07 – LA – 101, PM 33.0/34.4
EA 25720K
HE-11
February 2009

PROJECT STUDY REPORT
To
Request for Conceptual Approval
And
Programming for Capital Cost

On Route US-101

Between 0.9 mile West of Liberty Canyon Road

And 1.3 mile East of Kanan Road

The Right-of Way Data Sheets were completed by a consultant. I have reviewed the right-of-way information contained in this PSR and the Right-of-Way Data Sheets attached hereto, and find the data to be complete as to form and procedures only. No inferences or assertions are made as to the validity of the data or the values implied by the R/W Data Sheets.

Andrew P. Nierenberg, District Division Chief, Right of Way

APPROVAL RECOMMENDED BY:

Ravi B. Ghate, Project Manager

CONCURRED BY:

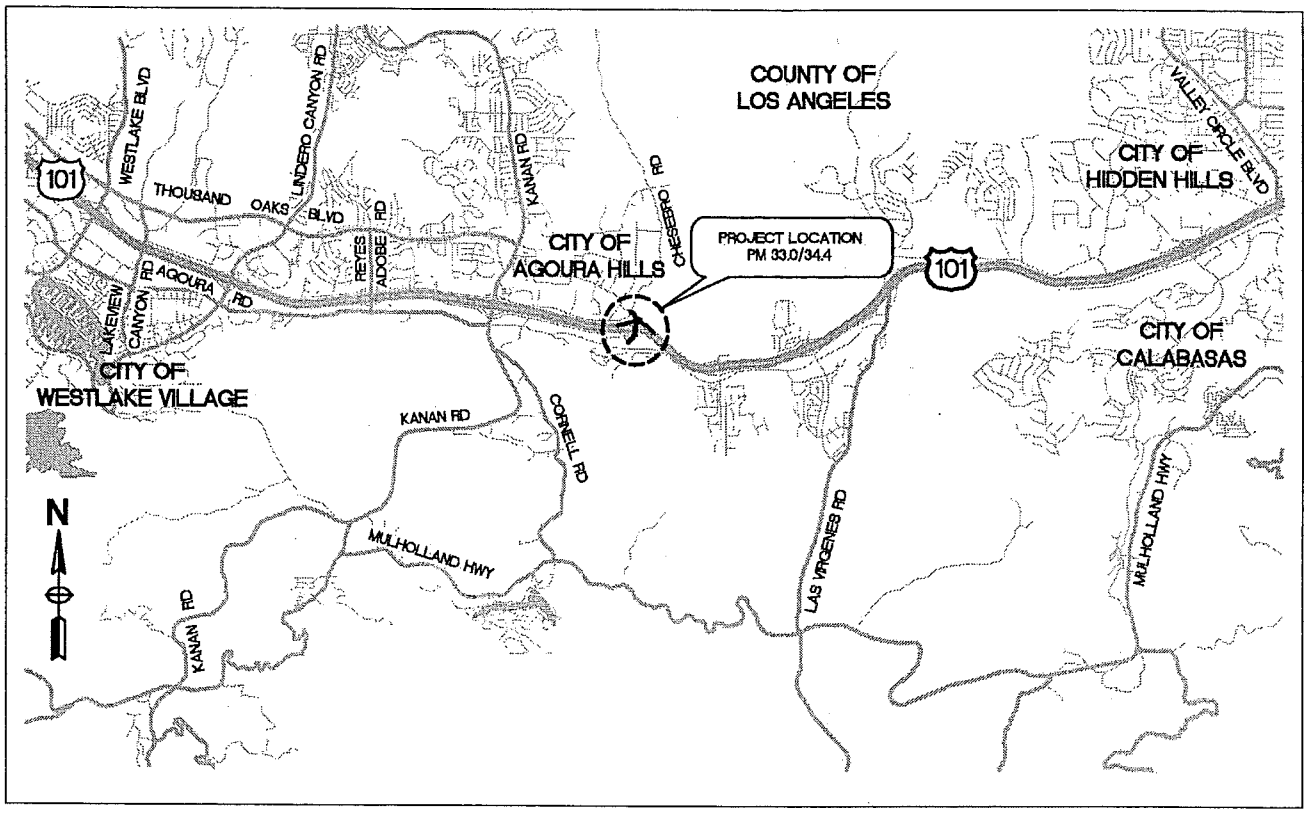
James McCarthy, Deputy District Director
Division of Planning, Public Transportation and Local Assistance

for **William H. Reagan**, Deputy District Director
Division of Design

APPROVED BY:

Douglas R. Failing 2/27/09
District Director Date

Ramiro Adeva 2/23/09
City Engineer, Date
City Of Agoura Hills



On Route	US-101
Between	0.9 mile West of Liberty Canyon Road
And	1.3 mile East of Kanan Road

This Project Study Report has been prepared under the direction of the following Registered Civil Engineer. The Registered Civil Engineer attests to the technical information contained therein and has judged the qualifications of any technical specialists providing engineering data upon which recommendations, conclusions, and decisions are based.

Surafael Teshale

2/23/2009

Surafael Teshale, P.E.
Registered Civil Engineer
Parsons Transportation Group, Inc.

Date

PREPARED BY:
Parsons Transportation Group Inc.
For the City of Agoura Hills

TABLE OF CONTENTS

1. **INTRODUCTION** 1
2. **BACKGROUND** 2
3. **PURPOSE AND NEED STATEMENT** 2
4. **DEFICIENCIES** 3
   - **4.1** Land Use 3
   - **4.2** Roadway Network 4
   - **4.3** Traffic 5
   - **4.4** Accident Analysis 7
5. **CORRIDOR AND SYSTEM COORDINATION** 8
   - **5.1** System Planning 8
   - **5.2** Air Quality Conformity 8
6. **ALTERNATIVES** 9
   - **6.1** Viable Project Alternatives 9
     - 6.1.1 Alternative 1: No Build 9
     - 6.1.2 Alternative 2: Widen Palo Comado Canyon Road and Overcrossing and Maintain Tight Diamond Ramps 9
     - 6.1.3 Alternative 3: Widen Palo Comado Canyon Road and Construct Northbound Hook Off-Ramp 9
     - 6.1.4 Alternative 3A: Widen Palo Comado Canyon Road with Full Overcrossing Replacement and Construct Northbound Hook Off-Ramp 10
   - **6.2** Analysis of Proposals 10
   - **6.3** Nonstandard Design Features 11
     - 6.3.1 Nonstandard Design Features for Alternative 2 11
     - 6.3.2 Nonstandard Design Features for Alternative 3 and 3A 13
   - **6.4** Other Geometries Considered for the Project 14
7. **COMMON FEATURES FOR ALTERNATIVES** 15
   - **7.1** Right-of-Way Impacts 15
   - **7.2** Utility Impacts 15
   - **7.3** Construction Staging 15
   - **7.4** Transportation Management Plan 16
   - **7.5** Resource Conservation 16
8. **ENVIRONMENTAL DETERMINATION/DOCUMENTATION** 16
   - **8.1** Environmental Summary 16
   - **8.2** Anticipated Project Mitigation 17
     - 8.2.1 Hazardous Waste 17
     - 8.2.2 Water Quality 18
     - 8.2.3 Air Quality 18
     - 8.2.4 Noise 18
     - 8.2.5 Biological Resources 19
     - 8.2.6 Paleontology 19

8.2.7 Invasive Species 19
8.2.8 Community Impacts 19
9. FUNDING 19
9.1 Capital Cost 19
9.2 Capital Support Estimate 20
10. SCHEDULE 20
11. FHWA COORDINATION 21
12. VALUE ANALYSIS 21
13. CONTACTS 21

LIST OF TABLES

Table 1 – Intersection Levels of Service Summary 6

Table 2 – Accident Rates for US 101/Palo Comado Canyon Road Interchange 7

Table 3 – Types of Collision for US 101/Palo Comado Canyon Road Interchange 8

Table 4 – Summary Cost Estimate of the Project Alternatives 11

Table 5 – Potential and Anticipated Permits Required for this Project 17

Table 6 – Programmed Capital Cost 20

Table 7 – Capital Support Estimate (Caltrans only) 20

Table 8 – Project Schedule 20

PROJECT STUDY REPORT

1. INTRODUCTION

The City of Agoura Hills (City) proposes to improve Palo Comado Canyon Road and the US 101 Palo Comado Canyon Road interchange (PM 33.0/34.4) in Los Angeles County. The proposed work includes widening the US 101 Palo Comado Canyon Road Overcrossing (OC) from one lane to two lanes in each direction, adding median and sidewalks, modifying the northbound on- and off-ramps, and modifying the intersections. The improvements would facilitate the increased volume of traffic using the interchange due to the development of the surrounding community including the construction of the Heschel West School in the immediate vicinity of the interchange. The project will improve flow and enhance safety for vehicles.

See Cost Estimate for specific work items included in this project.

Project Limits (Dist., Co., Rte., PM):	07-LA-US101 PM 33.0/34.4
Number of Alternatives:	Four
Alternative Recommended for Programming:	Alternative 3A
Programmed or Proposed Capital Construction Costs:	$19,812,000
Programmed or Proposed Capital Right-of-Way Costs:	$1,491,500
Funding Source:	City of Agoura Hills – General Fund
Type of Facility (conventional, expressway, freeway):	Freeway
Number of Structures:	One
Anticipated Environmental Determination/Document:	IS/EA
Legal Description:	
Project Category:	4B

Alternative 3 is the recommended alternative for programming only. All of the project alternatives will be carried to the next phase of the project. The Project Report will serve as the approval document for the selection of the preferred alternative.

US 101 is part of the federal highway system. The project includes improvements to local streets outside of the state and federal highway system, and it will require review and approval from local agencies – City of Agoura Hills and the County of Los Angeles.

2. BACKGROUND

The County of Los Angeles has approved the development of the vacant land in the northeast quadrant of the US 101/Palo Comado Canyon Road interchange. The land will be developed into Heschel West School, a private school, providing education to grades Pre-K-9. The school will have buildings totaling 166,450 square feet of floor space and ultimately serve up to 660 students and 90 preschoolers. Access to the school will be provided through Canwood Street, which is located adjacent to the US 101/Palo Comado Canyon Road interchange northbound off-ramp. The existing intersection at Palo Comado Canyon Road and the northbound ramps will be upgraded to a 5-legged signalized intersection as part of a current Caltrans permit project, with Canwood Street as the fifth leg (see Attachment B – Alternative 1). Although the development of the school occurs within Los Angeles County, the area adjacent to it, including Canwood Street and Palo Comado Canyon Road, are within the city of Agoura Hills. In addition to the proposed new school, there is a commercial office center with over 63,000 square feet of office space under construction at the northeast corner of Chesebro Road and Agoura Road, which is immediately south of the interchange. Furthermore, there are several developers seeking approval from the City to construct commercial and residential developments in the immediate vicinity of the interchange. On the north side of the freeway a new office center (8,000 square feet) and a furniture sales center (38,000 square feet) are planned. On the south side of the freeway a drive-through fast food restaurant (3,200 square feet), a tire retail store (8,000 square feet), a carpeting store (14,000 square feet) and an office center (20,000 square feet) are planned. These developments will use the Palo Comado Canyon Road interchange to access US 101.

Recognizing that the existing roadway network and freeway interchange will not accommodate the expected growth, the City is planning for the necessary roadway improvements.

Other Projects

The State approved a Project Study Report/Project Development Support (PSR/PDS) for the widening of US 101 (EA 24929k) on October 11, 2005. The PSR/PDS proposes to widen the median and add one mixed flow lane to each direction of the freeway.

3. PURPOSE AND NEED STATEMENT

Need

Currently, the distance between the existing Canwood Street intersection and the US 101 northbound ramps intersection on Palo Comado Canyon Road is approximately 100 feet (centerline to centerline). This configuration presents a nonstandard access control distance beyond the northbound off-ramp termini, and it does not have the capacity to handle the forecasted increase in traffic demand. Furthermore, the planned developments around Chesebro Road, Palo Comado Canyon Road, and Canwood Street west of Palo Comado Canyon Road will substantially increase traffic volumes on the local roadway network, as well as the US 101 interchange. Roadway improvements are needed to keep

traffic operation Level of Service (LOS) on the roadways and intersections within an acceptable range.

The need for this project is as follows:

- Planned development of the vacant lands adjacent to the interchange will increase traffic volumes around the area, and improvements to the interchange and the roadway network are needed to accommodate the additional traffic demands and relieve congestion.
- The existing access road, Canwood Street, has an intersection approximately 100 feet (centerline to centerline) from the existing northbound on-ramp intersection at the Palo Comado Canyon Road interchange. Improvements are needed to provide better access control and traffic circulation.

Purpose:

The purpose of the Palo Comado Canyon Road interchange improvement project is to:

- Provide improved access to the proposed new school
- Improve traffic circulation on the roadway network adjacent to the Palo Comado Canyon Road interchange
- Accommodate the forecasted increases in traffic volume resulting from future developments
- Improve the safety and operational LOS for the US 101/Palo Comado Canyon Road interchange

4. DEFICIENCIES

4.1 Land Use

Current Land Use

Land uses adjacent to the project area include residential, commercial, and school properties. The neighborhood along Agoura Road south of the interchange is mostly residential with single-family homes, while the properties in the immediate area of the interchange are mostly commercial, including business parks, light industrial, retail, and gas stations. Gas stations exist in the northeast and northwest quadrants of the interchange adjacent to the northbound ramps. Most of the remaining areas in the northeast quadrant of the interchange are vacant land, except for an equestrian community located near the intersection of Palo Comado Canyon Road and Driver Avenue. Several multi-family residential properties, Agoura Park, and Agoura High School are located northwest of the interchange.

Future Land Use

There are current plans to develop the vacant land in the northeast quadrant of the interchange into a school. The area has scattered vacant lots zoned commercial and residential that are planned to be developed as discussed in Section 2.

4.2 Roadway Network

Current Facility

US 101 is nominally a north-south principal arterial on the U.S. Highway System, but it runs east-west through the project area. The freeway is classified as an urban principal arterial freeway which provides international, interstate, interregional, and intra-regional travel and goods movement. It is part of the Surface Transportation Assistance Act (STAA) route network, the Interregional Road System (IRRS), a designated Lifeline route, and a Federal Aid Primary (FAP) system, which is a subset of the National Highway System (NHS). Within the project limits, approaching the Palo Comado Canyon Road Overcrossing from the east, the freeway typical section is on a curved horizontal alignment that is in cut that varies from 2 feet to 40 feet; west of the Palo Comado Canyon Road Overcrossing, the freeway typical section is on a tangent alignment that is on embankment fill that varies from 2 feet to 6 feet. The freeway is on an upgrade of 2.8 percent from the east, then crests at the existing overcrossing and continues on a downgrade of 0.8 percent to the west. The freeway has 4 mixed flow lanes in each direction and auxiliary lanes to and from the interchange ramps on both sides of the freeway.

