen Route 101 to add one mixed-flow lane in each direction within the project limits. The improvements include restriping lanes where feasible and minimizing right of way impacts. Portions of the project will have three non-standard lanes (3.35 m) and non-standard left shoulder (0.6 m) in both directions to minimize impact. The outside two lanes will be standard width lanes (3.66m) with standard right width shoulder (3.05 m) throughout the project. This alternative would also include related ramp modifications as well as soundwall and retaining wall construction. The replaced structures spanning Route 101 will provide space for standard lane widths which are the same as Alternative 3. The modified structures carrying Route 101 traffic will be widened to the full standard width as well, but will be striped to match the adjacent roadway lane configuration of Alternative 2.

Project Manager:	Ravi Ghate	Phone # 213-897-5593
DES Project Coordination Engineer:	John Cosmez (916) 227-8434	
DES Special Funded Projects Liaison Engineer:	John Fujimoto	Phone # 916-227-8757
DES Consultant Management Engineer:	Beth Overstreet	Phone # 213-896-5632

## Project Scope

Describe and identify in the following sections a general description of all improvements anticipated as part of the project scope that will require DES functional unit involvement. The project should be discussed in sufficient detail to accurately identify the involvement of DES. Please note any significant issues that may impact DES functional units during development of the Project Approval/Environmental Document (PAVED) and/or development of the Structure Plans, Specifications and Estimate (SPS&E).

Check applicable boxes describing proposed scope of project.

- |                                                                                                                                                |                                                              |                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> New Expressway/Freeway on new alignment                                                                               | <input type="checkbox"/> Other Roadway Realignment           | <input checked="" type="checkbox"/> Widen Highway |
| <input type="checkbox"/> Construct Interchange                                                                                                 | <input type="checkbox"/> Emergency/Storm Damage              | <input type="checkbox"/> Rockfall Project         |
| <input type="checkbox"/> Modify Interchange                                                                                                    | <input checked="" type="checkbox"/> Bridge Widening          | <input type="checkbox"/> Left-turn Pocket         |
| <input checked="" type="checkbox"/> Bridge Replacement<br>(New alignment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No) | <input type="checkbox"/> Curve Correction                    | <input checked="" type="checkbox"/> Modify Slope  |
| <input type="checkbox"/> Bridge Rehabilitation                                                                                                 | <input type="checkbox"/> Building Project                    | <input type="checkbox"/> Stabilize Subgrade       |
| <input type="checkbox"/> New Bridge                                                                                                            | <input type="checkbox"/> Median Barrier Retrofit             | <input type="checkbox"/> Stabilize Roadway        |
| <input type="checkbox"/> Bridge Seismic Retrofit                                                                                               | <input type="checkbox"/> Construct Passing Lane              | <input type="checkbox"/> Landslide/Slip-out       |
|                                                                                                                                                | <input checked="" type="checkbox"/> Soundwall/Retaining Wall |                                                   |
|                                                                                                                                                | <input type="checkbox"/> Other Design: Explain:              |                                                   |

## Project Schedule

Product or Milestone	Delivery Date	Work Performed By	
		Caltrans	Consultant or Local Agency
PSR/PSR(PDS)/PSSR	September 2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PR(or PA/ED*)	February 2009	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Structure Site Data Submittal		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Draft SPS&E (i.e. Activity 240 finish date)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
PS&E	August 2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RTL	January 2013	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Advertise		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Approve Contract			
Contract Administration		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contract Acceptance			

\*Note: Only the PAVED milestone is to be used for programming commitments. All other milestones are used to indicate relative time frame for planning purposes.

## Project Cost

For PSR (PDS) projects, the following section is to be used for each alternative, provided that the scope is significantly different.

### Alternative # 2

Project Cost Range (\$ 1000's)		Cost of Largest Structure (\$ 1000's)
Roadway	\$142,300	\$8,000
Structure**	\$39,600	
Total	\$181,900	

\*\*Structure Cost Range to be provided by:

- Consultant       Structure Design Technical Liaison.

## Project Scope Breakdown by DES Function

### Bridge Design Services (check applicable boxes)

#### Design by:

- Office of Structure Design
- Structure Maintenance Design
- Office of Structure Contract Management (Consultant Design Oversight)
- Office of Special Funded Projects (Consultant Design Oversight)

#### Bridge Information:

<input type="checkbox"/> New Bridge(s)	Number	Bridge Name(s) & No(s).
<input checked="" type="checkbox"/> Bridge Replacement(s)	Number 9	Bridge Name(s) & No(s). Table 1
<input checked="" type="checkbox"/> Bridge Widening(s)	Number 6	Bridge Name(s) & No(s). Table 1
<input type="checkbox"/> Bridge Rail Replacement(s)	Number	Bridge Name(s) & No(s).

### Other DES functional units required for Structure Work

- Structure Hydraulics (include if bridge is over or adjacent to water)
- Geotechnical Services (Structure Foundations)

### Soundwall and/or Retaining Wall Design (non-district designed)

<input checked="" type="checkbox"/> Soundwall(s)	Number 2	Estimated Max. Ht 4m	Estimated Total Length 1275
<input checked="" type="checkbox"/> Retaining walls(s)	Number 1	Estimated Max. Ht 4m	Estimated Total Length 460
<input type="checkbox"/> MSE walls(s)	Number	Estimated Max. Ht	Estimated Total Length

### Technical Specialist Design

#### Anticipated insertable plan sheet(s) check below:

<input checked="" type="checkbox"/> Culvert(s)	Number 1
<input checked="" type="checkbox"/> Barrier(s)	Number 1
<input checked="" type="checkbox"/> Signs and Overhead Structures	Number 1
<input type="checkbox"/> Other Design:	Explain:

### Transportation Architecture Design

<input type="checkbox"/> Design New Building(s)	Explain:
<input type="checkbox"/> Remodel Existing Buildings(s)	Explain:
<input checked="" type="checkbox"/> Bridge Aesthetics Evaluation	Explain: TBD at PA/ED Phase
<input type="checkbox"/> Build scale model	Explain:
<input type="checkbox"/> Other Aesthetics work	Explain:

### Electrical, Mechanical, Water & Wastewater Design

<input type="checkbox"/> Pumping Plants	Explain:
<input type="checkbox"/> Movable bridge, drawbridg	Explain:
<input checked="" type="checkbox"/> Lighting control system for facilities	Explain: TBD at PA/ED Phase
<input type="checkbox"/> Sanitary Systems	Explain:

### Materials Engineering & Testing Services

#### Pavement

<input type="checkbox"/> Rigid	<input type="checkbox"/> Flexible	Average Grade	Average Superelevation
<input type="checkbox"/> Deflection Studies Required	No. of Locations	Lane/miles to be tested	

**Consultation and Inspection**

<input type="checkbox"/> Loop detectors	<input type="checkbox"/> Signal & Lighting Products	<input type="checkbox"/> Changeable Message Signs, Closed Circuit TV
<input checked="" type="checkbox"/> Concrete Bridge	<input type="checkbox"/> Steel Bridge	

**Corrosion Tests**

<input type="checkbox"/> Soil	<input type="checkbox"/> Concrete	<input type="checkbox"/> Cathodic Protection System
-------------------------------	-----------------------------------	-----------------------------------------------------

**Other**

<input type="checkbox"/> Special Products:	Explain
--------------------------------------------	---------

**DES Geotechnical Services**

Is Oversight for consultant prepared geotechnical reports required?

Yes       No

Has the Geotechnical Design Liaison or other geotechnical person been contacted?

Yes       No      If yes, who?

<b>Terrain:</b>	<input type="checkbox"/> Flat	<input checked="" type="checkbox"/> Rolling	<input type="checkbox"/> Mountainous
<b>Cuts:</b>	Est. Max Height (m) 3	Est. Volume (m <sup>3</sup> ):97000	<input type="checkbox"/> New <input checked="" type="checkbox"/> Widen
<b>Fills:</b>	Est. Max Height (m) 3	Est. Volume (m <sup>3</sup> ):43650	<input type="checkbox"/> New <input checked="" type="checkbox"/> Widen

**Structures**

<input checked="" type="checkbox"/> Retaining Walls	Number 1	Est. Max. Height 4m	Est. length (m) 460	<input checked="" type="checkbox"/> Cut	<input checked="" type="checkbox"/> Fill
<input checked="" type="checkbox"/> Soundwalls	Number 5	Est. Avg. Height 4m	<input checked="" type="checkbox"/> Standard Plan	<input type="checkbox"/> Non-Standard Plan	
<input checked="" type="checkbox"/> Overhead Sign Foundations			Number		
<input type="checkbox"/> Changeable Message Sign Foundations			Number		

**Other:**

Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.) Explain Slope stability and erosion to be studied at PA/ED phase.

Existing Maintenance Problems:      Explain:

**Engineering Technology\***

<input type="checkbox"/> Aerial Photography			
<input type="checkbox"/> Raster Imaging:	Est. Total Length (km)	Est. Avg. Width (m):	
<input type="checkbox"/> DTM Modeling (non-district):	Est. Total Length (km)	Est. Total Width (m):	
<input type="checkbox"/> Mapping:	Est. Total Length (km)	Est. Avg. Width (m)	Scale:

\*Note: A Photogrammetry Service Request-PSR(PDS) must be completed and submitted to DES Photogrammetry by the District Photogrammetry Coordinator.

**Structure Construction**

Oversight for consultant construction administration required?  Yes  No

**Additional Studies, Investigations or Research from DES**

Identify additional studies or investigations that may be required from DES Functional Units.

Reviewed by:

Project Manager

Ravi Chhabra

Date 9/26/05

BRIDGE STRUCTURES DATA MATRIX (Source: Caltrans ASBUILTS & Bridge Inspection Reports)

Structure Name	Structure Type	Length (m)	Existing Average Width (m)	Spans	Existing Minimum Clearance	Proposed Minimum Clearance	Foundation Type	Potential for Liquefaction	Structure Impact	Area Widened or Replaced (M2)	Rate (\$/M2)	Bridge Removal (\$)	Structure Replacement Cost (\$)	Bridge or Structure Widening Cost Estimate (\$)	Retrofit Cost (\$)	Conceptual Cost Estimate Total (\$)	BTRIS Inspection Report Findings - CALTRANS Division of Maintenance			
																	Structure Condition	Work Recommendations		Element Inspection Ratings with Condition Status $\geq 2.0$
																		Item	Estimated Cost (\$)	
1.01/07 SEP UC	Concrete Slab supported by Steel girders or PC/PS Girders	42.7	46.3	2	4.62	4.6	1956 - Driven Concrete Piles 1989 - CIDH Piles	High	Widen to outside; Lowering of Feature Crossed accounted for in Roadway Costs	533	\$1,700	\$15,050	\$0	\$906,100	\$1,641,735	\$1,562,885	Good	No work pending		
	Steel Stringer + PC/PS Girders	52.4	39	2	Unimpaired	4.6	1955 - CIDH concrete piles at North Abutment RC spread footings at Bent 2 and South Abutment.	Low	Widen to outside	678	\$1,700	\$18,490	\$0	\$1,152,600	\$1,691,995	\$2,843,885	Good	No Work Pending		RC Approach Slab rating = 3 Deck Cracking rating = 2
	RC T Beam + PC PS Girders	20.4	42.7	1	4.70	4.6	1957 - RC Concrete Spread Footings 1989 widening - RC Concrete Spread Footings	Low	Widen to outside	310	\$1,800	\$8,170	\$0	\$558,000	\$440,450	\$1,006,620	Good	No work Pending		Deck Cracking Rating = 2
	RC Concrete Box Culvert	55.16	35	1	N/A	4.6	N/A (Culvert)	Low	Widening of 101 can occur to outside, however, there are impacts to headroom in tunnel on one end and will be accounted for in Roadway Costs. Tunnel is not ADA compliant, suggest re-profiling tunnel to accommodate 101 and make ADA compliant.	0	\$0	\$0	\$0	\$0	\$0	\$0	Good	Date: 7/01/2000 Needs ADA compliance work.	Not determined	
	RC Box Girder w/ Rigid Frame Abutments	29.6	35.2	1	4.62	4.6	1957 - Concrete Driven Piles under wingwalls Spread footings @ abutments	Low	Widen to outside; Lowering of Feature Crossed accounted for in Roadway Costs	448	\$2,000	\$10,330	\$0	\$896,000	\$1,602,398	\$1,508,728	Good	Date: 4-24-2002, spill patch in south bound lane #3 and #4 at abutment #1 Date: 7-7-1986, Provide and install right of way gates at the Northeast and southeast quadrants	Cost: \$1800 Cost: Not Determined	Compression Joint Seal rating = 3 Reinforced Concrete Approach Slab rating = 3 Deck Cracking rating = 2
	CIP/PS Slab	63.1	2.74	4	5.11	5.1	1957 - RC concrete Spread Footings	Low	Replace	173	\$1,300	\$37,215	\$224,900	\$0	\$0	\$262,115	Good	7-01-2000, This structure has been identified as needing ADA compliant work work deferred	Not determined	
	Culvert (119)	7	41.8	2	N/A	N/A	N/A (Culvert)	High if groundwater is present	No Impact	0	\$0	\$0	\$0	\$0	\$0	\$0	Good	No work pending		
	CIP/PS Box Girder	82.6	31.3	2	5.63	5.1	1996 - Class 100& 100C Piles Precast Prestressed Conc. Piles Design Load = 100Tons	High	No impact. Widening fits within exist bridge spans	0	\$1,200	\$0	\$0	\$0	\$0	\$0	Good	3-17-2004 - NO G-11 Freeway Level Signs	Not determined	
	Original Bridge: PC/PS Girders + CIP Girders Widening and Extension: CIP/PS Box Girders	82.6	23.2	4	4.67	5.1	1964 - RC spread footings 1991 widening - 60" diameter Cast in Drilled Hole shaft @ Bent 18" CIDH at abutments	Low	Replace	1913	\$1,200	\$411,400	\$2,295,600	\$0	\$0	\$3,707,000	Good	No work pending		Pourable Joint Seal Rating = 3
	Py/TI girders + RC T Girders	62.18	12.13	4	4.83	5.1	1965 - All supports on 16" CIDH Piles	Low	Replace	812	\$1,700	\$161,975	\$1,380,400	\$0	\$0	\$1,543,375	Good	No work pending		
	Steel Stringer	84.4	30.8	4	4.52	5.1	1961 - Cast in Place RC piles Design Load 45 tons 1971 Widening - Cast in Place RC piles Design Load 45 tons	High if groundwater is present	Replace	3187	\$2,300	\$354,295	\$7,330,100	\$0	\$0	\$7,884,395	Good	No work pending		Deck Cracking Rating = 3
	Box Culvert	17.1	51.2	3	N/A	N/A	N/A (Culvert)	High if groundwater is present	Widen to Outside Culvert beyond project limits to be modified to accommodate roadway widening of 101, accounted for in roadway costs	0	\$0	\$0	\$0	\$0	\$0	\$0	Good	3-17-2004 - Median Work Being Done (Local Agency)		
	PC PS Girders	61.6	12.1	4	4.52	5.1	1965 - RC spread footing 10x10 typical 2ft depth	Low	Replace	747	\$1,700	\$160,790	\$1,269,900	\$0	\$0	\$1,430,690	Good	3-15-1996 - Replace Damage Mounted Freeway Sign	Cost \$10,000	Pourable Joint Seal rating = 2
	PC/PS Box girder	46	42.7	1	4.75	4.6	1973 - East abutment on Spread Footings West abutment on CIDH concrete piles	Low	Widen to Outside	436	\$1,700	\$21,070	\$0	\$741,200	\$427,040	\$1,189,310	Good	3-17-2004, Joints Rehab South bound lane #2 at abutment #2 5-01-2004, Joints Rehab, Northbound #4 and Southbound #2	Cost: \$1800 Cost: \$2000	Compression Joint Seal rating = 2 Deck Cracking rating = 2
	PC/PS I-Girders (Spans 2 & 3); RC T-Girders (CIP) Spans 1 & 4	71.3	12.32	4	4.44	5.10	1962 - Cast in Drilled Hole Concrete Piles (16")	Low	Replace	976	\$1,700	\$188,925	\$1,659,200	\$0	\$0	\$1,848,125		3-17-2004, Deck Patch Spall, southbound lane at bent #4 5-13-1999, Replace damaged girder. Cost: Not provided, but should include traffic controls, and off-hours (per Inspection Report)	Cost: \$1800 Cost: Not provided, but should include traffic controls, and off-hours (per Inspection Report)	P/S Cast Open Girder Beam rating = 4



BRIDGE STRUCTURES DATA MATRIX (Source: Caltrans ASBULTS & Bridge Inspection Reports)

Structure Name	Structure Type	Length (m)	Existing Average Width (m)	Spans	Existing Minimum Clearance	Proposed Minimum Clearance	Foundation Type	Potential for Liquefaction	Structure Impact	Area Widened or Replaced (M2)	Rate (\$/M2)	Bridge Removal (\$)	Structure Replacement Cost (\$)	Bridge or Structure Widening Cost Estimate (\$)	Retrofit Cost (\$)	Conceptual Cost Estimate Total (\$)	Structure Condition	BTRIS Inspection Report Findings - CALTRANS Division of Maintenance		
																		Work Recommendations		Element Inspection Ratings with Condition State ≥ 2.0
																		Item	Estimated Cost (\$)	Item
..... Creek	RC Slab	24.4	58.3	3	Unimpaired	N/A	1949 - Drawings Not Provided 1963 - Drawings Not Provided 1971 widening - RC Piles	High	Replace by Retrofit	1492	\$2,000	\$472,785	\$0	\$0	\$2,984,000	\$3,456,785	Good	3-11-2004, Deck Patch Spall-North and South Widening Closure Pour Cost: \$6000	Concrete Slab - Base rating = 2 Reinforced Conc. Approach Slab rating = 3 Deck Cracking = 1	
..... Road POC	PC/PS main span, CIPPS approach spans open girders	167.3	2.9	6	5.38	5.1	1963 - 16" diameter RC Driven Piles 45 Ton capacity	Low	No Impact - Widening fits within existing bridge spans. Potential Non-Sid Barrier	0	\$1,800	\$0	\$0	\$0	\$0	\$0	Good	7-01-2000-This structure has been identified as needing ADA compliant work	Cost: Not Determined (Target 6 years)	
..... Creek	RC Slab supported on RC Piles	32.6	54.3	4	N/A	N/A	1949 Not Provided 1964 Widening PC/PS concrete Piles 12inch min diameter 1971 Widening PC/PS concrete Piles 12inch min diameter	Low (Could be High if groundwater is present)	Replace by Retrofit	1933	\$2,000	\$371,150	\$0	\$0	\$3,866,000	\$4,437,150	Good	3-18-2004, Deck Patch Spill (Northbound Off-ramp lane) 3-18-2004, Re Erect G-11 Sign 5-01-2005, Deck Patch Spill (Northbound #3 Lane)	Cost: \$2000.00 Cost: \$ Undefined Cost: \$1800	Deck Cracking Rating = 2
..... Road OC	PC/PS "I" Girders	60.7	29.3	2	4.67	5.1	1963 - RC spread footings 1991 - widening on C/DH concrete piles	Low	No Impact - Widening fits within existing bridge spans	0	\$1,700	\$0	\$0	\$0	\$0	\$0	Good	3-18-2004, Super Patch Spill 5-3-96, Repair Broken plastic conduits	Cost: \$2400 Cost: Undefined	PS Conc Open Girder rating = 3
..... Rd OC (Aggravated Road OC)	PC/PS "T" Girders RC "T" Beams	67.4	12.1	4	4.72	5.1	1965 - RC Drives Piles	Low	Replace (Note: This structural impact will nullify the Reyes Adobe Rd OC Widening Project that is currently at 75% PR Phase)	853	\$1,700	\$175,470	\$1,450,100	\$0	\$0	\$1,625,570	Good	No work pending		PC Concrete Beam rating = 3
..... Canyon Rd On-Off Ramp Culvert	Double RC box culverts split into 2 single barrels under shallow fill (7' max depth).	8.0	7.3	2	N/A	N/A	N/A (Culvert)	Low	No Impact	0	\$0	\$0	\$0	\$0	\$0	\$0		No work pending		
..... Canyon Rd OC	CIPPS Box Girders	88.4	34.4	2	5.10	5.1	1973 - Drives RC piles (class 70)	Low	No Impact - Widening fits within existing bridge spans	0	\$1,200	\$0	\$0	\$0	\$0	\$0	Good	Roadway approaches have been repaired		Bridge Rating rating = 2
..... Canyon Rd. OC	CIPPS Box Girder	73.2	23.6	2	4.95	5.1	1971 - Steel H-Piles HP 10x57	Low	No Impact - Widening fits within existing bridge spans	0	\$1,200	\$0	\$0	\$0	\$0	\$0	Good	No work pending		

Total = \$35,324,633

SAY TOTAL = \$36,000,000

..... to match those for Alternative 3 to insure a conservative estimate of program resources for the PAVED phase. In locations where non-standard lane widths could not be accommodated within the existing constraints of the structures carrying Route 101 traffic,

..... structure widths. This provides the flexibility to resipe to full standard lane widths on the structures at a later date without having to rebuild newly improved bridge portions to a slightly wider footprint. The actual lane widths on the structures for Alternative 2

..... the bridge structures carrying Route 101 traffic will have an overall width that could accommodate a full standard section. Additionally, the replaced structures spanning Route 101 will provide space for standard lane widths which are the same as Alternative 3.

**ALTERNATIVE 2: NON-STANDARD LANE WIDTHS ALTERNATIVE - EXISTING AND PROPOSED STRUCTURE WIDTHS**

Bridge No.	Bridge Name	Existing								Proposed							
		SOUTHBOUND				NORTHBOUND				SOUTHBOUND				NORTHBOUND			
		Outside SHLD	Other	MFL	Inside SHLD	Inside SHLD	MFL	Other	Outside SHLD	Outside SHLD	Other	MFL	Inside SHLD	Inside SHLD	MFL	Other	Outside SHLD
1064	Rte 101/27 SEP UC	2.8		5(3.36)	0.9	3.0	5(3.66)		2.8	2.44	1(3.66) AUX 1(2.44) GORE	2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)	1(3.66) RAMP 1(1.52) GORE	2.44
1065	Ventura Blvd UC	2.8		4(3.35)	0.6	3.0	4(3.65)		2.8	3.05		2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)		3.05
1095	Shoup Ave. UC	2.8	3.7 Ramp	4(3.35)	0.6	3.0	4(3.65)		2.8	2.44	1(3.66) RAMP 1(1.83) GORE	2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)		3.05
1163	Sale Ave PUC	3.0		4(3.35)	0.6	0.6	4(3.35)		3.0	3.05		2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)		3.05
1066	Fallbrook Ave UC	2.8		4(3.35)	0.6	0.6	4(3.35)		2.8	3.05		2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)		3.05
1162	Del Valle St POC	2.9		4(3.35)	0.6	0.6	4(3.35)		2.9	3.05		2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)		3.05
74	Dry Canyon Creek (Culvert)	3.0	3.7 Ramp	4(3.425)	0.6	0.6	4(3.35)	3.7 Ramp	3.0	2.44	1(3.66) RAMP 1(3.66) GORE	2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)	1(3.66) AUX	3.05
2775	Valley Circle Blvd. OC	4.6	4.27m ramp + 2.28m median	4(3.66)m	0.3	0.3	4(3.66)		3.6	2.44	1(3.66) RAMP 1(1.52) GORE	2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)		3.05
1680	Parkway Calabasas OC (formerly Craftsman Rd. OC)	3.1		4(3.65)	2.5	2.4	4(3.65)	3.0 shoulder, 1.2m median, 8.46m Ramp	1.2	3.05		2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)	1(6.1) RAMP	3.05
1681	Mureau Road OC	3.0		4(3.65)	2.7	2.7	4(3.65)		3.0	3.05		2(3.66) 3(3.35)	0.60	0.60	3(3.35) 2(3.66)		3.05
1442	Las Virgenes Rd. OC	2.7		4(3.66)	2.7	2.6	4(3.66)		2.9	3.05		3(3.66) 2(3.35)	0.60	0.60	3(3.66) 2(3.35)		3.05
3	Las Virgenes Creek (Culvert)	3.0	3.7m Ramp + 1.8m shoulder	4(3.65)	3.0	3.0	4(3.65)	3.7m Ramp	3.0	2.44	1(3.66) RAMP 1(2.44) GORE	3(3.66) 2(3.35)	0.60	0.60	3(3.66) 2(3.35)	1(3.35) AUX	3.05
1730	Lost Hills Rd. OC	2.9		4(3.66)	2.4	2.7	4(3.66)		2.8	3.05		3(3.66) 2(3.35)	0.60	0.60	3(3.66) 2(3.35)		3.05
1731	Liberty Canyon Rd UC	3.0		4(3.65)	3.0	3.0	4(3.65)		3.0	3.05		3(3.66) 2(3.35)	0.60	0.60	3(3.66) 2(3.35)		3.05
1678	Palo Comado Canyon Rd. OC (formerly Chesebro Rd. OC)	2.3	3.7 Ramp	4(3.65)	5.1	4.7	4(3.65)		3.0	3.05	1(3.35) AUX	3(3.66) 2(3.35)	0.60	0.60	2(3.35) 3(3.66)		3.05
755	Chesebro Creek	2.4	3.7 Ramp, 4.6m median	4(3.65)	2.4	2.4	4(3.65)	3.7 Ramp	3.0	3.05	1(3.66) AUX 1(6) GORE	5(3.66)	1.54	1.54	5(3.66)	1(3.66) AUX	3.05
998	Lewis Road POC	2.5	3.9 Ramp	4(3.65)	2.4	2.4	5(3.65)	3.4 Ramp	2.8	3.05	1(3.66) AUX	5(3.66)	1.54	1.54	5(3.66)	1(3.66) AUX	3.05
2	Medea Creek	3.0	3.7 Ramp	4(3.65)	5.2	5.2	4(3.65)	3.7 Ramp	3.0	3.05	1(3.66) AUX	5(3.66)	1.54	1.54	5(3.66)	1(3.66) AUX	3.05
945	Kanan Road OC	3.0		4(3.65)	4.0	4.3	4(3.65)		3.0	3.05		5(3.66)	0.74-1.34	0.74-1.34	5(3.66)		3.05
1726	Reyes Adobe Rd OC (Agoura Road OC)	2.7		4(3.65)	2.9	2.5	4(3.65)		2.9	3.05		5(3.66)	0.74-1.34	0.74-1.34	5(3.66)		3.05
2519M	Lindero Canyon Rd On-Ramp Culvert	4.72m easement, 4.57 shoulder	2(3.65) Ramp	4(3.65)	4.0	4.0	4(3.65)	2(3.7) Ramp	4.1	2.44	1(3.66) RAMP 1(3.66) AUX	5(3.66)	0.74-1.34	0.74-1.34	5(3.66)		3.05
2355	Lindero Canyon Rd OC	4.72m easement, 4.57 shoulder	2(3.65) Ramp	4(3.65)	4.0	4.0	4(3.65)	2(3.7) Ramp	4.1	2.44	1(3.66) RAMP 1(6) GORE	5(3.66)	1.54	1.04	5(3.66)	1(3.66) RAMP 1(6) GORE	2.44
349	Lakeview Canyon Rd. OC	3.0		5(3.66)	4.3	4.2	5(3.66)		3.0	3.66	1(3.66) AUX	5(3.66)	1.54	1.04	5(3.66)	1(3.66) AUX	3.05

It was assumed to match those for Alternative 3 to insure a conservative estimate of program resources for the PA/ED phase. In locations where non-standard lane widths could not be accommodated within the existing constraints of the structure carrying Route 101 traffic, standard structure widths. This provides the flexibility to restripe to full standard lane widths on the structures at a later date without having to rebuild newly improved bridge portions to a slightly wider footprint. The actual lane widths on the structures for Alternative 2 are shown in the table. The bridge structures carrying Route 101 traffic will have an overall width that could accommodate a full standard section. Additionally, the replaced structures spanning Route 101 will provide space for standard lane widths which are the same as Alternative 3.



## Division of Engineering Services PSR(PDS) Scoping Checklist

### Project Information

District 7    County LA/V    Route 101    Kilometer Post (Post Mile) PM LA 24.9, Ven 0.6

EA 24920K    Project Description:    Alternative 3 would widen Route 101 to add one mixed-flow lane in each direction within the project limits. The improvements for this alternative include full standard lane widths (3.66 m), standard shoulder widths (3.05 m) and other feasible full standard design features. This alternative would also include related ramp modifications, soundwall and retaining wall construction and bridge structure modifications or replacements as necessary to provide standard lane widths.

Project Manager Ravi Ghate

Phone # 213-897-5593

District Project Engineer Hassan H. Zadeh

Phone # 2138974160

DES Consultant Manager Engineer (if applicable)

DES Project Coordination Engineer John Cosmez (916) 227-8434

### Project Scope

Describe and identify in the following sections a general description of all improvements anticipated as part of the project scope that will require DES functional unit involvement. The project should be discussed in sufficient detail to accurately identify the involvement of DES to study the various alternatives. The PSR(PDS) is used to program support \$ for the Project Report and Environmental Document Phase of the project ONLY, and to commit to a schedule for the completion PR & ED phase.

#### Check applicable boxes describing proposed scope of project.

- |                                                                                      |                                                              |                                                   |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> New Expressway/Freeway on new alignment                     | <input type="checkbox"/> Other Roadway Realignment           | <input checked="" type="checkbox"/> Widen Highway |
| <input type="checkbox"/> Construct Interchange                                       | <input type="checkbox"/> Emergency/Storm Damage              | <input type="checkbox"/> Rockfall Project         |
| <input type="checkbox"/> Modify Interchange                                          | <input checked="" type="checkbox"/> Bridge Widening          | <input type="checkbox"/> Left-turn Pocket         |
| <input checked="" type="checkbox"/> Bridge Replacement                               | <input type="checkbox"/> Curve Correction                    | <input checked="" type="checkbox"/> Modify Slope  |
| (New alignment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No) | <input type="checkbox"/> Building Project                    | <input type="checkbox"/> Stabilize Subgrade       |
| <input type="checkbox"/> Bridge Rehabilitation                                       | <input type="checkbox"/> Median Barrier Retrofit             | <input type="checkbox"/> Stabilize Roadway        |
| <input type="checkbox"/> New Bridge                                                  | <input type="checkbox"/> Construct Passing Lane              | <input type="checkbox"/> Landslide/Slip-out       |
| <input type="checkbox"/> Bridge Seismic Retrofit                                     | <input checked="" type="checkbox"/> Soundwall/Retaining Wall |                                                   |
|                                                                                      | <input type="checkbox"/> Other Design: Explain:              |                                                   |

Proposed Scope of DES Design Work:

See Table 1 - Bridge Structures Data Matrix for Alternatives 2 and 3

The alternatives proposed are:  
Alternative 1: No Build Alternative  
Alternative 2: Non-Standard Lane Widths Alternative  
Alternative 3: Full Standard Lane Widths Alternative  
Alternative 4:

**Project Cost**

For PSR (PDS) projects, the following section is to be used for each alternative provided that the scope is significantly different:

Alternative #3

	<u>Project Cost Range (\$ 1000's)</u>	<u>Cost of Largest Structure (\$ 1000's)</u>
Roadway	\$282,500	\$8,000
Structure**	\$39,600	
Total	\$322,100	

\*\*Structure Cost Range to be provided by one of the following below:

- Consultant       Structure Design Technical Liaison.

**Project Scope Breakdown by DES Function**

**Bridge Design Services (check applicable boxes)**

**Design by:**

- Office of Structure Design  
 Structure Maintenance Design  
 Office of Structure Contract Management (Consultant Design Oversight)  
 Office of Special Funded Projects (Consultant Design Oversight)

**Bridge Information:**

<input type="checkbox"/> New Bridge(s)	Number	Bridge Name(s) & No(s).
<input checked="" type="checkbox"/> Bridge Replacement(s)	Number 9	Bridge Name(s) & No(s).Table 1
<input checked="" type="checkbox"/> Bridge Widening(s)	Number 6	Bridge Name(s) & No(s).Table 1
<input type="checkbox"/> Bridge Rail Replacement(s)	Number	Bridge Name(s) & No(s).

**Other DES functional units required for Structure Work**

- Structure Hydraulics (include if bridge is over or adjacent to water)  
 Geotechnical Services (Structure Foundations)

**Soundwall and/or Retaining Wall Design (non-district designed)**

<input checked="" type="checkbox"/> Soundwall(s)	Number 2	Estimated Max. Ht 4m	Estimated Total Length 1275
<input checked="" type="checkbox"/> Retaining walls(s)	Number 4	Estimated Max. Ht 4m	Estimated Total Length 1255
<input type="checkbox"/> MSE walls(s)	Number	Estimated Max. Ht	Estimated Total Length

**Technical Specialist Design**

**Anticipated insertable plan sheet(s) check below:**

<input checked="" type="checkbox"/> Culvert(s)	Number 1
<input checked="" type="checkbox"/> Barrier(s)	Number 1
<input checked="" type="checkbox"/> Signs and Overhead Structures	Number 1
<input type="checkbox"/> Other Design:	Explain:

**Transportation Architecture Design**

<input type="checkbox"/> Design New Building(s)	Explain:
<input type="checkbox"/> Remodel Existing Buildings(s)	Explain:
<input checked="" type="checkbox"/> Bridge Aesthetics Evaluation	Explain: TBD at PA/ED Phase
<input type="checkbox"/> Build scale model	Explain:
<input type="checkbox"/> Other Aesthetics work	Explain:

**Electrical, Mechanical, Water & Wastewater Design**

<input type="checkbox"/> Pumping Plants	Explain:
<input type="checkbox"/> Movable bridge, drawbridg	Explain:
<input checked="" type="checkbox"/> Lighting control system for facilities	Explain: TBD at PA/ED Phase
<input type="checkbox"/> Sanitary Systems	Explain:

**Materials Engineering & Testing Services****Pavement**

<input type="checkbox"/> Rigid	<input type="checkbox"/> Flexible	Average Grade	Average Superelevation
<input type="checkbox"/> Deflection Studies Required	No. of Locations	Lane/miles to be tested	

**Consultation and Inspection**

<input type="checkbox"/> Loop detectors	<input type="checkbox"/> Signal & Lighting Products	<input type="checkbox"/> Changeable Message Signs, Closed Circuit TV
<input checked="" type="checkbox"/> Concrete Bridge	<input type="checkbox"/> Steel Bridge	

**Corrosion Tests**

<input type="checkbox"/> Soil	<input type="checkbox"/> Concrete	<input type="checkbox"/> Cathodic Protection System
-------------------------------	-----------------------------------	-----------------------------------------------------

**Other**

<input type="checkbox"/> Special Products:	Explain
--------------------------------------------	---------

**DES Geotechnical Services**

Is Oversight for consultant prepared geotechnical reports required?

 Yes  No

Has the Geotechnical Design Liaison or other geotechnical person been contacted?

 Yes  No If yes, who? Bhaskar/Joshi/Deh-Jeng Jang

<b>Terrain:</b>	<input type="checkbox"/> Flat	<input checked="" type="checkbox"/> Rolling	<input type="checkbox"/> Mountainous
<b>Cuts:</b>	Est. Max Height (m) 3	Est. Volume (m <sup>3</sup> ):121,000	<input type="checkbox"/> New <input checked="" type="checkbox"/> Widen
<b>Fills:</b>	Est. Max Height (m) 3	Est. Volume (m <sup>3</sup> ):54450	<input type="checkbox"/> New <input checked="" type="checkbox"/> Widen

**Structures**

<input checked="" type="checkbox"/> Retaining Walls	Number 12	Est. Max. Height 4m	Est. length (m) 3775m	<input checked="" type="checkbox"/> Cut	<input checked="" type="checkbox"/> Fill
<input checked="" type="checkbox"/> Soundwalls	Number 7	Est. Avg. Height 4m	<input checked="" type="checkbox"/> Standard Plan	<input type="checkbox"/> Non-Standard Plan	
<input checked="" type="checkbox"/> Overhead Sign Foundations			Number TBD		
<input type="checkbox"/> Changeable Message Sign Foundations			Number		

**Other:** Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement,

Other:

- Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.) Explain Slope stability and erosion at PA/ED phase
- Existing Maintenance Problems: Explain:

Engineering Technology\*

<input type="checkbox"/> Aerial Photography			
<input type="checkbox"/> Raster Imaging:	Est. Total Length (km)	Est. Avg. Width (m):	
<input type="checkbox"/> DTM Modeling (non-district):	Est. Total Length (km)	Est. Total Width (m):	
<input type="checkbox"/> Mapping:	Est. Total Length (km)	Est. Avg. Width (m)	Scale:

Note: A Photogrammetry Service Request (PSR/PDS) must be completed and submitted for DES Photogrammetry by the District/Phase Property Coordinator.