The local roadways around the Palo Comado Canyon Road interchange have many discontinuities, as shown in Attachment B, Alternative 1. Canwood Street is a 2.5-mile east-west frontage road on the north side of US 101 that is discontinued between Chesebro Road and Palo Comado Canyon Road; it ends approximately 250 feet east of Palo Comado Canyon Road. Driver Avenue is also an east-west road parallel to US 101 located approximately 0.4-mile north of the freeway. Driver Avenue is the main collector road for the community north of the freeway, including Agoura High School located approximately 0.8-mile west of the project site. Driver Avenue feeds directly into Palo Comado Canyon Road at Chesebro Road north of the interchange. Agoura Road is a major east-west arterial approximately 0.2-mile south of the interchange running parallel to the freeway.

Chesebro Road is a north-south arterial that begins at Agoura Road south of the freeway and ends north beyond the limits of the city. Chesebro Road does not cross the freeway and is discontinued from where it joins the southbound freeway ramps on the south side of the freeway and Canwood Street on the north side of the freeway. Palo Comado Canyon Road intersects Chesebro Road on both sides of the freeway and serves to transport traffic over the freeway.

The Palo Comado Canyon Road interchange is configured with tight diamond (L-1) ramps for the northbound side and hook ramps (L-6) for the southbound side. The southbound hook ramps connect with Dorothy Drive and Chesebro Road at a four-point

intersection south of US 101. Dorothy Drive intersects with Palo Comado Canyon Road approximately 550 feet east of the hook ramp; however, due to a grade difference between the two roadways, the westerly side of Dorothy Drive and Palo Comado Canyon Road do not connect. A short section of Chesebro Road directly opposite the hook ramps provides access from the ramps to Palo Comado Canyon Road. The southbound off-ramp is a 1-lane exit that widens to 2 lanes at the termini. The southbound on-ramp is a 1-lane ramp throughout. The northbound on-ramp has 2 lanes starting from the intersection and tapers to a 1-lane on-ramp before joining the freeway. The northbound off-ramp is also a 1-lane facility and widens to 2 lanes at the termini.

Palo Comado Canyon Road is a 2-lane facility connecting Chesebro Road north and south of the freeway. The existing freeway overcrossing structure was built in 1963. It provides 12-foot-wide travel ways and 4-foot-wide shoulders in each direction. A 5-foot-wide sidewalk is provided on the west side of the structure. The bridge was repaired with one new concrete girder in 2006. The minimum vertical clearance is 15 feet, which is located in the northeast corner of the structure over the northbound US 101 outer lane.

The interchange does not have any signalized intersections. Palo Comado Canyon Road is a free-flowing street from Agoura Road to Driver Avenue, where the intersection is four-way "stop" controlled. Canwood Street at Palo Comado Canyon Road, and the US 101 northbound off-ramp at Palo Comado Canyon Road, and Dorothy Drive at Palo Comado Canyon Road are all one-way "stop" controlled. The intersection at Dorothy Drive, Chesebro Road, and the southbound hook ramps is four-way "stop" controlled.

4.3 Traffic

The results of the traffic analyses for the project, which includes year 2008, 2015, and 2035 as the existing, opening year, and design year, respectively, are presented below. The LOS conditions for the no build and build conditions for each of the intersection movements and for the intersection as a whole are illustrated in Figures 1 through 9 of Attachment D. The figures also show projected volumes of traffic and the type of control devices proposed. The traffic volume data is based on information collected from the June 2006 Environmental Impact Report for the Heschel School project. The "no build" condition reflects a 5-legged intersection at the northbound on-/off-ramps as proposed by the Heschel School project. A layout of the no build condition is shown as Alternative 1 in Attachment B. Refer to Section 6 of this PSR for an explanation of the project alternatives.

Table 1 summarizes the LOS results of the traffic analysis for the intersections. The analysis indicates that the existing stop-controlled northbound off-ramp is already operating at LOS F and E for the left-turn movement during the AM and PM peak hour, respectively. The projected year 2015 intersection LOS at the northbound ramps under the no build condition would be at unacceptable LOS E and F during the AM and PM peak hour, respectively, even with construction and signalization of the 5-legged Palo Comado Canyon Road/Canwood Street/northbound ramps intersection. The LOS for the intersection would worsen further to LOS F for both the AM and PM peak hour by year 2035. The capacity constraints for the no build condition are reflected in the lower volumes of traffic projected during the peak hours.

The year 2015 intersection LOS for all of the build alternatives would be LOS B or better. The year 2035 intersection LOS for all of the build alternatives would be at acceptable LOS D or better. Under Alternative 2, the year 2035 intersection LOS at Palo Comado Canyon Road and the northbound ramps would be LOS D and B for the AM and PM peak hour, respectively, while the intersection at Palo Comado Canyon Road and the school entrance would be LOS B for both the AM and PM peak hour.

Table 1 – Intersection Levels of Service Summary

Intersection Location	ALTERNATIVE					
	1		2		3/3A	
	AM	PM	AM	PM	AM	PM
2008						
Palo Comado Canyon Road at NB Diamond On Ramp	F	E	--	--	--	--
2015						
Palo Comado Canyon Road at NB On Ramp	F	E	B	B	B	B
Palo Comado Canyon Road at NB Off Ramp	F	E	B	B	A	A
School Entrance at Palo Comado Canyon Road (Alternative 2 only)	--	--	A	A	--	--
Roundabout at NB ramps and Palo Comado Canyon Road	--	--	--	--	--	--
2035						
Palo Comado Canyon Road at NB On Ramp	F	F	D	B	B	C
Palo Comado Canyon Road at NB Off Ramp	F	F	D	B	A	A
School Entrance at Palo Comado Canyon Road (Alternative 2 only)	--	--	B	B	--	--
Roundabout at NB ramps and Palo Comado Canyon Road	--	--	--	--	--	--

Under Alternative 3 and 3A, Canwood Street would serve as a frontage road and connect to Palo Comado Canyon Road as the easterly leg of the northbound on-ramp/Palo Comado Canyon Road intersection. The northbound diamond off-ramp would be replaced by a northbound hook off-ramp connecting to Canwood Street. The intersection at the northbound on-ramp would have an overall year 2035 intersection LOS of B and C for the AM and PM peak hour, respectively. The proposed intersection at Canwood Street and the northbound hook off-ramp would have an overall year 2035 LOS of A for both the AM and PM peak hours.

4.4 Accident Analysis

The accident data from Traffic Accident Surveillance and Analysis System (TASAS) Table B, for the 3-year period ending December 31, 2007, shows that the total rate of accidents at the Palo Comado Canyon Road interchange is generally lower than the statewide average accident rate, except for the northbound off-ramp. The total accident rate for the northbound off-ramp is 0.42 points higher than the statewide average for similar facilities. No accidents are reported on the mainline. The TASAS data is provided in Attachment D, and the information is summarized in Table 2.

Table 2 – Accident Rates for US 101/Palo Comado Canyon Road Interchange

Period: 1/1/05–12/31/2007

Route Segment US 101 Palo Comado Canyon Road Interchange	Actual Accident Rates			Statewide Average Accident Rate for Similar Facility		
	Fatalities	Injuries & Fatalities	Total	Fatalities	Injuries & Fatalities	Total
Northbound US 101 Mainline	0.000	0.000	0.000	0.003	0.186	0.596
Southbound US 101 Mainline	0.000	0.000	0.000	0.003	0.186	0.596
Northbound off-ramp	0.000	**0.70**	**1.92**	0.005	0.61	1.50
Southbound on-ramp	0.000	0.17	0.17	0.002	0.19	0.55
Northbound on-ramp	0.000	**0.33**	0.65	0.002	0.32	0.80
Southbound off-ramp	0.000	0.34	0.67	0.005	0.39	1.15

Source: TASAS Table "B" Caltrans District 7.

Table 3 summarizes the types of collisions that occurred at the interchange.

The data indicates that 69 percent of all accidents at the interchange occurred at the northbound off-ramp. Out of 11 accidents that occurred at the northbound off-ramp, 9 (82 percent) of them occurred at the intersection with Palo Comado Canyon Road where the off-ramp is stop controlled. The remaining 2 occurred midway through the ramp and had "influence alcohol" as the primary collision factor. No accidents are reported in the area with nonstandard minimum vertical clearance in the northbound direction of US 101.

The proposed improvements are not anticipated to contribute to an increase in accidents. Additional lanes for through and turning movements would be provided to accommodate the increased traffic. Signalized intersections in Alternative 2 and 3 would be provided to improve right-of-way control. The improvements under Alternative 2 and 3 would increase the spacing between intersections, and traffic operations would be enhanced despite the nonstandard intersection spacing that would remain.

Table 3 – Types of Collision for US 101/Palo Comado Canyon Road Interchange

Period: 1/1/05–12/31/2007

Route Segment US 101 Palo Comado Canyon Road Interchange	TYPE OF COLLISION							
	Head -on	Side-swipe	Rear End	Broadside	Hit Object	Over-Turn	Other	TOTAL
Northbound US 101 Mainline								0
Southbound US 101 Mainline								0
Northbound off-ramp		3	3	2	1		2	11
Southbound on-ramp			1					1
Northbound on-ramp	1						1	2
Southbound off-ramp			2					2

Source: TASAS Table "B" Caltrans District 7.

5. CORRIDOR AND SYSTEM COORDINATION

5.1 System Planning

The 1999 Transportation Concept Report for US 101 was approved on August 2, 1999, and the recommended lane configuration for the segment of US 101 within the project limits is four mixed-flow lanes and one high-occupancy vehicle lane. The proposed project does not conflict with the report.

The proposed project is not listed in Southern California Association of Governments (SCAG) 2008 Regional Transportation Plan or its 2006/2007 Regional Transportation Improvement Program. The project is not found in the latest Congestion Management Program.

The project sponsor should take steps to assure that the project is listed in all of the required documents, including the Southern California Association of Governments' Regional Transportation Plan and the Regional Transportation Improvement Plan, as required.

5.2 Air Quality Conformity

The project would increase capacity, and it should be included with other projects that will be modeled for determining conformity. The project needs to be included in the Southern California Association of Governments' Regional Transportation Plan and the Regional Transportation Improvement Plan as appropriate to satisfy the regional conformity requirement.

6. ALTERNATIVES

One no build alternative (Alternative 1) and three build alternatives are proposed for the project. Layouts and typical cross sections for each of the viable alternatives are provided in Attachment B. All of the build alternatives propose to widen Palo Comado Canyon Road from two lanes to four lanes with standard median, shoulders, and sidewalk.

6.1 Viable Project Alternatives

6.1.1 Alternative 1: No Build

The No Build Alternative would maintain the configuration of the US 101/Palo Comado Canyon Road interchange and the Palo Comado Canyon Road/Canwood Street intersection. The northbound ramp intersection at Palo Comado Canyon Road will include a fifth leg to Canwood Street, and the intersection will be signalized as part of a current Caltrans permit project. The Palo Comado Canyon Road Overcrossing would remain as a two-lane road and would not accommodate the future traffic demand. Congestion would not be alleviated, and the situation would deteriorate with time. There are no construction or right-of-way costs associated with this alternative.

6.1.2 Alternative 2: Widen Palo Comado Canyon Road and Overcrossing and Maintain Tight Diamond Ramps

This alternative proposes to maintain the existing tight diamond configuration of the northbound ramps and widen the entire length of Palo Comado Canyon Road and the existing overcrossing from 2 lanes to 4 lanes. The project would provide access to Heschel School via a new signalized intersection on Palo Comado Canyon Road between the northbound ramps and Driver Avenue. The project would eliminate the fifth leg (i.e. Canwood Street) at the existing Palo Comado Canyon Road, northbound ramps, and Canwood Street intersection that is proposed as part of the school project. Canwood Street, east of Palo Comado Canyon Road would be closed. The northbound ramps intersection would be modified to provide standard approach angles. Traffic signals will be installed at the northbound ramps intersection at Palo Comado Canyon Road or modified if the Heschel School project has already implemented a 5-legged signalized intersection. The estimated total project cost for Alternative 2 is $14,345,500, including $11,533,000 in construction costs, $1,082,500 in right-of-way costs, and $1,730,000 in support costs. A summary of the project cost estimate is provided in Attachment E.

6.1.3 Alternative 3: Widen Palo Comado Canyon Road and Construct Northbound Hook Off-Ramp.

This alternative proposes to reconfigure the northbound off-ramp to a partial Type L-6 hook ramp and widen the entire length of Palo Comado Canyon Road and the existing overcrossing from 2 lanes to 4 lanes. The school driveway would be relocated to the eastern end of Canwood Street approximately 60 feet east of the proposed hook off-ramp. The existing tight diamond northbound off-ramp would be removed, and the frontage road (i.e., Canwood Street) would be realigned and reconstructed to provide 2 lanes in

each direction. The intersection at Palo Comado Canyon Road and Canwood Street would be signalized and reconfigured so that westbound Canwood Street would have dual left-turn lanes to southbound Palo Comado Canyon Road, one shared through/right-turn lane to the northbound on-ramp and northbound Palo Comado Canyon Road, and one right-turn lane to northbound Palo Comado Canyon Road. The intersection at the proposed hook off-ramp and Canwood Street would be signalized, and the hook off-ramp would be configured with a right-turn lane and dual left-turn lanes to eastbound and westbound Canwood Street, respectively. Overhead lane usage signs and traffic markings are recommended to guide motorists on the northbound off-ramp and westbound Canwood Street. This alternative would widen the existing overcrossing and its approaches from 2 lanes to 4 lanes, similar to Alternative 2. The existing northbound tight diamond on-ramp would be modified to provide a standard approach angle at the intersection with Palo Comado Canyon Road. The estimated total project cost for Alternative 3 is $21,608,500, including $17,493,000 in construction costs, $1,491,000 in right-of-way costs, and $2,624,000 in support costs. A summary of the project cost estimate is provided in Attachment E.

6.1.4 Alternative 3A: Widen Palo Comado Canyon Road with Full Overcrossing Replacement and Construct Northbound Hook Off-Ramp

This alternative is identical to Alternative 3 except that the existing Palo Comado Canyon Road overcrossing will be replaced instead of being widened. The overcrossing and its approaches will be constructed at a higher vertical profile to allow for a standard vertical clearance over the US 101. The estimated total project cost for Alternative 3A is $24,275,500, including $19,812,000 in construction costs, $1,491,500 in right-of-way costs, and $2,972,000 in support costs. A summary of the project cost estimate is provided in Attachment E.

6.2 Analysis of Proposals

All three of the build alternatives would provide acceptable LOS through to the design year 2035, as discussed in Section 4.3. A summary of the estimated cost for each of the alternatives is shown in Table 4. Alternative 2 provides acceptable LOS, and it has the lowest construction cost for the project. Alternative 2 will require the realignment of the school access road from Canwood Street as described in Section 2 to Palo Comado Canyon Road.

The access road to the school via Canwood Street with a five-legged intersection at the northbound ramps is an interim condition. The access via Canwood Street is provided on condition that the school will reconstruct or relocate the school access road to accommodate future improvements at the interchange. The realignment of the private school access road will be funded and constructed as a separate project by others. The realignment of the access road will take right-of-way through a private open space parcel within the Old Agoura equestrian community in the City of Agoura Hills. The cut slopes required through the existing hillside of this parcel will change the character of this semi-rural community. The realignment of the school access road will not be part of this project.

Table 4 – Summary Cost Estimate of the Project Alternatives

	Alternative 2	Alternative 3	Alternative 3A
Cost for Improvements within the State Right-of-Way			
Roadway	$5,270,000	$9,410,000	$9,480,000
Structures	$2,943,000	$2,943,000	$4,812,000
Subtotal Construction	$8,213,000	$12,353,000	$14,292,000
Right-of-Way	$0	$174,000	$174,000
Support	$1,232,000	$1,853,000	$2,144,000
Total Cost	**$9,445,000**	**$14,380,000**	**$16,610,000**
Cost for improvements outside the State Right of Way			
Roadway	$3,320,000	$5,140,000	$5,520,000
Structures	$0	$0	$0
Subtotal Construction	$3,320,000	$5,140,000	$5,520,000
Right-of-Way	$1,082,500	$1,317,500	$1,317,500
Support	$498,000	$771,000	$828,000
Total Cost	**$4,900,500**	**$7,228,500**	**$7,665,500**
Cost for Entire Project			
Roadway	$8,590,000	$14,550,000	$15,000,000
Structures	$2,943,000	$2,943,000	$4,812,000
Subtotal Construction	$11,533,000	$17,493,000	$19,812,000
Right-of-Way	$1,082,500	$1,491,500	$1,491,500
Support	$1,730,000	$2,624,000	$2,972,000
Total Project Cost	**$14,345,500**	**$21,608,500**	**$24,275,500**

Alternative 3 and 3A would also provide acceptable LOS. However, the realignment of the school access road at the eastern terminus joining Canwood Street is expected to have far fewer right-of-way and community impacts compared to Alternative 2. The design of the tall retaining walls required along the freeway and the ramps will need to be consistent with the mountainous, open space characteristics of the US 101 corridor in the area. All the alternatives meet the need and purpose of this project.

6.3 Nonstandard Design Features

6.3.1 Nonstandard Design Features for Alternative 2

The proposed nonstandard design features for Alternative 2 are identified as follows. The location of the design exceptions are also shown in the layout sheet provided in Attachment B.

Mandatory Design Features

Vertical Clearances

A nonstandard minimum vertical clearance of 15 feet exists at the right edge of the traveled way on the northbound lane of US 101 under the overcrossing. The existing minimum vertical clearance would be maintained. The vertical clearance under the widened portion would be 15.0 feet, and it would not deteriorate the existing minimum vertical clearance. Index 309.2(1) (a) of the Highway Design Manual requires that 16 feet 6 inches shall be the minimum vertical clearance over the roadbed of the State facility.

Location and Design of Ramp Intersection on the Crossroads

The existing intersection of Canwood Street and Palo Comado Canyon Road will be eliminated in Alternative 2 and a nonstandard distance of 212 feet (curb return to curb return) is proposed between the northbound off-ramp intersection and the proposed school access road intersection on Palo Comado Canyon Road. The existing nonstandard distance between the intersection of the northbound off-ramp and the intersection of Canwood Street on Palo Comado Canyon Road is zero feet (curb return to curb return). Index 504.3(3) of the Highway Design Manual requires that for new construction or major reconstruction of interchanges, the minimum distance between the ramp intersection and local road intersection shall be 400 feet.

Superelevation Rate

A nonstandard superelevation rate of -2 percent is proposed for a horizontal curve of 850 feet radius on the proposed northbound on-ramp. Index 202.2 of the Highway Design Manual requires that based on an e_{max} selected by the designer for one of the conditions, superelevation rates from Table 202.2 shall be used within the given range of curve radii. Based on Table 202.2, the standard superelevation for ramps with range of radii of 850 to 1,099 feet is 10 percent.

Advisory Design Features

Location and Design of Ramp Intersection on the Crossroads

The existing intersection of Canwood Street and Palo Comado Canyon Road will be eliminated in Alternative 2 and a nonstandard distance of 212 feet (curb return to curb return) is proposed between the northbound off-ramp intersection and the proposed school access road intersection on Palo Comado Canyon Road. The existing nonstandard distance between the intersection of the northbound off-ramp and the intersection of Canwood Street on Palo Comado Canyon Road is zero feet. Index 504.3(3) of the Highway Design Manual requires that for new construction or major reconstruction of interchanges, the preferred minimum distance between the ramp intersection and local road intersection should be 500 feet.

Superelevation Transition Rate

A nonstandard superelevation transition rate of 6% per 100' is proposed for a horizontal curve of 850 feet radius on the proposed northbound on-ramp. Index 202.5(1) of the

Highway Design Manual requires that a superelevation transition should be designed in accordance with the diagram and tabular data shon in Figure 202.5A to satisfy the requirements of safety, comfort and pleasing appearance. Based on Table 202.5A, the standard superelevation transition rate is 1% per 2,500 feet.

6.3.2 Nonstandard Design Features for Alternative 3 and 3A

The proposed nonstandard design features for Alternative 3 and 3A are identified as follows. The location of the design exceptions are also shown in the layout sheet provided in Attachment B.

Mandatory Design Features

Vertical Clearances (not applicable to Alternative 3A)

A nonstandard minimum vertical clearance of 15 feet exists at the right edge of the traveled way on the northbound lane of US 101 under the overcrossing. The existing minimum vertical clearance would be maintained. The vertical clearance under the widened portion would be 15.0 feet, and it would not deteriorate the existing minimum vertical clearance. Index 309.2(1) (a) of the Highway Design Manual requires that 16 feet 6 inches shall be the minimum vertical clearance over the roadbed of the State facility.

Location and Design of Ramp Intersection on the Crossroads

A nonstandard distance of 226 feet (curb return to curb return) is proposed between the northbound off-ramp intersection and the Palo Comado Canyon Road intersection on Canwood Street. The existing nonstandard distance between the intersection of the northbound off-ramp and the intersection of Canwood Street on Palo Comado Canyon Road is zero feet (curb return to curb return). Index 504.3(3) of the Highway Design Manual requires that for new construction or major reconstruction of interchanges, the minimum distance between the ramp intersection and local road intersection shall be 400 feet.

Superelevation Rate

A nonstandard superelevation rate of 3 percent is proposed for a horizontal curve of 215 feet radius on the proposed northbound off-ramp. Index 202.2 of the Highway Design Manual requires that based on an e_{max} selected by the designer for one of the conditions, superelevation rates from Table 202.2 shall be used within the given range of curve radii. Based on Table 202.2, the standard superelevation for ramps with range of radii of 625 feet and under is 12 percent.

A nonstandard superelevation rate of -2 percent is proposed for a horizontal curve of 850 feet radius on the proposed northbound on-ramp. Index 202.2 of the Highway Design Manual requires that based on an e_{max} selected by the designer for one of the conditions, superelevation rates from Table 202.2 shall be used within the given range of curve radii. Based on Table 202.2, the standard superelevation for ramps with range of radii of 850 to 1,099 feet is 10 percent.

Access Control

A nonstandard access control distance of zero feet exists between the northbound on-ramp and Canwood Street on Palo Comado Canyon Road. A nonstandard access control distance of zero feet is proposed opposite the northbound on-ramp at Palo Comado Canyon Road. Index 504.8 of the Highway Design Manual requires that access control shall extend 50 feet beyond the end of the curb return or ramp radius, or taper.

Advisory Design Features

Location and Design of Ramp Intersection on the Crossroads

A nonstandard distance of 226 feet is provided between the northbound off-ramp intersection and the Palo Comado Canyon Road intersection on Canwood Street. The existing nonstandard distance between the intersection of the northbound off-ramp and the intersection of Canwood Street on Palo Comado Canyon Road is zero feet. Index 504.3(3) of the Highway Design Manual requires that for new construction or major reconstruction of interchanges, the preferred minimum distance between the ramp intersection and local road intersection should be 500 feet.

Access Control

A nonstandard access control distance of zero feet exists between the northbound off-ramp and Canwood Street along Palo Comado Canyon Road. A nonstandard access control distance of zero feet is proposed opposite the northbound on-ramp at Palo Comado Canyon Road. Index 504.8 of the Highway Design Manual requires that for new construction, access control should extend 100 feet beyond the end of the curb return or ramp radius in urban areas and 300 feet in rural areas, or as far as necessary, to ensure that entry onto the facility does not impair operational characteristics.

Isolated Off-Ramp

A nonstandard isolated off-ramp and partial interchange is proposed for the northbound hook off-ramp. Index 502.2 of the Highway Design Manual requires that isolated off-ramps or partial interchanges should be avoided because of the potential for wrong-way movements and added driver confusion.

6.4 Other Geometries Considered for the Project

Several other layout geometries have been considered for the project. A roundabout at the northbound ramp and Palo Comado Canyon Road intersection with Canwood Street as a fifth leg of the roundabout was considered in the PSR phase. Providing a roundabout layout with adequate spacing between the five legs of the roundabout, and a configuration that could reduce the ramp speeds, and provide adequate pedestrian and bicycle access would result in substantial right-of-way impacts to the both gas stations located at the intersection of the northbound ramps and Palo Comado Canyon Road.

7. Common Features for Alternatives

7.1 Right-of-Way Impacts

Right-of-way data sheets and exhibits for the project alternatives are provided in Attachment I. For Alternative 2, the City would need to acquire a partial take from one vacant undeveloped commercial retail zoned parcel in the northeast quadrant to accommodate the construction of vehicular access around the existing gas station and one full take of a vacant undeveloped single family residence zoned parcel in the southwest quadrant of the project to accommodate grading slopes associated with the widening of Palo Comado Canyon Road. Under Alternative 3 and 3A, additional right-of-way will be required from two additional parcels to accommodate the proposed hook off-ramp intersection at Canwood Street. These include a partial take from vacant County of Los Angeles land and a full take of a vacant commercial retail/service zoned parcel due to access restrictions. The latter parcel will be result in excess City right-of-way. Please refer to the exhibits attached to the right-of-way data sheets in Attachment I showing the areas of right-of-way acquisitions. There are no displacements required in any of the alternatives. The estimated total acquisition cost is $619,000 for Alternative 2 and $968,000 for Alternative 3 and 3A.

7.2 Utility Impacts

There are several utilities within the limits of the project including a sewer lines, overhead electrical lines, overhead telephone lines, and Caltrans communications including a fiber optic line along the outside shoulder of the freeway. Research shows no existing longitudinal utilities along Palo Comado Canyon Road. The replacement or widening of the overcrossing has the potential to impact the fiber optic and electrical communication lines located on the outside shoulders of the freeway. The widening and/or reconstruction of Palo Comado Canyon Road and the construction of retaining walls along Palo Comado Canyon Road and the northbound on-ramp may impact the existing overhead electrical, existing overhead telephone, and existing underground sewer lines and manholes. The estimated cost for the potential relocation of these utilities is $583,500. Please refer to the right-of-way utility estimate worksheets in Attachment I for a breakdown of the potential utility relocation costs. The project cost estimates include the potential cost of relocating these utilities. The layout showing the location of the existing utilities can be found in Attachment I.

7.3 Construction Staging

The project would require construction staging to maintain Palo Comado Canyon Road and the freeway ramps open during construction. Widening or replacement of the overcrossing would be performed in stages that would allow at least two lanes of Palo Comado Canyon Road and one lane of the freeway ramps to remain open during construction. More information regarding stage construction for the project is provided in the Transportation Management Plan (TMP) included in Attachment J.

7.4 Transportation Management Plan

A TMP for the project was prepared to minimize delay and inconvenience to the traveling public during construction of the proposed improvements at the Palo Comado Canyon Road interchange. Information regarding stage construction and a preliminary cost estimate for the TMP for the project is provided Attachment J.

7.5 Resource Conservation

Measures would be taken to conserve energy and nonrenewable resources during construction. Materials would be recycled according to Caltrans specifications, and existing pavement would be incorporated back into the project.

8. ENVIRONMENTAL DETERMINATION/DOCUMENTATION

8.1 Environmental Summary

Based on the Preliminary Environmental Analysis Report (PEAR), which is provided in Attachment F, the anticipated environmental document for this project will be a joint Initial Study/Environmental Assessment (IS/EA), with anticipated Mitigated Negative Declaration (MND) under the California Environmental Quality Act (CEQA) and Finding of No Significant Impact (FONSI) under the National Environmental Policy Act (NEPA) as the approval documents. The California Department of Transportation would be the lead agency under CEQA and Caltrans would be the lead agency under the assumption of responsibility pursuant to the 23 U.S.C. 327, NEPA delegation. No significant impacts are associated with the build alternatives that cannot be mitigated to a less than significant level. The environmental issues that could affect the cost and schedule of the project include:

- Air quality analysis and potential abatement
- Noise impact and potential abatement
- Soil investigations and structure surveys for hazardous materials and potential for special handling and disposal of hazardous materials

Table 5 presents potential and anticipated permits required for this proposed project. The project would have to obtain a National Pollutant Discharge Elimination System (NPDES) permit. Based on the reconnaissance survey, no water bodies are located within the immediate project vicinity. The proposed project would not require application to the Regional Water Quality Control Board (RWQCB) under provisions of §401 of the Clean Water Act.