Division of Engineering Services Workload Estimate for PSR(PDS)				
WBS	Alternative Number			
	1	2	3	
100			1.74	
150			0.71	
160			1.44	
165			φ	
175			0.85	
180			0.01	
<b>Total PY's per Alternative</b>			<b>4.75</b>	
			<b>Total Project PY's</b>	<b>4.75</b>

Additional Studies, Investigations or Research from DES

Preliminary Evaluation provided by:  
DES Project Coordination Engineer

*John R. Cosmez* 6-14-05  
John Cosmez (916) 227-8434

Reviewed by:  
Project Manager

*Ravi Ghata*

Date *9/26/05*



- (New alignment?  Yes  No)  Median Barrier Retrofit  Stabilize Roadway  
 Bridge Rehabilitation  Construct Passing Lane  Landslide/Slip-out  
 New Bridge  Soundwall/Retaining Wall  
 Bridge Seismic Retrofit  Other Design: Explain:

## Project Schedule

Product or Milestone	Delivery Date	Work Performed By	
		Caltrans	Consultant or Local Agency
PSR/PSR(PDS)/PSSR	September 2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PR(or PA/ED*)	February 2009	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Structure Site Data Submittal		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Draft SPS&E (i.e. Activity 240 finish date)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
PS&E	August 2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RTL	January 2013	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Advertise		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Approve Contract			
Contract Administration		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contract Acceptance			

\*Note: Only the PA/ED milestone is to be used for programming commitments. All other milestones are used to indicate relative time frame for planning purposes.

## Project Cost

For PSR (PDS) projects, the following section is to be used for each alternative, provided that the scope is significantly different.

### Alternative # 3

<u>Project Cost Range (\$ 1000's)</u>	<u>Cost of Largest Structure (\$ 1000's)</u>
Roadway \$282,500	\$8,000
Structure** \$39,600	
Total \$322,100	

\*\*Structure Cost Range to be provided by:

- Consultant  Structure Design Technical Liaison.

## Project Scope Breakdown by DES Function

Bridge Design Services (check applicable boxes)



**Design by:**

- Office of Structure Design
- Structure Maintenance Design
- Office of Structure Contract Management (Consultant Design Oversight)
- Office of Special Funded Projects (Consultant Design Oversight)

**Bridge Information:**

<input type="checkbox"/> New Bridge(s)	Number	Bridge Name(s) & No(s).
<input checked="" type="checkbox"/> Bridge Replacement(s)	Number 9	Bridge Name(s) & No(s). Table 1
<input checked="" type="checkbox"/> Bridge Widening(s)	Number 6	Bridge Name(s) & No(s). Table 1
<input type="checkbox"/> Bridge Rail Replacement(s)	Number	Bridge Name(s) & No(s).

**Other DES functional units required for Structure Work**

- Structure Hydraulics (include if bridge is over or adjacent to water)
- Geotechnical Services (Structure Foundations)

**Soundwall and/or Retaining Wall Design (non-district designed)**

<input checked="" type="checkbox"/> Soundwall(s)	Number 2	Estimated Max. Ht 4m	Estimated Total Length 1275
<input checked="" type="checkbox"/> Retaining walls(s)	Number 4	Estimated Max. Ht 4m	Estimated Total Length 1255
<input type="checkbox"/> MSE walls(s)	Number	Estimated Max. Ht	Estimated Total Length

**Technical Specialist Design**

**Anticipated insertable plan sheet(s) check below:**

<input checked="" type="checkbox"/> Culvert(s)	Number 1
<input checked="" type="checkbox"/> Barrier(s)	Number 1
<input checked="" type="checkbox"/> Signs and Overhead Structures	Number 1
<input type="checkbox"/> Other Design:	Explain:

**Transportation Architecture Design**

<input type="checkbox"/> Design New Building(s)	Explain:
<input type="checkbox"/> Remodel Existing Buildings(s)	Explain:
<input checked="" type="checkbox"/> Bridge Aesthetics Evaluation	Explain: TBD at PA/ED Phase
<input type="checkbox"/> Build scale model	Explain:
<input type="checkbox"/> Other Aesthetics work	Explain:

**Electrical, Mechanical, Water & Wastewater Design**

<input type="checkbox"/> Pumping Plants	Explain:
<input type="checkbox"/> Movable bridge, drawbridg	Explain:
<input checked="" type="checkbox"/> Lighting control system for facilities	Explain: TBD at PA/ED Phase
<input type="checkbox"/> Sanitary Systems	Explain:

**Materials Engineering & Testing Services**

**Pavement**

<input type="checkbox"/> Rigid	<input type="checkbox"/> Flexible	Average Grade	Average Superelevation
<input type="checkbox"/> Deflection Studies Required	No. of Locations	Lane/miles to be tested	

**Consultation and Inspection**

<input type="checkbox"/> Loop detectors	<input type="checkbox"/> Signal & Lighting Products	<input type="checkbox"/> Changeable Message Signs, Closed Circuit TV
<input checked="" type="checkbox"/> Concrete Bridge	<input type="checkbox"/> Steel Bridge	

**Corrosion Tests**

<input type="checkbox"/> Soil	<input type="checkbox"/> Concrete	<input type="checkbox"/> Cathodic Protection System
<b>Other</b>		
<input type="checkbox"/> Special Products:	Explain	

**DES Geotechnical Services**

Is Oversight for consultant prepared geotechnical reports required?

Yes     No

Has the Geotechnical Design Liaison or other geotechnical person been contacted?

Yes     No    If yes, who? Bhaker Joshi/Deh-Jeng Jang

<b>Terrain:</b>	<input type="checkbox"/> Flat	<input checked="" type="checkbox"/> Rolling	<input type="checkbox"/> Mountainous
<b>Cuts:</b>	Est. Max Height (m) 3	Est. Volume (m <sup>3</sup> ):121000	<input type="checkbox"/> New <input checked="" type="checkbox"/> Widen
<b>Fills:</b>	Est. Max Height (m) 3	Est. Volume (m <sup>3</sup> ):54450	<input type="checkbox"/> New <input checked="" type="checkbox"/> Widen

**Structures**

<input checked="" type="checkbox"/> Retaining Walls	Number 12	Est. Max. Height 4m	Est. length (m) 3775	<input checked="" type="checkbox"/> Cut	<input checked="" type="checkbox"/> Fill
<input checked="" type="checkbox"/> Soundwalls	Number 7	Est. Avg. Height 4m	<input checked="" type="checkbox"/> Standard Plan	<input type="checkbox"/> Non-Standard Plan	
<input checked="" type="checkbox"/> Overhead Sign Foundations			Number		
<input type="checkbox"/> Changeable Message Sign Foundations			Number		

**Other:**

Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.) Explain Slope stability and erosion to be studied at PA/ED phase.

Existing Maintenance Problems:                      Explain:

**Engineering Technology\***

<input type="checkbox"/> Aerial Photography			
<input type="checkbox"/> Raster Imaging:	Est. Total Length (km)	Est. Avg. Width (m):	
<input type="checkbox"/> DTM Modeling (non-district):	Est. Total Length (km)	Est. Total Width (m):	
<input type="checkbox"/> Mapping:	Est. Total Length (km)	Est. Avg. Width (m)	Scale:

\*Note: A Photogrammetry Service Request-PSR(PDS) must be completed and submitted to DES Photogrammetry by the District Photogrammetry Coordinator.

**Structure Construction**

Oversight for consultant construction administration required?  Yes     No

**Additional Studies, Investigations or Research from DES**

Identify additional studies or investigations that may be required from DES Functional Units.

Reviewed by:

Project Manager Ravi Ghate Date 9/26/05

**ALTERNATIVE 3: FULL STANDARD LANE WIDTHS ALTERNATIVE - EXISTING AND PROPOSED STRUCTURE WIDTHS**

No.	Bridge Name	Existing								Proposed							
		SOUTHBOUND				NORTHBOUND				SOUTHBOUND				NORTHBOUND			
		Outside SHLD	Other	MFL	Inside SHLD	Inside SHLD	MFL	Other	Outside SHLD	Outside SHLD	Other	MFL	Inside SHLD	Inside SHLD	MFL	Other	Outside SHLD
	Rte 101/27 SEP UC	2.8		5(3.36)	0.9	3.0	5(3.66)		2.8	3.05	1(3.66) Accel	5(3.66)	3.05	3.05	5(3.66)	1(3.66) Decel	3.05
	Ventura Blvd UC	2.8		4(3.35)	0.6	3.0	4(3.65)		2.8	3.05		5(3.66)	3.05	3.05	5(3.66)		3.05
	Shoup Ave. UC	2.8	3.7 Ramp	4(3.35)	0.6	3.0	4(3.65)		2.8	3.05	1(3.66++) Ramp	5(3.66)	3.05	3.05	5(3.66)		3.05
	Sale Ave PUC	3.0		4(3.35)	0.6	0.6	4(3.35)		3.0	3.05		5(3.66)	3.05	3.05	5(3.66)		3.05
	Fallbrook Ave UC	2.8		4(3.35)	0.6	0.6	4(3.35)		2.8	3.05		5(3.66)	3.05	3.05	5(3.66)		3.05
	Del Valle St POC	2.9		4(3.35)	0.6	0.6	4(3.35)		2.9	3.05		5(3.66)	3.05	3.05	5(3.66)		3.05
	Dry Canyon Creek (Culvert)	3.0	3.7 Ramp	4(3.425)	0.6	0.6	4(3.35)	3.7 Ramp	3.0	3.05	1(3.66++) Ramp	5(3.66)	3.05	3.05	5(3.66)	1(3.66) Ramp	3.05
	Valley Circle Blvd. OC	4.6	4.27m ramp + 2.28m median	4(3.66)m	0.3	0.3	4(3.66)		3.6	3.05	1(3.66++) Ramp	5(3.66)	3.05	3.05	5(3.66)		3.05
	Parkway Calabasas OC (formerly Craftsman Rd. OC)	3.1		4(3.65)	2.5	2.4	4(3.65)	3.0 shoulder, 1.2m median, 8.46m Ramp	1.2	3.05		5(3.66)	3.05	3.05	5(3.66)	1(3.66++) Ramp	3.05
	Mureau Road OC	3.0		4(3.65)	2.7	2.7	4(3.65)		3.0	3.05		5(3.66)	3.05	3.05	5(3.66)		3.05
	Las Virgenes Rd. OC	2.7		4(3.66)	2.7	2.6	4(3.66)		2.9	3.05	1(3.66++) Ramp	5(3.66)	3.05	3.05	5(3.66)		3.05
	Las Virgenes Creek (Culvert)	3.0	3.7m Ramp + 1.8m shoulder	4(3.65)	3.0	3.0	4(3.65)	3.7m Ramp	3.0	3.05		5(3.66)	3.05	3.05	5(3.66)	1(3.66) AUX	3.05
	Lost Hills Rd. OC	2.9		4(3.66)	2.4	2.7	4(3.66)		2.8	3.05		5(3.66)	3.05	3.05	5(3.66)		3.05
	Liberty Canyon Rd UC	3.0		4(3.65)	3.0	3.0	4(3.65)		3.0	3.05		5(3.66)	3.05	3.05	5(3.66)		3.05
	Palo Comado Canyon Rd. OC (formerly Chesebro Rd. OC)	2.3	3.7 Ramp	4(3.65)	5.1	4.7	4(3.65)		3.0	3.05	1(3.66++) Accel	5(3.66)	3.05	3.05	5(3.66)	1(3.66) AUX	3.05
	Chesebro Creek	2.4	3.7 Ramp, 4.6m median	4(3.65)	2.4	2.4	4(3.65)	3.7 Ramp	3.0	3.05	1(3.66) AUX 1(.6) GORE	5(3.66)	3.05	3.05	5(3.66)	1(3.66++) Accel	3.05
	Lewis Road POC	2.5	3.9 Ramp	4(3.65)	2.4	2.4	5(3.65)	3.4 Ramp	2.8	3.05	1(3.66) AUX	5(3.66)	3.05	3.05	5(3.66)	1(3.66) AUX	3.05
	Medea Creek	3.0	3.7 Ramp	4(3.65)	5.2	5.2	4(3.65)	3.7 Ramp	3.0	3.05	1(3.66++) Accel	5(3.66)	3.05	3.05	5(3.66)	1(3.66) Ramp	3.05
	Kanan Road OC	3.0		4(3.65)	4.0	4.3	4(3.65)		3.0	3.05		5(3.66)	3.05	3.05	5(3.66)		3.05
	Reyes Adobe Rd OC (Agoura Road OC)	2.7		4(3.65)	2.9	2.5	4(3.65)		2.9	3.05		5(3.66)	3.05	3.05	5(3.66)		3.05
	Lindero Canyon Rd On-Ramp Culvert	4.72m easement, 4.57 shoulder	2(3.65) Ramp	4(3.65)	4.0	4.0	4(3.65)	2(3.7) Ramp	4.1	3.05	1(3.66) AUX	5(3.66)	3.05	3.05	5(3.66)	1(3.66) AUX	3.05
	Lindero Canyon Rd OC	4.72m easement, 4.57 shoulder	2(3.65) Ramp	4(3.65)	4.0	4.0	4(3.65)	2(3.7) Ramp	4.1	3.05	1(3.66) Accel	5(3.66)	3.05	3.05	5(3.66)	1(3.66) Accel	3.05
	Lakeview Canyon Rd. OC	3.0		5(3.66)	4.3	4.2	5(3.66)		3.0	3.05	1(3.66) AUX	5(3.66)	3.05	3.05	5(3.66)	1(3.66) AUX	3.05

**Attachment G**

**Preliminary Environmental  
Assessment Report and  
Preliminary Noise Study Report**

**Route 101 Freeway Widening Project**

**Add One Mixed-Flow Lane in Each Direction  
from the Vicinity of Canoga Avenue  
to the Vicinity of the LA/Ventura County Line**

**Preliminary Environmental Assessment Report  
(PEAR)**

September, 2005



## Preliminary Environmental Analysis Report

### Project Information

District: 7 County: LA/Ven Route: 101 Kilometer Post (Post Mile): 40.0/61.5 (24.9/38.2) (LA)  
EA: 24920K 0.0/1.0 (0.0/0.6) (Ven)

Project Title: Route 101 Freeway Widening Project - Add One Mixed-Flow Lane in Each Direction from the Vicinity of Canoga Avenue to the Vicinity of the LA/Ventura County Line

Caltrans Project Manager Ravi Ghate Phone # (213) 897-5593

Consultant Project Manager Farid Naguib Phone # (213) 362-9483

Consultant Environmental Manager Steven Wolf Phone # (714) 973-4880

Consultant Environmental Planner Stephanie Oslick Phone # (714) 973-4880

### Project Description

**Purpose and Need:** Route 101 currently carries between 175,000 and 233,000 vehicles per day and experiences peak period traffic congestion along the mainline in both directions. According to Caltrans 2002 congestion maps, vehicle speeds are reduced to below 60 km/h (35 mph) for extended periods during the AM and/or PM peak periods in both directions, with several southbound segments experiencing more than three hours of reduced speeds during the PM peak period. Increased traffic volumes along the Route 101 corridor over the next 25 years, due to future growth and development in the region, will worsen traffic conditions and extend periods of congestion. This proposed Route 101 Freeway Widening Project, between the vicinity of Canoga Avenue and the vicinity of the LA/Ventura County Line, has three main objectives: reduce traffic congestion, accommodate future traffic growth, and improve traffic safety.

**Description of work:** The PSR (PDS) proposes to add one mixed-flow lane in each direction of Route 101 from the vicinity of Canoga Avenue to the vicinity of the LA/Ventura County line. This Preliminary Environmental Assessment Report (PEAR) covers the Route 101 PSR(PDS) between the vicinity of Canoga Avenue and the vicinity of the LA/Ventura County line.

**Alternatives:** Three alternatives including the "No Build" Alternative are being considered to address this problem. Alternative 1 is the No Build Alternative. This alternative would involve no action other than routine highway maintenance activities. Alternative 2 is the "Non-Standard Lane Widths" Alternative. This alternative would include the following: restripe lanes where feasible and minimize right of way impacts; portions of the project will have three non-standard lanes (width 3.35 m) and non-standard left shoulder (0.6 m) in both directions to minimize impacts; outside two lanes will be standard width (3.66 m) with standard right shoulder (3.05 m) throughout the project; related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements; modified and new structures will provide space for standard lane widths which are the same as Alternative 3. Alternative 3 is the "Standard Lane Widths" Alternative. This alternative would include the following: full standard lane widths (3.66 m), shoulders (3.05 m) and other feasible full standard design features; and related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements as necessary.

## Anticipated Environmental Approval

- | <u>CEQA</u>                                                     | <u>NEPA</u>                                                        |
|-----------------------------------------------------------------|--------------------------------------------------------------------|
| <input type="checkbox"/> Categorical/Statutory Exemption        | <input type="checkbox"/> Categorical Exclusion                     |
| <input type="checkbox"/> Negative Declaration / focused ND      | <input type="checkbox"/> Finding of No Significant Impact          |
| <input checked="" type="checkbox"/> Environmental Impact Report | <input checked="" type="checkbox"/> Environmental Impact Statement |

Due to a range of issues identified in the PEAR, various technical studies addressing possible environmental impacts will be needed. During the PA/ED phase of the project, an EIR/EIS is anticipated to be the appropriate environmental document for compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). However, this determination is subject to change during the PA/ED phase due to design changes and results of technical studies.

At this time, it is assumed that Caltrans would likely be the lead agency under CEQA and that FHWA (or Caltrans acting on behalf of FHWA) would likely be the lead agency under NEPA. It is anticipated that the required environmental approval will be an EIR/EIS (although the environmental document may change during the PA/ED phase as noted above) and that the environmental review will take approximately 36 to 42 months.

## PSR(PDS) Summary Statement

For Alternative 2, it is anticipated that the required environmental approval will be an EIR/EIS (subject to change during PA/ED) and that environmental review will take approximately 36 to 42 months.

### *Likely impacts include the following:*

Hazardous materials; noise impacts to adjacent residential and commercial uses; aesthetics; biological resources; hydrology/water quality; transportation/traffic; air quality; and geology and soils

Biological resource agency permits will be needed from the Army Corps of Engineers (404 Permit), Regional Water Quality Control Board (401 Certification), and the California Department of Fish and Game (1602 Agreement). These permits and agreements will take approximately 6 to 12 months or longer to obtain.

### *Impacts requiring additional investigation include:*

Noise, aesthetics, biological resources, transportation/traffic, hydrology/water quality, cultural resources, wetlands, hazardous wastes/materials; air quality; population/housing; relocation; recreation; utilities; seismic and geologic hazards

### *No impacts are anticipated to the following:*

Agriculture; mineral resources; land use planning; public resources

### *Project mitigation is anticipated for the following:*

Hydrology/water quality, aesthetics, biological resources, traffic, air quality, floodplain encroachment, hazardous materials, and cultural resources. The cost for the construction of soundwalls is not included in the environmental mitigation. It is included in the construction costs. The total estimate for environmental mitigation and compliance (permits and agreements) for Alternative 2 would be approximately \$24.8 million. See section on "Anticipated Project Mitigation" for further discussion.



For Alternative 3, it is anticipated that the required environmental approval will be an EIR/EIS (subject to change during PA/ED) and that environmental review will take approximately 36 to 42 months.

*Likely impacts include the following:*

Hazardous materials; noise impacts to adjacent residential and commercial uses; aesthetics; biological resources; hydrology/water quality; transportation/traffic; air quality; and geology and soils

Biological resource agency permits will be needed from the Army Corps of Engineers (404 Permit), Regional Water Quality Control Board (401 Certification), and the California Department of Fish and Game (1602 Agreement). These permits and agreements will take approximately 6 to 12 months or longer to obtain.

*Impacts requiring additional investigation include:*

Noise, aesthetics, biological resources, transportation/traffic, hydrology/water quality, cultural resources, wetlands, hazardous wastes/materials; air quality; population/housing; relocation; recreation; utilities; seismic and geologic hazards

*No impacts are anticipated to the following:*

Agriculture; mineral resources; land use planning; public resources

*Project mitigation is anticipated for the following:*

Hydrology/water quality, noise, aesthetics, biological resources, traffic, air quality, floodplain encroachment, geology and soils, hazardous materials, and cultural resources. The cost of the construction of soundwalls is not included in the environmental mitigation. It is included in the construction costs. The total estimate for environmental mitigation and compliance (permits and agreements) for Alternative 3 would be approximately \$26.5 million. See section on "Anticipated Project Mitigation" for further discussion.

The following technical studies are recommended to address the impacts of the proposed project on the Route 101 study corridor:

Noise (Traffic Noise Impact Report)

Land Use/Socioeconomic/Environmental Justice [Community Impact Assessment (CIA)]

Right of way Relocations [Draft Relocation Impact Report (DRIR)]

Aesthetics [Visual Impact Assessment (VIA)]

Biological Report [Natural Environment Study (NES)]

Air Quality Report [conformity with carbon monoxide (CO), ozone, oxides of nitrogen, and particulate matter less than 10 microns in diameter (PM<sub>10</sub>) standards]

Cultural Resources Studies [Cultural Impact Assessment Report with Historical Property Survey Report (HPSR), Historical Architectural Survey Report (HASR), and Archaeological Survey Report (ASR)]

Traffic Study Report

Water Quality Assessment

Floodplain Encroachment Report and Location Hydraulic Study

Preliminary Geotechnical Report (PGR) and Preliminary Foundation Reports (PFRs)

Site Investigation (SI)

**Special Considerations**

For Alternatives 2 and 3, special processes that may affect project delivery are Section 7 consultation, Section 4(f) resources issues, and for Alternative 3, a Section 404 Individual Permit. Biological surveys

would need to be completed at appropriate times during the year, which can vary depending on the species. Because swallows, swifts, and bats could be present at any or all of the bridges and/or overcrossings, construction activities such as clearing and grubbing, site preparation, staging and storage, and access routes may need to be restricted from February 15 to September 1 to avoid biological impacts (e.g., nesting season). Similarly, for compliance with the Migratory Bird Treaty Act, construction activities such as clearing and grubbing, site preparation, staging and storage, and access routes may need to be restricted from February 15 to September 1. Also, depending on the breeding activities of other species, specific construction activities may be restricted to certain months of the year. Construction should be avoided during the rainy season (October 15 – March 1) in areas where river systems are present.

Caltrans is proposing a wildlife corridor enhancement project in Agoura Hills just north of Liberty Canyon Road, which entails constructing an access tunnel approximately 10 to 11 feet diameter under the freeway. Construction of the wildlife corridor project is proposed to begin fall 2007 and last for one year. As the design gets refined during PA/ED, coordination with the Caltrans project manager, project engineer, and Division of Environmental Planning should occur during the PA/ED phase. Potential restrictions may include “no night work” periods and possibility of some critical corridor areas remaining open at all times.

#### **Anticipated Project Mitigation**

The environmental mitigation required for Alternatives 2 and 3 would be similar, except where noted below.

*Water Quality and Hydrology:* The proposed project improvements for Alternative 2 and 3 include structure replacement of the Chesebro Creek and Medea Creek Bridges which cross the Chesebro Creek and Medea Creek. It is anticipated that these improvements would require consultation with the Army Corps of Engineers (ACOE), the California Regional Water Quality Control Board (CRWQCB), the California Department of Fish and Game (CDFG), and other resource agencies to determine if potential impacts would require mitigation and what the mitigation would entail. Alternative 3 includes modification of the existing channel at Las Virgenes Creek, which would require permits from the Army Corps of Engineers (Section 404 of the Clean Water Act), Regional Water Quality Control Board (Section 401 of the Clean Water Act) and the California Department of Fish and Game (Section 1600 *et seq.* of the Fish and Game Code). Since the engineering designs have only been developed to conceptual levels for the PSR(PDS) and consultation with resource agencies has not occurred at this preliminary stage, specific mitigation measures cannot be identified at this time. Anticipated cost for implementation of mitigation and best management practices (BMPs) is approximately \$17.4 million for both Alternatives 2 and 3.

*Noise:* The existing noise-sensitive land use within the project limits includes large areas of single and multi-family residences, as well as schools near the freeway. There are also areas of commercial buildings and undeveloped lands within the project limits. Based on the results of the screening level noise analysis, the future traffic noise is projected to be in the range of 0.8 dB to 3.6 dB higher than the existing levels. With the exception of very few locations, all first-row noise sensitive receivers (residential, recreational, and institutional land uses) would require noise abatement in the form of soundwalls. The total approximate soundwall length of 11 barriers for 11 receivers will be 5,985 meters (19,644 feet) for Alternatives 2 and 3. The cost of the soundwalls is approximately \$13.3 million for Alternative 2 and \$14.7 million for Alternative 3. The cost for Alternative 3 is higher than for Alternative 2 because three existing soundwalls need to be replaced in Alternative 3 whereas only one existing soundwall is to be replaced in Alternative 2. The cost of the construction of soundwalls is not included in

the environmental mitigation. It has been included in the construction costs. No other noise mitigation is proposed at this time.

Detailed noise studies and modeling are recommended to determine the extent to which properties will be affected and the level and type of mitigation measures that would be warranted to mitigate any significant noise impacts.

*Aesthetics:* Mitigation for aesthetic impacts can include project design features such as structural enhancement of walls and columns, decorative architectural features such as light standards and bridge railing details, or softscape treatments such as revegetation or other landscape treatments. It is anticipated that Alternative 3 would require additional landscaping as compared to Alternative 2, due to greater right of way requirements. Anticipated mitigation cost for Alternative 2 is approximately \$500,000 and \$600,000 for Alternative 3. Since the engineering designs have only been developed to conceptual levels for the PSR(PDS), specific mitigation measures cannot be identified at this time.

*Biological Assessment:* Large segments adjacent to the Route 101 corridor are currently undeveloped lands, which have the potential to include sensitive habitats. Changes to or expansion of right of way may affect habitat or sensitive species. Mitigation of biological impacts can include biological monitoring prior to and during construction, limiting construction activities to certain times of the year (to avoid breeding season), fencing sensitive areas, and incorporating any mitigation measures already identified in a conservation plan. The proposed project site is located within the Los Angeles County Significant Ecological Area (SEA) No. 26 Santa Monica Mountains. Coordination will be needed with United States Fish and Wildlife Service (if a federal listed species has the potential to be present), ACOE, CRWQCB, and CDFG to develop other mitigation strategies. Due to greater right of way requirements, it is anticipated that Alternative 3 would require \$1.8 million in additional biological mitigation for wildlife corridor, bats, and endangered species impacts as compared to \$1.2 million for Alternative 2. Since the engineering designs have only been developed to conceptual levels for the PSR(PDS), specific mitigation measures cannot be identified at this time. The proposed project improvements for Alternative 2 includes 0.32 hectare (0.8 acre) wetland impacts at two locations and requires Nationwide Permits while Alternative 3 would potentially impact (0.57 hectare) 1.42 acres of wetlands at 3 locations with one at 0.25 hectare (0.62 acre) and require an Individual Permit.

*Traffic:* Existing and forecasted traffic volumes indicate peak period congestion along the Route 101 corridor. Changes in traffic volumes and flows related to the proposed improvements may require mitigation. Since only conceptual levels of design have been developed for the PSR(PDS), specific mitigation measures or locations cannot be identified at this time. See PSR(PDS) Attachment K, Transportation Management Plan, for discussion of proposed traffic mitigation measures during construction.

*Air Quality:* The residences along the corridor are considered to be sensitive receptors and would have the potential to be affected by short-term construction emissions, including fugitive dust during grading and emissions from construction equipment. However, dust control measures, such as daily watering, will be incorporated into the project to reduce fugitive dust. The procedures detailed in the SCAQMD's Rule 403 (Fugitive Dust Control) will be implemented to control emissions during construction. These procedures include: stabilizing soil, watering, washing trucks, fencing, construction phasing, etc. Impacts are expected to be considered negligible with the implementation of dust control measures. Once the freeway improvements are constructed no long-term impacts are expected.

Since only conceptual levels of design have been developed for the PSR(PDS), specific mitigation measures or locations cannot be identified at this time. Air quality impacts during roadway construction generally consist of fugitive dust and mobile source emissions from construction vehicles and equipment.

stage: minimize land disturbances, use watering trucks, cover trucks hauling dirt; during construction: cover trucks transferring materials, minimize unnecessary vehicular activities, utilize other appropriate best management practices (BMPs); during post construction: revegetate disturbed land not used, remove unused materials and dirt piles, and restore to original condition all vehicular paths created during construction to avoid future off-road vehicular activities. Anticipated mitigation and BMPs would cost approximately \$500,000 for both Alternatives 2 and 3.

*Floodplain Encroachment:* A Floodplain Encroachment Report and Location Hydraulic Study will be needed to identify potential impacts to floodplain areas. Alternatives 2 and 3 include replacements to Chesebro Creek and Medea Creek bridges. Alternative 3 also includes modifications to the existing Las Virgenes Creek channel. Identified impacts to 100-year floodplains would require development and evaluation of project alternatives to avoid or minimize potential impacts. Costs for floodplain mitigation are included in the water quality/hydrology mitigation costs described above.

*Geotechnical:* Preliminary studies indicate that the proposed project traverses areas of geological instability. In order to identify specific concerns regarding the local geology and project components, a comprehensive geotechnical investigation performed by a geotechnical engineer will be needed. Potential project impacts could be mitigated by designing structures to withstand the maximum ground accelerations anticipated to occur beneath the proposed improvements. In addition, all critical structural elements will be designed and built to resist strong ground motions approximating the Maximum Credible Earthquake (MCE) and the associated ground accelerations expected to occur in the vicinity of the proposed alignments. The effect of slope instability, ground shaking, and liquefaction on the proposed project can be reduced with proper engineering design and construction, and conformance with current building code requirements. Since the engineering designs have only been developed to conceptual levels for the PSR(PDS), specific mitigation measures cannot be identified at this time.

*Hazardous Materials:* Group Delta, Inc. (Group Delta) performed an Initial Site Assessment (ISA) for the proposed project (August 2005). Based on the results of their review of available information, review of an environmental and regulatory database search (within 0.5 mile of the freeway), and a site visit consisting of a windshield survey, the findings and recommendations of the assessment are as follows:

- There are unpaved areas along the Route 101 alignment where project improvements are proposed. These are mostly sloped embankments away from the freeway, cut embankments or adjacent graded areas of the freeway. It is possible that these areas may contain aerially-deposited lead (ADL) in the near surface soil. It is recommended that once the location of the lane addition improvements are finalized, shallow soil samples should be taken for analyses in unpaved areas where excavations are planned. The samples should be analyzed for total and soluble lead, as necessary to allow proper excavated soil management including on-site placement or offsite disposal.
- Assuming that DTSC (Department of Toxic Substances Control) extends Caltrans variance prior to construction of this project, any portion of the excavated soil that meets the Caltrans DTSC variance requirements may be re-used on site as backfill provided it is placed a minimum of 1.5 meters (5 feet) above the maximum water table elevation and covered with at least 0.3 meters (1 foot) of non-hazardous soil in accordance with the DTSC variance. Pavement is also suitable cover for lead contaminated soil. Specific recommendations will be made during the PS&E phase.
- Along parts of the freeway and specifically between Kilometer Post (KP) 46.0 and KP 50.0 on the northbound side, discolored soil was observed at the base of the adjacent embankment indicating the use of weed control chemicals. Residuals of these chemicals may persist in the near surface soil. For Alternative 2 or 3, it is recommended that testing during PS&E for such chemicals be included in areas where soil is to be excavated.

- Along parts of the freeway and specifically between Kilometer Post (KP) 46.0 and KP 50.0 on the northbound side, discolored soil was observed at the base of the adjacent embankment indicating the use of weed control chemicals. Residuals of these chemicals may persist in the near surface soil. For Alternative 2 or 3, it is recommended that testing during PS&E for such chemicals be included in areas where soil is to be excavated.
- Near the Las Virgenes Road, Chesebro Road, and Reyes Adobe Road interchanges, there are several Leaking Underground Storage Tank (LUST) sites that may have impacted the subsurface soil and groundwater. In addition, such a condition exists between about KP 54.0 and KP 57.0 near Kanan Road and in the area of the Eaton Corporation facility north of the Lindero Canyon Road interchange (KP 61.1). Any construction deeper than about 3 meters (10 feet) in these areas should be further evaluated during PS&E as contamination from these adjacent facilities may have impacted the soil and/or groundwater.
- In the area of Agoura Hills (28708 Roadside Drive in Agoura Hills at KP 55.3) a dry cleaning facility is located adjacent to the freeway. This represents an environmental concern as it may have impacted the shallow soil. Any construction deeper than about 3 meters (10 feet) in these areas should be further evaluated during PS&E as contamination from these adjacent facilities may have impacted the soil and/or groundwater. This facility would not be impacted directly by Alternative 2 or 3.

Anticipated mitigation cost for Alternative 2 is approximately \$5 million and \$6 million for Alternative 3. This estimated cost includes costs for ADL testing and remediation for potential soil or groundwater contamination from on-site sources.

*Cultural Resources:* Archaeological, paleontological, cultural, and historic resources have been identified throughout the Route 101 corridor. The proposed project would require some demolition, grading, or excavation activities that could have potential impacts on known or as yet unidentified resources along the corridor. Mitigation for archaeological, paleontological, cultural, or historic resources would be approximately \$200,000 for Alternative 2 or 3.

**Disclaimer**

This report is not an environmental document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in this report. The estimates and conclusions provided are approximate and are based on cursory analysis of probable effects. This report is to provide a preliminary level of environmental analysis to supplement the Project Study Report (Project Development Support). Changes in project scope, alternatives, or environmental laws will require a re-evaluation of this report.

**Reviewed by:**

\_\_\_\_\_  
Aziz Elattar  
Environmental Office Chief

\_\_\_\_\_  
Ravi Ghatge  
Project Manager

Date: 9-15-05

Date: 9/15/05

**Environmental Technical Reports or Studies Required**

	Study	Document	N/A
Community Impact Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farmland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Section 4(f) Evaluation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visual Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floodplain Evaluation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Quality Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paleontology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wild and Scenic River Consistency	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cumulative Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Cultural</b>			
ASR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HSR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HASR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HPSR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 106 / SHPO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Native American Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other			
Finding of Effect _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data Recovery Plan _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hazardous Waste</b>			
ISA (Additional)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PSI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other			
<b>Biological</b>			
Endangered Species (Federal)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Endangered Species (State)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Species of Concern (CNPS, USFS, BLM, S, F)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biological Assessment (USFWS, NMFS, State)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive Species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural Environment Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NEPA 404 Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Permits</b>			
401 Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
404 Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1602 Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
City/County Coastal Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State Coastal Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NPDES Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
US Coast Guard (Section 10)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion of Technical Review

Socio-economic and Community Effects. Lands within the project study area are within unincorporated Los Angeles County, City of Los Angeles (Canoga Park-Winnetka-Woodland Hills Community Plan Area), City of Agoura Hills, City of Calabasas, City of Hidden Hills, the City of Westlake Village, and the City of Thousand Oaks. The proposed project is adjacent to developed areas of commercial and residential uses as well as undeveloped lands and open space lands such as the Santa Monica Mountain National Recreation Area (SMMNRA).

The proposed project is along an existing transportation corridor, and would not divide any existing communities. However, the proposed project would include right of way takes due to construction of additional travel lanes and realignment of on- and off-ramps. The construction of additional travel lanes is proposed from approximately Canoga Avenue to the vicinity of the LA/Ventura County line. Adjacent residential communities between Topanga Canyon Boulevard and Valley Circle Boulevard may be affected by right of way acquisitions needed to accommodate the proposed travel lanes. Alternative 2 would have potential right of way takes near Woodlake Avenue, Valley Circle Boulevard, and San Luis Avenue. Surrounding uses that may be impacted include commercial, residential, and public uses. Alternative 3 would have potential right of way takes near Topanga Canyon Boulevard, Woodlake Avenue, Valley Circle Boulevard, San Luis Avenue, Parkway Calabasas, and Las Virgenes Road. Commercial, residential, vacant, and open space land uses would be potentially affected. Additional right of way is not anticipated for any of the Build Alternatives west of Liberty Canyon Road. Although no residential relocations are anticipated, impacts are likely to residential and commercial properties. Approximately 3,400 square meters (0.8 acres) of additional right of way would be required for Alternative 2 and approximately 23,500 square meters (5.8 acres) for Alternative 3 in order to accommodate mainline lane improvements. Alternative 2 would result in potential partial acquisition on seven parcels which may impact residential yards, landscaping, parking, and a nursery. Alternative 3 would result in potential partial impacts to 34 parcels resulting in potential impacts to five commercial buildings, residential front yards, landscaping, parking, and frontage road. Alternative 3 would also result in one full parcel acquisition of one commercial building. A Community Impact Assessment (CIA) and a Draft Relocation Impact Report (DRIR) are recommended.

Farmlands. There are no prime, unique, state, or local important farmland within or adjacent to the proposed project corridor.

Section 4(f) Impacts. Portions of the SMMNRA and Calabasas Park border the proposed project study area. Other open space areas and State-owned lands are also located within the project corridor area, as well as some smaller parks and open space areas including Reyes Adobe Park, Forest Cove Park, Old Agoura Park, Grape Arbor Park, and Warner Ranch Park. The proposed project would require some additional right of way which may affect parks and open space areas adjacent to the proposed project alignment. Impacts to these facilities may result in consideration of a Section 4(f) Resources Evaluation.

Visual Effects. Visual resources within the study area include the Santa Monica Mountains, local foothills, including Agoura Hills, Hidden Hills, and Woodland Hills, and three lakes, Westlake, Lake Lindero, and Lake Calabasas. The Route 101 freeway from Canoga Avenue to Westlake Boulevard (State Route 23) is identified as eligible for listing as a state scenic highway. Several roadways that cross Route 101 are locally designated scenic routes including Westlake Boulevard, Kanan Road, Las Virgenes Road, and Mulholland Drive. In addition, other roadway systems crossing Route 101 such as Agoura Road, Chesebro Road, Cornell Road, Old Topanga Canyon Road, and Topanga Canyon Boulevard, are considered to have scenic qualities.

The southern portion of the study area from Canoga Avenue to approximately Valley Circle Boulevard/Mulholland Drive has an urban character with the neatly patterned streets, clustered development, generous setbacks, and modern expressions of form and materials. The rest of the study area from Valley Circle Boulevard/Mulholland Drive to Westlake Boulevard is characterized by rolling hillsides and generous open space areas, which lend themselves to a more suburban character. Views within the southern portion of the study area from Canoga Avenue to Valley Circle Boulevard/Mulholland Drive are generally confined to the local area due to the amount of urban development, which includes commercial development, soundwalls, and mature vegetation along the freeway. Within the remaining portions of the study area more distant views are available.

The proposed project would require some additional right of way, which could result in the removal of vegetation, grading activities, addition of soundwalls, and potential relocation or modification of existing soundwalls. These activities may result in both long- and short-term impacts on the existing visual environment. These impacts may also have the potential to affect views along designated scenic routes. Since Alternative 3 would require more right of way acquisition, additional landscaping as mitigation may be needed compared to Alternative 2. A Visual Impact Assessment is recommended.

Water Quality and Erosion. Las Virgenes Creek flows parallel to the freeway a short distance before crossing under and continuing south. Modification of the existing Las Virgenes Creek channel [approximately 2,500 square meters (0.62 acre)] is anticipated in order to accommodate the construction of full standard lanes within this area. Alternative 2 and 3 includes replacement of the bridges at Chesebro Creek and Medea Creek. The replacement at Medea Creek will result in approximately 1,800 square meters (0.45 acre) of impact to Medea Creek. The replacement at Chesebro Creek will result in approximately 1,400 square meters (0.35 acre) of impact to Chesebro Creek. Other streams that cross under the freeway include Arroyo Calabasas, Dry Canyon Flood Control Channel, Palo Comado Canyon, Lindero Canyon, and Schoolhouse Canyon. Lake Lindero is adjacent to and north of the Route 101 east of Reyes Adobe Road. Westlake is approximately 0.7 mile south of the freeway at Westlake Boulevard. Lake Eleanor is approximately 2 miles southwest of the Route 101 in the same area. Construction of additional travel lanes would be a source of potential pollutants. Petroleum hydrocarbons may be introduced from runoff from additional proposed roadway surfaces. During construction, BMPs would be implemented for stormwater pollution control, in accordance with the National Pollution Discharge Elimination System (NPDES). The proposed project would be required to comply with all Regional Water Quality Control Board (RWQCB) water quality standards and waste discharge requirements. This project is subject to the Caltrans Statewide NPDES Storm Water Permit (Order No. 99-06-DWQ, NPDES No. CAS000003). In addition to the BMP requirements of the Caltrans Storm Water Management Plan (SWMP), a Water Quality Assessment is recommended to evaluate potential water quality impacts associated with the project. If site dewatering is required for new construction, a dewatering plan is required.

Floodplain. A review of the Flood Insurance Rate Maps (FIRM) for Los Angeles and Ventura County (dated 1978 to 2000) revealed that there are 100-year floodplain zones associated with Dry Canyon Flood Control Channel, Las Virgenes Creek, and Medea Creek which cross or are immediately adjacent to the study corridor. A Floodplain Evaluation Report and Location Hydraulic Study will be needed to analyze any potential impacts to the 100-year floodplain. Alternatives 2 and 3 include replacements to Chesebro Creek and Medea Creek bridges. Alternative 3 also includes modifications to the Las Virgenes Creek channel. Impacts to the 100-year floodplain require coordination with the Federal Emergency Management Agency (FEMA).

Noise. A Draft Preliminary Traffic Noise Study (August 2005) was prepared by Parsons Brinckerhoff to evaluate and identify potential noise impacts that may result from implementation of the proposed project and to identify and recommend noise abatement and mitigation measures necessary for the project to



comply with state and federal noise abatement/mitigation requirements. The existing noise-sensitive land use within the project limits includes large areas of single and multi-family residences, as well as schools near the freeway. There are also areas of commercial buildings and undeveloped lands within the project limits.

A screening level noise analysis was conducted to determine the comparative differences in traffic noise associated with each of the project build strategies. Using the Caltrans traffic noise impact screening procedure (Caltrans Technical Noise Supplement, October, 1998) the build strategies were compared to the existing freeway conditions based on the change in the freeway right of way and added lanes of traffic.

Based on the results of the screening level noise analysis, the future traffic noise is projected to be in the range of 0.8 dB to 3.6 dB higher than the existing levels. With the exception of very few locations, all first-row noise sensitive receivers (residential, recreational, and institutional land uses) will require noise abatement in the form of soundwalls within the freeway right of way or at the closest property line where the receiver is at a much higher elevation than the roadway.

Preliminary soundwalls and approximate noise barrier (NB) lengths are as follows and are listed in Table 1 (see Preliminary Traffic Noise Study):

- NB-1.** A 700-meter soundwall along the northbound edge-of-shoulder (EOS) between Lindero Canyon Road and Lakeview Canyon Road.
- NB-2** Raise existing 415-meter soundwall along the northbound right of way (ROW) between Lindero Canyon Road and Reyes Adobe Road and extend the existing soundwall 120-meters east to connect with a 200-meter existing soundwall.
- NB-3** An 1125-meter soundwall along the northbound ROW or property line between Reyes Adobe Road and Kanan Road. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway
- NB-4** A 400-meter soundwall along the southbound EOS or ROW between Palo Comado Canyon Road and Liberty Canyon Road.
- NB-5** A 300-meter soundwall along the northbound ROW or property line of the middle school just south of Liberty Canyon Road. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway
- NB-6** A 300-meter soundwall along the northbound off ramp to Liberty Canyon Road. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway
- NB-7** An 800-meter soundwall along the northbound EOS just north of Lost Hills Road on-ramp to NB Route 101.
- NB-8** A 125-meter soundwall along the northbound ROW or property line just north of the Mureau Road over crossing. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway.
- NB-9** The existing 600-meter soundwall along southbound Route 101 would be replaced with a new soundwall at the new EOS to meet Caltrans standards. This area is between Mulholland Drive and Fallbrook Avenue.

**NB-10** A 300-meter soundwall along the northbound ROW or property line. This area is between Mulholland Drive and Fallbrook Avenue. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway. This soundwall is required to be replaced in Alternative 3.

**NB-11** An 800-meter soundwall along the southbound ROW or property line. This area is between Fallbrook Avenue to Shoup Avenue. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway.

**Table 1  
Preliminary Soundwall Length**

<b>Barrier</b>	<b>Receiver</b>	<b>Approximate Wall Length (Meters)</b>	<b>Approximate Wall Length (Feet)</b>
NB-1	1	700	2300
NB-2	2	535	1755
NB-3	3	1125	3690
NB-4	4	400	1315
NB-5	5	300	985
NB-6	5	300	985
NB-7	6	800	2625
NB-8	7	125	410
NB-9	8	600	1969
NB-10	9	300	985
NB-11	24 hrs Site B	800	2625

Preliminary noise abatement measures in the form of soundwalls have been identified for the potentially impacted receivers for both Build Alternatives. Detailed noise studies and modeling are recommended to determine the extent to which properties will be affected and the level and type of mitigation measures that would be warranted to mitigate any significant noise impacts.

**Air Quality.** The study area is located in the South Coast Air Basin, which includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The proposed improvements on Route 101 are intended to ease traffic congestion and accommodate future traffic growth. Therefore, the proposed project is expected to have beneficial affect on air quality in the region. The proposed project is located in the South Coast Air Basin which has been federally classified as being non-attainment. The non-attainment status of each criteria pollutant is provided as follows: carbon monoxide (CO) – serious, particulate matters 10 microns or less, (PM<sub>10</sub>) – serious, 1 hour ozone – extreme, 8 hour ozone (O<sub>3</sub>) – severe 17, and particulate matter 2.5 microns or less – non-attainment. The state designations of the above criteria pollutants are that of non-attainment. Therefore, the project is subject to both regional as well a localized emissions analysis. Currently, the proposed project is not included in the 2004 RTIP and RTP; however, the proposed improvements shall be in conformity with a future RTIP/RTP and the appropriate project level analysis requirements during the PA/ED phase. To satisfy the project level analysis requirements, the Air Quality Report will include the following:

- Carbon monoxide analysis in accordance to the Transportation Project-Level Carbon Monoxide Protocol; and
- PM10 analysis in accordance to Caltrans Interim Guidance Project –Level PM10 Hot-Spot Analysis.

During the PA/ED phase, the potential short-term air quality impacts associated with construction of the proposed project alternatives will be assessed.

The added freeway capacity will result in higher operating speeds and improved level of service, which will reduce the carbon monoxide (CO) air quality emissions. The project will not result in a cumulatively considerable net increase of an existing or projected future air violation. Further study would be required to determine if the proposed Build Alternatives would result in an increase in any of these pollutants. An air quality technical study is recommended. During construction, criteria pollutant construction emissions could potentially exceed established thresholds. Emissions would be short-term and temporary.

Wild and Scenic River. There are no designated wild and scenic rivers located within the proposed project corridor.

Cultural Resources. Pre-historic and historic archeological sites exist throughout the Route 101 Corridor area. The area's mild climate, water resources, and abundant flora and fauna supplied a wide variety of food and building materials for Native Americans, who were the area's first inhabitants. Remnants of various Native American cultures continue to be unearthed and documented. These include rockshelters and villages dating from at least 5,500 years ago to the historic period.

The Route 101 Corridor area is also rich in paleontological sites. The Corridor includes areas underlain by geologic units of high paleontologic sensitivity. Fossil resources have been found in sedimentary rock that has been uplifted, eroded, or otherwise exposed.

The Corridor study area is rich in history and culture that was shaped by chronological and natural events. The cultural history of the area dates back to the pre-contact period of Native American settlement and continues through the Spanish expeditions, Mexican rancho period, and the cultural diversity of today's modern communities. Historic sites and structures that depict the areas rich history and culture are protected and preserved through various groups and actions including designation by the National Register of Historic Places, Cultural Heritage Commissions, listing through California Register of Historical Places, and implementation of Historic Preservation Overlay Zones (HPOZs).

Archeological, paleontological, cultural, and historic resources have been identified throughout the Route 101 corridor. The proposed project would require some demolition, grading, or excavation activities that could have potential impacts on known or as yet unidentified resources along the corridor.

A Cultural Resource Assessment Report, Historical Property Survey Report (HPSR), Historical Architectural Survey Report (HASR), Archeological Survey Report (ASR), Findings of Effect (FOE), and Data Recovery Plan Report (DPR) are recommended to determine potential impacts to historic, archeological, and paleontological resources, unique geological features, and human remains.

Native American Coordination. The area's mild climate, water resources, and abundant flora and fauna supplied a wide variety of food and building materials for Native Americans, who were the area's first inhabitants. Remnants of various Native American cultures continue to be unearthed and documented. Initial coordination would occur through contact with the Native American Heritage Commission to identify tribal representatives in the area and to request a report of any known sacred grounds. Subsequently, coordination with individual tribal representatives may be necessary.

Hazardous Waste/Materials. Group Delta, Inc. (Group Delta) performed an Initial Site Assessment (ISA) for the proposed project (August 2005, under separate cover). Both Federal and State of California databases were searched to identify sites within 0.5 mile of the project corridor. Based on the results of their review of available information, review of an environmental and regulatory database search (within

0.5 mile of the freeway), and a site visit consisting of a windshield survey, the findings and recommendations of the assessment are as follows:

- There are unpaved areas along the Route 101 alignment where project improvements are proposed. These are mostly sloped embankments away from the freeway, cut embankments or adjacent graded areas of the freeway. It is possible that these areas may contain aerially-deposited lead in the near surface soil. It is recommended that once the location of the lane addition improvements are finalized, shallow soil samples should be taken for analyses in unpaved areas where excavations are planned. The samples should be analyzed for total and soluble lead, as necessary to allow proper excavated soil management including on-site placement or offsite disposal.
- Assuming that DTSC (Department of Toxic Substances Control) extends Caltrans variance prior to construction of this project, any portion of the excavated soil that meets the Caltrans DTSC variance requirements may be re-used on site as backfill provided it is placed a minimum of 1.5 meters (5 feet) above the maximum water table elevation and covered with at least 0.3 meters (1 foot) of non-hazardous soil in accordance with the DTSC variance. Pavement is also suitable cover for lead contaminated soil. Specific recommendations will be made during the PS&E phase.
- Along parts of the freeway and specifically between Kilometer Post (KP) 46 and KP 50 on the northbound side, discolored soil was observed at the base of the adjacent embankment indicating the use of weed control chemicals. Residuals of these chemicals may persist in the near surface soil. It is recommended that testing for such chemicals be included areas where soil is to be excavated.
- Near the Las Virgenes, Chesebro Road, and Reyes Adobe Road there are several LUST sites that may have impacted the subsurface soil and groundwater. In addition, such a condition exists between about KP 54 and KP 57 near Kanan Road and in the area of the Eaton Corporation facility north of the Lindero Canyon intersection (KP 61.1). Any construction deeper than about 3 meters (10 feet) in these areas should be further evaluated as contamination from these adjacent facilities may have impacted the soil and/or groundwater.
- In the area of Agoura Hills (28708 Roadside Drive in Agoura Hills at KP 55.3) a dry cleaning facility is located adjacent to the freeway. This represents an environmental concern as it may have impacted the shallow soil. Any construction deeper than about 3 meters (10 feet) in these areas should be further evaluated as contamination from these adjacent facilities may have impacted the soil and/or groundwater.

Hazardous and potentially hazardous materials used in construction would be handled, transported and disposed in accordance with applicable federal, state, and local requirements so that potential risks are reduced. Mitigation measures would be developed as needed in consultation with regulatory agencies.

Biological Resources. A literature review was conducted to determine the existence or potential occurrence of sensitive plant and animal species. Database records for the Thousand Oaks, Calabasas, and Canoga Park USGS Quadrangles were searched using the California Department of Fish and Game (CDFG) RAREFIND Version 3.0.5 of the California Natural Diversity Database (CNDDDB) (California Department of Fish and Game, November 2004) and the California Native Plant Society's Electronic Inventory of Rare and Endangered Vascular Plants of California. The search indicated the potential presence of Federal and State-designated endangered, threatened, and candidate species including the following: Coast (San Diego) Horned Lizard, Agoura Hills Dudleya, California Orcutt Grass, Southwestern Pond Turtle, and Tri-colored Blackbird; and the California Walnut Woodland as a sensitive habitat. During the environmental documentation process, further study will be required to determine if

the project will affect critical habitat areas and species. If the proposed project is determined to affect those areas, any federal action related to the proposed project would be subject to formal Section 7 consultation pursuant to the Endangered Species Act. The projected timeframe to obtain a biological agency permit will take approximately 6 to 12 months to conduct a Biological Assessment, coordinate with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, and receive and respond to biological opinion surveys.

There is one Significant Ecological Area (SEA) which may potentially be affected by the proposed project. The SEA No. 26 Santa Monica Mountains lies east of the Agoura Hills. Under Alternative 3, the edge of the Santa Monica Mountains at the NB Route 101 and Las Virgenes Road may potentially be affected by additional right-of-way requirements.

The proposed project area includes natural hillsides, arroyos, valleys, large open space areas, and drainage facilities that could support and provide for wildlife habitat and migration. Modification and expansion of the freeway corridor and/or auxiliary facilities and the associated removal of existing vegetation, grading activities, and modifications to drainage channels, may affect habitat and/or sensitive communities. Since Alternative 3 would require more right of way acquisition, additional biological mitigation may be needed compared to Alternative 2.

A Natural Environment Study (NES) and Delineation of Jurisdictional Waters is recommended to determine potential impacts to threatened and endangered species, riparian habitat, wildlife corridors, and habitat conservation plans. If impacts to threatened or endangered species are possible, then a Biological Assessment should also be completed. In addition, the proposed project should be evaluated for potential impacts to wetlands.

Wetlands. A search of the National Wetlands Inventory (NWI) database indicated that wetlands can be found within the project corridor study area. A delineation of Army Corps of Engineers (ACOE) and CDFG jurisdictional wetlands and waters of the United States is required for the proposed project. It is anticipated that ACOE jurisdictional habitats will be impacted by the proposed project, and a Section 404 permit (Clean Water Act) would be required for the modification of the Las Virgenes Creek channel for Alternative 3 and the replacement of bridges at Medea and Chesebro Creeks for Alternatives 2 and 3. Therefore, a Section 401 Water Qualification Certification will also be required from the RWQCB. Also, it is anticipated that CDFG jurisdictional areas will be impacted by the proposed project, and a Section 1602 Streambed Alteration Agreement would be required.

Invasive Pest Plant Species. Executive Order 13112 requires that any Federal action may not cause or promote the spread or introduction of invasive species. In areas where existing landscaping is disturbed, it is anticipated that those areas will be re-landscaped with similar species as are currently present. The NES will address project compliance with Executive Order 13112 regarding Invasive Species.

Right of Way Relocation or Staging Areas. Based on preliminary engineering designs both Alternative 2 and Alternative 3 would require additional right of way to accommodate additional mainline lanes and the realignment of on- and off-ramps. Approximately 3,400 square meters (0.8 acres) of additional right of way would be required for Alternative 2 and approximately 23,500 square meters (5.8 acres) for Alternative 3 in order to accommodate mainline lane improvements. Alternative 2 would result in potential partial acquisition to approximately seven parcels which may impact residential yards, landscaping, parking, and a nursery. Alternative 3 would result in potential partial impacts to approximately 34 parcels resulting in potential impacts to five commercial buildings, residential front yards, landscaping, parking, and frontage road. Alternative 3 would also result in one full parcel acquisition of one commercial building. Any relocation of businesses or residences as a result of property acquisition shall be in accordance with Caltrans policies and procedures on relocation assistance. The

estimate of additional right of way needed to accommodate project improvements does not include construction or relocation of soundwalls or construction staging areas. Anticipated right-of-way costs are approximately \$4 million for Alternative 2 and \$27 million for Alternative 3. Since the engineering designs have only been developed to conceptual levels and a construction staging plan has not been completed at this stage of design, the need for additional right of way, other than what has been identified for the freeway improvements themselves, cannot be calculated at this time.

Mitigation (For standard PSR only). See Anticipated Project Mitigation section of this report.

Permits. Permits from the California Department of Fish and Game (1602), U. S. Army Corps of Engineers (a Nationwide 404 Permit for Alternative 2 and an Individual 404 Permit for Alternative 3 will probably be required due to wetland/water impacts). A permit from the Regional Water Quality Control Board (401) will be required. Permits are anticipated to take six to twelve months or more to obtain from the biological resource agencies. If required, a Biological Opinion from the US Fish and Wildlife Service (Section 7) will take approximately twelve months to obtain. Additional permits for the material site and disposal site may be required.

Coastal Zone. This project is not located within the coastal zone as defined by the 1976 California Coastal Act.

Geology and Soils. A Preliminary Geotechnical Data Report (2005) was prepared by Group Delta for this project. The alignment traverses moderate to steep hilly terrain exposing bedrock comprised of Tertiary-Age sedimentary soft rock and volcanic bedrock units. The bedrock hills have been dissected by numerous alluvial canyon drainages containing deposits of alluvial soils. The flanks of hillsides adjacent to the alluvial drainages generally have accumulations of slopewash or colluvium. On flanks of the hills in the east end of the alignment are extensive young alluvial fan deposits. Man-made cuts and fills have been constructed in many areas as part of freeway and grade separation construction. The primary geologic units crossed by the alignment include Qyf (Quaternary Young Alluvial Fan Deposits), Qa (alluvial deposits), Tmd (Modelo Formation – diamaceous shale bedrock), Tcb (Calabasas Formation – shale, siltstone bedrock), Tm (Modelo Formation – shale/siltstone/sandstone bedrock), and Tco (various facies of Conejo Volcanics bedrock).

The proposed alignment is not located in the Alquist-Priolo Fault Zone and no active faults are mapped as crossing or projecting towards the Route 101 alignment. However, the alignment is in close proximity to active and potentially active fault zones and is subject to significant hazards from moderate to large earthquakes. According to Caltrans 1996 Seismic Hazard Map (Mualchin, 1996), the following faults are located within the project vicinity; the Malibu Coast-Santa Monica-Hollywood Raymond Fault located approximately 7 to 9 miles south of the proposed project, and the Simi Santa Rosa Northridge Fault located approximately 7 to 11 miles from the alignment. The peak bedrock acceleration (PBA) at the site is between 0.4 g and 0.5 g (Mualchin, 1996). Design and construction of the proposed improvements would meet all Caltrans and federal standards for withstanding seismically induced ground shaking. A formal Preliminary Geotechnical Report (PGR) and Preliminary Foundation Reports (PFRs) are recommended for the bridges along the alignment. The preliminary and final Geotechnical Design Reports and Structure Foundation reports should be prepared in accordance with the latest version of Caltrans Guidelines for Foundation Investigations and Reports.

For liquefaction to occur, a site would typically have loose to medium dense granular soils that are saturated by groundwater when an earthquake occurs. Bridges underlain by bedrock, dense soils, and compacted fills without groundwater have negligible liquefaction potential. Bridges with loose alluvium permanently saturated by groundwater have high potential for liquefaction. Some bridges have loose alluvium, but no groundwater was encountered in the Log of Test Borings (LOTBs) conducted by Group

Delta (2005). Based on the LOTBs and geologic and seismic mapping performed for the proposed project, soils under the bridges associated with Route 101 at Topanga Canyon Boulevard Undercrossing (UC), Dry Canyon Creek Culvert, Valley Circle Boulevard Overcrossing (OC), Las Virgenes Road OC, Las Virgenes Creek Culvert, and Chesebro Canyon Road have a high potential for liquefaction.

The project is situated in a topographically lifted area of Los Angeles County. Some portions of the proposed project area are mapped within an area of potential for landslides (City of Los Angeles General Plan, 1996). A detailed stability analysis should be performed during the PFR and PGR phases or PS&E stage of geotechnical investigation.

Grading and construction activities can result in high levels of topsoil erosion by removing vegetation and exposing the slopes to precipitation during the wet season. The project would be designed so that the slope would not become unstable and would include storm water BMPs that would reduce the risk of soil erosion. There are no large open bodies of water near the site, so there is no potential for hazards associated with seiches.

Transportation and Traffic. Route 101 currently experiences peak period traffic congestion along the mainline in both directions. Future traffic projections indicate an approximate 30 percent increase in traffic demand between 2005 and 2030. The proposed improvements on Route 101 are intended to reduce traffic congestion and accommodate future traffic growth. It is anticipated that the proposed improvements on Route 101 will also help to improve traffic safety and reduce congestion-related accidents (e.g., rear-end collisions).

Cumulative Impacts. The cumulative impacts on the environment will be discussed in the environmental document to address the projects within the surrounding area and their cumulative impact on the environment.

#### List of Preparers

Hazardous Waste Review by Group Delta, Inc.	Date: 8/15/2005
Biological Review by Stephanie Oslick (PBQ&D)	Date: 8/15/2005
Cultural Scoping by Theresa Dickerson (PBQ&D)	Date: 8/15/2005
Community Impact Scoping by Veronica Chan (PBQ&D)	Date: 8/15/2005
Visual Scoping by Theresa Dickerson (PBQ&D)	Date: 8/15/2005
Floodplain Scoping by Veronica Chan (PBQ&D)	Date: 8/15/2005

## ATTACHMENT A - Resources by WBS Code

**EA:** 24920K

**Description:** Route 101 Freeway Corridor Improvement Study

Add One Mixed-Flow Lane in Each Direction from the Vicinity of Canoga Avenue to the Vicinity of the LA/Ventura County Line

WBS Task Activity Code	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Sup Svcs	Total	Begin Date	End Date	Duration
<b>Assigned Unit</b>													
<b>Project Management</b>													
100.05.05 – Proj. Init. & Png.										-			
100.05.10 – PID Exec. & Ctrl.										-			
100.05.15 – PID Closeout										-			
100.10.05 – PA&ED Init. & Png.	12	4	2	2	2	2	2	2	8	36			
100.10.10 – PA&ED Exec. & Ctrl.	8	16	8	8	8	8	8	8	24	96			
100.10.15 – PA&ED Closeout	8	16	2	2	2	2	2	2	8	44			
100.10.20 – Project Shelving (PA&ED)	4	8								12			
100.10.25 – Project Unshelving (PA&ED)	4	8								12			
100.10.30 – Prep/Updt Admin Record PA&ED										-			
100.15.05 – PS&E Init. & Png.										-			
100.15.10 – PS&E Exec. & Ctrl.	8	16	8	8	8		8			56			
100.15.15 – PS&E Closeout										-			
100.15.20 – Project Shelving (PS&E)										-			
100.15.25 – Project Unshelving (PS&E)										-			
100.15.30 – Prep/Update Admin Record PS&E										-			
100.20.05 – Const. Init. & Png.										-			
100.20.10 – Const. Exec. & Ctrl.										-			
100.20.15 – Const. Closeout										-			
100.20.20 – Project Shelving (Construction)										-			
100.20.25 – Project Unshelving (Construction)										-			
100.20.30 – Prep/Update Admin Record Const										-			
100.25.05 – RW Init. & Png.										-			
100.25.10 – RW Exec. & Ctrl.										-			
100.25.15 – RW Closeout										-			
100.25.20 – Project Shelving (Right of Way)										-			
100.25.25 – Project Unshelving (Right of Way)										-			
100.25.30 – Prep/Update Admin Record RW										-			
<b>Total Project Management</b>	<b>44</b>	<b>68</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>12</b>	<b>20</b>	<b>12</b>	<b>40</b>	<b>256</b>			
<b>Perform Preliminary Engineering Studies and Prepare Draft Project Report</b>													
160.05.05 – Review Approved PID										-			
160.05.10 – Review Geotechnical Information		2								2			
160.05.20 – Review Traffic Data & Forecasts										-			
160.05.30 – Review Project Scope		2								2			
160.10.20 – Perform Value Analysis										-			
160.10.25 – Perform Hydraulics/Hydro Study							160			160			
160.10.30 – Dev Hwy Planting Des Concepts										-			
160.10.20 – Prepare Draft Project Report										-			
160.15.25 – Circ, Rev & App Draft PR	2	8								10			
160.30 – Dev ESR										-			
<b>Total Perf Pre Eng Studies</b>	<b>2</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>160</b>	<b>-</b>	<b>-</b>	<b>174</b>			



WBS Task Activity Code	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Sup Svcs	Total	Begin Date	End Date	Duration
<b>Perform Environmental Studies and Prepare Draft Environmental Document</b>													
165.05.05 – Rev Project Information	8	16	10							34			
165.05.10 – Pub & Agency Scoping	16	60	30							106			
165.05.15 – Select Alt for Fut Study	4	8	30							42			
165.05.20 – Maps for Env Evaluation			10						40	50			
165.10.05 – Surveys & Map for Study		30	15							45			
165.10.10 – Obtain Rights of Entry		40								40			
165.10.15 – CIA, Land Use & Growth		500								500			
165.10.25 – Noise Study								1,000		1,000			
165.10.30 – Air Quality Study								160		160			
165.10.35 – Water Quality Studies	4						240			244			
165.10.40 – Energy Studies										-			
165.10.45 – Sum Geotech Report		40								40			
165.10.50 – Site Investigation HW	6				120					126			
165.10.65 – Paleontology Study				60						60			
165.15.05 – Biological Assessment	16		1,500							1,516			
165.15.10 – Wetlands Study			500							500			
165.15.15 – Resource Agency Coord			180							180			
165.15.20 – NES Report	16		600							616			
165.20.05 – Archaeology Survey										-			
165.20.05.05 – Perform Archy Survey				100						100			
165.20.05.10 – Conduct NA Consultation				60						60			
165.20.05.15 – Perform Records Search				160						160			
165.20.05.20 – Conduct Field Survey										-			
165.20.05.25 – Prepare ASR				240						240			
165.20.10 – Phase I Archy Studies										-			
165.20.10.05 – Conduct NA Consultation	8									8			
165.20.10.10 – Prepare Phase I Proposal										-			
165.20.10.15 – Conduct Field Investigation										-			
165.20.10.20 – Analyze Materials										-			
165.20.10.25 – Prepare Report										-			
165.20.15 – Phase II Archy Studies										-			
165.20.15.05 – Conduct NA Consultation										-			
165.20.15.10 – Prepare Phase II Proposal										-			
165.20.15.15 – Conduct Field Investigation										-			
165.20.15.20 – Analyze Materials										-			
165.20.15.25 – Prepare Report										-			
165.20.20 – Hist & Architect Studies	32									32			
165.20.20.05 – Prepare Prelim APE/SAM				80					8	88			
165.20.20.10 – Prep Hist Res Eval Rpt - Archy				100						100			
165.20.20.15 – Prep Hist Res Eval Rpt - Arct				100						100			
165.20.20.20 – Prepare Bridge Evaluation				24						24			
165.20.25 – Cultural Res Comp Docs	32									32			
165.20.25.05 – Prepare Final APE Maps				24					8	32			
165.20.25.10 – Perform PRC 5024.5 Consult	16									16			
165.20.25.15 – Prep HPSR/Det Elig/HRCR				100						100			
165.20.25.20 – Prep Finding of Effect										-			
165.20.25.25 – Prep Archy Data Recovery Pln										-			
165.20.25.30 – Prepare MOA										-			

WBS Task Activity Code	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Sup Svcs	Total	Begin Date	End Date	Duration
<b>Perform Environmental Studies and Prepare Draft Environmental Document (Continued)</b>													
165.25.05 – Prepare DED	40	2,000								2,040			
165.25.10 – 4(f) Evaluation	16	720								736			
165.25.15 – CE/CE Determination										-			
165.25.20 – Peer & Other Reviews	8	150	50							208			
165.25.25 – Obtain Approval to Circ		300								300			
165.25.30 – Perform Env Coordination		60								60			
Total Env Studies & Prep DED	222	3,924	2,925	1,048	120	-	240	1,160	56	9,695			
<b>Circulate Draft Environmental Document and Select Preferred Project Alternative</b>													
175.05.05 – Master Dist & Inv Lists		40								40			
175.05.10 – Not Pub Hear & Avail	40	40								80			
175.05.15 – Pub & Circulate DED		160								160			
175.05.20 – Fed Const Det (Coastal)										-			
175.10.05 – Need for Pub Hearing		5								5			
175.10.10 – Pub Hearing Logistics		40								40			
175.10.15 – Displays for Pub Hearing		40							24	64			
175.10.20 – Not Pub Hear & Avail										-			
175.10.25 – Review Map Displays		10								10			
175.10.30 – Display Pub Hear Maps		2	2							4			
175.10.35 – Hold Public Hearing	24	24	2							50			
175.10.40 – Dist Rec or Pub Hearing										-			
175.15 – Res to Pub Hear Comments		120	26							146			
175.20 – Select Preferred Alternative		4								4			
Total DED & Preferred Alt	64	485	30	-	-	-	-	-	24	603			
<b>Prepare and Approve Project Report and Final Environmental Document</b>													
180.05.10 – Rev & App Project Rep		24								24			
180.10.05 – Prep & Approve FED	40	600	30							670			
180.10.05.10 – Circulate for Review										-			
180.10.05.10 – Rev due to Review Comments										-			
180.10.05.15 – Section 4(f) Evaluation										-			
180.10.05.20 – Findings Report										-			
180.10.05.25 – Statement of Overriding Consid										-			
180.10.05.30 – Prepare CEQA Certification										-			
180.10.05.35 – FHWA and Approval										-			
180.10.05.40 – Section 106 Cons & MOA				40						40			
180.10.05.45 – Conduct Section 7 Consult			750							750			
180.10.05.50 – Finalize Section 4(f) Statement			160							160			
180.10.05.55 – Prep Floodplain Only PAF										-			
180.10.05.60 – Prep Wetlands Only PAF										-			
180.10.05.65 – Coord Section 404 Permit			24							24			
180.10.05.70 – Finalize Mitigation Measures			24							24			
180.10.10 – Public Dist of FED		80								80			
180.10.10.05 – Resp to Comments on FED		32								32			
180.15.05 – Prep & App ROD (NEPA)		16								16			
180.15.10 – Prep & File NOD (CEQA)		8								8			
180.15.20 – Prep/Update Env Commitments		40								40			
Total App PR & FED	40	800	988	40	-	-	-	-	-	1,868			

WBS Task Activity Code	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Sup Svcs	Total	Begin Date	End Date	Duration
<b>Coordinate Utilities</b>													
200.15 - Utility Conflict Resolution										-			
Total Coordinate Utilities	-	-	-	-	-	-	-	-	-	-			
<b>Obtain Permits, Agreements and Route Adoptions</b>													
205.10.05 - Army Corp Permit (404)			150							150			
205.10.10 - USFS Permit										-			
205.10.15 - US Coast Guard Permit										-			
205.10.20 - DFG Permit (1601/1603)			175							175			
205.10.25 - Coastal Dev Permit										-			
205.10.30 - Loc Agcy Concurrence										-			
205.10.40 - Waste Dischg (NPDES)										-			
205.10.45 - USFWS Approval			80							80			
205.10.50 - RWQCB Permit (401)			135							135			
205.10.60 - Update Summary of Env Commit										-			
205.10.95 - "Other" Permits		20	160							180			
205.20.05 - Draft Fwy Agreement										-			
205.20.10 - Review Draft Fwy Agree										-			
205.20.15 - Prep Final Fwy Agree										-			
205.20.20 - Execute Fwy Agreement										-			
205.25 - Prep Agreement for Material Sites										-			
205.35.05 - Prep & Exc Coop for Env										-			
205.40.10 - New Conn & Rte Adopt										-			
205.45 - MOU from TERO										-			
Total Permits, Agree & Rte	-	20	700	-	-	-	-	-	-	720			
<b>Prepare Draft PS&amp;E</b>													
205.05.45 - Prepare Noise Barrier Plans										-			
230.10.05 - Prepare Hwy Planing Plans										-			
230.10.15 - Prepare Plant List			45							45			
230.35.10 - Dev Hwy Planting Specs			45							45			
230.35.35 - Dev Water Poll Ctrl Specs										-			
230.35.40 - Dev Erosion Control Specs			20				8			28			
230.30.60 - Rev & Updt Proj Info Draft PS&E	8	16								24			
Total Prepare Draft PS&E	8	16	110	-	-	-	8	-	-	142			
<b>Mitigate Environmental Impacts and Clean-up Hazardous Waste</b>													
235.05.05 - Hist Structures Mitig										-			
235.05.10 - Archy & Cult Mitigation										-			
235.05.15 - Biological Mitigation			550							550			
235.05.20 - Perform Env Mit R/W										-			
235.05.25 - Paleontology Mitigation										-			
235.10.10 - Surveys to Locate HW										-			
235.10.15 - Conduct Detailed Invest					600					600			
235.15 - Dev HW Management Plan										-			
235.20 - Prepare HW PS&E										-			
235.25 - Perform HW Clean-up										-			
235.30 - Certify Freedom of HW										-			
235.35 - Long Term Mitigation Mon	20	400	240							660			

WBS Task Activity Code	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Sup Svcs	Total	Begin Date	End Date	Duration
<b>Mitigate Environmental Impacts and Clean-up Hazardous Waste (Continued)</b>													
235.40 – Update Summary of Env Commit		32								32			
Total Mitigation & HW Clean-up	20	432	790	-	600	-	-	-	-	1,842			
<b>Circulate, Review and Prepare Final District PS&amp;E Package</b>													
255.05 – Circ & Rev Draft Dist PS&E	4	24								28			
255.10.25 - Update Technical Reports			8	8	80	8	8	80		192			
255.15 – Env Reevaluation	20	140								160			
255.20.05 - Rev Plans for Stds Comp										-			
255.40 - Prep Res Eng's File			8	8						16			
Total PS&E	24	164	16	16	80	8	8	80	-	396			
<b>Prepare Contract Documents</b>													
260.15.15 - Env Cert at RTL	8	16	4	4	4	4	4	4		48			
Total Prepare Contract Documents	8	16	4	4	4	4	4	4	-	48			
<b>Perform Construction Engineering and General Contract Administration</b>													
270.20.50 – Technical Support					80					80			
270.50 – Cert of Comp with Mit Req	8	40	150	40	40	40	16	24		358			
270.55 – Perf Final Inspect & Rec Accept										-			
270.70 – Update Summary of Env Commit	8	8								16			
Total Const Engineering	16	48	150	40	120	40	16	24	-	454			
<b>Prepare and Administer Contract Change Orders</b>													
285.05.05 - Det Need for CCO										-			
285.10.95 – Prov Other Func Support										-			
Total CCOs	-	-	-	-	-	-	-	-	-	-			
<b>Resolve Contract Claims</b>													
290.35 – Provide Technical Support										-			
Total Contract Claims	-	-	-	-	-	-	-	-	-	-			
<b>Accept Contract, Prepare Final Construction Estimate &amp; Prepare Final Report</b>													
295.35 – Prep Cert of Env Compliance										-			
Total Final Construction	-	-	-	-	-	-	-	-	-	-			
Total Project Hours	448	5,985	5,733	1,168	944	64	456	1,280	120	16,198			

**Route 101 Freeway Widening Project**

**Add One Mixed-Flow Lane in Each Direction  
from the Vicinity of Canoga Avenue  
to the Vicinity of the LA/Ventura County Line**

**Preliminary Traffic Noise Study**

September, 2005

## **Introduction**

The objective of this report is to provide information for the Preliminary Environmental Assessment Report (PEAR) for the proposed addition of one mixed-flow lane in each direction along Route 101. The project limits are from the vicinity of Canoga Avenue (southern project limit) to the vicinity of the Los Angeles/Ventura County Line (northern project limit). This information will be used to evaluate and identify potential noise impacts that may result from implementation of the proposed project and to identify and recommend noise abatement and mitigation measures necessary for the project to comply with state and federal noise abatement/mitigation requirements.