Table 5 – Potential and Anticipated Permits Required for this Project

Regulation and Description	Resource Agency
National Pollutant Discharge Elimination System (NPDES) – Storm Water Pollution Prevention Plan (SWPPP)	California Water Resources Control Board

8.2 Anticipated Project Mitigation

8.2.1 Hazardous Waste

Prior to disposal of drilled soil and groundwater from the piling areas, sampling and analysis of the subject soil and groundwater would be conducted to determine the level of contamination to identify proper handling and disposal methods.

Prior to project construction, sampling and analysis of the liquids in the pole-top transformers would be conducted to determine if polychlorinated biphenyls (PCBs) are present in the pole-top transformer fluid and to determine proper disposal methods if the transformers are to be removed or proper handling methods if the transformers are to be relocated.

Prior to project construction, sampling and analysis of the joint compound in the overcrossing would be conducted to determine whether or not asbestos-containing materials (ACMs) are present in the joint compound and to determine proper disposal methods if ACMs are found.

Prior to project construction, sampling and analysis of the paint striping on the roadways would be conducted to determine whether lead-based paint (LBP) is present in the lane striping paint and to determine proper disposal methods if lead is found.

Prior to project construction, sampling and analysis of surface soils from unpaved areas along the US 101/Palo Comado Canyon Road interchange that are subject to excavation would be conducted to determine the level of total and soluble lead to allow proper excavated soil management, including onsite placement or offsite disposal.

Prior to project construction, sampling and analysis of soils from landscaped areas along the US 101/Palo Comado Canyon Road interchange that are subject to excavation would be conducted to determine the level of pesticides/herbicides contamination to identify a proper handling method.

Two service stations within the project limits have recorded underground storage tanks discharges of gasoline into the soil and groundwater. Prior to the project construction or right-of-way take, sampling and analysis of soil and groundwater within in any of the right-of-way areas being transferred to Caltrans including any acquisitions in the area of the gas stations, should be conducted for petroleum hydrocarbons to determine proper handling and disposal requirements.

8.2.2 Water Quality

Stormwater pollution prevention and treatment Best Management Practices (BMPs) would be incorporated in the project design to ensure that impacts to water quality are minimized.

8.2.3 Air Quality

An Air Quality Analysis would be conducted during the environmental document preparation phase when the detailed engineering design is developed. Air quality impacts during the construction phase could be minimized by implementing South Coast Air Quality Management District (SCAQMD) Rule 403 (PM_{10} Control Measures) and requiring the contractor to follow current standard procedures to reduce/control construction equipment emissions. If potentially significant impacts on air quality are identified during the implementation phase, then mitigation measures to minimize the impacts would be proposed.

A qualitative or quantitative CO local impact will be analyzed, in accordance with the CO Protocol (UC Davis, 1997). Qualitative analysis of MSATs will be conducted. An interagency consultation would be conducted, pursuant to the requirement of 40CFR 93.105 (c)(1)(i), to determine whether particulate matter (PM_{10} and $PM_{2.5}$) hot spot analyses would be required for conformity purposes. If it is determined that such analyses are required, qualitative PM_{10} and $PM_{2.5}$ hot spot analysis will be conducted for the opening year and the horizon year, following the Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas (EPA, March 2006). An interagency consultation will be conducted pursuant to the requirement of 40CFR 93.105 (c)(1)(i), to determine whether particulate matter (PM_{10} and $PM_{2.5}$) hot spot analyses will be required for conformity purposes. If it is determined that such analyses are required, qualitative PM_{10} and $PM_{2.5}$ hot spot analysis will be conducted for the opening year and the horizon year, following the most recent FHWA and EPA guidance for qualitative PM_{10} and $PM_{2.5}$ hot spot analysis. A traffic report will be made available that will provide the information necessary to complete the analysis in accordance with the CO Protocol and mobile source PM and air toxics analyses guidelines.

8.2.4 Noise

A preliminary noise study was conducted. Based on the available information and the preliminary assessment, a soundwall appears to be required for first-row residences located in the northwest quadrant of the Palo Comado Canyon Road/US 101 interchange. A detailed noise study would be conducted to identify the specific length, appropriate heights, and exact location of the barrier, which can only be determined upon reviewing project drawings and plans. The feasibility and reasonability of recommended soundwalls would be determined during the detailed analysis.

8.2.5 Biological Resources

Mitigation for permanent impacts to sensitive biological resources (i.e., oak trees) may be required. Such mitigation may include avoidance (i.e., alignment modification) or tree replacement. The removal of any large trees would be scheduled outside the nesting and fledging season (i.e., after August).

8.2.6 Paleontology

Areas of deep excavation (i.e., deeper than 5 feet below surface grade) would be monitored for any vertebrate fossils. If found, the excavation activities would be temporarily halted to allow samples to be collected and analyzed for paleontological potential. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution.

8.2.7 Invasive Species

Exposed soil areas would be replanted with noninvasive vegetation, and equipment inspection and control would be performed to ensure that they are cleaned of potential noxious weed sources (i.e., mud and vegetation) before and after entering the project area. To the extent applicable, any topsoil removed to a depth of 6 inches during construction should be stockpiled onsite for subsequent use as fill needed directly onsite to avoid the spread of existing invasive plant species at the project site.

8.2.8 Community Impacts

Impacts to the community during project construction could be minimized by keeping area residents and business owners informed of the project schedule, and coordinating closely with utility service providers to ensure that minimum disruption would occur. In addition, the contractor would develop a TMP for implementation during project construction to ensure that traffic impacts are minimized.

9. FUNDING

9.1 Capital Cost

The City is sponsoring the preparation of the PSR and intends to provide 100 percent of the funding for the project approval and environmental document (PA/ED); plans, specifications, and estimate (PS&E); and construction of this project from the City's general fund. Table 6 shows the programmed right-of-way capital and construction capital costs for the project by fiscal year.

Table 6 – Programmed Capital Cost

Fiscal Year	Right of Way Capital	Construction Capital
FY10-11 - STIP	$ -	
FY10-11 - Local	$ -	
FY11-12 - STIP	$ -	
FY11-12 - Local	$ 1,491,500	$ 4,930,000
FY12-13 - STIP	$ -	
FY12-13 - Local	$ -	$ 9,866,000
FY13-14 - STIP	$ -	
FY13-14 - Local	$ -	$ 5,016,000
Total	$ 1,491,500	$ 19,812,000

See "ready to sign" cooperative agreement for the cooperative features.

9.2 Capital Support Estimate

Table 7 – Capital Support Estimate (Caltrans only)

	PROJECT SUPPORT COMPONENTS								
	PA&ED 0 Phase		Design 1 Phase		Right of Way 2 Phase		Construction 3 Phase		Total
	Dist	DES	Dist	DES	Dist	DES	Dist	DES	
Estimated PY's	1.5	0.5	1.5	0.5	0.2	0	1.9	0.8	6.9
Estimated PS $'s ($1000's)	240.0	80	240.0	80.0	32.0	0	304.0	128.0	1104.0
Total $'s ($1000's)	240.0		240.0		32.0		304.0		1104.0

10. SCHEDULE

Table 8 – Project Schedule

HQ Milestones	Delivery Date (Month, Day, Year)
Begin Environmental	03/23/2009
Circulate DED	06/07/2010
PA/ED	12/13/2010
Regular Right-of-Way	04/15/2011
Project PS&E	06/15/2012
Right-of-Way Certification	09/15/2012
Ready to List	09/24/2012
Approve Contract	11/19/2012
Contract Acceptance	10/23/2014
End Project	01/05/2015

11. FHWA COORDINATION

No federal-aid funding is anticipated and no FHWA action is required for this project. US 101 is part of the National Highway System. This project does not propose to use federal funds and based on Chapter 2, Section 7, Figure 2 & 3 of the PDPM, FHWA involvement is not expected.

12. VALUE ANALYSIS

A formal Value Analysis (VA) study is required for all federal-aid highway projects on the NHS with a total estimated cost of $25 million or more. US 101 is part of the NHS and the project is close to $25 million but the project does not propose to use federal funds. Although a formal VA is not required, efforts have been made to provide alternatives that maximize the value and effectiveness of the project.

13. CONTACTS

Principal contacts for the project are as follows:

CITY OF AGOURA HILLS
Ramiro Adeva
Project Manager, City of Agoura Hills
(818) 597-7353

CALTRANS
Elaheh Yadegar
Chief, Office of Project and Special Studies, Caltrans District 7
(213) 897-9635

Mohammed A. Ahmed
Senior Transportation Engineer, Office of Project and Special Studies, Caltrans District 7
(213) 897-5975

Trilly Nguyen
Project Engineer, Office of Project and Special Studies, Caltrans District 7
(213) 897-7825

Ravi B. Ghate
Project Manager, Office of Project Management North, Caltrans District 7
(213) 897-5593

Carlos Montez
Environmental Planning, Caltrans District 7
(213) 897-9116

Linda Tong
R/W Local Programs
(213) 897-2024

Sheik M. Moinuddin
Office of Traffic Investigations, Caltrans District 7
(213) 897-7612

CALTRANS HEADQUARTERS (STRUCTURE)
Richard Hartzell
Division of Structures, Caltrans Headquarters
(916) 227-4113

PARSONS TRANSPORTATION GROUP, INC.
Thomas Sardo
Project Manager, Parsons
(949) 333-4531

Surafael Teshale
Project Manager, Parsons
(949) 333-4540

PROJECT REVIEWS

Field Review _____ Date _____

District Maintenance _____ Date _____

District Safety Review _____ Date _____

Constructability Review _____ Date _____

HQ Design Coordinator _____ Date _____

Project Manager District Safety Review _____ Date _____

LIST OF ATTACHMENTS

ATTACHMENT A PROJECT LOCATION MAP

ATTACHMENT B TYPICAL CROSS SECTIONS & LAYOUTS

ATTACHMENT C ADVANCE PLANNING STUDY (APS)

ATTACHMENT D TRAFFIC DATA

ATTACHMENT E PROJECT COST ESTIMATE SUMMARY

ATTACHMENT G INITIAL SITE ASSESSMENT (ISA) CHECKLIST

ATTACHMENT H INITIAL SITE ASSESSMENT (ISA) *(SEE PROJECT FILE)*

ATTACHMENT I RIGHT-OF-WAY DATA SHEET & EXHIBITS

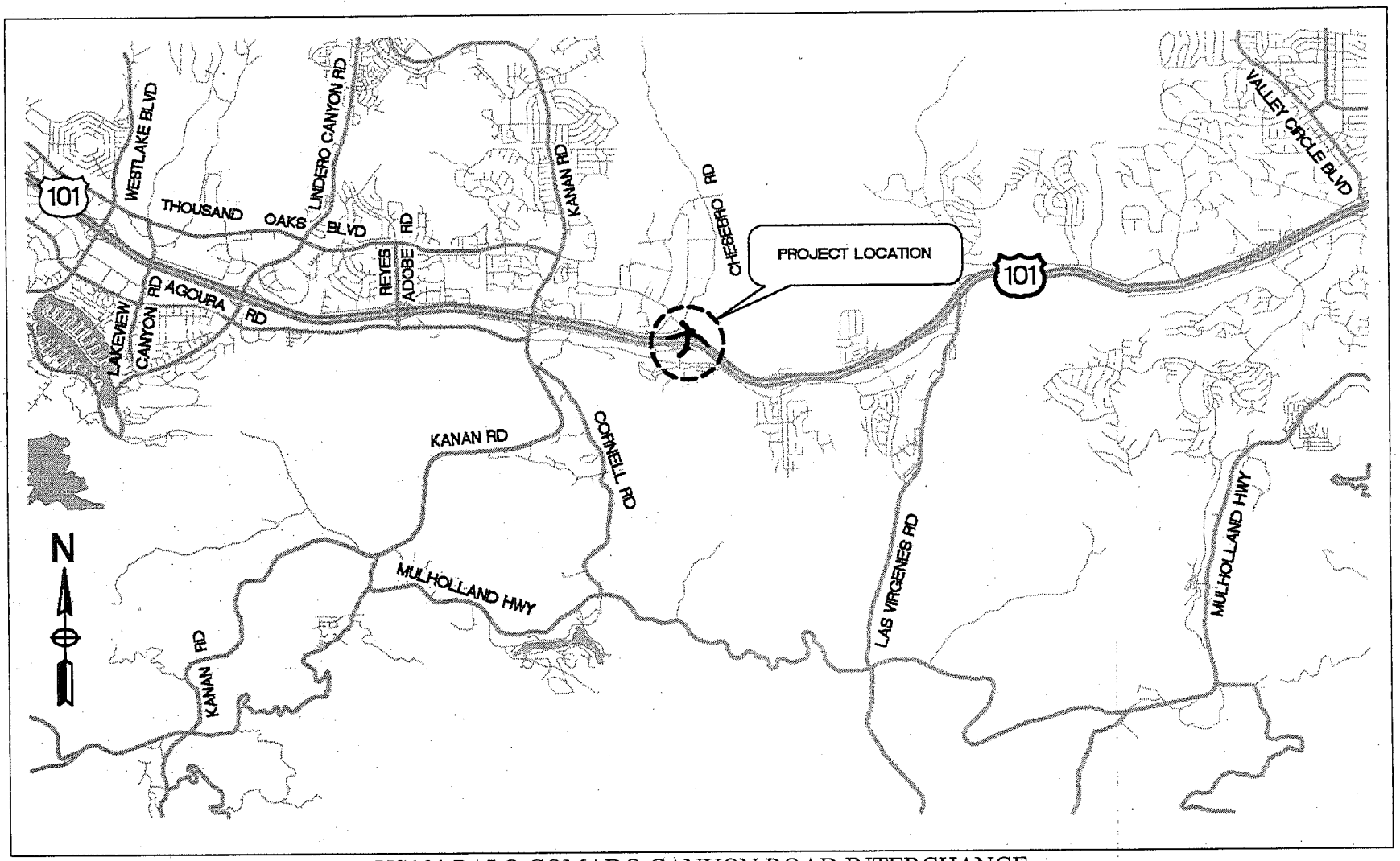
ATTACHMENT J TRANSPORATION MANAGEMENT PLAN (TMP)

ATTACHMENT K PROJECT WORK PLAN AND SCHEDULE

ATTACHMENT L STORM WATER DATA REPORT *(PROJECT FILES)*

ATTACHMENT A

PROJECT LOCATION MAP



US101 PALO COMADO CANYON ROAD INTERCHANGE
LOCATION MAP

ATTACHMENT B

TYPICAL CROSS SECTIONS & LAYOUTS

TYPICAL STRUCTURAL SECTIONS

[1] 0.60' HMA-B
0.60' LCB (RAPID SETTING)
1.15' AB (CLASS 3)

[2] 0.85' JPCP (RAPID STRENGTH CONCRETE)
0.40 LCB (RAPID SETTING)
0.60 AB (CLASS 3)

EXISTING STRUCTURAL SECTIONS

[A] 0.33' AC
0.67' AB (CLASS 2)
1.00' AGGREGATE SUBBASE (CLASS 2)

[B] 0.33' AC
0.33' AB (CLASS 2)
0.67' ROAD MIXED CEMENT TREATED BASE
0.57' AGGREGATE SUBBASE (CLASS 2)

[C] 0.45' TYPE B AC
0.65' AB (CLASS 2)
0.60' AGGREGATE SUBBASE (CLASS 4)

ABBREVIATIONS

JPCP JOINTED PLAIN CONCRETE PAVEMENT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	33.4 / 33.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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.

PARSONS
2201 DUPONT DRIVE, SUITE 200
IRVINE, CALIFORNIA 92612

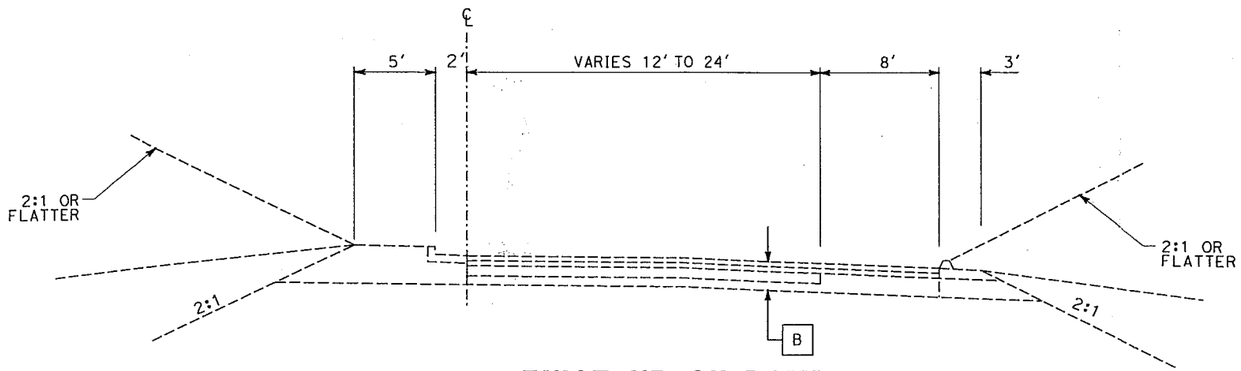
CITY OF AGOURA HILLS
30001 LADYFACE COURT,
AGOURA HILLS, CALIFORNIA 91301

REVISED BY
DATE REVISED

CALCULATED-DESIGNED BY
CHECKED BY

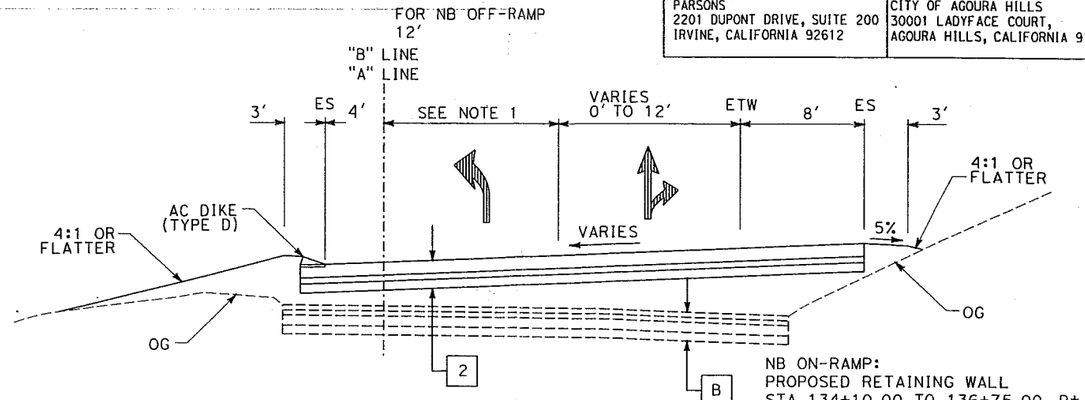
FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans



EXIST NB ON-RAMP
EXIST NB OFF-RAMP

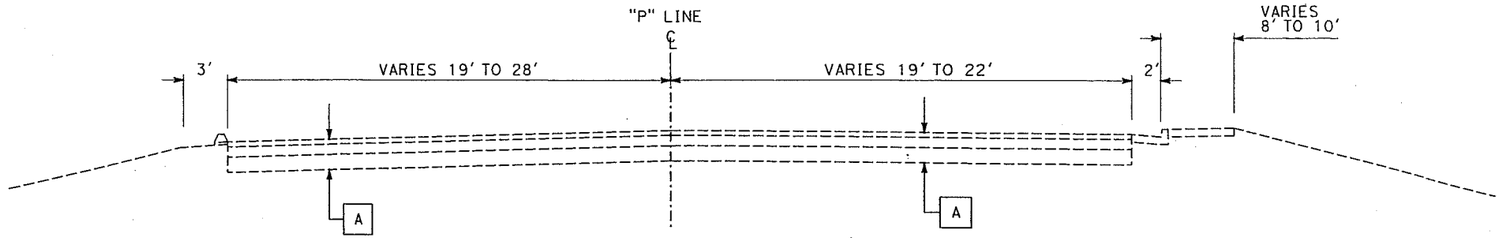
NOTE 1:
FOR NB ON-RAMP
VARIES 21.2' to 12'
FOR NB OFF-RAMP
12'



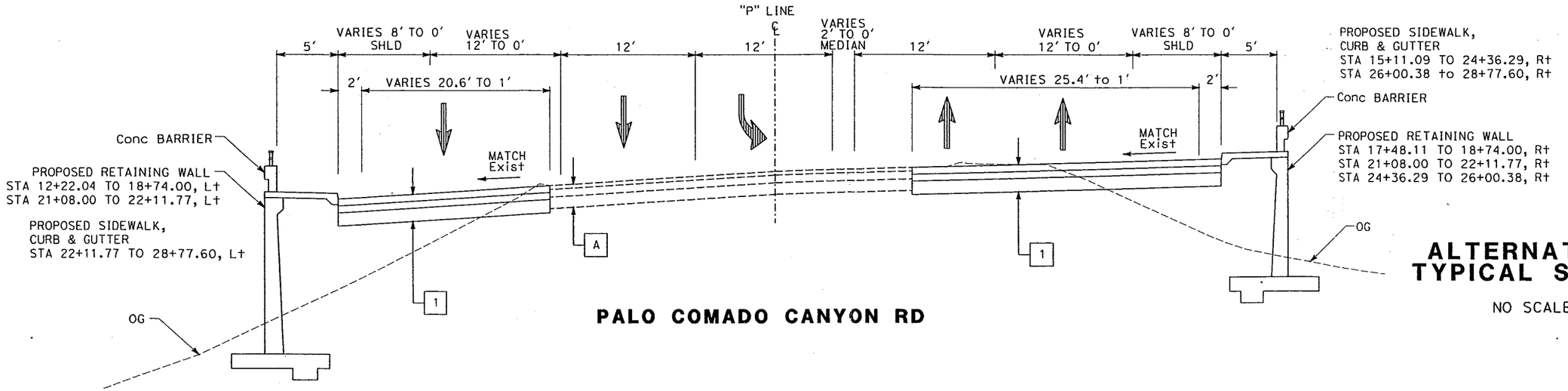
NB ON-RAMP
NB OFF-RAMP

NB ON-RAMP:
PROPOSED RETAINING WALL
STA 134+10.00 TO 136+75.00, R+

PROPOSED (TYPE D) AC DIKE
STA 136+75.00 TO 142+50.00, R+



EXIST PALO COMADO CANYON RD
STA 21+08.00 TO 28+77.60
STA 12+22.04 TO 18+74.00



PALO COMADO CANYON RD

ALTERNATIVE 2
TYPICAL SECTION

NO SCALE

X- 1

RELATIVE PAPER SCALE 0 1 2 3

USERNAME =>0063268

LAST REVISION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	33.4 / 33.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

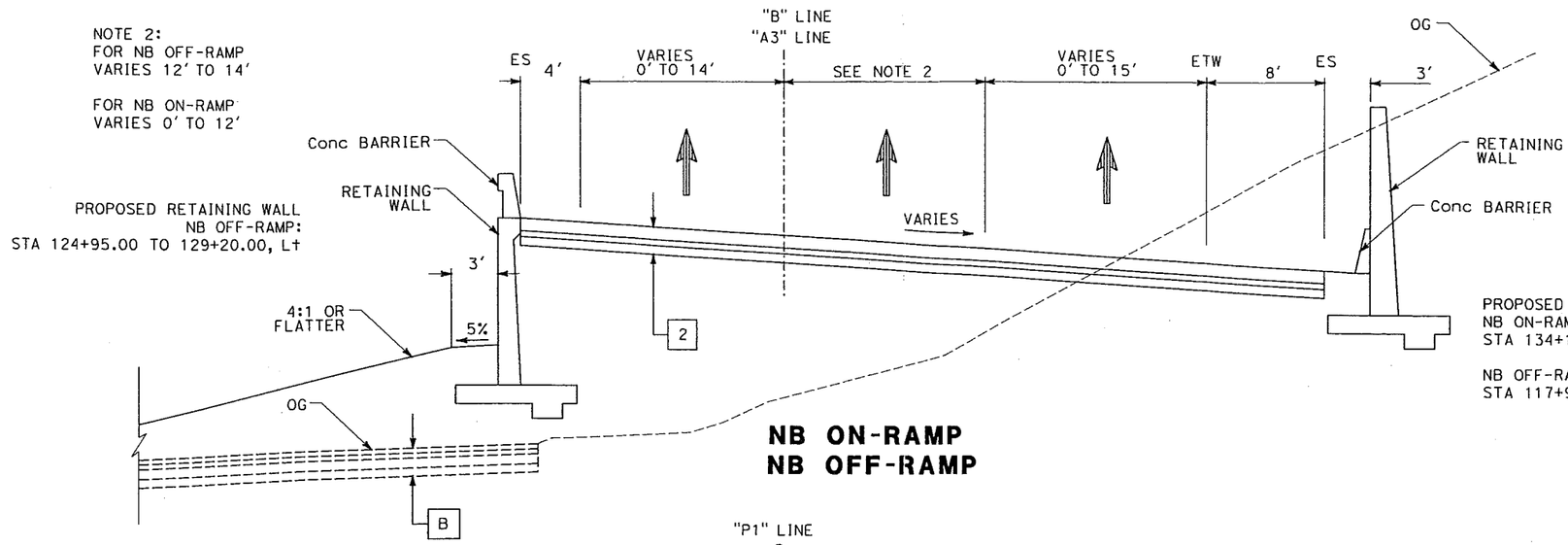
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

PARSONS
2201 DUPONT DRIVE, SUITE 200
IRVINE, CALIFORNIA 92612

CITY OF AGOURA HILLS
30001 LADYFACE COURT,
AGOURA HILLS, CALIFORNIA 91301

NOTE 2:
FOR NB OFF-RAMP
VARIES 12' TO 14'

FOR NB ON-RAMP
VARIES 0' TO 12'

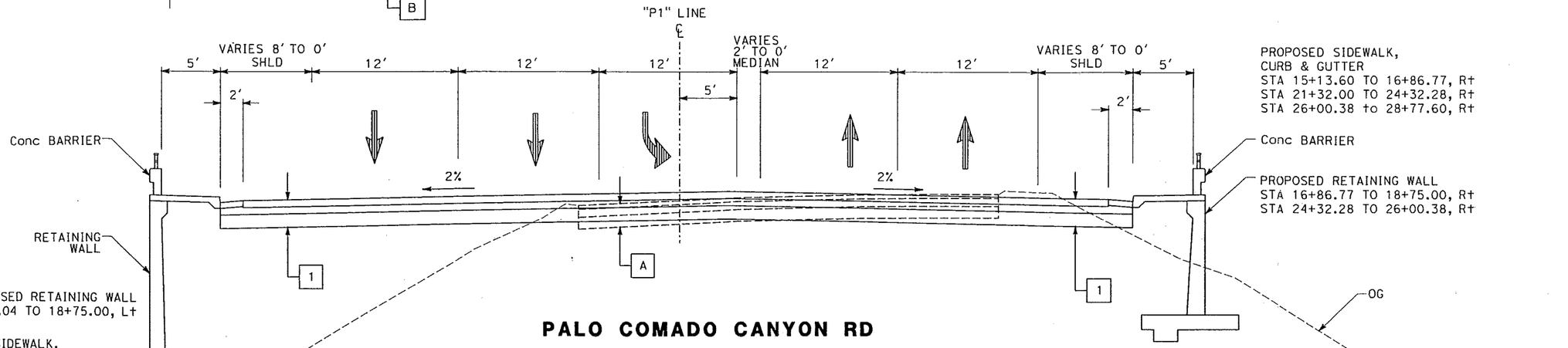


PROPOSED RETAINING WALL
NB OFF-RAMP:
STA 124+95.00 TO 129+20.00, Lt

PROPOSED RETAINING WALL
NB ON-RAMP:
STA 134+10.00 TO 136+75.00, Rt

NB OFF-RAMP:
STA 117+99.99 TO 129+65.50, Rt

NB ON-RAMP
NB OFF-RAMP



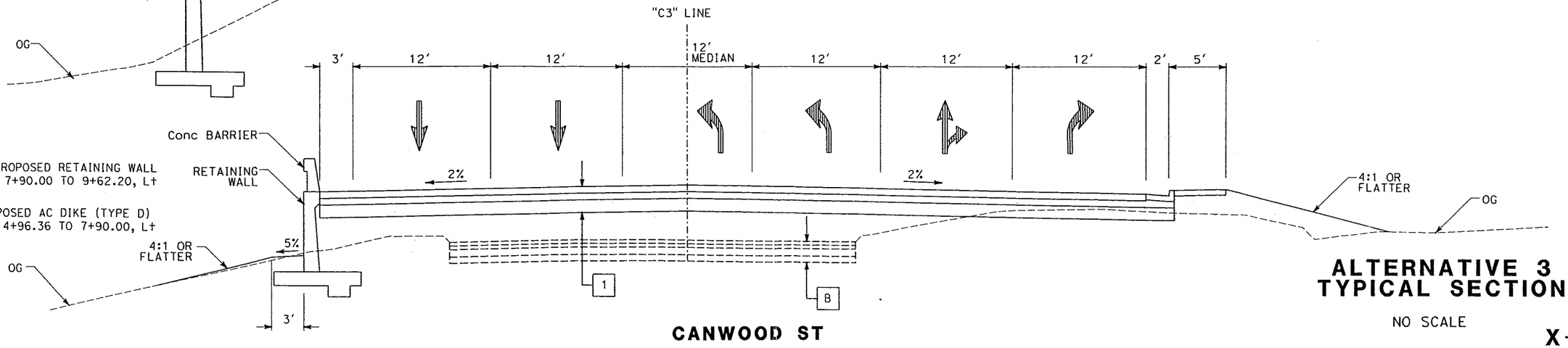
PROPOSED SIDEWALK,
CURB & GUTTER
STA 15+13.60 TO 16+86.77, Rt
STA 21+32.00 TO 24+32.28, Rt
STA 26+00.38 to 28+77.60, Rt