This preliminary traffic noise study has been prepared to comply with Title 23, Part 772 of the Code of Federal Regulations, *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, and Caltrans noise analysis policy and procedures described in the Caltrans Traffic Noise Analysis Protocol (TNAP) (California Department of Transportation 1998).

## **Project Description**

This project proposes two build alternatives for Route 101 from the vicinity of Canoga Avenue to the vicinity of the Los Angeles/Ventura County line:

### ***Alternative 2: Non-Standard Lane Widths***

This alternative would restripe and/or widen Route 101 to add one mixed-flow lane in each direction within the project limits. The proposed improvements include restriping lanes where feasible and minimizing right of way impacts. Portions of the project will have three non-standard lanes (width 3.35 m) and non-standard left shoulder (0.6 m) in both directions to minimize impacts. The outside two lanes will be standard width lanes (3.66 m) with standard width right shoulder (3.05 m) throughout the project. This alternative would also include related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements as necessary. The modified and replaced structures will provide space for standard lane widths which are the same as Alternative 3.

### ***Alternative 3: Standard Lane Widths***

This alternative would widen Route 101 to add one mixed-flow lane in each direction within the project limits. The proposed improvements include full standard lane widths (3.66 m), shoulders (3.05 m) and other feasible full standard design features. This alternative would also include related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements as necessary.

## **Sensitive Receivers and Potential Impacts**

A field survey was conducted in order to identify sensitive receivers, determine existing noise levels and potential impacts resulting from the proposed project. The existing noise-sensitive land use within the project limits includes large areas of single and multi-family residences, as well as schools near the freeway. There are also areas of commercial buildings and undeveloped lands within the project limits.

The purpose for conducting measurements of the existing freeway noise is to establish the worst noise traffic hour as a baseline condition. This is accomplished with long term (24 hour or longer) continuous measurements. After the noisiest hour is established with long-term measurement, a number of short-term measurements are conducted and compared to the 24-hour measurements and adjusted to estimate the existing worst hour traffic noise levels at other receiver locations. Since traffic noise modeling has not been conducted as part of this initial screening analysis, these existing noise measurements are used to

determine if any of the alternatives would exceed the Caltrans Noise Abatement Criteria of 67 dBA and require noise abatement.

A total of 12 receivers were selected for noise measurement locations. Measurements were conducted for 24 hours at two of the 12 sites, and measurements at ten sites were conducted for a minimum of 15 minutes. The location of these measurement sites is presented in Figure 1. Short-term traffic noise measurements and traffic counts are presented in Table 1.

**Table 1**  
**Short-Term Traffic Noise Measurements and Traffic Counts on Route 101**

Site #	Time and Date of Measurement	Noise Level – Leq (dBA)	Speed (MPH)	Cars	Medium Trucks	Heavy Trucks	Direction*
1	11:30 3-7-05	76.0	65+	1130	60	45	SB
			65+	1118	43	53	NB
2	12:45 3-7-05	63.3	65+	1206	61	27	SB
			65+	1104	52	39	NB
3	13:25 3-7-05	62.6	65+	1193	63	29	SB
			65+	1112	49	38	NB
4	13:50 3-7-05	63.0	65+	1164	53	41	SB
			65+	1121	51	37	NB
5	14:10 3-7-05	74.8	65+	1278	80	39	SB
			65+	1138	45	38	NB
6	12:45 3-8-05	68.0	65+	1254	61	27	SB
			65+	1115	52	39	NB
7	13:15 3-8-05	67.3	65+	1288	103	66	SB
			65+	1251	54	62	NB
8	14:10 3-8-05	65.3	65+	1219	74	64	SB
			65+	1193	62	62	NB
			25	73	0	0	EB**
			25	96	0	0	WB**
9	11:10 3-8-05	65.1	65+	1460	68	68	SB
			65+	1141	64	48	NB
10	10:45 3-8-05	59.2	65+	1359	63	65	SB
			65+	1169	61	47	NB

\*SB=Southbound

NB=Northbound

\*\*EB=Eastbound (Frontage Road)

\*\*\*WB=Westbound (Frontage Road)

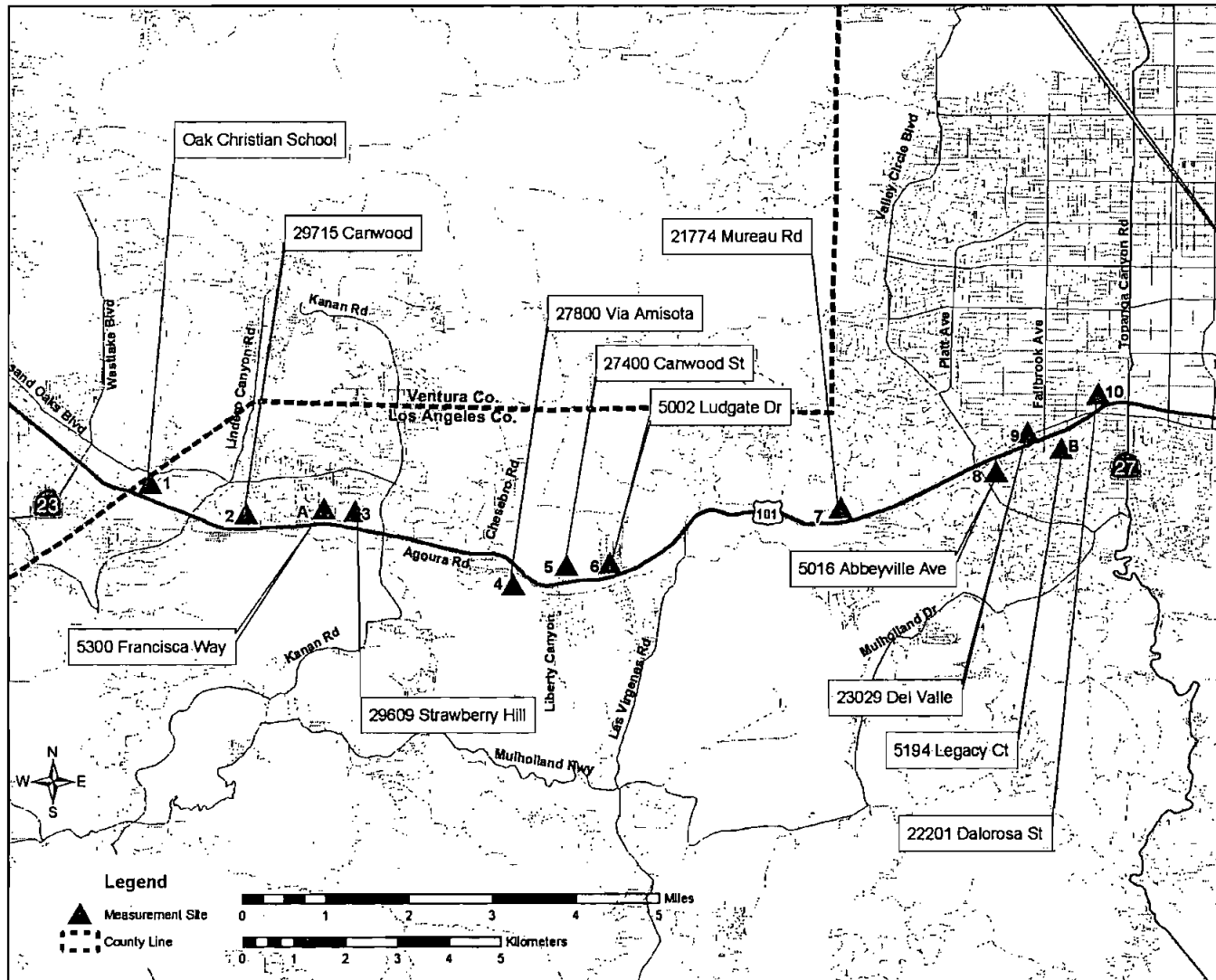


Figure 1  
Noise Measurement Locations



## Short-Term Measurement Sites

1. Oak Christian School, Thousand Oaks, CA. Site is at the baseball and softball field for the School, located 100 to 120 feet from the edge of travel way of the Route 101 NB lanes and 60 ft from the centerline of the frontage road (La Tienda Road). Measurement site was 7 to 10 feet above Route 101. Measurement was taken on 3-7-05 at 11:30 a.m. Temp was 70 degrees with wind speed of 0-5 mph from the southwest.
2. 29715 Canwood St. Agoura Hills, CA. Site is in an area of single-family residential units. The meter was placed approximately 100 feet from the edge of travel way of the NB Route 101 lanes and 30 feet from the centerline of the frontage road (Canwood Street). Route 101 is at grade in this area and the homes are shielded by a 14 to 16 ft high noise barrier located on the NB Route 101 right of way (ROW). Measurement was taken on 3-7-05 at 12:45 p.m. Temp was 70 degrees with wind speed of 0-5 mph from the southwest.
3. 29609 Strawberry Hill, Agoura Hills. Site is in an area of single-family residential units. The meter was placed approximately 200 feet from the edge of travel way of the NB Route 101 lanes and 140 feet from the centerline of the frontage road (Canwood Street). Route 101 is at grade in this area and the homes are not shielded from Route 101. Measurement was taken on 3-7-05 at 1:25 p.m. Temp was 70 degrees with wind speed of 0-5 mph from the southwest.
4. 27800 Via Amisota, Agoura Hills. Site is in an area of single-family residential units. The meter was placed in the front yard of the home approximately 400 feet from the edge of travel way of SB Route 101 and 210 feet from the centerline of Agoura Road. Route US 101 is approximately 30 feet above grade of this site and the homes are shielded by a hillside on the edge-of-shoulder of SB Route 101. Measurement was taken on 3-7-05 at 1:50 p.m. Temp was 70 degrees with wind speed of 0-5 mph from the southwest.
5. 27400 Canwood Street, Agoura Hills. Site is a private middle school. The meter was placed on the edge of school property closest to Route 101. The school is approximately 150 feet from the edge of travel way of NB Route 101. Route 101 is below grade of this area and the school is not shielded from Route 101. Measurement was taken on 3-7-05 at 2:10 p.m. Temp was 70 degrees with wind speed of 0-5 mph from the southwest.
6. 5002 Ludgate Dr., Calabasas. Site is an area of single-family residential units. The meter was placed in the front yard of the home approximately 180 feet from the edge of travel way of NB Route 101 and 40 feet from the centerline of the frontage road (Canwood Street). Route 101 is above grade of this site and this area has no shielding from NB Route 101. Measurement was taken on 3-8-05 at 12:45 p.m. Temp was 75 degrees with wind speed of 0-3 mph from the southwest.
7. 21774 Mureau Road, Hidden Hills. Site is an area of single-family residential units. The meter was placed in the front yard of the home. Route 101 approximately 100 feet from the edge of travel way of NB Route 101. Route 101 is approximately 20 feet below grade of the home. This area has no shielding from Route 101. Measurement was taken on 3-8-05 at 1:15 p.m. Temp was 75 degrees with wind speed of 0-3 mph from the southwest.
8. 5016 Abbeyville Ave, Woodlands Hills. Site is an area of single-family residential units. The meter was placed in the front yard of the home approximately 75 feet from the edge

of travel way of SB Route 101 and 60 feet from the centerline of the frontage road (Avenue San Luis). Route 101 is at grade in this area and the homes are shielded by a 14 to 16 ft high noise barrier located on the SB Route 101 ROW. Measurement was taken on 3-8-05 at 2:10 p.m. Temp was 75 degrees with wind speed of 0-3 mph from the southwest.

9. 23029 Del Valle, Woodland Hills. Site is an area of multi-family residential units. The meter was placed in the front of the apartment with direct exposure to NB Route 101. Route 101 is approximately 125 feet from the edge of travel way of NB Route 101. Route 101 is approximately 20 feet below grade of this measurement site. This site has no shielding from Route 101. Measurement was taken on 3-8-05 at 11:10 a.m. Temp was 70 degrees with wind speed of 0-5 mph from the southwest.
10. 22201 Dalorosa Street, Woodlands Hill. Site is an area of single-family residential units. The meter was placed in the front yard approximately 100 feet from the edge of travel way and approximately 20 below grade of NB Route 101. The homes are shielded by a 12 to 14 ft high noise barrier located on the NB Route 101 ROW. Measurement was taken on 3-8-05 at 10:45 a.m. Temp was 70 degrees with wind speed of 0-5 mph from the southwest.

#### **Long-Term Measurement Sites**

- A. 5300 Francisca Way, Agoura Hills, CA. Site is in an area of single-family homes 125 feet from the NB Route 101 edge of travel way. The homes in this area are at grade or 5 to 10 feet above the freeway at this location. The worst hour noise level of Leq = 71.0 dBA was between 6 and 7 A.M on 3-8-05.
- B. 5194 Legacy Court, Woodland Hills, CA. Site is in an area of single-family homes 100 feet from SB Route 101. The homes in this area are at grade or 5 to 10 feet above the freeway at this location. The worst hour noise level of Leq = 68.9 dBA was between 3 P.M. and 4 P.M on 3-7-05.

#### **Potential Traffic Noise Abatement**

##### ***Regulatory Compliance***

##### **Federal and State Regulations, Standards, and Policies**

Federal and state regulations, standards, and policies relating to traffic noise are discussed in detail in the Traffic Noise Analysis Protocol (TNAP). Transportation projects affected by the TNAP are referred to as Type I projects. A Type I project is defined in 23 CFR 772 as a proposed federal or federal-aid highway project for the construction of a highway on a new location or the physical alteration of an existing highway that significantly changes either the horizontal or vertical alignment or increases the number of through traffic lanes. FHWA has clarified their interpretation of Type I projects by stating that a Type I project is any project that has the potential to increase noise levels at adjacent receivers. This includes projects to add interchange, ramp, auxiliary, or truck-climbing lanes to an existing highway. A project to widen an existing ramp by a full lane width is also considered to be a Type I project. Caltrans extends this definition to include state-funded highway projects. The proposed project evaluated in this report is considered to be a Type I project because it adds new lanes and provides additional

capacity to the existing freeway. The following is a brief discussion of applicable federal and state regulations, standards, and policies.

- *National Environmental Policy Act (NEPA)* – NEPA is a federal law that establishes environmental policy for the nation, provides an interdisciplinary framework for federal agencies to prevent environmental damage, and contains “action-forcing” procedures to ensure that federal agency decision-makers take environmental factors into account. Under NEPA, impacts and measures to mitigate adverse impacts must be identified, including the identification of impacts for which no mitigation or only partial mitigation is available. The FHWA regulations below constitute the Federal Noise Standard. Projects complying with this standard are also in compliance with the requirements stemming from NEPA.
- *Federal Highway Administration (FHWA) Regulations* – Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772) provides procedures for conducting highway-project noise studies and implementing noise abatement measures to help protect the public health and welfare, supply Noise Abatement Criteria (NAC), and establish requirements for information to be given to local officials for use in planning and designing highways. Under this regulation, noise abatement must be considered for a Type I project if the project is predicted to result in a traffic noise impact. A traffic noise impact is considered to occur when the project results in a *substantial noise increase* or when the predicted noise levels *approach or exceed* NAC specified in the regulation. 23 CFR 772 does not specifically define what constitutes a “substantial increase” or the term “approach” and leaves interpretation of these terms to the individual states.

Noise abatement measures that are *reasonable and feasible* and likely to be incorporated into the project, as well as noise impacts for which no apparent solution is available, must be identified and incorporated into the project's plans and specifications. Table 2 summarizes the FHWA Noise Abatement Criteria.

**Table 2**  
**FHWA/CALTRANS Noise Abatement Criteria (NAC)**

Activity Category	Leq(h) for Noisiest Traffic Hour (dBA)	Description of Activity
A	57 (Exterior)	Land on which serenity and quiet are of extraordinary significance and serve an important public need; and where the preservation of those qualities is essential if the area is to continue to serve its intended purposes.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E	52 (Interior)	Residences, motels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

The interior noise levels (activity) apply to:

- (1) Indoor activities for those parcels where no exterior noise-sensitive land uses or activities have been identified, and
- (2) Those situations where the exterior activities are either remote from the highway or shielded in some manner so that the exterior activities will not be affected by the noise, but the interior activities will.

Note: Leq(h) is the one-hour energy equivalent sound level.  
Source: Caltrans, *Traffic Noise Analysis Protocol*, October 1998

- *California Environmental Quality Act (CEQA)* – CEQA is the foundation of environmental law and policy in California. CEQA's main objectives are to disclose to decision makers and the public the significant environmental effects of proposed activities and identify ways to avoid or reduce those effects by requiring implementation of feasible alternatives or mitigation measures. Under CEQA, a substantial noise increase may result in a significant adverse environmental effect and, if so, must be mitigated or identified as a noise impact for which it is likely that only partial (or no) mitigation measures are available. Specific economic, social, environmental, legal, and technological conditions may make noise mitigation measures infeasible.
- *California Streets and Highways Code, Section 216* – Section 216 of the California Streets and Highways Code relates to the noise level produced by the traffic on, or by the construction of, a state freeway measured in the classrooms, libraries, multipurpose rooms, and spaces used for pupil personnel services of a public or private elementary or secondary school. The code states that if the interior noise level produced by freeway traffic or the construction of a freeway exceeds 52 dBA-Leq, the department shall undertake a noise abatement program in any such classroom, library, multipurpose room, or space used for pupil personnel services to reduce the freeway traffic noise level therein to 52 dBA-Leq or less by measures including, but not limited to, installing acoustical materials, eliminating windows, installing air conditioning, and constructing sound baffle structures.
- *Traffic Noise Analysis Protocol (TNAP)* – The TNAP for New Highway Construction and Reconstruction Projects (California Department of Transportation 1998) specifies the policies, procedures, and practices to be used by agencies that sponsor new construction or reconstruction projects. Noise abatement criteria specified in this document are the same as those specified in 23 CFR 772. The document defines a noise increase as substantial when build peak-hour noise levels are predicted to be 12 dBA -Leq(h) higher than the existing peak hour noise levels. The TNAP also states that a sound level is considered to approach an NAC level when the sound level is within 1 dB of the NAC identified in 23 CFR 772. For example, a sound level of 66 dBA is considered to approach the NAC of 67 dBA, whereas 65 dBA is not.

### Future Traffic Noise Levels

A screening level noise analysis was conducted to determine the comparative differences in traffic noise associated with each of the project build strategies. Using the Caltrans traffic noise impact screening procedure (Caltrans Technical Noise Supplement, October, 1998) the build strategies were compared to the existing freeway conditions based on the change in the freeway right of way and added lanes of traffic. The future change in noise level was calculated using the following equation:

$$\text{Change in Noise (dBA)} = 10\text{Log}_{10} [V_{E(\text{Future})}/V_{E(\text{Existing})}] + 15\text{Log}_{10} [D_{E(\text{Existing})}/D_{E(\text{Future})}]$$

- Where:
- $V_{E(\text{Future})}$  = Number of equivalent vehicles per hour after the project.
  - $V_{E(\text{Existing})}$  = Number of equivalent vehicles per hour before the project.
  - $D_{E(\text{Existing})}$  = Equivalent lane distance before project.
  - $D_{E(\text{Future})}$  = Equivalent lane distance after project.

- NB-5** A 300-meter soundwall along the northbound ROW or property line of the private middle school just south of Liberty Canyon Road. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway
- NB-6** A 300-meter soundwall along the northbound off ramp to Liberty Canyon Road. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway
- NB-7** An 800-meter soundwall along the northbound EOS just north of Lost Hills Road on-ramp to NB Route 101.
- NB-8** A 125-meter soundwall along the northbound ROW or property line just north of the Mureau Road over crossing. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway.
- NB-9** The existing 600-meter soundwall along southbound Route 101 would be reconstructed at the new EOS to meet Caltrans standards. This area is between Mulholland Drive and Fallbrook Avenue.
- NB-10** A 300-meter soundwall along the northbound ROW or property line. This area is between Mulholland Drive and Fallbrook Avenue. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway.
- NB-11** An 800-meter soundwall along the southbound ROW or property line. This area is between Fallbrook Avenue and Shoup Avenue. The soundwall would have to be constructed in an area which would reduce line-of-sight from the freeway.

**Table 4  
Preliminary Soundwall Length**

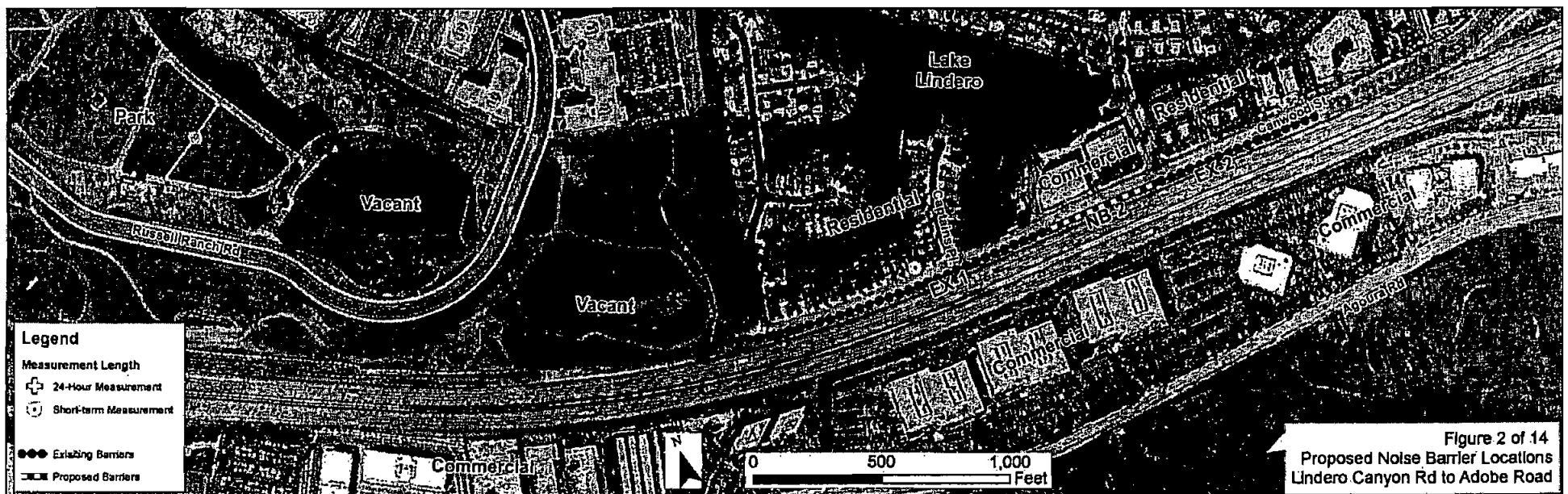
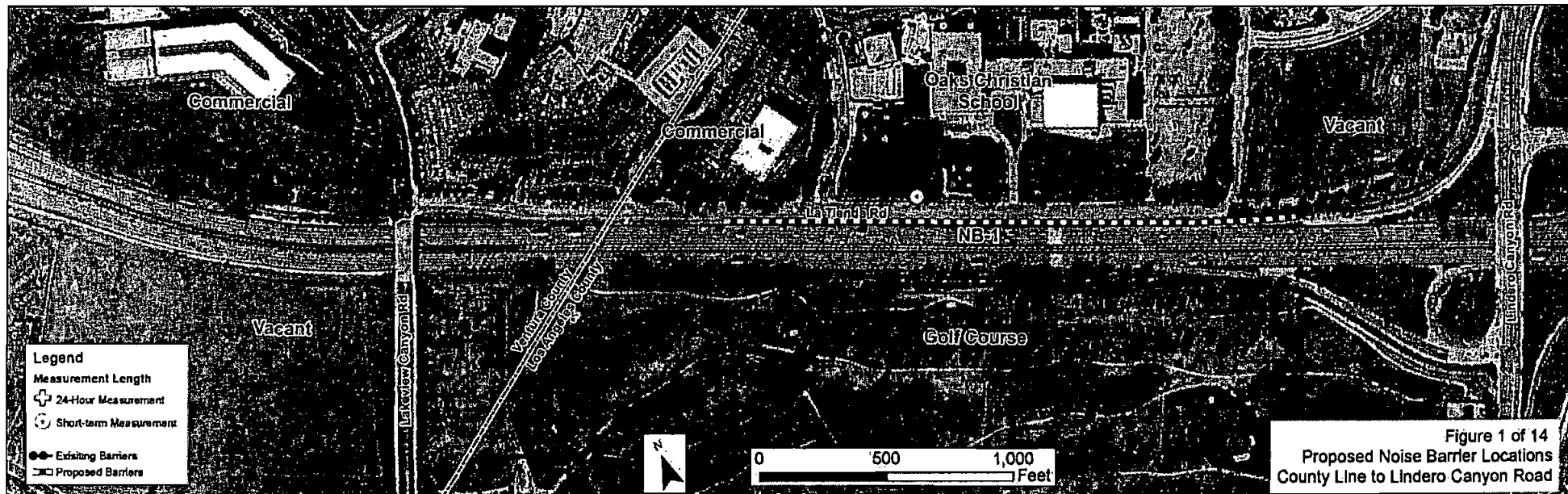
Barrier	Receiver	Approximate Wall Length (Meters)	Approximate Wall Length (Feet)
NB-1	1	700	2300
NB-2	2	535	1755
NB-3	3	1125	3690
NB-4	4	400	1315
NB-5	5	300	985
NB-6	5	300	985
NB-7	6	800	2625
NB-8	7	125	410
NB-9	8	600	1969
NB-10	9	300	985
NB-11	24 hrs Site B	800	2625

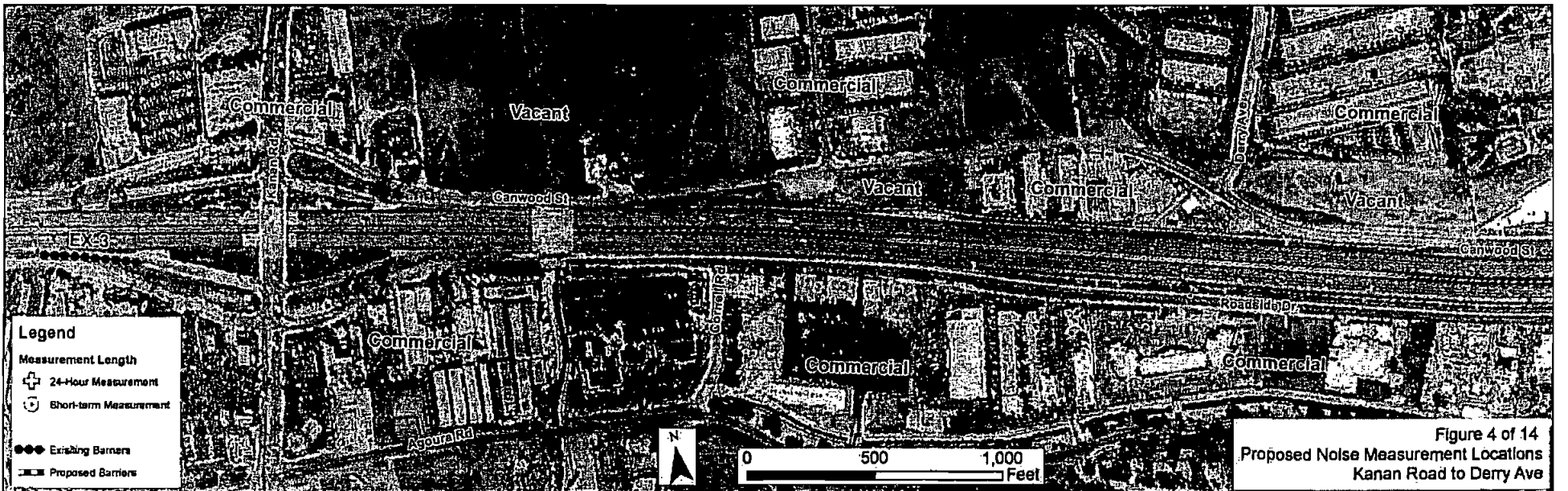
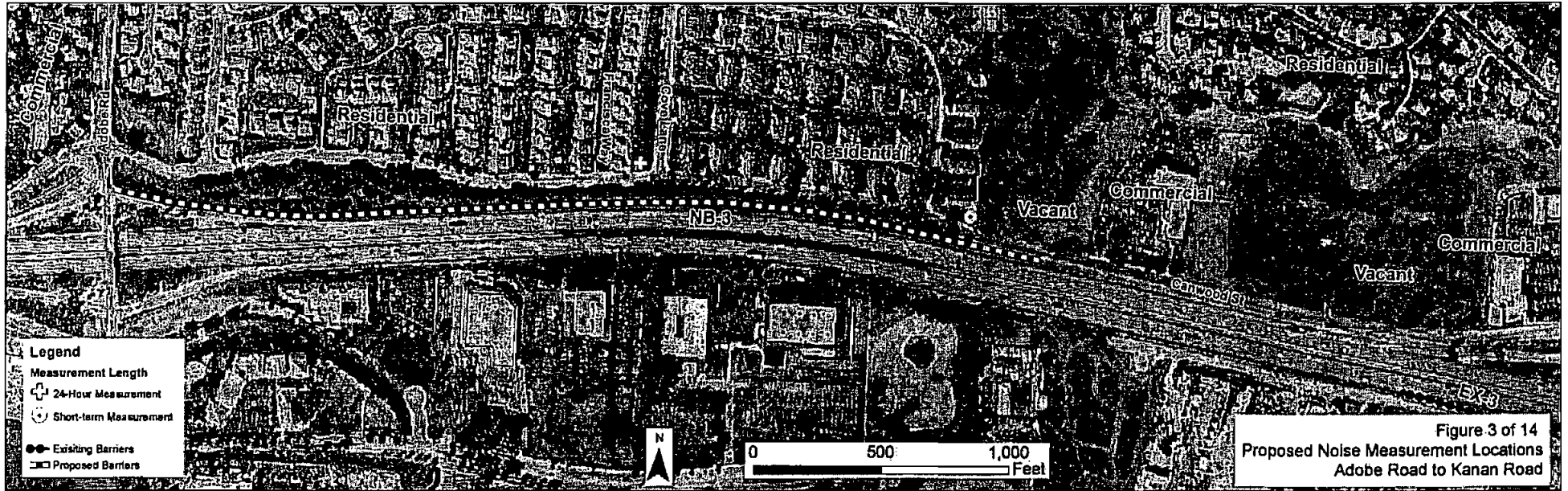
**Summary/Recommendations**

Preliminary noise abatement measures in the form of soundwalls have been identified for the potentially impacted receivers for both Build Alternatives. Detailed noise studies and modeling are recommended to determine the extent to which properties will be affected and the level and type of mitigation measures that would be warranted to mitigate any significant noise impacts.