PROPOSED RETAINING WALL
STA 16+86.77 TO 18+75.00, Rt
STA 24+32.28 TO 26+00.38, Rt

PROPOSED RETAINING WALL
STA 12+22.04 TO 18+75.00, Lt

PROPOSED SIDEWALK,
CURB & GUTTER
STA 21+32.00 TO 28+77.60, Lt

PALO COMADO CANYON RD



PROPOSED RETAINING WALL
STA 7+90.00 TO 9+62.20, Lt

PROPOSED AC DIKE (TYPE D)
STA 4+96.36 TO 7+90.00, Lt

CANWOOD ST

ALTERNATIVE 3
TYPICAL SECTION

NO SCALE

X- 2

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIF. - DEPARTMENT OF TRANSPORTATION
Caltrans

RELATIVE PLOTTER SCALE 0 1 2 3 | USERNAME =\p0063268 | LAST REVISION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	33.0/34.4		

REGISTERED CIVIL ENGINEER DATE

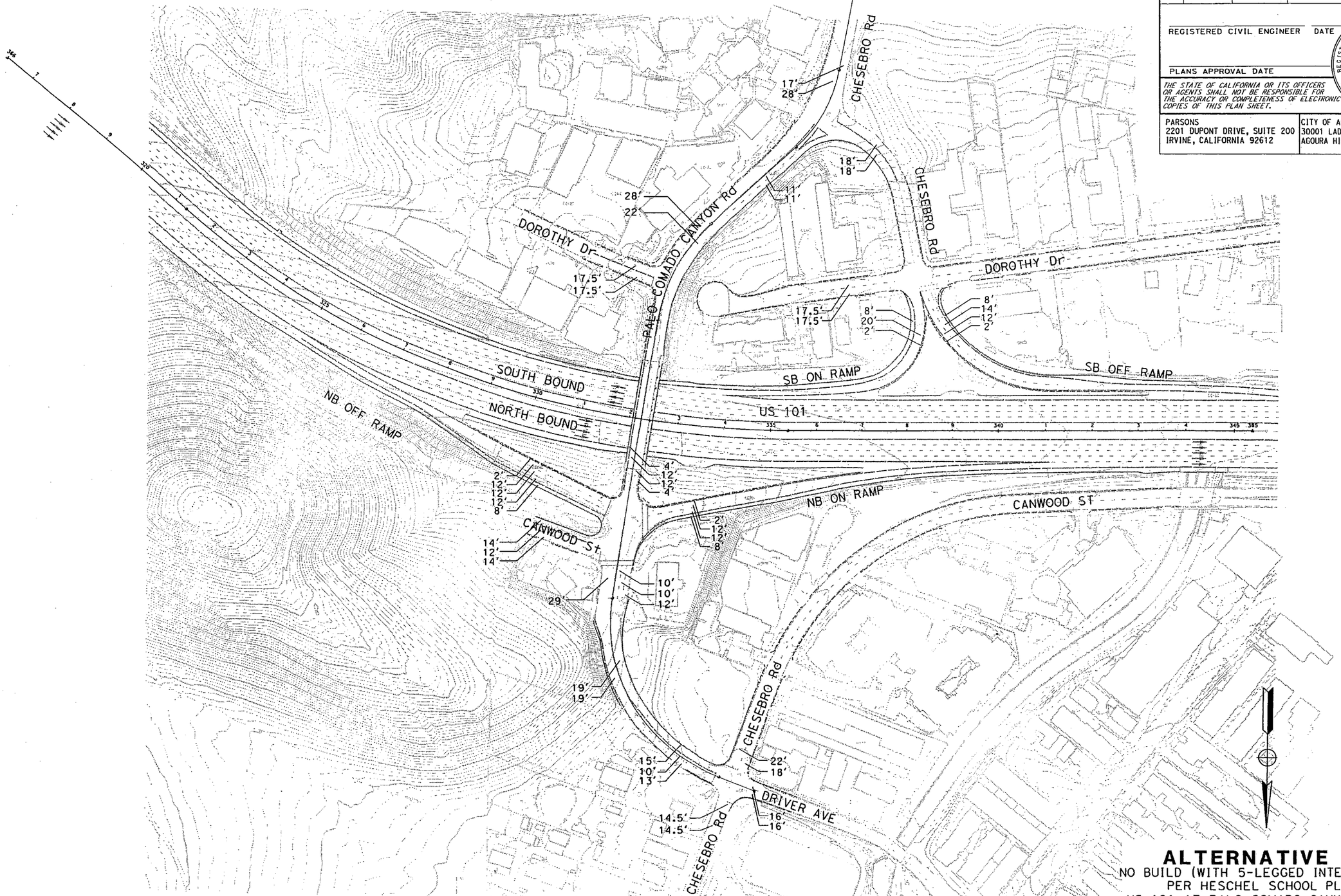
REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

PLANS APPROVAL DATE

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.

PARSONS
2201 DUPONT DRIVE, SUITE 200
IRVINE, CALIFORNIA 92612

CITY OF AGOURA HILLS
30001 LADYFACE COURT,
AGOURA HILLS, CALIFORNIA 91301



ALTERNATIVE 1

NO BUILD (WITH 5-LEGGED INTERSECTION PER HESCHEL SCHOOL PLANS)
US 101 AT PALO COMADO CANYON ROAD
INTERCHANGE PROJECT
SCALE: 1"= 100'

ALL DIMENSIONS ARE IN FEET
UNLESS OTHERWISE SHOWN

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY
CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 2/19/2009
TIME PLOTTED => 8:42:29 AM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => p0032249
DGN FILE => H:\646928_US101_CHESEBRO\REF\Alt-nobuild_1A.dgn

CU 00000

EA 25720K

MANDATORY DESIGN EXCEPTIONS				
#	HDM	DESCRIPTION	STANDARD	PROPSOED
M1	HDM 504.3(3)	LOCATION OF RAMP INTERSECTIONS	400'	212'
M2	HDM 309.2(1)	VERTICAL CLEARANCE	16.5' at ES	15.0' at ES
M3	HDM 202.2	STANDARDS FOR SUPERELEVATION	e=0.10	e=-0.02

ADVISORY DESIGN EXCEPTIONS				
#	HDM	DESCRIPTION	STANDARD	PROPOSED
A1	HDM 202.5	SUPERELEVATION TRANSITION	1% PER 250'	6% PER 100' MAX
A2	HDM 504.3(3)	LOCATION OF RAMP INTERSECTIONS	500'	212'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	33.0/34.4		

REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

PLANS APPROVAL DATE

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.

PARSONS
2201 DUPONT DRIVE, SUITE 200
IRVINE, CALIFORNIA 92612

CITY OF AGOURA HILLS
30001 LADYFACE COURT,
AGOURA HILLS, CALIFORNIA 91301

DOROTHY Dr
CHESEBRO Rd
PALO COMADO CANYON Rd
Exist OH ELECTRIC AND COMMUNICATION LINE PROTECT IN PLACE
FIBER OPTIC LINE PROTECT IN PLACE
SB ON RAMP
SB OFF RAMP
SOUTH BOUND
NORTH BOUND
US 101
NB OFF RAMP
NB ON RAMP
CANWOOD ST
Exist R/W
CONDUIT PROTECT IN PLACE
RAMP METERING CABINETS
21" Swr (42" Conc Csg) PROTECT IN PLACE
18" CMP PROTECT IN PLACE
DRIVER AVE
R 350'
R 150'
R 850'

ALL DIMENSIONS ARE IN FEET
UNLESS OTHERWISE SHOWN

ALTERNATIVE 2

WIDENING

US 101 AT PALO COMADO CANYON ROAD
INTERCHANGE PROJECT
SCALE: 1"= 100'

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY
CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 2/19/2009 | TIME PLOTTED => 8:32:23 AM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => p0032249
DGN FILE => H:\646928_US101_CHESEBRO\REF\Alt-1a-71408.dgn

CU 00000

EA 25720K

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	33.0/34.4		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

PARSONS
2201 DUPONT DRIVE, SUITE 200
IRVINE, CALIFORNIA 92612

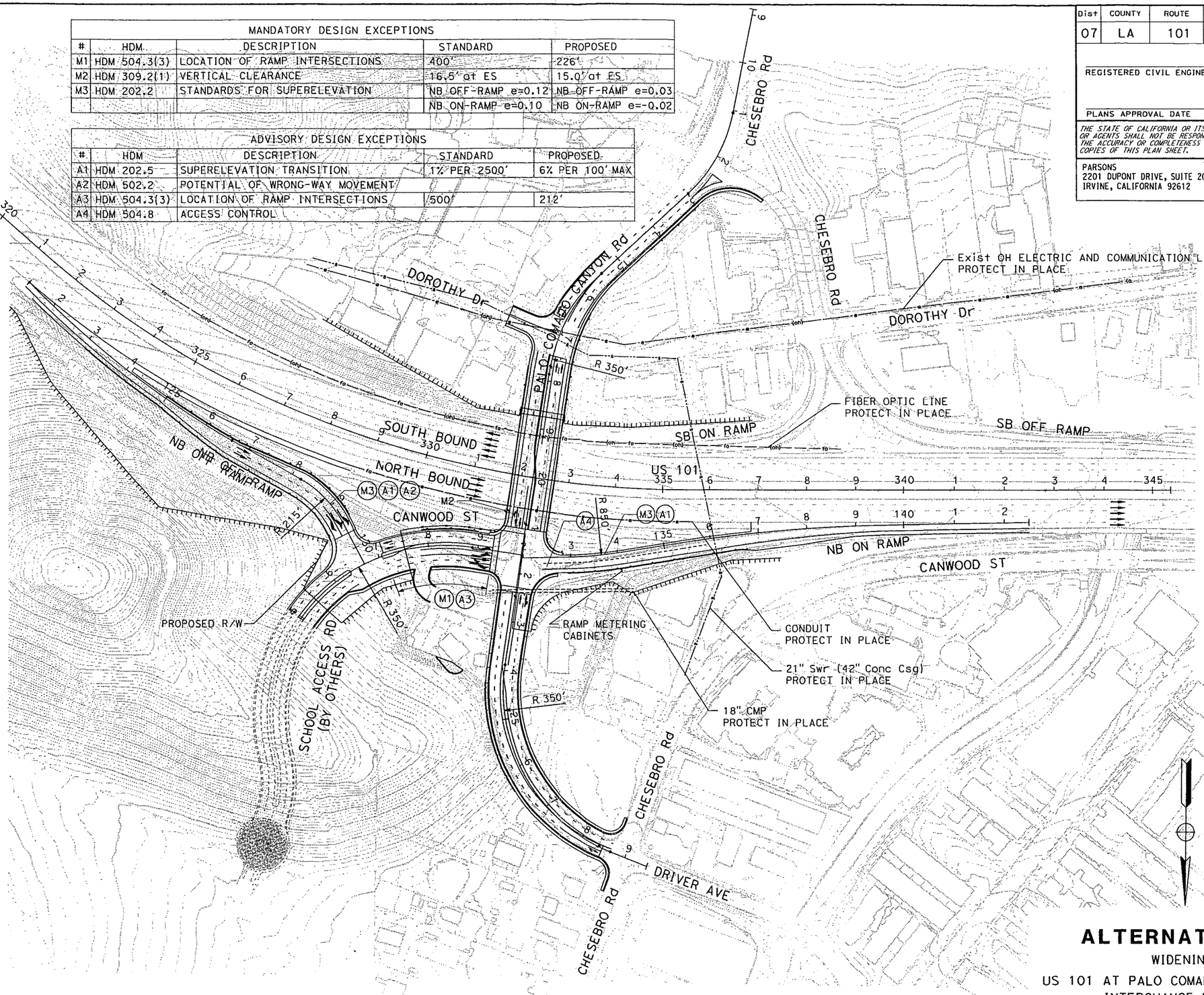
CITY OF AGOURA HILLS
30001 LADYFACE COURT,
AGOURA HILLS, CALIFORNIA 91301

MANDATORY DESIGN EXCEPTIONS

#	HDM	DESCRIPTION	STANDARD	PROPOSED
M1	HDM 504.3(3)	LOCATION OF RAMP INTERSECTIONS	400'	226'
M2	HDM 309.2(1)	VERTICAL CLEARANCE	16.5' at ES	15.0' at ES
M3	HDM 202.2	STANDARDS FOR SUPERELEVATION	NB OFF-RAMP e=0.12	NB OFF-RAMP e=0.03
			NB ON-RAMP e=0.10	NB ON-RAMP e=-0.02

ADVISORY DESIGN EXCEPTIONS

#	HDM	DESCRIPTION	STANDARD	PROPOSED
A1	HDM 202.5	SUPERELEVATION TRANSITION	1% PER 250'	6% PER 100' MAX
A2	HDM 502.2	POTENTIAL OF WRONG-WAY MOVEMENT		
A3	HDM 504.3(3)	LOCATION OF RAMP INTERSECTIONS	500'	212'
A4	HDM 504.8	ACCESS CONTROL		



ALTERNATIVE 3& 3A

WIDENING

US 101 AT PALO COMADO CANYON ROAD
INTERCHANGE PROJECT
SCALE: 1"= 100'

ALL DIMENSIONS ARE IN FEET
UNLESS OTHERWISE SHOWN

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 2/19/2009 | TIME PLOTTED => 8:40:25 AM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => p0032249 | DGN FILE => H:\646928_US101_CHESEBRO\REF\Alt-6.dgn | CU 00000 | EA 25720K

ATTACHMENT C

ADVANCE PLANNING STUDY (APS)

DEPARTMENT OF TRANSPORTATION

Advanced Planning Study Design Memo

PROJECT IDENTIFICATION **City of Agoura Hills – Palo Comado Canyon Road Overcrossing**						DATE November 11, 2008
DIST 7	CO LA	RTE 101	Post Mile 33.69	CU	EA	DESIGN GROUP Parsons – Irvine, Ca
BRIDGE NAME (S)			BR NO(S)	MP	CONSTRUCTION COST - $	Cost per SF $/SF
Palo Comado Canyon Road OC (Widen)			53-1678		$2,943,000	$254
Palo Comado Canyon Road OC (Replace)			53-1678		$4,812,000	$228

CLIENT: City of Agoura Hills
30001 Ladyface Court
Agoura Hills, CA 91301

City Project Engineer:

CONSULTANT : PARSONS
2201 Dupont Drive, Suite 200
Irvine, Ca 92612
(949) 333-4500

Project Manager: Tom Sardo, P.E.
Roadway Manager:
Structures Manager:

Project Overview

Parsons Transportation Group (PTG) is currently preparing the Project Study Report (PSR) for the improvements to the Palo Comado Canyon Road Overcrossing at the U.S. 101 Freeway with the City of Agoura Hills within the County of Los Angeles. This project will include four APS alternatives; Alternative 1 will be "no build"; Alternatives 2 and 3 will include widening to the east and west side of the existing Palo Comado Canyon Road Overcrossing; and Alternative 3A will include an entire bridge replacement. Alternatives 2, 3, and 3A will accommodate both the existing and future traffic conditions and provide for increased safety. Note that for Alternatives 2 and 3, there will be no change in the APS, only in the ramp configuration, which will not affect the layout or type of the bridge widening. In addition to the bridge widening/replacement, the project will also include minor ramp and signal modifications, along with other related changes to each respective alternative.