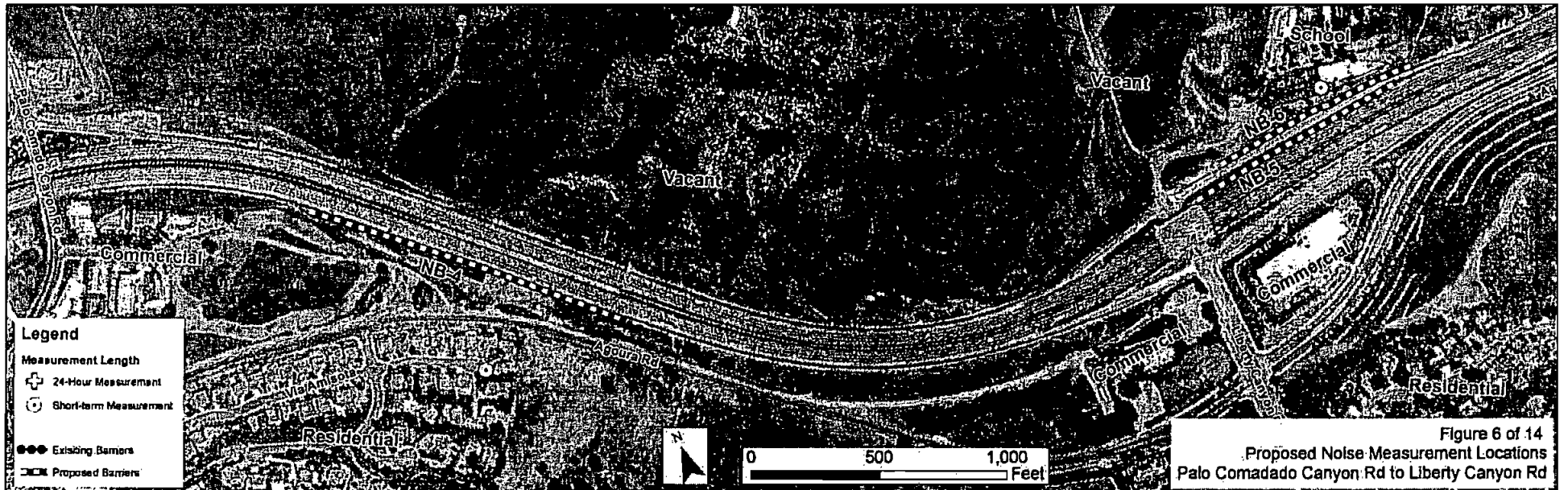
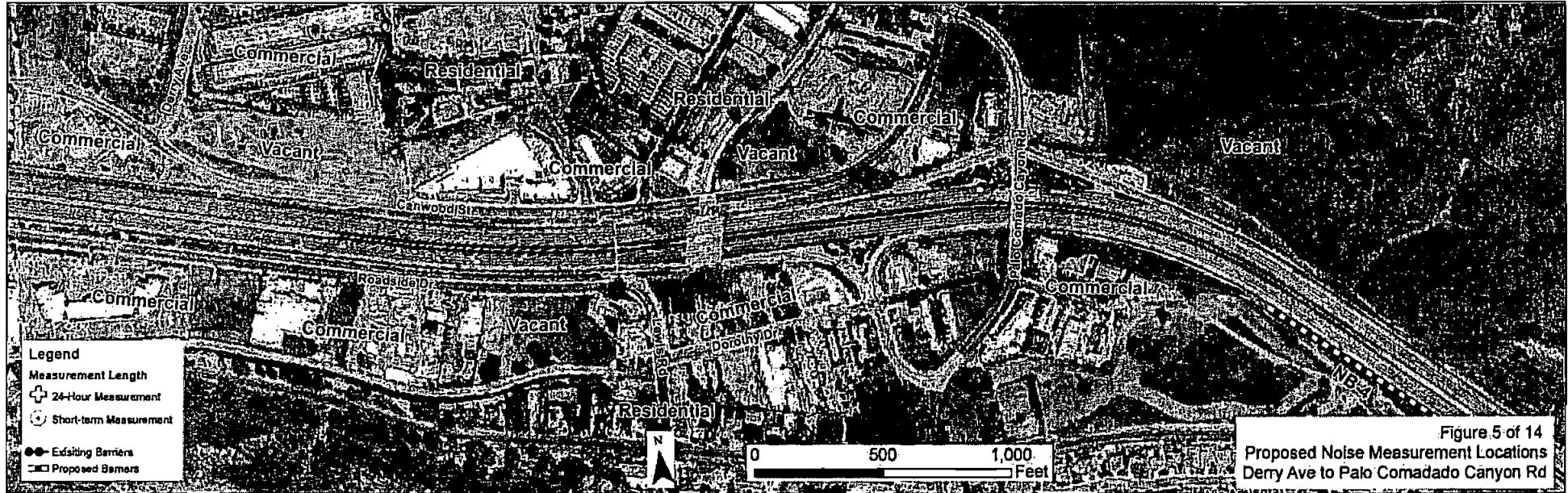
**Prepared by**

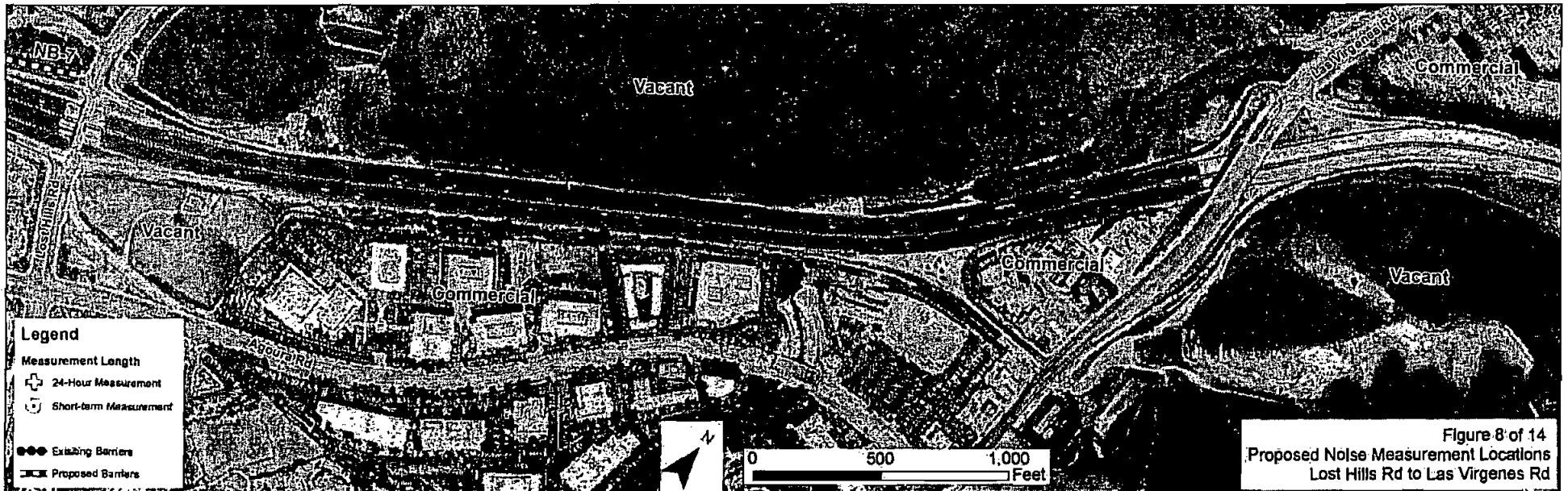
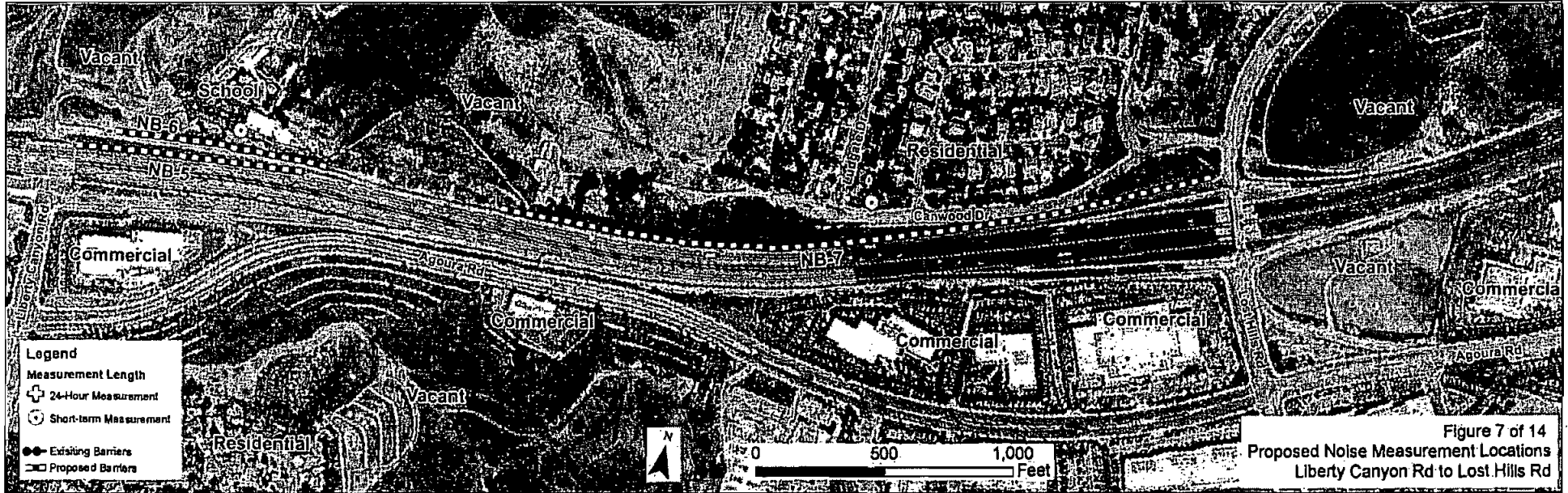
Parsons Brinckerhoff Quade & Douglas, Inc.

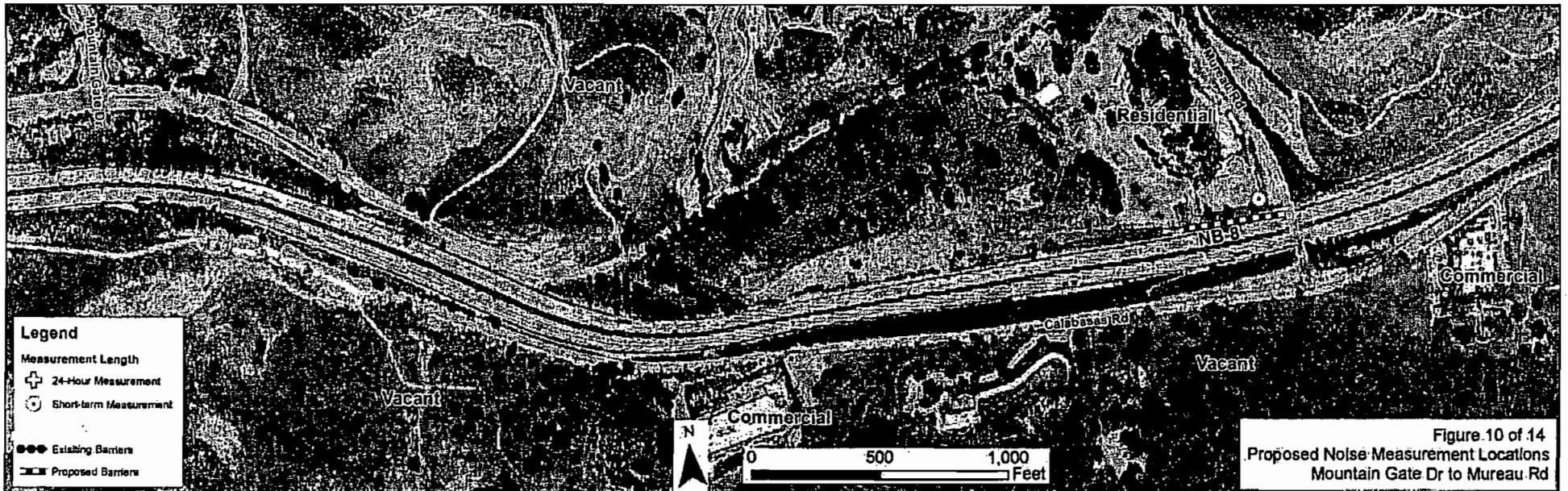
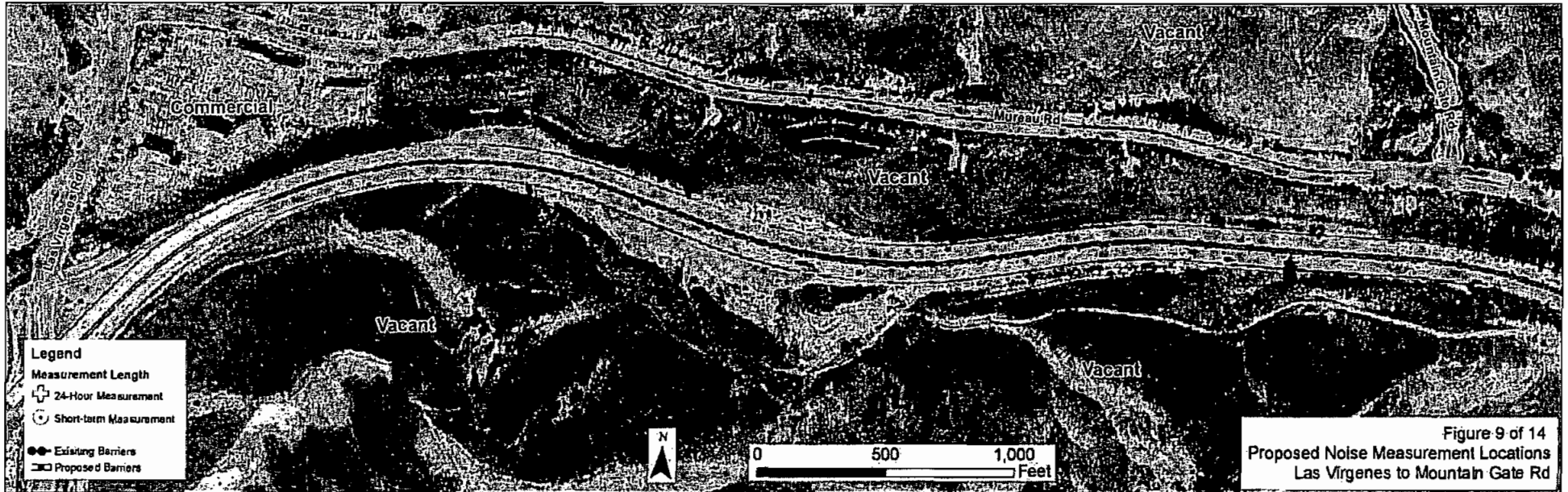


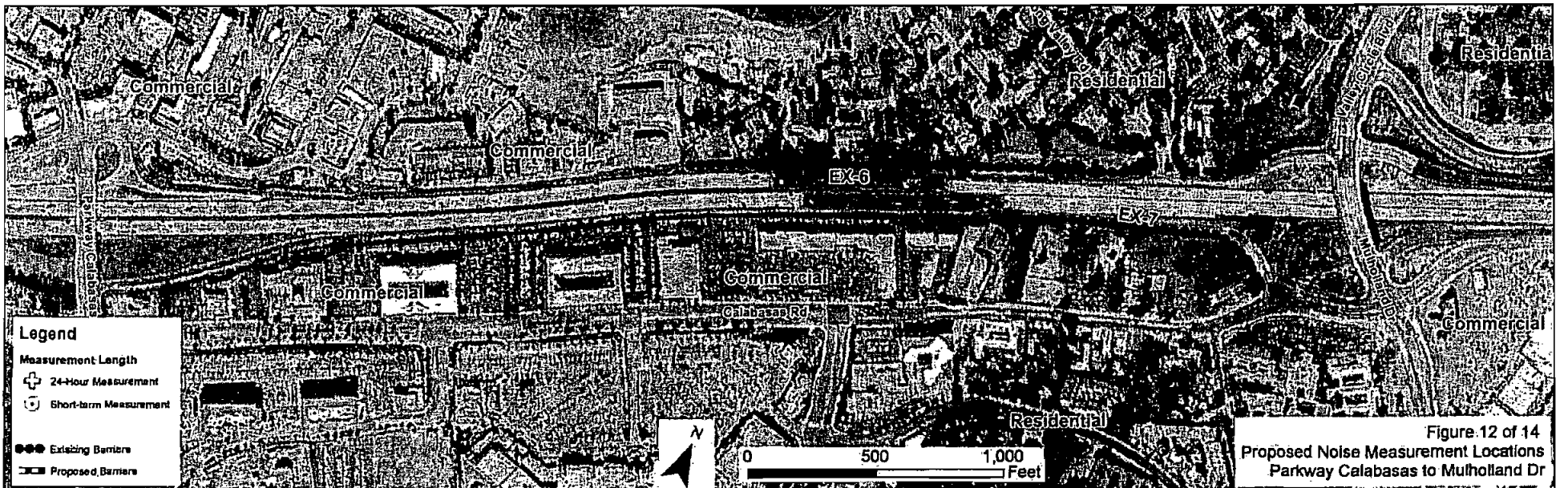
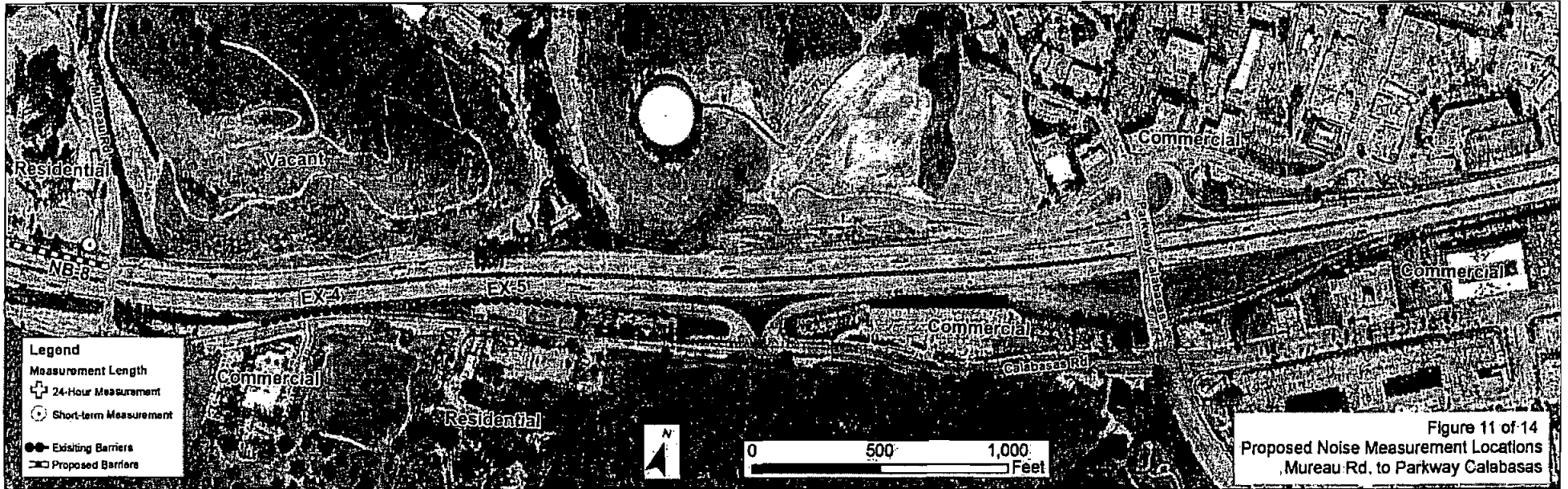


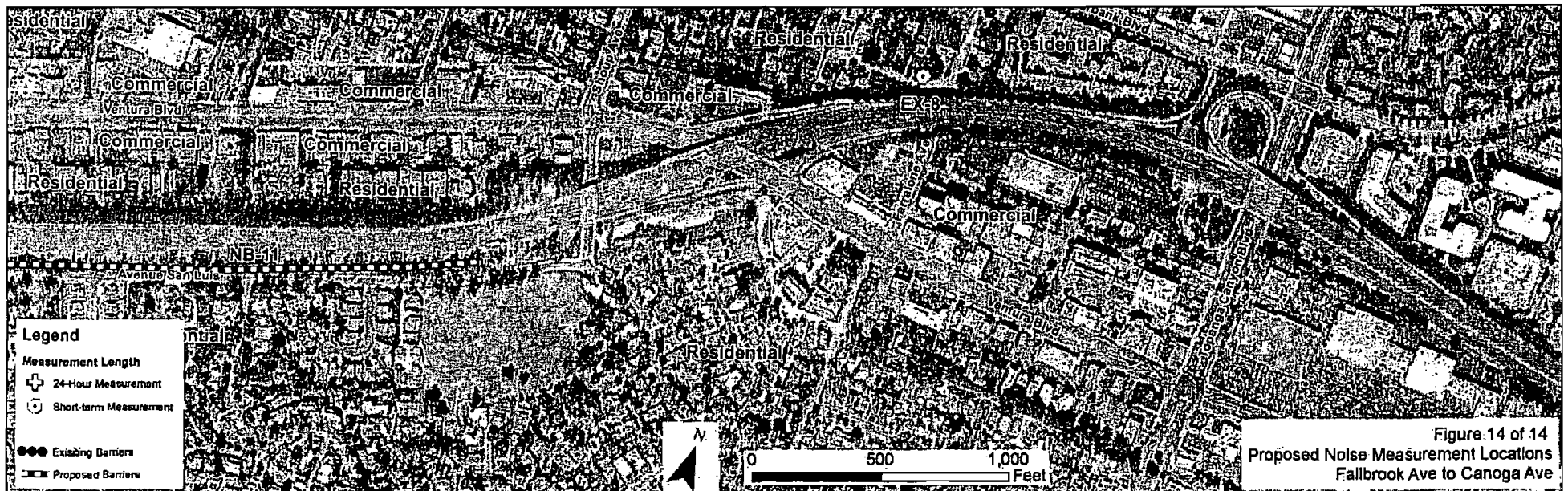
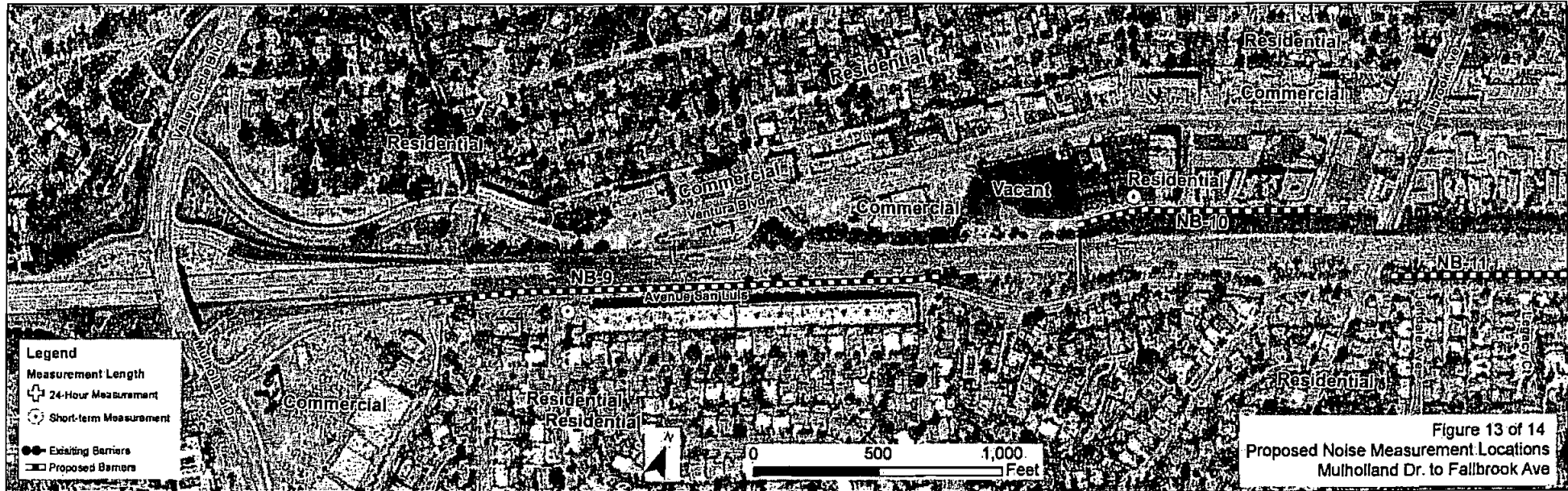












**Attachment H**

**Geotechnical Review Summary**

**GEOTECHNICAL REVIEW SUMMARY**  
**Route 101 Freeway Widening Project**  
**from the Vicinity of Canoga Avenue**  
**to the Vicinity of the LA/Ventura County Line**

The project consists of the construction of a mixed-flow lane in each direction of Route 101 between the vicinity of Canoga Avenue and the vicinity of the LA/Ventura County Line. The segment is about 22.5 km long from Sta. 400 near Canoga Avenue to the vicinity of the LA/Ventura County Line. A total of 15 bridge structures are present along this portion of the alignment that will require widening/replacing. The alignment is partly in cut and partly in fill.

The alignment traverses moderate to steep hilly terrain exposing bedrock comprised of Tertiary-Age sedimentary soft rock and volcanic bedrock units. The bedrock hills have been dissected by numerous alluvial canyon drainages containing deposits of alluvial soils with the flanks of hillsides having accumulations of slopewash or colluvium or young alluvial fan deposits. Man-made cuts and fills have been constructed in many areas as part of freeway and grade separation construction.

The primary geologic units crossed by the alignment include Qyf (Quaternary Young Alluvial Fan Deposits), Qa (alluvial deposits), Tmd (Modelo Formation - diatomaceous shale bedrock), Tcb (Calabassas Formation - shale, siltstone bedrock), Tm (Modelo Formation - shale/siltstone/sandstone bedrock), and Tco (Various facies of Conejo Volcanics bedrock).

Depth to groundwater also varies significantly along the alignment. In general permanent or seasonal groundwater should be expected in the alluvial drainages, while perched water and seepage may be encountered within the bedrock units.

**Key Geotechnical Issues**

- No fault rupture
- Peak bedrock acceleration (PBA) at the site is 0.5g.
- The controlling faults for this project are the Malibu Coast-Santa Monica-Hollywood-Raymond Fault with a magnitude of 7.5 is located about 11 km to 15 km to the south of the segment, or Simi Santa Rosa Northridge Fault (M 7.5) fault located about 12 km to 17 km from the alignment, depending on the actual location of a bridge along the alignment.
- Soil Type D (Caltrans SDC, 2004) or soil type C (depending on the depth to bedrock at the individual bridge location) modified for near-field effects maybe used for ARS curves with 0.5 g PBA.
- Bridges underlain by bedrock, dense soils, and compacted fills without groundwater have negligible liquefaction potential, and bridges with loose alluvium permanently saturated by groundwater have high potential for liquefaction.
- Widening of bridges, potential seismic retrofit, design of retaining / soundwalls, and pavement design will be key geotechnical design issues.

**Attachment I-1**

**Traffic Forecasting, Analysis and  
Operations Checklists**





# PDS Traffic Forecasting, Analysis and Operations Scoping Checklist

## Project Information

District 7 County LA, VEN Route 101 LA KP 40.0/61.5 (PM 24.9/38.2), VEN KP 0.0/1.0 (PM 0.0/0.6) EA 24920K

## Description

### Alternative: Alternative 2: Non-Standard Lane Widths Alternative

This alternative would restripe and/or widen Route 101 to add one mixed-flow lane in each direction within the project limits. The proposed improvements include restriping lanes where feasible and minimizing right of way impacts. Portions of the project will have three non-standard lanes (width 3.35 m) and non-standard left shoulder (0.6 m) in both directions to minimize impact. The outside two lanes will be standard width lanes (3.66 m) with standard width right shoulder (3.05 m) throughout the project. This alternative would also include related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements as necessary. The modified and new structures will provide space for standard lane widths which are the same as Alternative 3.

Caltrans Project Manager Ravi Ghate

Phone #(213) 897-5593

Consultant Project Engineer Farid Naguib

Phone #(213) 362-9483

Traffic Forecasting Functional Manager Fred Pearson

Phone #(213) 362-9484

Traffic Operations Functional Manager Fred Pearson

Phone # (213) 362-9484

## Traffic Forecasting, Traffic Analysis Scoping

A traffic analysis was conducted as part of the Route 101 Freeway Widening Project. The following tasks were conducted as part of this analysis:

- Existing (Year 2005) Traffic Volumes and Level of Service: Existing traffic volumes were compiled and analysis of existing traffic conditions was conducted.
- Alternative 1 – No Build (Year 2030) Traffic Volumes and Level of Service: Future traffic volumes were projected for year 2030, based on the 2025 SCAG model forecasts used in the previous US-101 Freeway Corridor Improvement Study (2003). The objective of this analysis was to forecast traffic demand expected to result from general

regional growth and the implementation of planned transportation projects by the year 2030.

- Alternative 2 – Non-Standard Lane Widths, (Year 2030) Level of Service: Future traffic conditions; under either Alternative 2 or Alternative 3, were evaluated using estimated 2030 traffic volumes and a proposed capacity of five continuous lanes in each direction, since both alternatives would add one mixed-flow lane in each direction within the project limits.
- Alternative 3 – Full Standard Lane Widths, (Year 2030) Level of Service: Future traffic conditions, under either Alternative 2 or Alternative 3, were evaluated using estimated 2030 traffic volumes and a proposed capacity of five continuous lanes in each direction, since both alternatives would add one mixed-flow lane in each direction within the project limits.

The following basic freeway segments were analyzed on the Route 101 corridor.

Route 101 Northbound:

- Between Canoga Avenue and Valley Circle Boulevard
- Between Valley Circle Boulevard and Lost Hills Road
- Between Lost Hills Road and Reyes Adobe Road
- Between Reyes Adobe Road and Los Angeles/Ventura County Line

Route 101 Southbound:

- Between Los Angeles/Ventura County Line and Reyes Adobe Road
- Between Reyes Adobe Road and Lost Hills Road
- Between Lost Hills Road and Valley Circle Boulevard
- Between Valley Circle Boulevard and Canoga Avenue

### **Traffic Operations Scoping**

As identified in the previous US-101 Freeway Corridor Improvement Study and based on current counts, peak period traffic congestion and delay exists in the Route 101 corridor. Alternatives 2 and 3 propose to add one mixed-flow lane in each direction between the vicinity of Canoga Avenue and the vicinity of the Los Angeles/Ventura County Line.

### **Project Screening**

1. Project Features: New R/W? Yes Excavation or fill? Yes

Note: Additional right of way is required in several areas.

2. Project Setting

Route 101, Los Angeles and Ventura Counties

---

Rural or Urban

Rural and Urban Los Angeles and Ventura Counties

---

Current land uses  
Transportation/utilities, open space

---

Adjacent land uses  
Corridor serves developed commercial and residential properties, recreational areas and open space

---

### **Existing Traffic Operational Conditions and Warrants Supporting the Need for the Improvement**

#### Mainline highway

Northbound Route 101 currently operates at LOS F between Canoga Avenue and Parkway Calabasas during the AM peak hour and at LOS F on portions of the freeway between Canoga Avenue and Las Virgenes Road during the PM peak hour. Southbound Route 101 operates at LOS F on portions of the freeway between Canoga Avenue and Las Virgenes Road during the AM peak hour and at LOS F on portions of the freeway between Canoga Avenue and Mulholland Drive during the PM Peak hour. Field observations conducted in February and March 2005 confirmed peak period traffic congestion along the mainline.

#### Ramp Intersection

Current ramp volumes range from approximately 1,000 ADT to 14,400 ADT.

#### Merge / Diverge

Peak period traffic congestion limits the ability of vehicles to freely enter and exit the freeway.

#### Street Intersection

N/A

#### Weaving

Auxiliary lanes are currently provided to facilitate weaving operations at the following closely-spaced on- and off-ramp locations:

- NB Topanga Canyon Boulevard – Ventura Boulevard
- NB Woodlake Avenue – Valley Circle Boulevard

#### Other

Rapid corridor growth and development in recent years has produced increased peak period traffic volumes and congestion in both directions along the Route 101 Freeway. Future projections indicate an approximate 30 percent increase in traffic demand by the year 2030.

### **Traffic Modeling Assumptions**

- √ Use Local Model (Corridor Study forecasts based on 2025 SCAG model forecasts)
  - o Update New Model
  - o New Model

- √ Existing Traffic Counts
  - o New Traffic Counts
    - o Historical Growth
- o General Plan (GP) Buildout
  - o Pro-Rate GP Growth

- √ Existing Year (2005)
  - √ Design Year (2030 )
    - o Interim Year ( )

**Traffic Analysis**

- √ Mainline LOS
  - o Merge/Diverge LOS
    - o Ramp Int. LOS
- o Adjacent IC LOS
  - o Ramp Metering (open)
    - o Ramp Metering (later)
- o Left/Right Turn Storage
  - √ Accident / Safety Analysis
    - o Intersection Queues
- o Construction Staging
  - o Project Staging

References: Guide for the Preparation of Traffic Impact Studies, Caltrans January 2001;  
Highway Capacity Manual: Transportation Research Board

Traffic Operations Scoping

Traffic Operational Improvements

Attach the project location map to this checklist to show location of all traffic operations improvements anticipated. (N/A)

- √ Auxiliary Lanes (All existing auxiliary lane locations will be maintained)
  - o Intersection Improvements
    - o Truck Climbing Lane
- o New Signals
  - o Modify Signals
    - o Merging Improvements
- o Weaving Improvements
  - o Deceleration / Acceleration Lanes

**Traffic Management Systems**

Attach the project location map to this checklist to show location of all traffic management systems identified. (N/A)

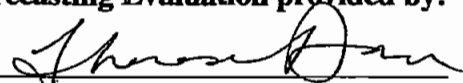
- o Ramp Meters
  - o HOV Ramp Bypass
  - o Mainline HOV Lanes
- o Detector Loops
  - o Communication Networks (fiber optic, telephone, etc.)
- o Closed Circuit Television (CCTV communications system to be installed under EA 12088)
  - o Changeable Message Sign
  - o Highway Advisory Radio

Discuss strategies (technical analysis, public outreach, etc.) to secure local agency and public support to implement HOV lanes and ramp metering:

N/A

**Preliminary Traffic Forecasting Evaluation provided by:**

**Traffic Forecasting:** \_\_\_\_\_

  
Theresa Dau, Parsons Brinckerhoff

Date 3/18/05

Preliminary Traffic Operations Evaluation provided by: N/A

**Traffic Operation Engineer:** N/A

Date \_\_\_\_\_

**Traffic Electrical Engineer:** N/A

Date \_\_\_\_\_



# PDS Traffic Forecasting, Analysis and Operations Scoping Checklist

## Project Information

District 7 County LA, VEN Route 101 LA KP 40.0/61.5 (PM 24.9/38.2), VEN KP 0.0/1.0 (PM 0.0/0.6) EA 24920K

## Description

### Alternative: Alternative 3: Full Standard Lane Widths Alternative

This alternative would widen Route 101 to add one mixed-flow lane in each direction within the project limits. The proposed improvements include full standard lane widths (3.66 m), shoulders (3.05 m) and other feasible full standard design features. This alternative would also include related ramp modifications, soundwall and retaining wall construction, and bridge structure modifications and replacements as necessary providing for standard lane widths.

Caltrans Project Manager Ravi Ghate

Phone #(213) 897-5593

Consultant Project Engineer Farid Naguib

Phone #(213) 362-9483

Traffic Forecasting Functional Manager Fred Pearson

Phone #(213) 362-9484

Traffic Operations Functional Manager Fred Pearson

Phone # (213) 362-9484

## Traffic Forecasting, Traffic Analysis Scoping

A traffic analysis was conducted as part of the Route 101 Freeway Widening Project. The following tasks were conducted as part of this analysis:

- Existing (Year 2005) Traffic Volumes and Level of Service: Existing traffic volumes were compiled and analysis of existing traffic conditions was conducted.
- Alternative 1 – No Build (Year 2030) Traffic Volumes and Level of Service: Future traffic volumes were projected for year 2030, based on the 2025 SCAG model forecasts used in the previous US-101 Freeway Corridor Improvement Study (2003). The objective of this analysis was to forecast traffic demand expected to result from general regional growth and the implementation of planned transportation projects by the year 2030.