As-Built Information

Palo Comado Canyon Road Overcrossing is a four-span bridge with precast prestressed "I" girders, having a total length of 234'-0" and depth of 5'-1 ½". The structure provides a 12'-0" travel way and 4'-0" shoulder in each direction, as well as a 5'-0" sidewalk located on the west side of the bridge. The original structure was built in 1963, and was repaired with one new concrete "I" girder on span 3 in 2006. All foundations are supported on 45-ton Cast in Drilled Hole (CIDH) piles.

Alternatives 2 and 3 (Bridge Widening)

Structure Type

The new Palo Comado Canyon Road Overcrossing will provide two 12'-0" travel lanes, one 8'-0" shoulder and 5'-0" sidewalk in each direction with a 14'-0" center median. The widened structure will match in kind with precast prestressed "I" girders on diaphragm abutments. Intermediate supports will consist of multi-column bents. All foundations will consist of pile caps on CIDH piles as recommended in the Preliminary Foundation Report prepared by Group Delta Consultants. Concrete Barrier Type 26 will be provided with a chain link fence placed on top to act as safety barriers for pedestrians on Palo Comado Canyon Road. A 30-ft structure approach slab will be used on the approaches and rock cobble slope paving will be utilized in front of each abutment to match the adjacent bridge aesthetics scheme.

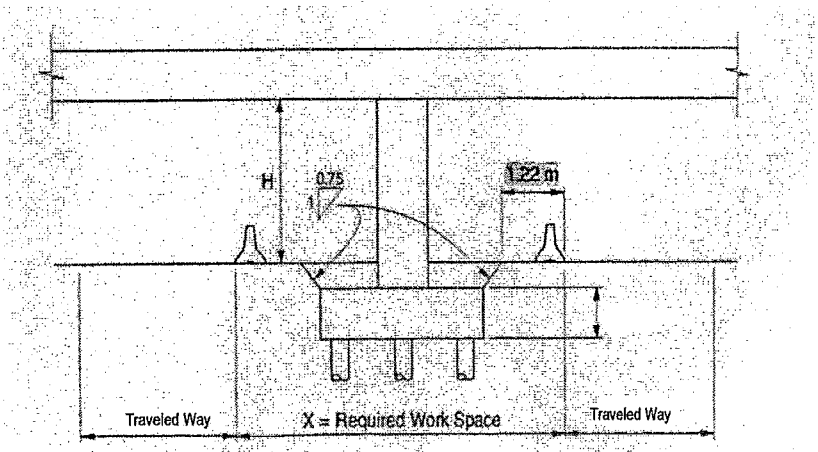
The structure type shown is proposed to match in kind with the existing, limit structure depth and maintain a minimum vertical clearance no less than the existing. Other viable alternatives may be researched further during the Type Selection process.

Minimum Vertical Clearance

The minimum vertical clearance is 15'-0" located in the northeast corner of the structure over the northbound US-101 lane at the edge of traveled way. The proposed widening is designed to maintain at least a minimum existing clearance of 15'-0" to not worsen the existing condition. In order to do this, the proposed widening needs to be shallower than the existing superstructure. By utilizing higher strength concrete, closer girder spacing, and modifying the prestressing cable paths for the precast girder will enable the use of a shallower girder depth.

Construction Clearance and Traffic Control for Widening Alternatives

For construction at or around the bents, the construction of the footing and column in the median will require a minimum working space of 18'-0" feet between the traffic faces of the temporary railing, as shown below. Construction of falsework bents will not be required due to the use of precast, prestressed concrete I-beam girders. The existing median is 36'-0", which is wide enough to conduct the operation safely without any hindrance to the traveled way.



Footing and Column Construction

When erecting girders over traveled ways, a temporary freeway closure will be required during the erection process.

Additional Comments for Widening Alternatives

As previously discussed, the existing Palo Comado Canyon Road Overcrossing has a non-standard minimum vertical clearance over US-101. A cast-in-place, prestressed concrete box girder bridge would not be feasible to widen the existing bridge because of vertical clearance restrictions and the limited space required for falsework to construct the widening. The proposed precast, prestressed I-girder Bridge is the most desirable option and will eliminate the need for falsework.

The existing bridge has been seismically retrofitted with hinge restrainers in 1986. In 1991, the bridge was screened out of Caltrans' seismic retrofit program. The seismic retrofit was analyzed for a peak rock acceleration of 0.4g according to Caltrans 1996 Hazard Map. However, the map has been revised and now reflects a PRA of 0.5g. Recently, the subject bridge was flagged for re-analysis to determine if it should be placed back into the seismic retrofit program for a more in-depth seismic analysis. Under a future design contract, the design engineer may wish to consider a small contingency for a seismic analysis and retrofit. A qualitative seismic review has been performed. The widening will increase the overall seismic mass of the existing superstructure. The addition of hinge restrainers (existing) will prevent potential unseating of spans upon the relatively short seat supports. The existing bridge has relatively short spans founded upon multi-column bents, providing a degree of redundancy. Further, the bridge is not skewed at the supports. Therefore the bridge does not appear to require any additional seismic retrofit as a result of the widening. However, due to the increase in PRA and that Caltrans has placed the bridge back into the seismic screening program, it is recommended that further seismic analysis is warranted. The advanced planning study reflects this potential cost.

The aesthetics for the proposed widening will match that of the other bridges in the immediate area and to the City's requirements. The bent cap for the proposed widening will maintain a cantilevered portion adjacent to the existing bent cap for an appearance of one continuous structure.

Alternative 3A (Bridge Replacement)

Structure Type

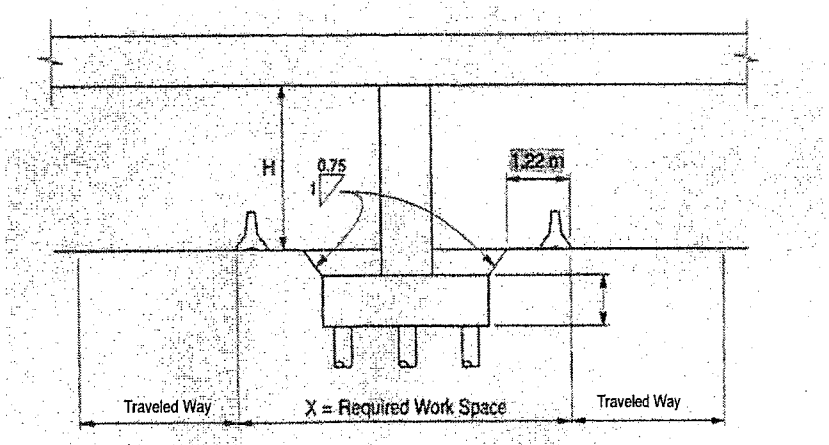
The new Palo Comado Canyon Road Overcrossing will provide four 12'-0" travel lanes, two 8'-0" shoulders, two 5'-0" sidewalks and a center median. The new structure will be in the same location as the existing, comprised of the same span lengths (36'-0", 90'-0", 78'-0" and 30'-0") and total length (234'-0"). The superstructure will consist of precast prestressed "I" girders on seat type abutments. Intermediate supports will consist of multi-column bents. All foundations will consist of pile caps on CIDH piles as recommended in the Preliminary Foundation Report prepared by Group Delta Consultants. Concrete Barrier Type 26 will be provided with a chain link fence placed on top to act as safety barriers for pedestrians on Palo Comado Canyon Road. A 30-ft structure approach slab will be used on the approaches and rock cobble slope paving will be utilized in front of each abutment to match the adjacent bridge aesthetics scheme.

Minimum Vertical Clearance

The proposed minimum vertical clearance will be approximately 16'-6" in the northeast corner of the structure over the northbound US-101 lane at the edge of traveled way. This meets the Caltrans criteria provided in Caltrans Bridge Design Aids 10-4.

Construction Clearance and Traffic Control for Replacement Alternative

For construction at or around the bents, the construction of the footing and column in the median will require a minimum working space of 22'-0" feet between the traffic faces of the temporary railing, as shown below. The existing median is 36'-0", which is wide enough to conduct the operation safely without any hindrance to the traveled way.

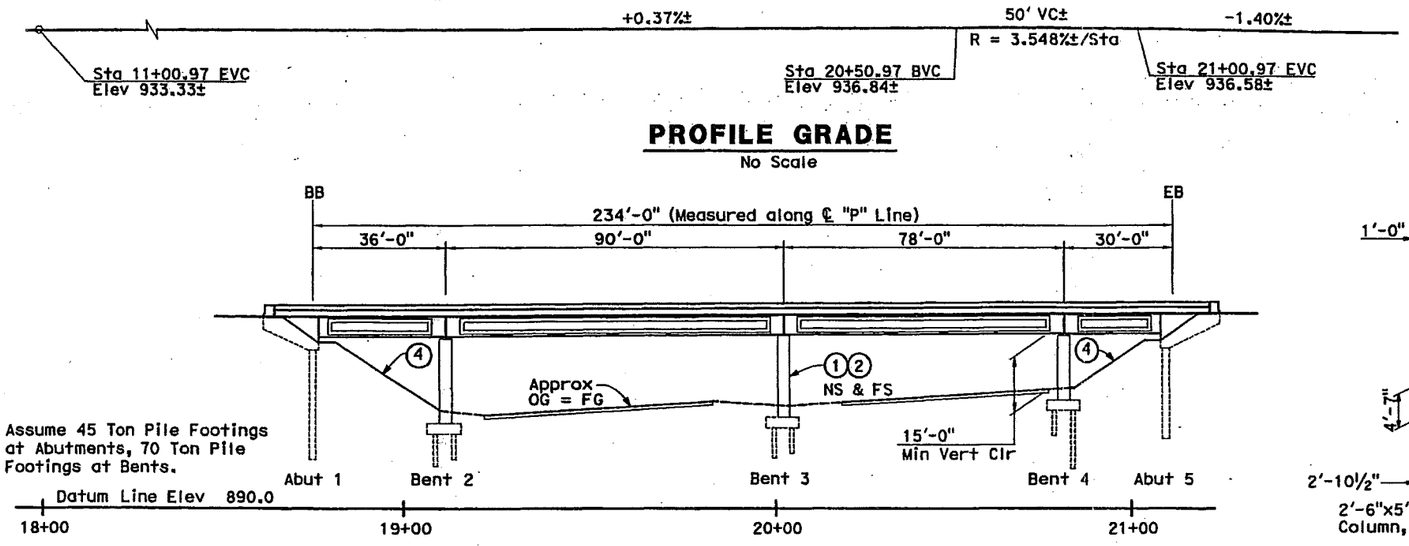


Footing and Column Construction

When erecting girders over traveled ways, a temporary freeway closure will be required during the erection process.