- Alternative 2 – Non-Standard Lane Widths, (2030) Level of Service: Future traffic conditions, under either Alternative 2 or Alternative 3, were evaluated using estimated 2030 traffic volumes and a proposed capacity of five continuous lanes in each direction, since both alternatives would add one mixed-flow lane in each direction within the project limits.
- Alternative 3 – Full Standard Lane Widths, (Year 2030) Level of Service: Future traffic conditions, under either Alternative 2 or Alternative 3, were evaluated using estimated 2030 traffic volumes and a proposed capacity of five continuous lanes in each direction, since both alternatives would add one mixed-flow lane in each direction within the project limits.

The following basic freeway segments were analyzed on the Route 101 corridor.

Route 101 Northbound:

- Between Canoga Avenue and Valley Circle Boulevard
- Between Valley Circle Boulevard and Lost Hills Road
- Between Lost Hills Road and Reyes Adobe Road
- Between Reyes Adobe Road and Los Angeles/Ventura County Line

Route 101 Southbound:

- Between Los Angeles/Ventura County Line and Reyes Adobe Road
- Between Reyes Adobe Road and Lost Hills Road
- Between Lost Hills Road and Valley Circle Boulevard
- Between Valley Circle Boulevard and Canoga Avenue

**Traffic Operations Scoping**

As identified in the previous US-101 Freeway Corridor Improvement Study and based on current counts, peak period traffic congestion and delay exists in the Route 101 corridor. Alternatives 2 and 3 propose to add one mixed-flow lane in each direction between the vicinity of Canoga Avenue and the vicinity of the Los Angeles/Ventura County Line.

**Project Screening**

1. Project Features: New R/W? Yes Excavation or fill? Yes

Note: Additional right of way is required in several areas.

2. Project Setting

Route 101, Los Angeles and Ventura Counties

---

Rural or Urban

Rural and Urban Los Angeles and Ventura Counties

---

Current land uses

Transportation/utilities, open space

---

Adjacent land uses  
Corridor serves developed commercial and residential properties, recreational areas  
and open space

---

### **Existing Traffic Operational Conditions and Warrants Supporting the Need for the Improvement**

#### Mainline highway

Northbound Route 101 currently operates at LOS F between Canoga Avenue and Parkway Calabasas during the AM peak hour and at LOS F on portions of the freeway between Canoga Avenue and Las Virgenes Road during the PM peak hour. Southbound Route 101 operates at LOS F on portions of the freeway between Canoga Avenue and Las Virgenes Road during the AM peak hour and at LOS F on portions of the freeway between Canoga Avenue and Mulholland Drive during the PM Peak hour. Field observations conducted in February and March 2005 confirmed peak period traffic congestion along the mainline.

#### Ramp Intersection

Current ramp volumes range from approximately 1,000 ADT to 14,400 ADT.

#### Merge / Diverge

Peak period traffic congestion limits the ability of vehicles to freely enter and exit the freeway.

#### Street Intersection

N/A

#### Weaving

Auxiliary lanes are currently provided to facilitate weaving operations at the following closely-spaced on- and off-ramp locations:

- NB Topanga Canyon Boulevard – Ventura Boulevard
- NB Woodlake Avenue – Valley Circle Boulevard.

#### Other

Rapid corridor growth and development in recent years has produced increased peak period traffic volumes and congestion in both directions along the Route 101 Freeway. Future projections indicate an approximate 30 percent increase in traffic demand by year 2030.

### **Traffic Modeling Assumptions**

- √ Use Local Model (Corridor Study forecasts based on 2025 SCAG model forecasts)
  - o Update New Model
  - o New Model
- √ Existing Traffic Counts
  - o New Traffic Counts
  - o Historical Growth
- o General Plan (GP) Buildout
  - o Pro-Rate GP Growth



- √ Existing Year (2005)
  - √ Design Year (2030 )
    - o Interim Year ( )

**Traffic Analysis**

- √ Mainline LOS
  - o Merge/Diverge LOS
    - o Ramp Int. LOS
- o Adjacent IC LOS
  - o Ramp Metering (open)
    - o Ramp Metering (later)
- o Left/Right Turn Storage
  - √ Accident / Safety Analysis
    - o Intersection Queues
- o Construction Staging
  - o Project Staging

References: Guide for the Preparation of Traffic Impact Studies, Caltrans January 2001;  
Highway Capacity Manual: Transportation Research Board

**Traffic Operations Scoping**

**Traffic Operational Improvements**

Attach the project location map to this checklist to show location of all traffic operations improvements anticipated. (N/A)

- √ Auxiliary Lanes (All existing auxiliary lane locations will be maintained)
  - o Intersection Improvements
    - o Truck Climbing Lane
- o New Signals
  - o Modify Signals
    - o Merging Improvements
- o Weaving Improvements
  - o Deceleration / Acceleration Lanes

**Traffic Management Systems**

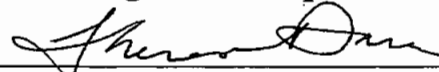
Attach the project location map to this checklist to show location of all traffic management systems identified. (N/A)

- o Ramp Meters
  - o HOV Ramp Bypass
  - o Mainline HOV Lanes
- o Detector Loops
  - o Communication Networks (fiber optic, telephone, etc.)
- o Closed Circuit Television (CCTV communications system to be installed under EA 12088)
  - o Changeable Message Sign
  - o Highway Advisory Radio

Discuss strategies (technical analysis, public outreach, etc.) to secure local agency and public support to implement HOV lanes and ramp metering:

N/A

**Preliminary Traffic Forecasting Evaluation provided by:**

Traffic Forecasting:  Date 3/18/05  
Theresa Dau, Parsons Brinckerhoff

Preliminary Traffic Operations Evaluation provided by: N/A

Traffic Operation Engineer: N/A Date \_\_\_\_\_

Traffic Electrical Engineer: N/A Date \_\_\_\_\_

**Attachment I-2**

**Traffic Impact Analysis**

**Route 101 Freeway Widening Project**

**Add One Mixed-Flow Lane in Each Direction  
from the Vicinity of Canoga Avenue  
to the Vicinity of the LA/Ventura County Line**

**Traffic Impact Analysis**

September, 2005

## **Introduction**

A traffic impact analysis was conducted for the proposed Route 101 Freeway Widening Project, which would add one mixed-flow lane in each direction on Route 101 from the vicinity of Canoga Avenue to the vicinity of the Los Angeles (LA)/Ventura County Line. Route 101 currently experiences peak period traffic congestion along the mainline in both directions. The proposed improvements on Route 101 are intended to reduce traffic congestion, accommodate future traffic growth, and improve traffic safety.

To determine the potential effects of the proposed project, traffic conditions associated with the following scenarios were analyzed:

- Existing Conditions (Year 2005)
- Alternative 1: No Build Alternative (Year 2030)
- Alternative 2: Non-Standard Lane Widths Alternative (Year 2030)
- Alternative 3: Standard Lane Widths Alternative (Year 2030)

## **Approach**

The traffic impact analysis conducted for the proposed Route 101 Freeway Widening Project includes evaluation of freeway mainline levels of service under existing and forecasted future traffic conditions, identification of existing peak-period congestion locations and durations, analysis of need for auxiliary lanes, and evaluation of accident data for a three-year period.

Caltrans traffic counts for year 2003 were used as a basis to estimate existing (Year 2005) and future (Year 2030) traffic volumes along Route 101.<sup>1</sup> An annual growth rate of 1.06% per year compounded, based on 2025 SCAG model forecasts from the previous US-101 Freeway Corridor Improvement Study (2003), was applied to determine 2005 and 2030 traffic volumes. The forecast produced a total traffic growth of approximately 30% from 2005 to the forecast year of 2030.

## **Existing Traffic Conditions (Year 2005)**

The Route 101 freeway, between Canoga Avenue and the LA/Ventura County Line, currently has four continuous mixed-flow lanes in each direction. In addition, there are auxiliary lanes provided in the northbound direction between Topanga Canyon Boulevard and Ventura Boulevard and between Woodlake Avenue and Valley Circle Boulevard, as well as auxiliary lanes between all interchanges west of Las Virgenes Road in both directions. In the southbound direction, there is a deceleration lane provided on the approach to the Parkway Calabasas exit ramp.

According to 2003 Caltrans traffic counts, the Average Daily Traffic (ADT) volume on the Route 101 freeway within the project limits range from approximately 175,000 vehicles per day (vpd) on the west end to approximately 233,000 vpd on the east end near Canoga Avenue. The

---

<sup>1</sup> 2003 Caltrans traffic counts, <http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/2003all/r101i.htm>, 5/5/2004.

percentage of trucks traveling through this area is approximately 4.3 percent. The majority of these trucks are 2-axle and 3-axle trucks, approximately 46 percent and 11 percent respectively. Other trucks include 4-axle trucks (approximately 4 percent) and 5-axle trucks (approximately 39 percent).

Table 1 summarizes estimated existing (2005) AM and PM peak hour traffic volumes on Route 101 within the project limits. The freeway mainline volumes in the northbound direction range from approximately 6,100 to 9,000 vehicles per hour (vph) in the AM peak hour and range from 6,800 to 8,700 vph in the PM peak hour. In the southbound direction, freeway mainline volumes range from approximately 6,500 to 8,300 vph in the AM peak hour and range from approximately 5,800 to 8,700 vph in the PM peak hour.

Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		NB	SB	NB	SB
25.3	Rte. 27, Topanga Canyon Boulevard	9,000	8,300	8,700	8,700
25.7	Ventura Boulevard	8,300	7,700	8,000	8,000
26.8	Woodlake Avenue	8,300	7,700	8,000	8,000
27.3	Valley Circle/Mulholland Drive	8,800	8,100	8,400	8,400
28.2	Parkway Calabasas	8,300	7,600	8,000	8,000
31.0	Las Virgenes Road	7,800	8,300	8,700	7,400
31.9	Lost Hills Road	6,800	7,300	7,600	6,500
32.7	Liberty Canyon Road	7,000	7,500	7,800	6,700
33.6	Chesebro/ Palo Comado Canyon Roads	7,200	7,700	8,000	6,800
35.0	Kanan Road	7,000	7,600	7,900	6,700
36.1	Reyes Adobe Road	6,900	7,400	7,700	6,600
37.5	Lindero Canyon Road	7,000	7,500	7,800	6,700
38.2	LA/Ventura County Line	6,100	6,500	6,800	5,800

Notes:

1. Estimated 2005 traffic volumes were calculated based on Peak Hour Volumes from 2003 Caltrans Traffic Counts, and applying a growth factor and directional split percentages as follows:
  - a. An annual growth rate of 1.06% per year compounded was used, based on the 2025 SCAG model forecasts used in the US-101 Freeway Corridor Improvement Study (2003).
  - b. Directional split assumptions were based on count data from Caltrans Traffic Volumes, June 2004, at two locations within the project limits – south of Parkway Calabasas and at Reyes Adobe Road.

Based on the estimated 2005 traffic volumes, existing traffic conditions were evaluated. Tables 2a and 2b provide a summary of estimated existing peak period volume-to-capacity (V/C) ratios and levels of service (LOS) for various segments along Route 101 in the northbound and southbound directions. LOS is a measure of traffic conditions which ranges from LOS A, representing free-flow conditions, to LOS F, representing forced or unstable conditions. As shown in Table 2a, five out of the 13 locations analyzed on northbound Route 101 currently operate at LOS F during the AM peak hour and three of the locations operate at LOS F during the

**Table 2a**  
**Northbound Route 101 – 2005 AM and PM Peak Hour V/C Ratios and LOS**

Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		V/C Ratio	LOS	V/C Ratio	LOS
25.3	Rte. 27, Topanga Canyon Boulevard	1.13	F	1.08	F
25.7	Ventura Boulevard	1.04	F	1.00	E
26.8	Woodlake Avenue	1.04	F	1.00	E
27.3	Valley Circle/Mulholland Drive	1.10	F	1.05	F
28.2	Parkway Calabasas	1.04	F	1.00	E
31.0	Las Virgenes Road	0.97	E	1.08	F
31.9	Lost Hills Road	0.85	D	0.95	E
32.7	Liberty Canyon Road	0.88	D	0.98	E
33.6	Chesebro/ Palo Comado Canyon Roads	0.89	D	1.00	E
35.0	Kanan Road	0.88	D	0.99	E
36.1	Reyes Adobe Road	0.86	D	0.97	E
37.5	Lindero Canyon Road	0.88	D	0.98	E
38.2	LA/Ventura County Line	0.76	C	0.85	D
<b>Number of Locations with LOS F</b>			<b>5</b>		<b>3</b>

Notes:

- Capacity estimates are based on four continuous freeway lanes in each direction: auxiliary lanes assumed to provide operational benefits only. Capacity is assumed to be 2,000 vehicles per hour per lane.

**Table 2b**  
**Southbound Route 101 – 2005 AM and PM Peak Hour V/C Ratios and LOS**

Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		V/C Ratio	LOS	V/C Ratio	LOS
25.3	Rte. 27, Topanga Canyon Boulevard	1.04	F	1.09	F
25.7	Ventura Boulevard	0.96	E	1.00	E
26.8	Woodlake Avenue	0.96	E	1.00	E
27.3	Valley Circle/Mulholland Drive	1.01	F	1.05	F
28.2	Parkway Calabasas	0.95	E	1.00	E
31.0	Las Virgenes Road	1.04	F	0.92	E
31.9	Lost Hills Road	0.91	E	0.81	D
32.7	Liberty Canyon Road	0.94	E	0.83	D
33.6	Chesebro/ Palo Comado Canyon Roads	0.96	E	0.85	D
35.0	Kanan Road	0.94	E	0.84	D
36.1	Reyes Adobe Road	0.92	E	0.82	D
37.5	Lindero Canyon Road	0.94	E	0.83	D
38.2	LA/Ventura County Line	0.81	D	0.72	C
<b>Number of Locations with LOS F</b>			<b>3</b>		<b>2</b>

Notes:

- Capacity estimates are based on four continuous freeway lanes in each direction: auxiliary lanes assumed to provide operational benefits only. Capacity is assumed to be 2,000 vehicles per hour per lane.

PM peak hour. In the southbound direction, there are three locations that operate at LOS F during the AM peak hour and two locations that operate at LOS F during the PM peak hour (Table 2b). Caltrans congestion maps were also used to identify freeway mainline traffic conditions. These maps show the duration of congestion during peak hours on incident-free days. Generally, freeway operating conditions are directly influenced by the freeway's capacity. When the traffic demand on the freeway exceeds capacity, vehicle speeds are reduced to below 60 km/h (35 mph) and congestion occurs until traffic demand returns to a level below freeway capacity.

The Caltrans 2002 congestion maps show that AM peak operating conditions on northbound Route 101, between approximately Ventura Boulevard and Parkway Calabasas, are associated with an F (jammed flow) level of service. Congested conditions for the AM peak period last for one to two hours on this northbound freeway mainline segment. Over the duration of this peak period, the northbound average travel speed is reduced to below 60 km/h (35 mph). Northbound Route 101 in other areas of the project corridor operates at speeds which average more than 60 km/h (35 mph), during the AM peak period.

For Route 101 in the southbound direction, AM peak operating conditions are associated with an F level of service between approximately Mureau Road and Canoga Avenue. Congested conditions for the AM peak period last for one to two hours on this southbound freeway mainline segment. Over the duration of this peak period, the southbound average travel speed is reduced to below 60 km/h (35 mph). Southbound Route 101 in other areas of the project corridor operates at speeds which average more than 60 km/h (35 mph), during the AM peak period.

During the PM peak period, Route 101 in the northbound direction operates at speeds which average more than 60 km/h (35 mph), along the entire project corridor between the vicinity of Canoga Avenue and the LA/Ventura County Line.

The PM peak operating conditions for Route 101 in the southbound direction are associated with an F level of service, between approximately Chesebro Road and Canoga Avenue. Congested conditions for the PM peak period last for more than three hours on this southbound freeway mainline segment. Over the duration of this peak period, the southbound average travel speed is reduced to below 60 km/h (35 mph). Southbound Route 101 in other areas of the project corridor operates at speeds which average more than 60 km/h (35 mph), during the PM peak period. The peak period congestion conditions are summarized in Table 3.

Table 3 Peak Period Traffic Congestion		
Direction/Location	Peak Period	Congestion
Northbound Route 101: Between approximately Ventura Boulevard and Parkway Calabasas	AM Peak	Peak Duration: 1 to 2 hours ATS <sup>1</sup> : Below 60 km/h (35 mph) LOS: F <sub>1</sub>



Table 3 Peak Period Traffic Congestion		
Direction/Location	Peak Period	Congestion
Southbound Route 101: Between approximately Mureau Road and Canoga Avenue	AM Peak	Peak Duration: 1 to 2 hours ATS <sup>1</sup> : Below 60 km/h (35 mph) LOS: F <sub>1</sub>
Southbound Route 101: Between approximately Chesebro Road and Canoga Avenue	PM Peak	Peak Duration: More than 3 hours ATS <sup>1</sup> : Below 60 km/h (35 mph) LOS: F <sub>3</sub>

Source: Caltrans 2002 AM and PM Peak Freeway Operations Maps

1. ATS = Average Traffic Speed

Caltrans uses the duration of congestion as a measure to classify the level of service F conditions experienced on the freeway. Table 4 presents the level of service F designations used by Caltrans.

Table 4 Caltrans Level of Service F Designations	
Level of Service Designation	Duration of Congestion
F <sub>0</sub>	15 minutes to 1 hour
F <sub>1</sub>	1 hour to 2 hours
F <sub>2</sub>	2 hours to 3 hours
F <sub>3</sub>	More than 3 hours

Source: Caltrans 2002 AM and PM Peak Period Freeway Congestion Maps

#### Alternative 1: No Build – Traffic Conditions (Year 2030)

Estimated Year 2030 traffic volumes on Route 101 are summarized in Table 5, for both the AM and PM peak hours. Future projections indicate an approximate 30% increase in traffic demand to Year 2030. Estimated 2030 freeway mainline volumes in the northbound direction range from approximately 7,900 to 11,800 vehicles per hour (vph) in the AM peak hour, and from 8,800 to 11,300 vph in the PM peak hour. In the southbound direction, freeway mainline volumes range from approximately 8,500 to 10,800 vph in the AM peak hour and range from approximately 7,500 to 11,300 vph in the PM peak hour.

**Table 5  
Route 101 – 2030 AM and PM Peak Hour Traffic Volumes**

Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		NB	SB	NB	SB
25.3	Rte. 27, Topanga Canyon Boulevard	11,800	10,800	11,300	11,300
25.7	Ventura Boulevard	10,900	10,000	10,400	10,400
26.8	Woodlake Avenue	10,900	10,000	10,400	10,400
27.3	Valley Circle/Mulholland Drive	11,400	10,500	11,000	11,000
28.2	Parkway Calabasas	10,800	9,900	10,400	10,400
31.0	Las Virgenes Road	10,100	10,800	11,300	9,600
31.9	Lost Hills Road	8,900	9,500	9,900	8,400
32.7	Liberty Canyon Road	9,100	9,800	10,200	8,700
33.6	Chesebro/ Palo Comado Canyon Roads	9,300	10,000	10,400	8,800
35.0	Kanan Road	9,200	9,800	10,300	8,700
36.1	Reyes Adobe Road	9,000	9,600	10,100	8,500
37.5	Lindero Canyon Road	9,100	9,800	10,200	8,700
38.2	LA/Ventura County Line	7,900	8,500	8,800	7,500

**Notes:**

1. Estimated 2030 traffic volumes were calculated based on Peak Hour Volumes from 2003 Caltrans Traffic Counts, and applying a growth factor and directional split percentages as follows:
  - a. An annual growth rate of 1.06% per year compounded was used, based on the 2025 SCAG model forecasts used in the US-101 Freeway Corridor Improvement Study (2003).
  - b. Directional split assumptions were based on count data from Caltrans Traffic Volumes, June 2004, at two locations within the project limits – south of Parkway Calabasas and Reyes Adobe Road.

Based on these estimated traffic volumes, the peak period V/C ratios and LOS were calculated for 2030 No Build conditions, assuming no increase in capacity on Route 101 (i.e., four continuous mixed-flow lanes in each direction). As shown in Tables 6a and 6b, nearly all the locations analyzed would operate at LOS F during the AM and/or PM peak hour for both northbound and southbound directions under 2030 No Build conditions.

**Alternatives 2 and 3 – Traffic Conditions (Year 2030)**

For both Alternative 2 (Non-Standard Lane Widths) and Alternative 3 (Standard Lane Widths), forecasted future traffic conditions were evaluated using estimated 2030 traffic volumes and a proposed capacity of five continuous lanes in each direction, since both alternatives would add one mixed-flow lane in each direction within the project limits. Tables 7a and 7b provide a summary of estimated peak period V/C ratios and LOS along Route 101 under future build conditions, in the northbound and southbound directions.

On northbound Route 101, a total of six locations would operate at LOS F during the AM peak hour in Year 2030 with proposed improvements (compared to 12 locations under 2030 No Build conditions). During the PM peak hour, the number of locations that would operate at LOS F

**Table 6a**  
**Northbound Route 101 – 2030 No Build AM and PM Peak Hour V/C Ratios and LOS**

Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		V/C Ratio	LOS	V/C Ratio	LOS
25.3	Rte. 27, Topanga Canyon Boulevard	1.47	F	1.41	F
25.7	Ventura Boulevard	1.36	F	1.30	F
26.8	Woodlake Avenue	1.36	F	1.30	F
27.3	Valley Circle/Mulholland Drive	1.43	F	1.37	F
28.2	Parkway Calabasas	1.35	F	1.30	F
31.0	Las Virgenes Road	1.26	F	1.41	F
31.9	Lost Hills Road	1.11	F	1.24	F
32.7	Liberty Canyon Road	1.14	F	1.28	F
33.6	Chesebro/ Palo Comado Canyon Roads	1.16	F	1.30	F
35.0	Kanan Road	1.15	F	1.29	F
36.1	Reyes Adobe Road	1.12	F	1.26	F
37.5	Lindero Canyon Road	1.14	F	1.28	F
38.2	LA/Ventura County Line	0.99	E	1.11	F
<b>Number of Locations with F</b>			<b>12</b>		<b>13</b>

Notes:

- Capacity estimates are based on four continuous freeway lanes in each direction: auxiliary lanes assumed to provide operational benefits only. Capacity is assumed to be 2,000 vehicles per hour per lane.

**Table 6b**  
**Southbound Route 101 – 2030 No Build AM and PM Peak Hour V/C Ratios and LOS**

Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		V/C Ratio	LOS	V/C Ratio	LOS
25.3	Rte. 27, Topanga Canyon Boulevard	1.35	F	1.41	F
25.7	Ventura Boulevard	1.25	F	1.31	F
26.8	Woodlake Avenue	1.25	F	1.31	F
27.3	Valley Circle/Mulholland Drive	1.31	F	1.37	F
28.2	Parkway Calabasas	1.24	F	1.30	F
31.0	Las Virgenes Road	1.35	F	1.20	F
31.9	Lost Hills Road	1.19	F	1.05	F
32.7	Liberty Canyon Road	1.22	F	1.08	F
33.6	Chesebro/ Palo Comado Canyon Roads	1.25	F	1.11	F
35.0	Kanan Road	1.23	F	1.09	F
36.1	Reyes Adobe Road	1.20	F	1.07	F
37.5	Lindero Canyon Road	1.22	F	1.08	F
38.2	LA/Ventura County Line	1.06	F	0.94	E
<b>Number of Locations with LOS F</b>			<b>13</b>		<b>12</b>

Notes:

- Capacity estimates are based on four continuous freeway lanes in each direction: auxiliary lanes assumed to provide operational benefits only. Capacity is assumed to be 2,000 vehicles per hour per lane.

**Table 7a**  
**Northbound Route 101 – 2030 Build AM and PM Peak Hour V/C Ratios and LOS**

Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		V/C Ratio	LOS	V/C Ratio	LOS
25.3	Rte. 27, Topanga Canyon Boulevard	1.18	F	1.13	F
25.7	Ventura Boulevard	1.09	F	1.04	F
26.8	Woodlake Avenue	1.09	F	1.04	F
27.3	Valley Circle/Mulholland Drive	1.14	F	1.10	F
28.2	Parkway Calabasas	1.08	F	1.04	F
31.0	Las Virgenes Road	1.01	F	1.13	F
31.9	Lost Hills Road	0.89	D	0.99	E
32.7	Liberty Canyon Road	0.91	E	1.02	F
33.6	Chesebro/ Palo Comado Canyon Roads	0.93	E	1.04	F
35.0	Kanan Road	0.92	E	1.03	F
36.1	Reyes Adobe Road	0.90	D	1.01	F
37.5	Lindero Canyon Road	0.91	E	1.02	F
38.2	LA/Ventura County Line	0.79	C	0.88	D
<b>Number of Locations with LOS F</b>			<b>6</b>		<b>11</b>

Notes:

- Capacity estimates are based on five continuous freeway lanes in each direction: auxiliary lanes assumed to provide operational benefits only. Capacity is assumed to be 2,000 vehicles per hour per lane.

**Table 7b**  
**Southbound Route 101 – 2030 Build AM and PM Peak Hour V/C Ratios and LOS**

Postmile	Location, South of:	AM Peak Hour		PM Peak Hour	
		V/C Ratio	LOS	V/C Ratio	LOS
25.3	Rte. 27, Topanga Canyon Boulevard	1.08	F	1.13	F
25.7	Ventura Boulevard	1.00	E	1.04	F
26.8	Woodlake Avenue	1.00	E	1.04	F
27.3	Valley Circle/Mulholland Drive	1.05	F	1.10	F
28.2	Parkway Calabasas	0.99	E	1.04	F
31.0	Las Virgenes Road	1.08	F	0.96	E
31.9	Lost Hills Road	0.95	E	0.84	D
32.7	Liberty Canyon Road	0.98	E	0.87	D
33.6	Chesebro/ Palo Comado Canyon Roads	1.00	E	0.88	D
35.0	Kanan Road	0.98	E	0.87	D
36.1	Reyes Adobe Road	0.96	E	0.85	D
37.5	Lindero Canyon Road	0.98	E	0.87	D
38.2	LA/Ventura County Line	0.85	D	0.75	C
<b>Number of Locations with LOS F</b>			<b>3</b>		<b>5</b>

Notes:

- Capacity estimates are based on five continuous freeway lanes in each direction: auxiliary lanes assumed to provide operational benefits only. Capacity is assumed to be 2,000 vehicles per hour per lane.

would be reduced from 13 locations to 11 locations in the Year 2030 with proposed improvements.

Traffic conditions on southbound Route 101 would also improve in 2030 with the proposed project. A total of three locations would operate at LOS F (instead of 13 locations under 2030 No Build conditions) during the AM peak hour. During the PM peak hour, five locations would operate at LOS F (instead of 12 locations under 2030 No Build conditions). For both northbound and southbound directions, the V/C ratios at all LOS F locations would be lower with the proposed improvements compared to 2030 No Build conditions.

### **Auxiliary Lanes**

Each existing auxiliary lane location was evaluated to determine whether right of way constraints might require consideration of eliminating the auxiliary lane at specific locations. West of Las Virgenes Road, no right of way acquisition requirements or right of way constraints were identified, and thus auxiliary lanes were provided at all existing locations. East of Las Virgenes Road, the two existing northbound auxiliary lane locations could be also retained, due to the short weave distance available between Topanga Canyon Boulevard and Ventura Boulevard and between Woodlake Avenue and Valley Circle Boulevard. No other segment warranted consideration of adding an auxiliary lane based on the projected 2030 traffic volumes and length of weaving section. For each build alternative, the existing auxiliary lanes on Route 101 within the project limits will be maintained.

### **Accident Data Analysis**

Accident rates on Route 101 for a three-year period were compared to the statewide average for a similar type of facility, based on Traffic Accident Surveillance and Analysis System (TASAS) Table B data. The three-year period provided by Caltrans extended from January 1, 2001 to December 31, 2003. Attachment I-3 contains TASAS Table B, which summarizes accident data for the following basic freeway segments on the Route 101 corridor:

- Topanga Canyon Boulevard (near Canoga Avenue), to Valley Circle Boulevard
- Valley Circle Boulevard to Lost Hills Road
- Lost Hills Road to Reyes Adobe Road
- Reyes Adobe Road to Los Angeles/Ventura County Line

As shown in Attachment I-3, TASAS Table B, the accident rates on both northbound and southbound Route 101, within the project limits, were generally lower than the statewide average rates for the three-year time period analyzed. Overall, the accident rate was 0.49 accidents per million vehicle miles (MVM) in the northbound direction and 0.61 accidents per MVM in the southbound direction, compared to the statewide average accident rate of 0.99 accidents per MVM for similar facilities.

Route 101 had a total of 649 accidents in northbound direction and a total of 806 accidents in southbound direction during the three-year time period analyzed. The most frequent type of collisions was rear-end collisions, which accounted for approximately 38 percent of collisions in the northbound direction and approximately 62 percent of collisions in the southbound direction. Rear-end accidents are considered to be congestion-related accidents. Therefore, the proposed improvements to widen Route 101, and thus reduce congestion, are expected to help to reduce this type of accidents on Route 101 in the future.

**Attachment I-3**

**TASAS Table B**

TASAS TABLE B DISTRICT 07  
 SELECTIVE ACCIDENT RATE CALCULATION  
 ROUTE SEQUENCE

LOCATION	DESCRIPTION	RA GRP (RUS)	*-NUMBER OF ACCIDENTS/SIGNIFICANCE*										PER KLD INJ	*ADT MAIN X-ST	*TOTAL MV+ OR MVM	*-ACCIDENT RATE ACCS/MV+ OR MVM-*		
			TOT	FAT	INJ	F+I	VEH	WET	DARK	ACTUAL	FAT	F+I				TOT	FAT	F+I
101 07-0001	LA 25.340 THRU LA 2.020M 01-01-01 03-12-31 36 MO (U)	027.359 NORTH H	148	1	43	44	120	18	39	1	103.3	228.50	.004	.19	.65	.005	.34	1.09
101 07-0001	LA 25.340 THRU LA 2.020M 01-01-01 03-12-31 36 MO (U)	027.359 SOUTH H	218	0	67	67	193	12	51	0	103.3	228.50	.000	.29	.95	.005	.34	1.09
101 07-0002	LA 27.360 THRU LA 4.550M 01-01-01 03-12-31 36 MO NA	031.909 NORTH H	281	0	91	91	207	31	93	0	95.1	473.97	.000	.19	.59	.005	.33	1.05
101 07-0002	LA 27.360 THRU LA 4.550M 01-01-01 03-12-31 36 MO NA	031.909 SOUTH H	352	1	106	107	314	27	77	1	95.1	473.97	.002	.23	.74	.005	.33	1.05
101 07-0003	LA 31.910 THRU LA 4.270M 01-01-01 03-12-31 36 MO NA	036.179 NORTH H	162	0	56	56	89	36	50	0	90.7	424.20	.000	.13	.38	.005	.29	.94
101 07-0003	LA 31.910 THRU LA 4.270M 01-01-01 03-12-31 36 MO NA	036.179 SOUTH H	183	1	54	55	134	22	62	1	90.7	424.20	.002	.13	.43	.005	.29	.94
101 07-0004	LA 36.180 THRU LA 2.010M 01-01-01 03-12-31 36 MO (U)	038.189 NORTH H	58	0	19	19	42	4	16	0	88.1	193.92	.000	.10	.30	.005	.28	.90
101 07-0004	LA 36.180 THRU LA 2.010M 01-01-01 03-12-31 36 MO (U)	038.189 SOUTH H	53	0	25	25	30	9	20	0	88.1	193.92	.000	.13	.27	.005	.28	.90
101 07-0005	LA 25.340 THRU LA 12.850M 01-01-01 03-12-31 36 MO NA	038.189 NORTH H	649	1	209	210	458	89	198	1	93.9	1320.58	.001	.16	.49	.005	.31	.99
101 07-0005	LA 25.340 THRU LA 12.850M 01-01-01 03-12-31 36 MO NA	038.189 SOUTH H	806	2	252	254	671	70	210	2	93.9	1320.58	.002	.19	.61	.005	.31	.99

**Attachment J**

**Right of Way Data Sheets**



To: Caltrans District 7  
 100 Main Street  
 Los Angeles, CA

Date: 9/02/05

Attention: Andrew P.  
 Nierenberg

Dist 07 Co LA Rte 101 KP 40.0/61.5(LA)  
 EA 24920K 0.0/1.0 (Ven)

**Project Description** This alternative would restripe and/or widen Route 101 to add one mixed-flow lane in each direction within the project limits.

**Subject:** Right of Way Data Alternative 2: Non-Standard Lane Widths Alternative

This Alternate meets the criteria for a Design/Build project: Yes  No

**1. Right of Way Cost Estimate:**

		Current Value Future Use	Escalation Rate	Escalated Value
<b>A</b>	<b>Total Acquisition Cost</b> Acquisition, including Excess Lands, Damages, and Goodwill. Project Permit Fees	\$838,700	%	\$1,099,000
<b>B</b>	<b>Utility Relocation</b>	\$1,911,000*	%	\$2,102,100*
<b>C</b>	<b>Relocation Assistance</b>	\$0	%	\$0
<b>D</b>	<b>Clearance/Demolition</b>	\$50,000	%	\$55,000
<b>E</b>	<b>Title and Escrow</b>	\$37,300	%	\$41,400
<b>F</b>	<b>Total Estimated Cost</b>	\$2,837,000		\$3,297,500
<b>G</b>	<b>Construction Contract Work</b>	\$		

**2. Current Date of Right of Way Certification** FY 2010

**3. Workload Estimate:** To be entered into PMCS EVNT RW Screen.

Type	Dual/Appr	Utilities		RR Involvements	
X		U4-1	_____	None	<u>X</u>
A		-2	_____	C&M Agrmt	_____
B <u>\$248,000</u>		-3	<u>\$1.9 Mil</u>	Svc Contract	_____
C <u>\$460,500</u>		-4	_____	Design	_____
D		U5-7	_____	Const.	_____
E XXXX		-8	_____	Lic/RE/Clauses	_____
F XXXX		-9	_____		_____
Total <u>\$708,500</u>				Misc. R/W Work	_____
				RAP Displ	_____
				Clear/Demo	<u>\$50,000</u>
				Const Permits	_____
				Condemnation	_____
Areas: R/W <u>3300 M2(TCE)</u> No Exc Parcels <u>N/A</u>				Excess	_____
Entered PMCS Screens <u>___/___/___</u> by					_____
Entered AGRE Screen (Railroad data only)	<u>___/___/___</u>				_____
			by		_____

4. Are there any major items of construction contract work Yes No **X**

5. Resources Required  
*District Right of Way resources will be needed for utility certification, right of way appraisals and all acquisition activities*

6. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.) No right of way required.

*A total of 7 partial takes are anticipated for this alternative. The partial takes will impact both residential and commercial properties.*

7. Is there an effect on assessed valuation? Yes  Not Significant  No  (If "Yes", explain)

*At this time detailed appraisals have not been prepared to answer this question. However the improvements are not expected to impact valuation of the impacted properties due to the extent of the proposed partial take.*

8. Are utility facilities or rights of way affected?

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	(If "Yes," attach Utility Information Sheet, Exhibit 4-EX-5.)
The following checked items may seriously impact lead time for utility relocation:				
<input type="checkbox"/>	Longitudinal policy conflict(s)			
<input type="checkbox"/>	Environmental concerns impacting acquisition of potential easements			
<input type="checkbox"/>	Power lines operating in excess of 50KV and substations			
(See attached Exhibit 4-EX-5 for explanation.)				

9. Are Railroad facilities or rights of way affected?  
Yes No **X** (If "Yes", attach Railroad Information Sheet, Exhibit 4-EX-6.)

10. Were any previously unidentified sites with hazardous waste and/or material found?  
Yes None Evident **X** (If "Yes", attach memorandum per R/W Manual, Chapter 4, Section 4.01.10.00.)

*An Initial Site Assessment is to be performed at the PA/ED phase of this project*

11. Are RAP displacements required? Yes No **X** (If "Yes", provide the Following Information.)

No. of Single Family	_____	No. of Business/nonprofit	_____
No. of Multi-Family	_____	No. of Farms	_____

Based on Draft/Final Relocation Impact Statement/Study dated \_\_\_\_\_, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

12. Are there Material Barrow and/or Disposal Sites Required? Yes **X** No (If "Yes", explain)

*The project is not expected to generate enough embankment material to construct this build alternative. Thus, import is required.*

13. Are there potential relinquishments and/or abandonments? Yes No **X** (If "Yes", explain)

14. Are there any existing and/or potential airspace sites? Yes No **X** (If "Yes", explain)

15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if district proposes less than PMCS lead time and/or if significant pressures for project advancement are anticipated.)

Based on the R/W requirements on Page 1 of this Data Sheet, R/W will require a lead time 18 months from the date regular appraisals can begin to project certification.

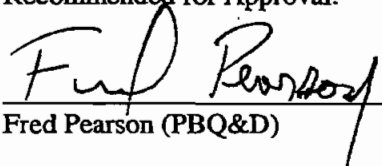
In any event R/W Maps will require 12 months from Final Maps to project certification.

16. Is it anticipated that Caltrans staff will perform all Right of Way work? Yes  No (If "No" discuss.)


17. Summary of Conclusions

Significant R/W department resources will be required to address the utility and right of way certification of this project alternative. While no displacements are anticipated, there are 7 partial acquisitions and over 3300m2 of temporary construction easements are needed.

Evaluation Prepared By:

Right of Way:	Name	<u>J. Wei, P.E. (PBQ&amp;D)</u>	Date:	<u>9/02/05</u>
Railroad:	Name	<u>N/A</u>	Date:	<u>          </u>
Utilities:	Name	<u>S. Henderson, P.E. (HNTB)</u>	Date:	<u>9/02/05</u>
		Recommended for Approval:  <u>Fred Pearson (PBQ&amp;D)</u>		

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.

  
 Brian Lin  
 Metropolitan Transportation Authority

9/23/05  
 Date

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION EXHIBIT  
**UTILITY INFORMATION SHEET 4-EX-5 (REV 3/2004)**  
(Form #)

1. Name of utility companies involved in project:

Adelphia	
Shell Oil Co.	Cingular
City of Los Angeles	Equilon
Exxon	LACFCD
Mobil	
Las Virgenes MWD	Level 3 Communications
MCI/Worldcom	MWD
SBC	SCE
So Cal Gas	Sprint
Time Warner	Verizon
LADWP	City of Westlake Village

2. Types of facilities and agreements required:

Research and definition of existing agreements and prior rights should be initiated during the PA/ED phase of the project to determine the need for any agreements.

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.

No.

Disposition of longitudinal encroachment(s):

Relocation required.  
Exception to policy needed.  
Other. Explain.

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).

Several large diameter water transmission lines for a variety of water districts cross the project. Long lead times are anticipated with respect to relocation work for these facilities since long term shut downs may not be allowed by the owners.

5. PMCS Input Information Total estimated cost of State's obligation for utility relocation on this project: \$

At this time the level of state participation is not known. The status of existing agreements within the project were not researched for this phase of the project. It is recommended that agreements with private and public owners be researched and quantified during the PA/ED phase

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION EXHIBIT  
**UTILITY INFORMATION SHEET 4-EX-5 (REV 3/2004)**  
(Form #)

of the project. For the purpose of this document, the cost of utility relocation is the estimated cost without distinction of agency/owner responsibility.

**Note: Total estimated cost to include any Department obligation to relocate longitudinal encroachments in access controlled right of way and acquire any necessary utility easements.**

Utility Involvements

U4-1	U5-7
-2	-8
-3 \$10,140,000	-9
-4	

Prepared By:

Right of Way Utility Estimator: S. Henderson(HNTB Corporation) Date: 9/02/05

**Alternative 2 - Non-Standard Lane Widths  
Estimated R/W Acquisition**

Layout #	Approx. Sta	to Sta	Commer. /Misc Area (m2)	Commer. Parcels	Est Commer Cost	Residen. Area (m2)	Residen. Parcels	Est Residen. Cost	Total Cost	SB/NB	Notes
5-6	430+80	439+20	110	1	\$ 22,000	660	3	\$ 99,000	\$ 121,000	SB	Appartment front yards (San Luis Ave)/Commercial, residential and a church landscaping/Parking Lot
	432+90	436+40	2000	2	\$ 400,000	0	0	\$ -	\$ 400,000	NB	Commercial Parking
7	442+00	443+40	600	1	\$ 120,000	0	0	\$ -	\$ 120,000	NB	Nursery
General - TCE's									\$ 165,000		
General - Damages/Permits									\$ 32,700		

Total=	2710	4	\$ 542,000	660	3	\$ 99,000	\$ 638,700
Commer. Escalation 5% per year=			\$ 692,000				Res. 10% per year= \$ 160,000

TCS's, Escalation 5% per year= \$ 211,000  
 Damages/Permits, Escalation 10%= \$ 36,000

**Final Total= \$ 1,099,000**

To: Caltrans District 7  
 100 Main Street  
 Los Angeles, CA

Date: 9/02/05

Attention: Andrew P. Nierenberg

Dist 07 Co LA Rte 101 KP 40.0/61.5(LA)  
 EA 24920K 0.0/1.0 (Ven)

**Project Description** This alternative would widen Route 101 to add one mixed-flow lane in each direction within the project limits.

Subject: Right of Way Data

Alternative 3: Full Standard Lane Widths Alternative

This Alternate meets the criteria for a Design/Build project: Yes  No

1. **Right of Way Cost Estimate:**

		Current Value Future Use	Escalation Rate	Escalated Value
A	<b>Total Acquisition Cost</b> Acquisition, including Excess Lands, Damages, and Goodwill. Project Permit Fees	\$10,862,500	%	\$13,939,000
B	<b>Utility Relocation</b>	\$10,140,000*	%	\$11,154,100*
C	<b>Relocation Assistance</b>	\$250,000	%	\$275,000
D	<b>Clearance/Demolition</b>	\$150,000	%	\$165,000
E	<b>Title and Escrow</b>	\$632,750	%	\$696,030
F	<b>Total Estimated Cost</b>	\$22,035,250		\$26,229,130
G	<b>Construction Contract Work</b>	\$		

2. **Current Date of Right of Way Certification** FY 2010

3. **Workload Estimate:** To be entered into PMCS EVNT RW Screen.

Type	Dual/Appr	Utilities		RR Involvements	
X		U4-1	_____	None	<u>X</u>
A		-2	_____	C&M Agrmt	_____
B	\$ 520,000	-3	\$10.1Mil	Svc Contract	_____
C	\$11,058,650	-4	_____	Design	_____
D		U5-7	_____	Const.	_____
E XXXX		-8	_____	Lic/RE/Clauses	_____
F XXXX		-9	_____		_____
Total	\$11,578,650			Misc. R/W Work RAP Displ Clear/Demo Const Permits	\$150,000
				Condemnation	_____
Areas: R/W 3300 M2 (TCE) No Exc Parcels N/A Entered PMCS Screens ___/___/___ by Entered AGRE Screen (Railroad data only) ___/___/___				Excess	_____



4. Are there any major items of construction contract work    Yes            No **X**

5. Resources Required  
*District Right of Way resources will be needed for utility certification, right of way appraisals and all acquisition activities*

6. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels,etc.)    No right of way required.   

*Partial takes of 26 commercial properties and 8 residential properties are required. Also one full acquisition of a commercial property is expected.*

7. Is there an effect on assessed valuation?    Yes     Not Significant     No  (If "Yes", explain)

*At this time detailed appraisals have not been prepared to answer this question. However the improvements may impact valuation of the impacted residential properties due to the extent of the proposed partial take.*

8. Are utility facilities or rights of way affected?

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	(If "Yes," attach Utility Information Sheet, Exhibit 4-EX-5.)
The following checked items may seriously impact lead time for utility relocation:				
<input type="checkbox"/>	Longitudinal policy conflict(s)			
<input type="checkbox"/>	Environmental concerns impacting acquisition of potential easements			
<input type="checkbox"/>	Power lines operating in excess of 50KV and substations			
(See attached Exhibit 4-EX-5 for explanation.)				

9. Are Railroad facilities or rights of way affected?  
Yes    No **X** (If "Yes", attach Railroad Information Sheet, Exhibit 4-EX-6.)

10. Were any previously unidentified sites with hazardous waste and/or material found?  
Yes None Evident **X** (If "Yes", attach memorandum per R/W Manual, Chapter 4, Section 4.01.10.00.)

*An Initial Site Assessment is to be performed at the PA/ED phase of this project*

11. Are RAP displacements required? **X** Yes No (If "Yes", provide the Following Information.)

No. of Single Family	_____	No. of Business/nonprofit	<u>1</u>
No. of Multi-Family	_____	No. of Farms	_____

Based on Draft/Final Relocation Impact Statement/Study dated \_\_\_\_\_, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

12. Are there Material Barrow and/or Disposal Sites Required? Yes **X** No (If "Yes", explain)

*The project is not expected to generate enough embankment material to construct this build alternative. Thus, import is required.*

13. Are there potential relinquishments and/or abandonments? Yes No **X** (If "Yes", explain)

14. Are there any existing and/or potential airspace sites? Yes No **X** (If "Yes", explain)

15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if district proposes less than PMCS lead time and/or if significant pressures for project advancement are anticipated.)

Based on the R/W requirements on Page 1 of this Data Sheet, R/W will require a lead time 23 months from the date regular appraisals can begin to project certification.

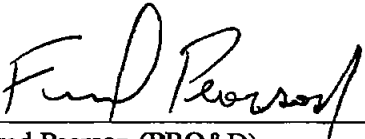
In any event R/W Maps will require 12 months from Final Maps to project certification.

16. Is it anticipated that Caltrans staff will perform all Right of Way work? Yes  No (If "No" discuss.)

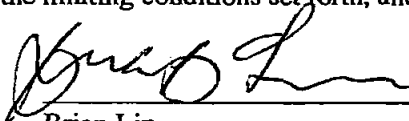
17. Summary of Conclusions

Significant R/W department resources will be required to address the utility and right of way certification of this project alternative. While no residential displacements are anticipated, there are 34 partial acquisitions, 1 full acquisition and over 3300m2 of temporary construction easements needed.

Evaluation Prepared By:

Right of Way:	Name	<u>J. Wei, P.E. (PBO&amp;D)</u>	Date:	<u>8/09/05</u>
Railroad:	Name	<u>N/A</u>	Date:	
Utilities:	Name	<u>S. Henderson, P.E. (HNTB)</u>	Date:	<u>8/09/05</u>
		Recommended for Approval:  Fred Pearson (PBQ&D)		

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.



Brian Lin  
 Metropolitan Transportation Authority

9/23/05  
 Date

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION EXHIBIT  
**UTILITY INFORMATION SHEET 4-EX-5 (REV 3/2004)**  
(Form #)

1. Name of utility companies involved in project:

Adelphia	
Shell Oil Co.	Cingular
City of Los Angeles	Equilon
Exxon	LACFCD
Mobil	
Las Virgenes MWD	Level 3 Communications
MCI/Worldcom	MWD
SBC	SCE
So Cal Gas	Sprint
Time Warner	Verizon
LADWP	City of Westlake Village

2. Types of facilities and agreements required:

Research and definition of existing agreements and prior rights should be initiated during the PA/ED phase of the project to determine the need for any agreements.

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.

No.

Disposition of longitudinal encroachment(s):

Relocation required.  
Exception to policy needed.  
Other. Explain.

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).

Several large diameter water transmission lines for a variety of water districts cross the project. Long lead times are anticipated with respect to relocation work for these facilities since long term shut downs may not be allowed by the owners.

5. PMCS Input Information Total estimated cost of State's obligation for utility relocation on this project: \$

At this time the level of state participation is not known. The status of existing agreements within the project were not researched for this phase of the project. It is recommended that agreements with private and public owners be researched and quantified during the PA/ED phase

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION EXHIBIT  
**UTILITY INFORMATION SHEET 4-EX-5 (REV 3/2004)**  
(Form #)

of the project. For the purpose of this document, the cost of utility relocation is the estimated cost without distinction of agency/owner responsibility.

**Note: Total estimated cost to include any Department obligation to relocate longitudinal encroachments in access controlled right of way and acquire any necessary utility easements.**

Utility Involvements

U4-1	U5-7
-2	-8
-3 \$1,911,000	-9
-4	

Prepared By:

Right of Way Utility Estimator: S. Henderson(HNTB Corporation) Date: 9/02/05

**Alternative 3 - Full Standard Lane Widths  
Estimated R/W Acquisition**

Layout #	Approx. Sta	to Sta	Commer. /Misc Area (m2)	Commer. /Misc Parcels	Est Commer Cost	Residen. Area (m2)	Residen. Parcels	Est Residen. Cost	Total Cost	SB/NB	Notes
1	404+30	405+60	310	2	\$ 62,000	0	0	\$ -	\$ 62,000	SB	Commercial parking
2	409+10	413+50	3400	5	\$ 4,480,000	0	0	\$ -	\$ 4,480,000	SB	Commercial parking+ 1 commercial bldg
	411+50	414+80	960	2	\$ 192,000	790	5	\$ 118,500	\$ 310,500	NB	Commercial, Residential landscapes/yards
5-6	430+80	439+20	1600	1	\$ 320,000	680	3	\$ 102,000	\$ 422,000	SB	Frontage Rd R/W. Appt bldg front yard + commercial and a church parking lot/landscaping
	430+60	432+20	990	2	\$ 798,000	0	0	\$ -	\$ 798,000	NB	1 full parcel. 1 commercial bldg
	432+90	436+40	3200	2	\$ 640,000	0	0	\$ -	\$ 640,000	NB	Commercial Parking
6-7	440+50	446+10	5900	8	\$ 1,180,000	0	0	\$ -	\$ 1,180,000	NB	Commercial front landscape
9	455+80	458+00	2400	2	\$ 120,000	0	0	\$ -	\$ 120,000	NB	hillside cut
10	464+20	465+20	350	1	\$ 17,500	0	0	\$ -	\$ 17,500	SB	Calabasas Rd minor re-alignment
15	498+00	499+20	600	1	\$ 30,000	0	0	\$ -	\$ 30,000	SB	Las Virgenes Rd small cut
	500+00	502+50	2300	1	\$ 2,632,000	0	0	\$ -	\$ 2,632,000	SB	3 commercial bldgs
General - TCE's									\$ 165,000		
General - Damages/Permits									\$ 5,500		

Total=	22010	27	\$10,471,500	1470	8	\$ 220,500	\$10,862,500
Commer. Escalation 5% per year=			\$13,365,000			Res. 10% per year=	\$ 356,000

TCS's, Escalation 5% per year= \$ 211,000  
 Damages/Permits, Escalation 10%= \$ 7,000

**Final Total= \$13,939,000**

**Attachment K**

**Transportation Management Plan**

# TRANSPORTATION MANAGEMENT PLAN DATA SHEET

## (Preliminary TMP Elements and Costs)

Co/Rte/PM LA/Ven/101  
KP/40.7/61.5(LA) 0.0/1.02 (Ven) EA 24920K Alternative No. 2  
PM 25.3/38.2(LA) 0.0/0.6 (Ven)

Project Limit From Canoga Avenue/Route 101 interchange to 1.02 Kilometers west of the County Line.

Project Description Adding a mixed flow lane in each direction of the Route 101 Mainline

### 1) Public Information

<input checked="" type="checkbox"/> a. Brochures and Mailers	\$ 90,000
<input type="checkbox"/> b. Press Release	\$
<input checked="" type="checkbox"/> c. Paid Advertising	\$ 250,000
<input type="checkbox"/> d. Public Information Center/Kiosk	\$
<input checked="" type="checkbox"/> e. Public Meeting/Speakers Bureau	\$ 30,000
<input type="checkbox"/> f. Telephone Hotline	
<input checked="" type="checkbox"/> g. Internet	\$ 7,500
<input type="checkbox"/> h. Others _____	\$

### 2) Motorists Information Strategies

<input type="checkbox"/> a. Changeable Message Signs (Fixed)	\$
<input checked="" type="checkbox"/> b. Changeable Message Signs (Portable)	\$ 242,000
<input checked="" type="checkbox"/> c. Ground Mounted Signs	\$ 75,000
<input checked="" type="checkbox"/> d. Highway Advisory Radio	\$ 200,000
<input type="checkbox"/> e. Caltrans Highway Information Network (CHIN)	
<input type="checkbox"/> f. Others _____	\$

### 3) Incident Management

<input checked="" type="checkbox"/> a. Construction Zone Enhanced Enforcement Program (COZEEP)	\$ 899,000
<input checked="" type="checkbox"/> b. Freeway Service Patrol	\$ 1,492,000
<input type="checkbox"/> c. Traffic Management Team	
<input type="checkbox"/> d. Helicopter Surveillance	\$
<input checked="" type="checkbox"/> e. Traffic Surveillance Stations (Loop Detector)	\$ 500,000
<input type="checkbox"/> f. Others _____	\$



4) Construction Strategies

<input checked="" type="checkbox"/> a. Lane Closure Chart	\$
<input type="checkbox"/> b. Reversible Lanes	\$
<input type="checkbox"/> c. Total Facility Closure	\$
<input type="checkbox"/> d. Contra Flow	\$
<input type="checkbox"/> e. Temporary Traffic Screens	\$
<input type="checkbox"/> f. Reduced Speed Zone	\$
<input type="checkbox"/> g. Connector and Ramp Closures	\$
<input type="checkbox"/> h. Incentive and Disincentive	\$
<input type="checkbox"/> i. Moveable Barrier	\$
<input type="checkbox"/> j. Others _____	\$

5) Demand Management

<input type="checkbox"/> a. HOV Lanes/Ramps (New or Convert)	\$
<input type="checkbox"/> b. Park and Ride Lots	\$
<input type="checkbox"/> c. Rideshare Incentives	\$
<input type="checkbox"/> d. Variable Work Hours	\$
<input type="checkbox"/> e. Telecommute	\$
<input type="checkbox"/> f. Ramp Metering (Temporary Installation)	\$
<input checked="" type="checkbox"/> g. Ramp Metering (Modify Existing)	\$300,000
<input type="checkbox"/> h. Others _____	\$

6) Alternative Route Strategies

<input type="checkbox"/> a. Ramp Closures	\$
<input type="checkbox"/> b. Street Improvement (widening, traffic signal... etc)	\$
<input type="checkbox"/> c. Traffic Control Officers	\$
<input type="checkbox"/> d. Parking Restrictions	\$
<input type="checkbox"/> e. Others _____	\$

7) Other Strategies

<input type="checkbox"/> a. Application of New Technology	\$
<input checked="" type="checkbox"/> e. Others <u>AWIS</u>	\$1,100,000

**TOTAL ESTIMATED COST OF TMP ELEMENTS = \$ 5,185,500**

Project Notes:

1.) The project consist of adding a lane in each direction to provide five continuous lanes in the northbound and southbound direction of the Route 101 from the Canoga Avenue interchange to 1.02 KM west of the County line.

---

2.) Construction of the proposed improvements will be undertaken in two stages for all construction north of the Parkway Calabasas Interchange. Stage 1 will consist of outside widening of Route 101 in the northbound and southbound direction. As part of this stage, interchange ramp realignment and structures improvements will be implemented as well. Stage 2 will consist of median reconstruction. Type K barriers will be placed between the traveled lanes and the construction.

The construction of an additional lane between Canoga Avenue and the Parkway Calabasas interchange will use 3.35 m (11') lanes without left and right shoulder. The Type K barrier would be placed adjacent to the work zone and secured with pins.

---

3.) Internet Website development is assumed to be linked to the current State of California website.

---

4.) It is assumed that approximately 150 ground mounted signs would be needed at a cost of \$500 per sign.

---

5.) It is assumed that a total of 6 PCMS units will be used for the project. (Three PMCS units per each direction of the Route 101). Each unit is estimated \$35,000 and assumed 5% maintenance per year for 3 years.

---

6.) HAR units were estimated to cost \$50,000 each and a total of 4 units were estimated for use on this project. Locations were estimated to be at the Route 101/SR-134 Interchange, the Route 101/I-405 Interchange, the SR-23/101 Interchange, and at a location within the project limits.

---

7.) Freeway Service Patrol (FSP) support consisting of 2 trucks for the project limits was assumed to be required for the weekday morning, afternoon and evening peak periods (total of 9 hours a day and 45 hours a week), as well as a 9 hour period for Saturday and Sunday for the 3-year construction period. Thus, the total weekly FSP is 63 hours a week. The total FSP hours for the 3-year construction period were determined to be 63hrs/week X 52 weeks/yr X 3 yrs = 9,828 hours total.

FSP Cost are as Follows:

FSP=\$50/Hour/Truck (2X\$50X9,828 = \$982,800)

Dispatch=\$35/hour (\$35X4,536= \$343,980 )

MTA Administration Cost= 5% of Truck Cost (5%X \$982,800=\$49,140)

CHP Safety Inspection : \$60/hour, 8 Hours/Month (\$60X8X36=\$17,280)

Subtotal ( \$982,800+\$343,980 +\$49,140+\$17,280=\$1,393,200) say \$1,394,000

Contingency @ 7% (\$1,394,000 X 0.07 = \$97,580)

Total =\$1,491,580 say **\$1,492,000**

COOZEEP was determined to be as follows:

It is assumed that CHP enforcement will occur at 6 times a week for a total of 48 hours a week per officer (96 hours a week total). At the 3-year construction period, the total hours are 96 X 52 X 3 = 14,976 hours total.

\$60/Officer/Hour (per 8 hour shift) per 2 cars. (\$60 X 14,976 = \$898,560) say **\$899,000**

8) Ramps may be closed temporarily to construct the ramp gore/interchange modifications. It will be staged that no two consecutive ramps will be closed at the same time to minimize public inconvenience.

---

9) Temporary traffic loop detectors used for surveillance is assumed to be \$50,000 per station for both directions of the freeway. 10 stations are assumed to be used within the project limits.

---

10) Existing ramp metering shall be maintained and operated during construction. The estimated cost is \$300,000 with 20 locations @ \$15,000 per location.

---

11) Automated WorkZone Information System (AWIS) is assumed to be approximately \$1.1M for this section of the freeway.

In a FHWA document, for a 3-mile concrete reconstruction project in West Memphis, AR on I-40, \$495,000 was estimated for AWIS in 2002.

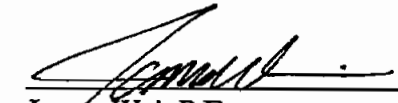
The FHWA document also shows in 2000, it cost \$1.5 million to purchase an AWIS for a 2-year project of construction of interchange of I-40 and I-25 in Albuquerque, NM.

The cost included CCTV cameras, modular DMSs, arrow dynamic signs, portable DMSs, portable traffic management systems, and HAR units.

Taken in account of the scope of this project with consideration of total affected mileage, type of construction and construction cost, \$1.1 million is said a reasonable estimate:

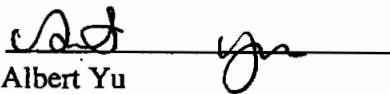
---

PREPARED BY

  
James Wei, P.E.  
Project Engineer  
PBQ&D Inc

9-15-05  
DATE

APPROVAL RECOMMENDED BY

  
Albert Yu  
TMP Coordinator, West

9-16-05  
DATE

APPROVED BY

  
John Yang  
District Traffic Manager

9-16-05  
DATE

# TRANSPORTATION MANAGEMENT PLAN DATA SHEET

## (Preliminary TMP Elements and Costs)

Co/Rte/PM LA/Ven/101  
KP/40.7/61.5(LA) 0.0/1.02 (Ven) EA 24920K Alternative No. 3  
PM 25.3/38.2(LA) 0.0/0.6 (Ven)

Project Limit From Canoga Avenue/Route 101 interchange to 1.02 Kilometers west of the County Line.

Project Description Adding a mixed flow lane in each direction of the Route 101 Mainline

1) Public Information

<input checked="" type="checkbox"/> a. Brochures and Mailers	\$ 90,000
<input type="checkbox"/> b. Press Release	\$
<input checked="" type="checkbox"/> c. Paid Advertising	\$ 250,000
<input type="checkbox"/> d. Public Information Center/Kiosk	\$
<input checked="" type="checkbox"/> e. Public Meeting/Speakers Bureau	\$ 30,000
<input type="checkbox"/> f. Telephone Hotline	
<input checked="" type="checkbox"/> g. Internet	\$ 7,500
<input type="checkbox"/> h. Others _____	\$

2) Motorists Information Strategies

<input type="checkbox"/> a. Changeable Message Signs (Fixed)	\$
<input checked="" type="checkbox"/> b. Changeable Message Signs (Portable)	\$ 242,000
<input checked="" type="checkbox"/> c. Ground Mounted Signs	\$ 75,000
<input checked="" type="checkbox"/> d. Highway Advisory Radio	\$ 200,000
<input type="checkbox"/> e. Caltrans Highway Information Network (CHIN)	
<input type="checkbox"/> f. Others _____	\$

3) Incident Management

<input checked="" type="checkbox"/> a. Construction Zone Enhanced Enforcement Program (COZEEP)	\$ 899,000
<input checked="" type="checkbox"/> b. Freeway Service Patrol	\$ 1,492,000
<input type="checkbox"/> c. Traffic Management Team	
<input type="checkbox"/> d. Helicopter Surveillance	\$
<input checked="" type="checkbox"/> e. Traffic Surveillance Stations (Loop Detector and CCTV)	\$ 500,000
<input type="checkbox"/> f. Others _____	\$

4) Construction Strategies

<input checked="" type="checkbox"/> a. Lane Closure Chart	\$
<input type="checkbox"/> b. Reversible Lanes	\$
<input type="checkbox"/> c. Total Facility Closure	\$
<input type="checkbox"/> d. Contra Flow	\$
<input type="checkbox"/> e. Temporary Traffic Screens	\$
<input type="checkbox"/> f. Reduced Speed Zone	\$
<input type="checkbox"/> g. Connector and Ramp Closures	\$
<input type="checkbox"/> h. Incentive and Disincentive	\$
<input type="checkbox"/> i. Moveable Barrier	\$
<input type="checkbox"/> j. Others _____	\$

5) Demand Management

<input type="checkbox"/> a. HOV Lanes/Ramps (New or Convert)	\$
<input type="checkbox"/> b. Park and Ride Lots	\$
<input type="checkbox"/> c. Rideshare Incentives	\$
<input type="checkbox"/> d. Variable Work Hours	\$
<input type="checkbox"/> e. Telecommute	\$
<input type="checkbox"/> f. Ramp Metering (Temporary Installation)	\$
<input checked="" type="checkbox"/> g. Ramp Metering (Modify Existing)	\$300,000
<input type="checkbox"/> h. Others _____	\$

6) Alternative Route Strategies

<input type="checkbox"/> a. Ramp Closures	\$
<input type="checkbox"/> b. Street Improvement (widening, traffic signal... etc)	\$
<input type="checkbox"/> c. Traffic Control Officers	\$
<input type="checkbox"/> d. Parking Restrictions	\$
<input type="checkbox"/> e. Others _____	\$

7) Other Strategies

<input type="checkbox"/> a. Application of New Technology	\$
<input checked="" type="checkbox"/> e. Others <u>AWIS</u>	\$1,100,000

**TOTAL ESTIMATED COST OF TMP ELEMENTS = \$ 5,185,500**

Project Notes:

1.) The project consist of adding a lane in each direction to provide five continuous lanes in the northbound and southbound direction of the Route 101 from the Canoga Avenue interchange to 1.02 KM west of the County line.

---

2.) Construction of the proposed improvements will be undertaken in two stages for all construction north of the Parkway Calabasas Interchange. Stage 1 will consist of outside widening of Route 101 in the northbound and southbound direction. As part of this stage, interchange ramp realignment and structures improvements will be implemented as well. Stage 2 will consist of median reconstruction. Type K barriers will be placed between the traveled lanes and the construction.

The construction of an additional lane between Canoga Avenue and the Parkway Calabasas interchange will use 3.35 m (11') lanes without left and right shoulder. The Type K barrier would be placed adjacent to the work zone and secured with pins. Rapid Set Concrete (RSC) can be used in this restricted travel way width section to minimize the length of construction period.

---

3.) Internet Website development is assumed to be linked to the current State of California website.

---

4.) It is assumed that approximately 150 ground mounted signs would be needed at a cost of \$500 per sign.

---

5.) It is assumed that a total of 6 PCMS units will be used for the project. (Two PMCS units per each direction of the Route 101 and two units dedicated to the weekend closures). Each unit is estimated \$35,000 and assumed 5% maintenance per year for 3 years.

---

6.) HAR units were estimated to cost \$50,000 each and a total of 4 units were estimated for use on this project. Locations were estimated to be at the Route 101/SR-134 Interchange, the Route 101/I-405 Interchange, the SR-23/101 Interchange and at a location within the project limits.

---



7.) Freeway Service Patrol (FSP) support consisting of 2 trucks for the project limits was assumed to be required for the weekday morning, afternoon and evening peak periods (total of 9 hours a day and 45 hours a week), as well as a 9 hour period for Saturday and Sunday for the 3-year construction period. Thus, the total weekly FSP is 63 hours a week. The total FSP hours for the 3-year construction period were determined to be 63hrs/week X 52 weeks/yr X 3 yrs = 9,828 hours total.

FSP Cost are as Follows:

FSP=\$50/Hour/Truck (2X\$50X9,828 = \$982,800)

Dispatch=\$35/hour (\$35X4,536= \$343,980 )

MTA Administration Cost= 5% of Truck Cost (5%X \$982,800=\$49,140)

CHP Safety Inspection : \$60/hour, 8 Hours/Month (\$60X8X36=\$17,280)

Subtotal ( \$982,800+\$343,980 +\$49,140+\$17,280=\$1,393,200) say \$1,394,000

Contingency @ 7% (\$1,394,000 X 0.07 = \$97,580)

Total =\$1,491,580 say **\$1,492,000**

COOZEEP was determined to be as follows:

It is assumed that CHP enforcement will occur at 6 times a week for a total of 48 hours a week per officer (96 hours a week total). At the 3-year construction period, the total hours are 96 X 52 X 3 = 14,976 hours total.

\$60/Officer/Hour (per 8 hour shift) 2 per car. (\$60 X 14,976 = \$898,560) say **\$899,000**

8) Ramps may be closed temporarily to construct the ramp gore/interchange modifications. It will be staged that no two consecutive ramps will be closed at the same time to minimize public inconvenience.

---

9) Temporary traffic loop detectors used for surveillance is assumed to be \$50,000 per station for both directions of the freeway. 10 stations are assumed to be used within the project limits.

---

10) Existing ramp metering shall be maintained and operated during construction. The estimated cost is \$300,000 with 20 locations @ \$15,000 per location.

---

11) Automated WorkZone Information System (AWIS) is assumed to be approximately \$1.1M for this section of the freeway.

In a FHWA document, for a 3-mile concrete reconstruction project in West Memphis, AR on I-40, \$495,000 was estimated for AWIS in 2002.

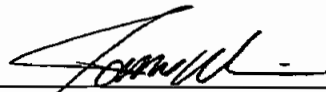
The FHWA document also shows in 2000, it cost \$1.5 million to purchase an AWIS for a 2-year project of construction of interchange of I-40 and I-25 in Albuquerque, NM.

The cost included CCTV cameras, modular DMSs, arrow dynamic signs, portable DMSs, portable traffic management systems, and HAR units.

Taken in account of the scope of this project with consideration of total affected mileage, type of construction and construction cost, \$1.1 million is said a reasonable estimate.

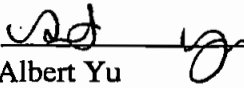
---

PREPARED BY

  
James Wei, P.E.  
Project Engineer  
PBQ&D Inc

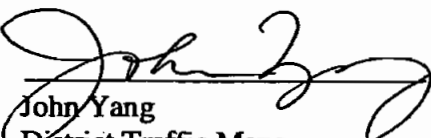
9-15-05  
DATE

APPROVAL RECOMMENDED BY

  
Albert Yu  
TMP Coordinator, West

9-16-05  
DATE

APPROVED BY

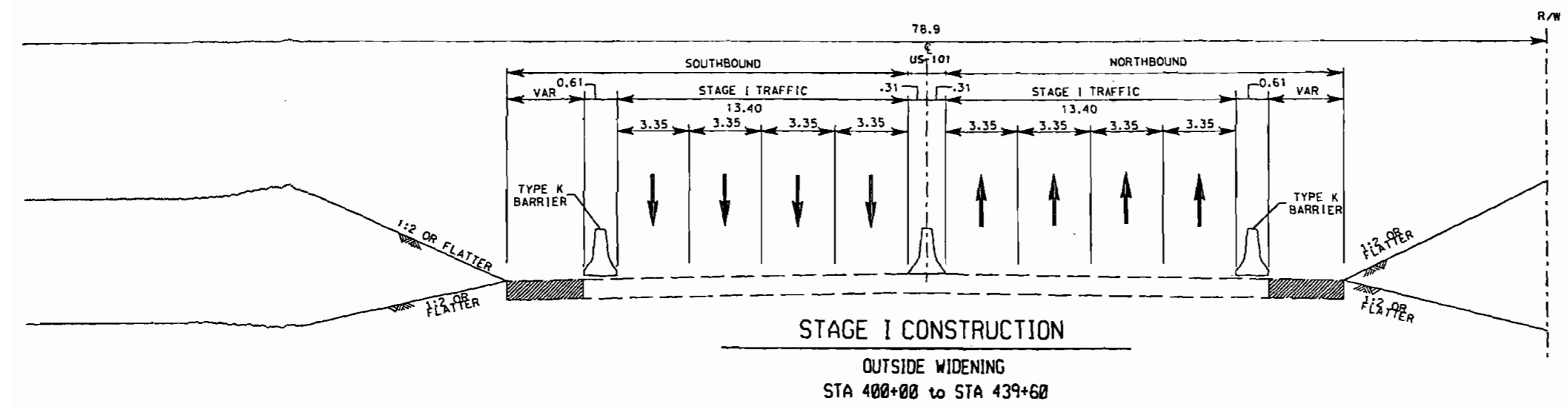
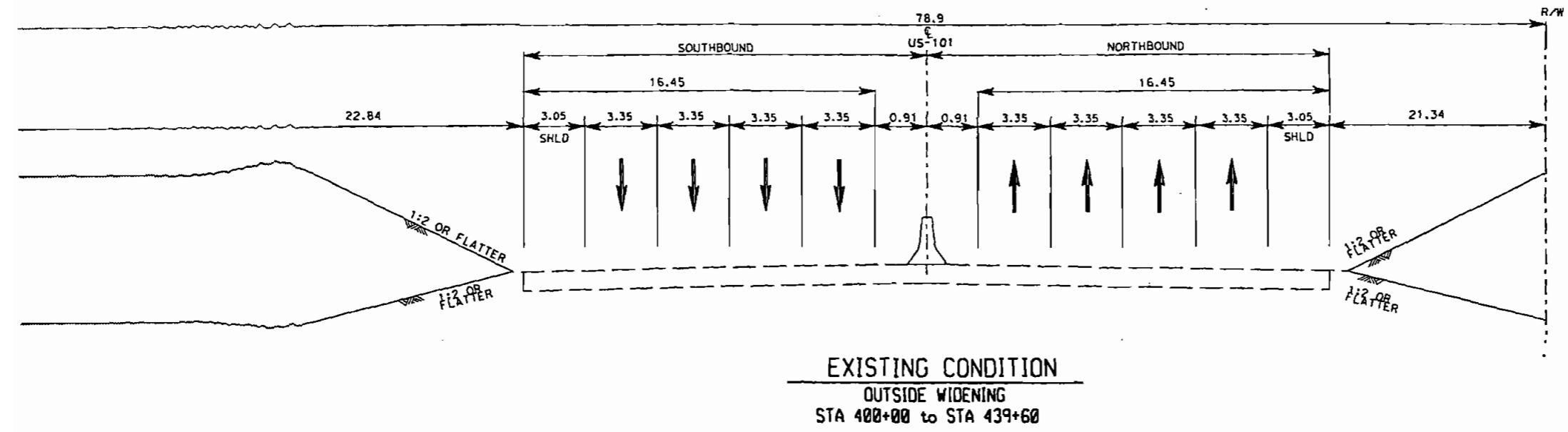
  
John Yang  
District Traffic Manager

9-16-05  
DATE



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	40.0/61.5(LA) 0.0/1.00 (Ven)		

**HNTB**  
 1845 BUSINESS CENTER DRIVE  
 SUITE 208  
 SAN BERNARDINO, CALIFORNIA 92408  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

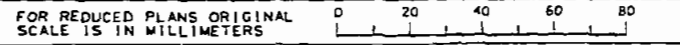


LEGEND

	CONSTRUCTION THIS STAGE
	EXISTING

**TYPICAL STAGING PLAN**  
NO SCALE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN



USERNAME => \$\$\$\$\$\$USER\$\$\$\$\$\$  
\$\$\$\$\$\$\$\$\$DGN\$PEC\$\$\$\$\$\$\$\$\$

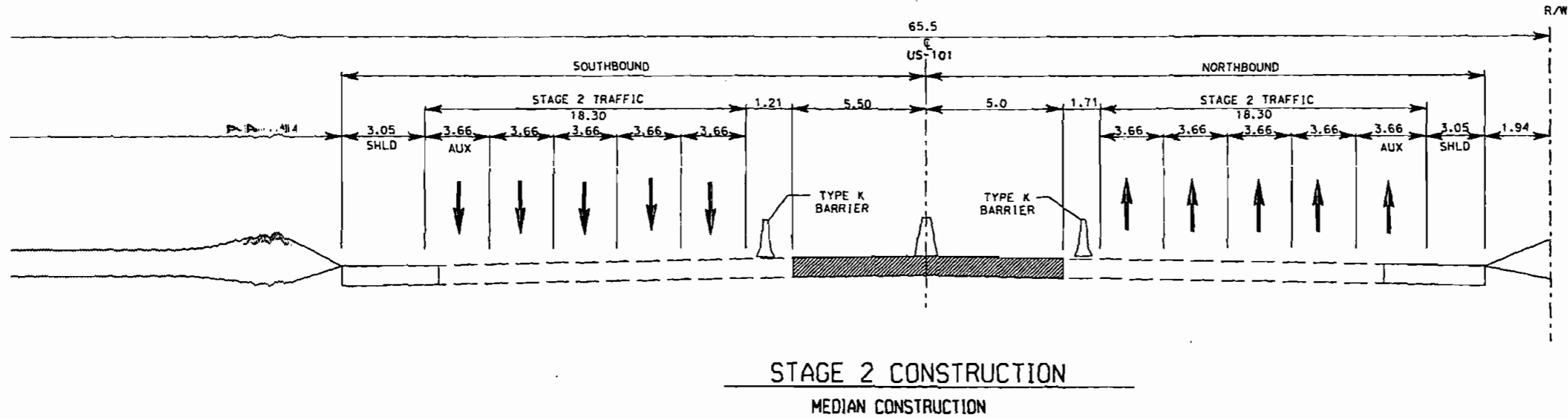
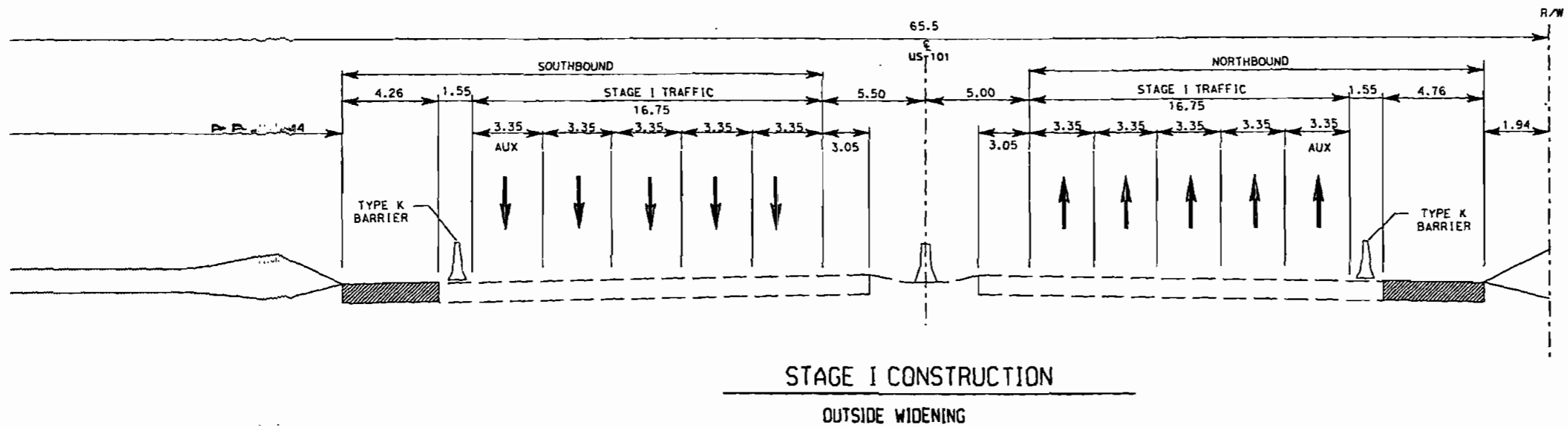
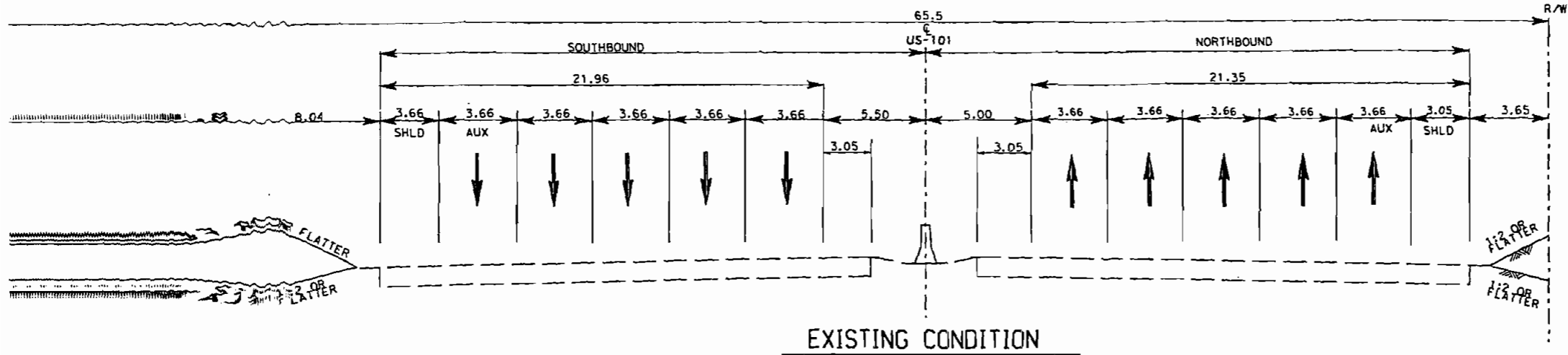
CU EA

TIME PLOTTED => \$\$\$\$\$\$SYTIME\$\$\$\$\$\$  
00-00-00

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	40.0/61.5(LA) 0.0/1.00 (Ven)		



**HNTB**  
 1845 BUSINESS CENTER DRIVE  
 SUITE 208  
 SAN BERNARDINO, CALIFORNIA 92408  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



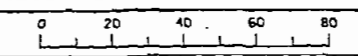
**LEGEND**

	CONSTRUCTION THIS STAGE
	CONSTRUCTION LAST STAGE
	EXISTING

**TYPICAL STAGING PLAN**  
 NO SCALE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS



USERNAME => \*\*\*\*\*USER\*\*\*\*\*  
 \*\*\*\*\*DGN\*\*\*\*\*

CU EA

LAST REVISION 00-00-00 TIME PLOTTED => \*\*\*\*\*

**Attachment L**

**Work Plan**

WBS Code	Activity Description	% Comp	Orig Dur	Ram Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
0.100	PERF PROJ MGMT	10	3,270*	3,088*	11/15/04A	07/20/17	11/15/04A	07/20/17	0
0.100.05	PROJ MGMT - PID	100	222*	40*	11/15/04A	09/23/05	11/15/04A	09/23/05	
0.100.10	PROJ MGMT - PA&ED	0	287*	287*	09/26/05	11/03/06	01/08/08	02/16/09	588
0.100.15	PROJ MGMT - PS&E	0	893*	893*	01/22/10	07/09/13	04/01/10	07/09/13	0
0.100.20	PROJ MGMT - CONSTR	0	1,040*	1,040*	07/10/13	07/20/17	07/10/13	07/20/17	0
0.100.25	PROJ MGMT - RW	0	1,093*	1,093*	01/22/10	04/17/14	04/01/10	07/20/17	840
1.150	DEV PROJ INITIATION DOC	40	200	40	11/15/04A	09/23/05	11/15/04A	09/23/05	0
2.160	PERF PRELIM ENGRG STUDIES	0	140*	140*	09/26/05	04/11/06	01/08/08	07/22/08	588
2.160.05	REV & UPDATE PROJ INFO	0	40	40	09/26/05	11/18/05	01/08/08	03/03/08	588
2.160.10	PERF ENGRG STUDIES	0	120	120	10/10/05	03/28/06	01/22/08	07/08/08	588
2.160.15	PREP DRAFT PROJ RPT	0	70	70	01/04/06	04/11/06	04/15/08	07/22/08	588
2.160.20	PROJ CONTROL	0	105	105	09/26/05	02/21/06	01/08/08	06/02/08	588
2.165	PERF ENVIRO STUDIES &	0	100*	100*	09/28/05	02/14/06	03/04/08	07/22/08	628
2.165.05	PERF ENVIRO SCOPING &	0	40	40	09/26/05	11/18/05	03/04/08	04/28/08	628
2.165.10	PERF GENERAL ENVIRO	0	40	40	09/26/05	11/18/05	03/04/08	04/28/08	628
2.165.15	PERF BIOLOGICAL STUDIES	0	40	40	09/26/05	11/18/05	03/04/08	04/28/08	628
2.165.20	PERF CULT RESOURCES	0	40	40	09/26/05	11/18/05	03/04/08	04/28/08	628
2.165.25	PREP & APPROVE DED	0	100	100	09/26/05	02/14/06	03/04/08	07/22/08	828
2.175	CIRCULATE DED & SELECT	0	100*	100*	04/12/06	08/30/06	07/23/08	12/09/08	588
2.175.05	CIRCULATE DED	0	90	90	04/12/06	08/16/06	07/23/08	11/25/08	588
2.175.10	PREP FOR & HOLD PUBLIC	0	90	90	04/12/06	08/16/06	07/23/08	11/25/08	588
2.175.15	RESPD TO PUBLIC COMMENTS	0	60	60	05/24/06	08/16/06	09/03/08	11/25/08	588
2.175.20	SELECT PREFERRED ALT	0	10	10	08/17/06	08/30/06	11/26/08	12/09/08	588
2.180	PREP & APPROVE PROJ RPT &	0	47*	47*	08/31/06	11/03/06	12/10/08	02/16/09	588
2.180.05	PREP & APPROVE PROJ RPT	0	47	47	08/31/06	11/03/06	12/10/08	02/16/09	588
2.180.10	PREP & APPROVE FNL ENVIRO	0	47	47	08/31/06	11/03/06	12/10/08	02/16/09	588
2.180.15	COMPLETE ENVIRO	0	29	29	08/01/05	09/08/05	06/09/17	07/20/17	3,059
3.185	PREP BASE MAPS & PLAN	0	120*	120*	01/22/10	07/09/10	04/01/10	09/16/10	49
3.185.05	REV & UPDATE PROJ INFO	0	6	6	01/22/10	01/29/10	04/01/10	04/08/10	49
3.185.10	PERF DSGN SURVEYS &	0	120	120	02/17/09	08/04/09	04/01/10	09/16/10	289
3.185.15	PERF PRELIM DSGN	0	114	114	02/01/10	07/09/10	04/09/10	09/16/10	49
3.185.20	PREP ENGRG RPTS	0	114	114	02/01/10	07/09/10	04/09/10	09/16/10	49
3.185.25	DETER RW REQS	0	57	57	01/26/07	04/16/07	06/29/10	09/16/10	883
3.190	PREP STRUC SITE PLANS	0	60	60	07/12/10	10/01/10	06/28/11	09/20/11	249
4.195	R/W PROP MGMT & EXCESS	0	1	1	07/12/10	07/12/10	07/20/17	07/20/17	1,812
4.200	COORDINATE UTIL	0	100	100	08/01/05	12/16/05	03/02/17	07/20/17	2,988

Start Date 01/01/80  
Finish Date 07/20/17  
Data Date 08/01/05  
Run Date 08/17/05 15:05

NEW1 - 6K00

Sheet 1 of 3

Caltrans District 7

EA 24920

Aux Lane from Topanga Canyon to County Line

WBS Code	Activity Description	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
2.205	OBT PERMITS/AGREMENTS &	0	270	270	04/12/06	04/27/07	12/27/11	01/11/13	1,472
3.210	PREP PRELIM STRUC DSGN	0	40	40	10/04/10	11/26/10	09/21/11	11/15/11	249
3.215	PREP STRUC GENERAL PLANS	0	40	40	11/29/10	01/25/11	11/16/11	01/12/12	249
4.220	PERF R/W ENGRG	0	75	75	07/12/10	10/22/10	06/27/16	10/10/18	1,538
4.225	OBT R/W INTERESTS FOR	0	150	150	07/12/10	02/08/11	06/06/12	01/04/13	492
3.230	PREP DRAFT PS&E	0	400	400	07/12/10	01/27/12	09/17/10	04/05/12	49
3.235	MITIGATE ENVIRO IMPACTS &	0	100	100	07/12/10	11/26/10	03/02/17	07/20/17	1,713
3.240	PREP DRAFT STRUC PS&E	0	60	60	01/26/11	04/19/11	01/13/12	04/05/12	249
4.245	POST R/W CERTIFICATION	0	1	1	02/09/11	02/09/11	07/20/17	07/20/17	1,662
3.250	PREP FNL STRUC PS&E PKG	0	40	40	01/30/12	03/23/12	06/29/12	08/24/12	109
3.255	CIRCULATE/REV & PREP FNL	0	100	100	01/30/12	06/15/12	04/06/12	08/24/12	49
3.260	PREP CONTRACT DOCS	0	98	98	06/18/12	11/01/12	08/27/12	01/11/13	49
3.265	ADVERTISE/OPEN	0	126	126	01/14/13	07/09/13	01/14/13	07/09/13	0
5.270	PERF CONSTR ENGRG &	0	600*	600*	07/10/13	11/04/15	07/10/13	11/04/15	0
5.270.15	PERF CONSTR STAKING	0	564	564	07/10/13	09/15/15	08/07/13	10/13/15	20
5.270.20	PERF CONSTR ENGRG WORK	0	584	584	07/10/13	10/13/15	07/10/13	10/13/15	0
5.270.25	PERF CONSTR CONTRACT	0	584	584	07/10/13	10/13/15	07/10/13	10/13/15	0
5.270.30	INSPECT CONTRACT ITEM	0	584	584	07/10/13	10/13/15	07/10/13	10/13/15	0
5.270.35	SAMPLE & TEST CONSTR	0	584	584	07/10/13	10/13/15	07/10/13	10/13/15	0
5.270.40	PERF SAFETY & MAINT REVS	0	10	10	10/14/15	10/27/15	10/14/15	10/27/15	0
5.270.45	PROCESS RELIEF FROM	0	1	1	10/28/15	10/28/15	10/28/15	10/28/15	0
5.270.50	PREP CERT OF COMPL	0	1	1	10/28/15	10/28/15	10/28/15	10/28/15	0
5.270.55	PERF FNL INSPECTION &	0	5	5	10/29/15	11/04/15	10/29/15	11/04/15	0
5.270.60	ADMINISTER PLANT	0	120	120	05/20/15	11/04/15	05/20/15	11/04/15	0
5.270.65	VERIFY IMPLEMENT TMP	0	584	584	07/10/13	10/13/15	07/10/13	10/13/15	0
5.285	PREP & ADMINISTER	0	1,040*	1,040*	07/10/13	07/20/17	07/10/13	07/20/17	0
5.290	RESOLVE CONTRACT CLAIMS	0	1,040*	1,040*	07/10/13	07/20/17	07/10/13	07/20/17	0
5.295	ACPT CONTRACT/PREP FNL	0	180	180	11/08/16	07/20/17	11/08/16	07/20/17	0
4.300	PERF FNL R/W ENGRG	0	200	200	07/10/13	04/17/14	10/11/16	07/20/17	840
M000	ID NEED	100	0	0		11/15/04A		11/15/04A	
M010	APPROVE PID	0	0	0		09/23/05*		09/23/05*	0
M015	PROG PROJ	0	0	0		09/23/05		01/07/08	588
M020	BEGIN ENVIRO	0	0	0		09/23/05		03/03/08	628
M040	BEGIN PROJ	0	0	0		09/23/05		01/07/08	588
M120	CIRC DED	0	0	0		04/11/06		07/22/08	588
M200	PA&ED	0	0	0		02/16/09*		02/16/09*	0
M221	BRIDGE SITE DATA ACCEPTED	0	0	0		10/01/10		09/20/11	249
M222	BEGIN BRIDGE	0	0	0		11/26/10		11/15/11	249
M224	R/W MAPS	0	0	0		07/29/05		09/16/10	1,324
M225	REGULAR R/W	0	0	0		07/29/05		06/05/12	1,767
M275	GENERAL PLANS	0	0	0		01/25/11		01/12/12	249
M300	CIRC PLANS IN DIST	0	0	0		01/27/12		04/05/12	49

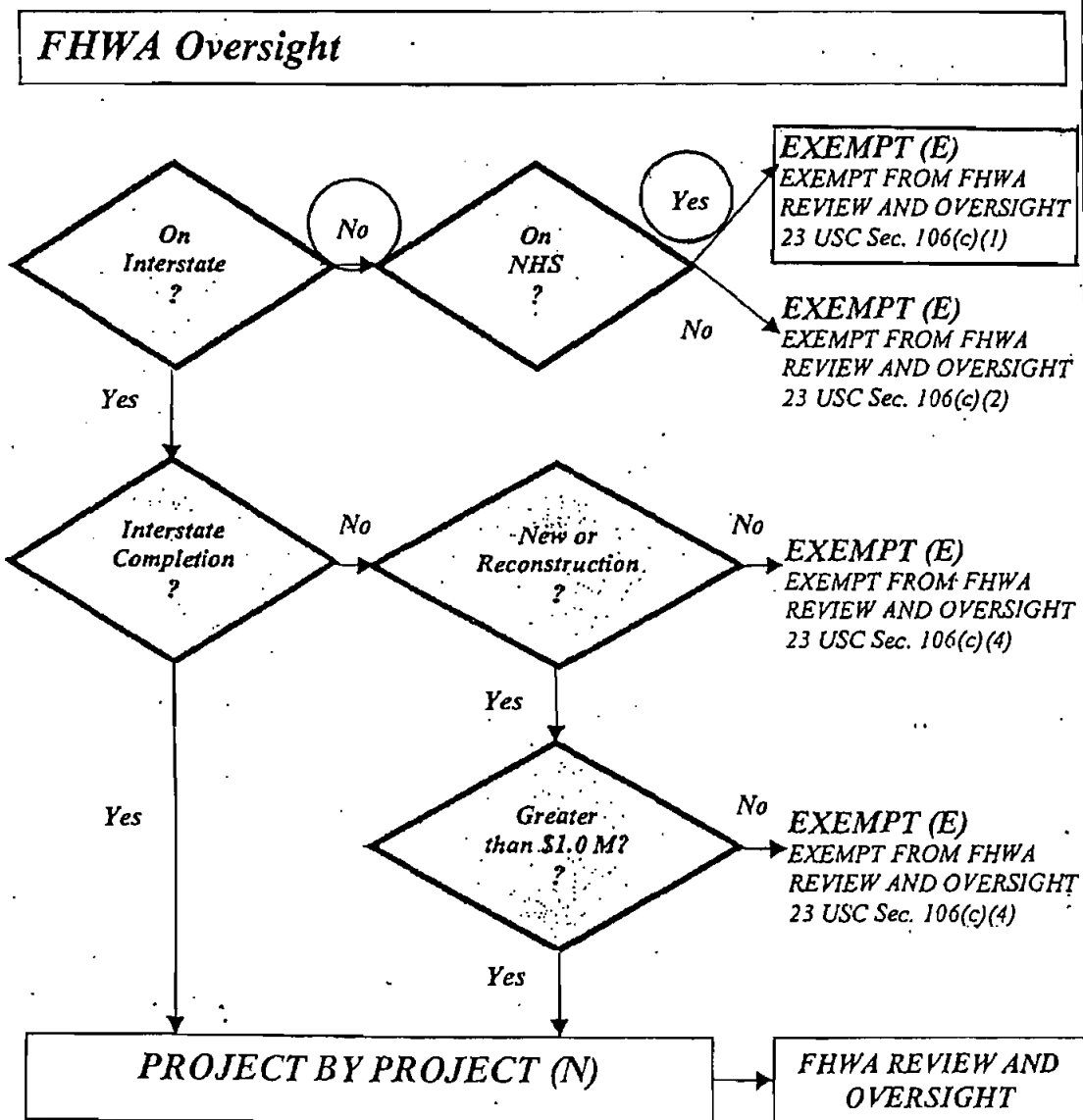


WBS Code	Activity Description	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
M318-D7	DESIGN SAFETY REVIEW	0	0	0		02/24/12		05/17/12	59
M328-D7	CONSTRUCTABILITY REVIEW	0	0	0		02/24/12		05/17/12	59
M377	PS&E TO DOE	0	0	0		03/23/12		06/14/12	59
M378	DRAFT STRUC PS&E	0	0	0		04/19/11		04/05/12	249
M380	PROJ PS&E	0	0	0		06/15/12		08/24/12	49
M410	R/W CERT	0	0	0		02/08/11		01/04/13	492
M460	RTL	0	0	0		01/11/13*		01/11/13*	0
M480	HQ ADVERT	0	0	0		01/11/13		01/11/13	0
M500	APPROVE CONTRACT	0	0	0		07/09/13		07/09/13	0
M588-D7	FINAL SAFETY REVIEW	0	0	0		11/07/16		11/07/16	0
M600	CONTRACT ACCEPT	0	0	0		11/07/16		11/07/16	0
M700	FINAL REPORT	0	0	0		07/20/17		07/20/17	0
M800	END PROJ	0	0	0		07/20/17		07/20/17	0

**Attachment M**

**FHWA Involvement**

FIGURE 2 - Flowchart for Determining FHWA Involvement and Oversight on a Project



**Attachment N**

**Project Evaluation Checklist**

## PSR Evaluation Checklist

07-LA-101 KP 40.0/61.5 (PM 24.9/38.2)

07-VEN-101 KP 0.0/1.0 (PM 0.0/0.6)

EA 24920K

Date September 2005

<b>Concerns of applicable permitting agencies on the need and purpose of the project:</b>
Widening or replacing 15 bridge structures will require extensive communication and coordination with the resource agencies. Future consideration of HOV lane alternatives and options beyond the limits of this project will require extensive outreach and coordination with an expanded group of stakeholders. The PA/ED phase will take into consideration the lead time and resources needed to coordinate with the resource agencies and obtain the necessary permits.
Potential impact to scope cost or schedule: Developing the Draft Environmental Document may take 36 to 42 months, as reflected in the anticipated project schedule.
Recommended actions: Meet with the resource agencies at the initiation of the PA/ED phase to get their buy-in of the project concepts and to become fully aware of the permit requirements and their associated lead times.
<b>Any exclusion of applicable Traffic Management System (TMS) elements, replacement planting, environmental mitigation, environmental enhancement opportunities, maintenance needs (structural and roadway), and relinquishment requirements:</b>
N/A
Potential impact to scope cost or schedule:
Recommended actions:
<b>Request for work that is requested by a customer, but is not consistent with the primary need and purpose.</b>
N/A
Potential impact to scope cost or schedule:
Recommended actions:

<b>Non-standard features:</b>
Alternative 3 incorporates full standard freeway lane widths for the proposed widening. Alternatives 2 and 3 would require approval of non-standard features, including horizontal stopping sight distance and minimum curve radius. Alternative 2 would require approval of additional non-standard features, including non-standard lane widths and shoulder widths. This alternative would minimize right of way impacts and costs.
Potential impact to scope cost or schedule: The full standard alternative will require more new right of way.
Recommended actions: During the PA/ED phase, the Project Development Team will develop an evaluation process to weigh the benefits and costs of the various design exceptions under consideration.

<b>If applicable, availability of non-STIP funding sources and commitments:</b>
N/A
Potential impact to scope cost or schedule:
Recommended actions:
<b>Deadlines for use of funding, other than STIP funds:</b>
N/A
Potential impact to scope cost or schedule:
Recommended actions:
<b>Environmental Investigations (e.g., study windows, right of entry, etc.)</b>
Seasonal windows for conducting biological and geotechnical surveys will be identified.
Potential impact to scope cost or schedule: The environmental review process could be delayed if the biological and geotechnical surveys are not done within the appropriate windows.
Recommended actions: Provide adequate resources to ensure staff is ready when the survey period begins.

<b>Permit Issues (e.g., regulatory requirements, responsible parties)</b>
Environmentally sensitive areas along the corridor will require coordination and communication with various resource agencies. Permit requirements and their associated lead times will be determined.
Potential impact to scope cost or schedule: Mitigation measures that will be required will be accounted for in the project costs.
Recommended actions: Develop and get buy-off on the project mitigation plan from the various resource agencies. Also, ensure that all costs associated with the mitigation plan have been identified and accounted for.
<b>Identification of alternatives that have been suggested which are not considered viable for study.</b>
N/A
Potential impact to scope cost or schedule:
Recommended actions:

<b>Right of Way Issues (acquisition, utilities).</b>
Right of way acquisition will be required. See PSR(PDS) Attachment J.
Potential impact to scope cost or schedule: Possible right of way acquisition issues could increase costs or extend schedule.
Recommended actions: Begin right of way acquisition process as soon as possible.
<b>Other issues:</b>
N/A
Potential impact to scope cost or schedule:
Recommended actions:

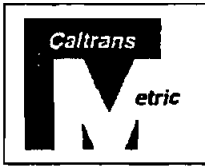
**Attachment O**

**Storm Water Data Report  
(SWDR) Signature Sheet and  
NPDES Information Submittal**



**APPENDIX E**

*Long Form - Storm Water Data Report*



Dist-County-Route 07-LA-101  
Kilometer Post (Post Mile) Limits  
KP40.0/61.5(LA):KPO.0/1.0(VEN)  
PM24.9/38.2(LA):PM0.0/0.6(VEN)

Project Type Widening \_\_\_\_\_  
EA: 24920K \_\_\_\_\_  
RU: 07-186 \_\_\_\_\_  
Program Identification: STIP \_\_\_\_\_  
Phase:  PID     PA/ED     PS&E

Regional Water Quality Control Board(s): Los Angeles RWQCB

Is the project required to consider incorporating Treatment BMPs?      Yes     No   
If yes, can Treatment BMPs be incorporated into the project?      Yes     No

If No, a Technical Data Report must be submitted to the RWQCB  
at least 30 days prior to Advertisement.    List submittal date: \_\_\_\_\_

Total Disturbed Soil Area: 28.3 h, Final Disturbed Area to be determined at the PS&E Phase

Estimated: Construction Start Date: 01-2011      Construction Completion Date: 11-2016

Notification of Construction (NOC) Date to be submitted: 11-2010

Notification of ADL reuse (if Yes, provide date)      Yes     Date \_\_\_\_\_    No

Separate Dewatering Permit (if Yes, permit number)      Yes     Permit # \_\_\_\_\_    No

*This Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.*

Ryan Long      Albert Andraos      9/16/05  
Registered Project Engineer      Caltrans Designated Oversight Representative      Date  
*I have reviewed the storm water quality design issues and find this report to be complete, current, and accurate:*

Ravi Ghate      9/19/05  
Ravi Ghate, Project Manager      Date

Richard Gordon      10-3-05  
Richard Gordon, Designated Maintenance Representative      Date

Ron Russak      10-03-05  
Ron Russak, Designated Landscape Architect Representative      Date


STAMP  
(Required for PS&E only)

Shirley Y. Pak      10/6/05  
Shirley Y. Pak, District/Regional SW Coordinator or Designer      Date

## NPDES INFORMATION SUBMITTAL

Project name: <u>Route 101 Auxiliary Lane Project</u>	Dist <u>07</u>	Rte <u>101</u>
Description of Work: <u>Widening in the north-</u>	KP <u>40.0/61.5(LA)</u>	PM <u>24.9/38.2(LA)</u>
Bound for construction of an Auxiliary Lane.	<u>0.0/1.0(VEN)</u>	<u>0.0/0.6(VEN)</u>
Project Engineer: <u>Ryan Luong</u>	EA: <u>24920K</u>	Phone: <u>213-362-9470</u>
Project Manager: <u>Ravi Ghate</u>	Phone: <u>213-897-5593</u>	
Dist PS&E date: <u>08/10</u>	PS&E to HQ date: <u>10/10</u>	
Target construction beginning and completion date: <u>01/11 to 11/16</u>		

- |                                                                                                                                                                                     | Yes                                 | No                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| ▪ Will project impact existing slopes?                                                                                                                                              | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| ▪ Will project create new slopes?                                                                                                                                                   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| ▪ Have Federal or State listed aquatic resources been identified in receiving waters on or adjacent to the site? If yes, what? _____                                                | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| ▪ Is soil disturbing activity occurring within 1/4 mile of a perennial surface water or a storm drain that drains directly to a perennial surface water?                            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| ▪ Any requirements regarding water quality identified in the Environmental Document? If yes, what? <u>Water quality impacts will be addressed through permanent BMP's</u> _____     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| to address TMDL's _____                                                                                                                                                             |                                     |                                     |
| ▪ Any Federal or State permit required for this project? If, yes, please list the names of the permits: <u>404, 401 and 1602 Permits have been identified as likely to be</u> _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <u>required due to project construction.</u>                                                                                                                                        |                                     |                                     |
| ▪ Will the project use lead contaminated soil as backfill?                                                                                                                          | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| - Total land disturbed: <u>A minimum of 28.3</u> hectares, <u>69.9</u> acres                                                                                                        |                                     |                                     |
| - What is the proposed slope gradient (v:h): <u>1:2</u>                                                                                                                             |                                     |                                     |
| - What is the existing soil type (i.e. sandy, clay, etc.)? <u>Colluvium</u>                                                                                                         |                                     |                                     |
| - Is it potential for significant sediment discharge? <u>No. Constructed slopes are to utilized erosion control measures.</u>                                                       |                                     |                                     |
| - Describe condition of existing vegetative coverage on existing slopes: _____                                                                                                      |                                     |                                     |
| <u>Native vegetation/scrub cover slopes</u>                                                                                                                                         |                                     |                                     |
| - What is the existing drainage pattern? <u>Easterly to the Los Angeles River, westerly to Calleguas Creek</u>                                                                      |                                     |                                     |
| - Identify receiving waters: <u>Los Angeles River, Malibu Creek, Calleguas Creek</u>                                                                                                |                                     |                                     |
| - What is their condition? <u>Receiving waters are monitored by the LARWOQB for TMDL's</u>                                                                                          |                                     |                                     |
| - Area exposed for the following work (hectares/acres):                                                                                                                             |                                     |                                     |
| Area to be cleared <u>TBD</u> , Area to be cut _____, Area to be filled _____                                                                                                       |                                     |                                     |
| Staging area within state R/W, Access road <u>VAR</u> , Utility relocation <u>VAR</u>                                                                                               |                                     |                                     |
| - Estimate the type of areas adjacent to project site, approximately; <u>30%</u> %urban                                                                                             |                                     |                                     |
| - <u>10</u> % undeveloped, <u>40</u> % residential, <u>20</u> % others.                                                                                                             |                                     |                                     |
| - Describe the proposed location and condition of access road: <u>Fully paved urban freeway</u>                                                                                     |                                     |                                     |
| Additional remarks: _____                                                                                                                                                           |                                     |                                     |

Submit by:  Date: 09/09/05

**Attachment P**

**Project Risk Management Plan**

Telephone Number (213) 897-5593 or ATSS 8-647-5593

PROJECT RISK MANAGEMENT PLAN																	
Identification				Qualitative Analysis				OPTIONAL Quantitative Analysis			Response Strategy			Monitoring and Control			
Functional Assignment (5)	Threat/Opportunity Event (6)	SMART Column (7)	Risk Trigger (8)	Type (9)	Probability (10)	Impact (11)	Risk Matrix (12)	Probability (%) (13)	Impact (\$ or days) (14)	Effect (\$ or days) (15) = (13)x(14)	Strategy (16)	Response Actions including advantages and disadvantages (17)	Affected WBS Tasks (18)	Responsibility (Task Manager) (19)	Status Interval or Milestone Check (20)	Date, Status and Review Comments (21)	
Hazardous Waste Unit	For properties that need to be acquired and are contaminated, identifying responsible party and negotiate for clean up may require long turnaround and delay project schedule.	Once the properties representing environmental concern are located in reference to those requiring R/W acquisition and if groundwater contamination is identified, the party responsible for cleaning up the contamination will need to be identified as well.	identification of properties requiring R/W acquisition, location of Lust sites and dry cleaning facilities representing environmental concern	schedule	Moderate	Moderate						Mitigation	Perform SI at the early stage of the design to identify the contamination, approach the responsible party and start negotiations.	WBS 225 Obtain Right of Way Interests for Project Right of Way Certification	Design Manager / ROW Manager	PS&E	
Planning/Design	Additional HOV Alternatives may need to be studied	Expanded Scope, Increased Project Impacts, Extended Delivery Schedule, Public /Stakeholder Opposition, Cost Increases	PA / ED Scoping Phase	Scope Cost Schedule	High	High						Avoidance	Address HOV issues early	WBS 160 Perform Preliminary Engineering Studies and Prepare Draft Project Report	Design / Project Manager	PA / ED	
Planning/Design	Project Limits may be expanded to address HOV options	Schedule Slippage, Cost Increases	PA / ED Scoping Phase	Schedule Cost Scope	High	High						Avoidance	Address HOV issues early	WBS 160 Perform Preliminary Engineering Studies and Prepare Draft Project Report	Design/Project Manager	PA / ED	
Environmental Branch	Environmental Document may be expanded due to additional impact issues	Schedule Slippage, Cost Increases	FHWA Review of Draft ED (requirement during PA/ED for NEPA clearance - consultation among Caltrans HQ, MTA, SCAG, COG, other Stakeholders)	Schedule Cost Scope	High	High						Avoidance	Increase contingencies	WBS 173 Circulate Draft Environmental Document and Select Preferred Project Alternative	Environmental Planning Manager	PA & ED	
Environmental Branch	Public participation and project support may need to be augmented	Schedule Slippage, Cost Increases	PA / ED Scoping Phase	Schedule Cost Scope	High	High						Avoidance	Address Public Concerns and Build Project Support	WBS 165 Perform Environmental Studies and Prepare Draft Environment	Environmental Planning Manager	Start of PA / ED	
Right-of-Way Manager	Right-of-Way requirements may be increased to provide additional mitigation (# 2 and 3 above)	Schedule Slippage, Cost Increases	Circulation of Draft ED (Additional R/W needs may occur when APE is prepared for ED)	Schedule Cost Scope	High	High						Avoidance	Early identification of R/W Needs, Increase contingencies if necessary	WBS 165 Perform Environmental Studies and Prepare Draft Environment	R/W Manager	Draft ED	
Project / Program Manager	Timely Project Funding may not be available	Project may need to be segmented and segments programmed. Schedule Slippage, Cost Increases	Start of PA / ED Phase	Schedule Cost Scope	High	High						Avoidance	Develop broad stakeholder support for project funding	WBS 160 Perform Preliminary Engineering Studies and Prepare Draft Project	Project / Program / Design Manager	Start of PA / ED	