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
07	LA	101	33.69

PARSONS 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



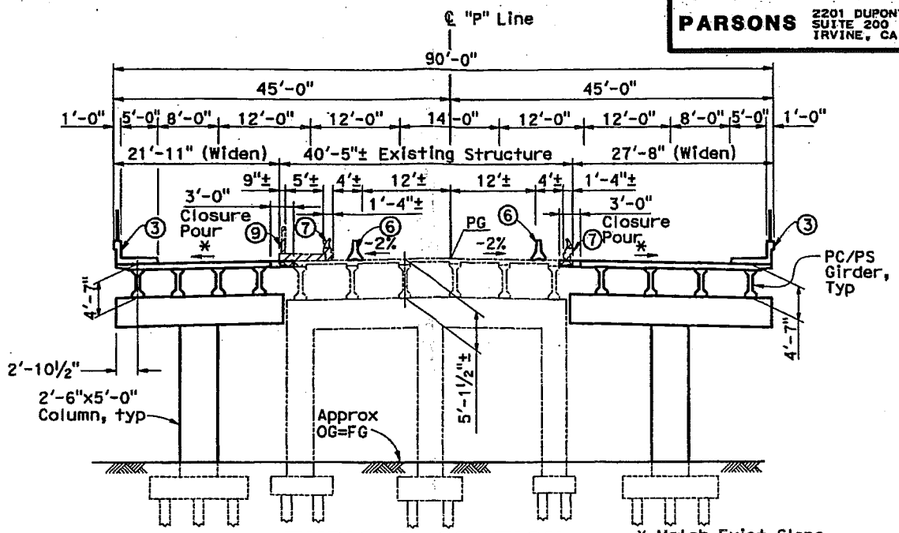
PROFILE GRADE

No Scale

ELEVATION

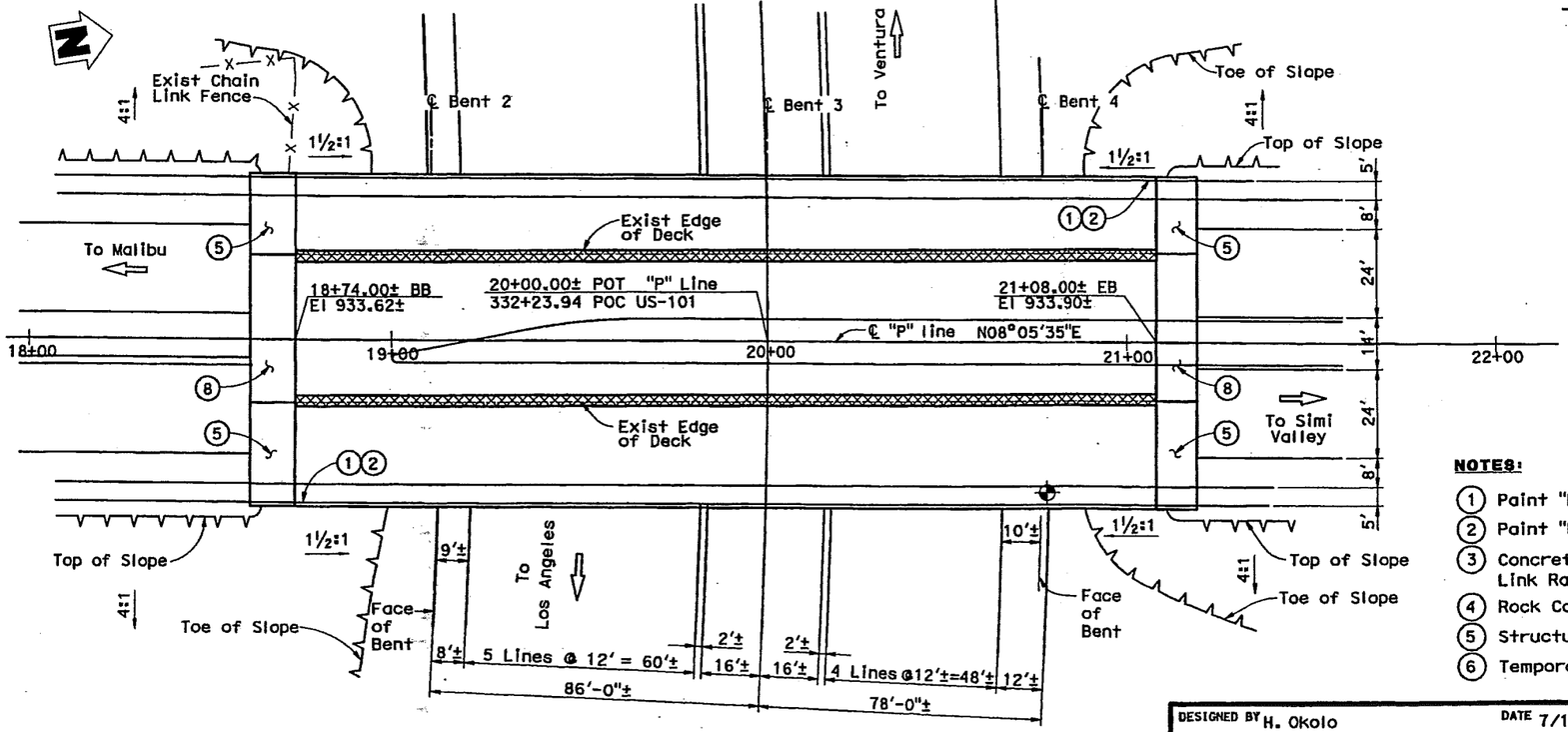
1" = 20'

Note: Traffic will pass through during construction
(No falsework is required for erection of PC/PS Girder)



TYPICAL SECTION

1" = 10'



PLAN

1" = 20'

DATE OF ESTIMATE	= 7/14/08
BRIDGE REMOVAL	= 2,646 SF
STRUCTURE DEPTH	= 4'- 7"
LENGTH	= 234'-0"
WIDTH	= 53'-5"
AREA	= 11,602 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $254
TOTAL COST	= $2,943,000

LEGEND:

- Point of Minimum Vertical clearance
- Indicates Removal Structure
- Indicates Closure Pour

NOTES:

1. Paint "Br No. 53-1678"
2. Paint "Palo Comado Canyon Road OC"
3. Concrete Barrier Type 26 (Mod) w/Chain Link Railing Type 7
4. Rock Cobble Slope Paving
5. Structure Approach Slab Type N(30S)
6. Temporary Railing Type K
7. Remove and Salvage Existing Type 1 Barrier Railing
8. Structure Approach Type R(30D)
9. Existing Pipe Railing

X
DESIGN OVERSIGHT

X
SIGN OFF DATE

DESIGNED BY H. Okolo	DATE 7/14	X PROJECT ENGINEER	PLANNING STUDY ALTERNATIVE 2 & 3
DRAWN BY E. Abapo	DATE 7/14		PALO COMADO CANYON RD OC (WIDEN)
CHECKED BY T. Sardo	DATE 7/14		BRIDGE NO. 53-1678 CU X
APPROVED	DATE		SCALE: As Noted EA X

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => H:\646928_US101_CHESEBRO\SHT\STRUCTURES\Chesebro-Bridge.dgn

USERNAME => p0035324 DATE PLOTTED => 2/4/2009 TIME PLOTTED => 4:01:35 PM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

BRIDGE GENERAL PLAN ESTIMATE

☐ OR PLANNING ESTIMATE ☒

DS-D-0016 (REV. 5/93)

STRUCTURE	BR. NO.		RCVD. BY		ESTIMATING GROUP	
Chesebro Road Overcrossing (Replace Existing)	53-1678				IN	
TYPE : Precast Prestressed Concrete Girder	DIST. 07	CO LA	RTE. 101	P.M. 33.69	OUT	

LENGTH 234 x WIDTH 90 = AREA 21,060 SQFT

DESIGN SECTION Parsons Transportation Group — QUANTITIES BY H. Okolo — DATE 8/4/08 — ESTIMATE NO. 1

PROJECT INCLUDES 1 STRUCTURE(S) — QUANTITIES CHECKD. BY _____ — DATE _____ — PRICED BY _____

AND _____ ROADWORK — CHARGE UNIT AND EA _____ — COST INDEX 2007

	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	TEMPORARY RAILING (TYPE K)	LF	588	$20.00	$11,760
2	BRIDGE REMOVAL	LS	1	$190,000.00	$190,000
3	STRUCTURE EXCAVATION (BRIDGE)	CY	787	$75.00	$59,025
4	STRUCTURE BACKFILL (BRIDGE)	CY	387	$75.00	$29,025
5	16 INCH CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	4,440	$125.00	$555,000
6	PRESTRESSING PRECAST GIRDER	LS	1	$20,000.00	$20,000
7	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	172	$500.00	$86,000
8	STRUCTURAL CONCRETE, BRIDGE	CY	1,320	$750.00	$990,000
9	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	CY	200	$650.00	$130,000
10	FURNISH PRECAST PRESTRESSED CONCRETE GIRDER (5-10M)	EA	28	$6,000.00	$168,000
11	FURNISH PRECAST PRESTRESSED CONCRETE GIRDER (25-30M)	EA	28	$15,000.00	$420,000
12	ERECT PRECAST PRESTRESSED CONCRETE GIRDER	EA	56	$2,500.00	$140,000
13	JOINT SEAL (MR = 2")	LF	180	$75.00	$13,500
14	BAR REINFORCING STEEL (BRIDGE)	LB	290,680	$1.50	$436,020
15	SLOPE PAVING (CONCRETE)	CY	117	$600.00	$70,200
16	CHAIN LINK RAILING (TYPE 7)	LF	588	$100.00	$58,800
17	CONCRETE BARRIER (TYPE 26)	LF	588	$170.00	$99,960
18	REMOVE AND SALVAGE EXISTING TYPE 1 BARRIER RAILING	LF	588	$20.00	$11,760
19	REMOVE AND SALVAGE EXISTING PIPE RAILING	LF	294	$35.00	$10,290

SUBTOTAL		$3,499,340
MOBILIZATION %	10%	$349,934
SUBTOTAL BRIDGE ITEMS		$3,849,274
CONTINGENCIES %	25%	$962,319
BRIDGE TOTAL COST		$4,811,593
COST PER SQ. FT.		$228
		$0
		$0
		$0
GRAND TOTAL		$4,812,000
FOR BUDGET PURPOSES - SAY		

ROUTING

1. DESIGN SECTION _____
2. DESIGN A SUPERVISOR
3. DESIGN B SUPERVISOR
4. PLANNING

COMMENTS _____

ESTIMATION - LAST

DS 93 0043

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

BRIDGE GENERAL PLAN ESTIMATE

☐ OR PLANNING ESTIMATE ☒

DS-D-0016 (REV. 5/93)

STRUCTURE	BR. NO.		RCVD. BY		ESTIMATING GROUP	
Chesebro Road Overcrossing (Widen)	53-1678				IN	
TYPE : Precast Prestressed Concrete Girder	DIST. 07	CO LA	RTE. 101	P.M. 33.69	OUT	

LENGTH 234 x WIDTH 49.58 = AREA 11,602 SQFT

DESIGN SECTION Parsons Transportation Group — QUANTITIES BY H. Okolo — DATE 8/4/08 — ESTIMATE NO. 1

PROJECT INCLUDES 1 STRUCTURE(S) — QUANTITIES CHECKD. BY _____ — DATE _____ — PRICED BY _____

AND _____ ROADWORK — CHARGE UNIT AND EA _____ — COST INDEX 2007

	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	BRIDGE REMOVAL (PORTION)	CY	145	$100.00	$14,500
2	STRUCTURE EXCAVATION (BRIDGE)	CY	267	$92.00	$24,564
3	STRUCTURE BACKFILL (BRIDGE)	CY	140	$100.00	$14,000
4	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	52	$765.00	$39,780
5	STRUCTURAL CONCRETE, BRIDGE	CY	776	$916.00	$710,816
6	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	CY	125	$725.00	$90,625
7	FURNISH PRECAST PRESTRESSED CONCRETE GIRDER	EA	28	$15,000.00	$420,000
8	ERECT PRECAST PRESTRESSED CONCRETE GIRDER	EA	28	$3,000.00	$84,000
9	JOINT SEAL (MR = 2")	LF	112	$75.00	$8,400
10	BAR REINFORCING STEEL (BRIDGE)	LB	171,155	$1.80	$308,079
11	SLOPE PAVING (CONCRETE)	CY	117	$690.00	$80,730
12	CHAIN LINK RAILING (TYPE 7)	LF	588	$85.00	$49,980
13	CONCRETE BARRIER (TYPE 26)	LF	588	$170.00	$99,960
14	SEISMIC RETROFIT	LS	1	$50,000.00	$50,000

ROUTING

1. DESIGN SECTION _____
2. DESIGN A SUPERVISOR
3. DESIGN B SUPERVISOR
4. PLANNING

SUBTOTAL		$1,995,434
MOBILIZATION %	10%	$199,543
SUBTOTAL BRIDGE ITEMS		$2,194,977
CONTINGENCIES %	25%	$548,744
BRIDGE TOTAL COST		$2,743,722
COST PER SQ. FT.		$236
		$0
		$0
		$0
GRAND TOTAL		$2,744,000
FOR BUDGET PURPOSES - SAY		

COMMENTS _____

ESTIMATION - LAST

DS 93 0043

Consultant Prepared Advance Planning Study (APS) Checklist

Date:	Consultant Firm (for structures):		Phone No:
Sept 11, 2008	**PARSONS** **2201 Dupont Ave., Ste. 200** **Irvine, CA 92612**		949-333-4500
Designed by: Heather Okolo			Phone No: 949-333-4521
EA:	County: Los Angeles	Rte: 101	PM 33.69
Project Description: Improvements and widening of the Palo Comado Canyon Road Overcrossing over U.S. Route 101			
Bridge No(s): 53-1678	Bridge Name(s): Palo Comado Canyon Road Overcrossing		
Total number of bridges in project: 1		APS Alternative Letter or Number (if more than one): N/A	
Purpose of this APS:	Initial APS Cost & Feasibility ☒	Revised scope ☐	Update cost ☐

Part A Items to collect and considerations prior to beginning the APS

All items listed in Part A are to be made available and submitted if requested by the Liaison Engineer. (Mark **N/A** if not applicable)

N/A Preliminary profile grade of proposed structure.

☒ Typical section of the proposed structure. (Including barrier type, sidewalks, cross slope %, etc.)

☒ Grades or spot elevations of roadway below the structure.

☒ Typical section of roadway below the structure. (Including shoulders, gutters, embankment slope.)

N/A Site map: including horizontal alignment of new structure and the roadway below, topo, contours, etc.

☒ Stage construction or detour plan for traffic on the structure.
(number of lanes to remain open, Temp Railing, etc.)

N/A Stage construction or detour plan for the roadway below the structure.
(falsework openings for each stage and any restrictions.)

☒ "As Built" plans for existing structures.

N/A Future widening plans of upper and lower roadway (verify with Route Concept Report).

☒ Site aerial photograph (at the proposed structure).

N/A Environmental and/or permit requirements (areas of potential impact, construction windows, etc.)

☒ Overhead and underground utility plans

☒ Any other information that you feel is necessary to complete the study. (Other concerns that may affect the APS: local agency requirements such as aesthetics, improvements in vicinity of structure, airspace usage, other obstructions, etc.)

Consultant Prepared Advance Planning Study (APS) Checklist

Part B Considerations during the APS design and cost estimate preparation

1.	Has this project been discussed with:	the OSFP Liaison Engineer?	Yes ☒ No ☐
		the Caltrans District Project Manager?	Yes ☒ No ☐
		the roadway consultant?	Yes ☒ No ☐
2.	Have the Caltrans Structures Maintenance records been reviewed?		Yes ☒ No ☐
	If the records recommend any work for the structure, is it included in the APS?		Yes ☒ No ☐
3.	Are there special aesthetic considerations?		Yes ☐ No ☒
4.	(Widenings and Modifications) Has this project been reviewed for seismic retrofit requirements?		Yes ☒ No ☐
	Are seismic retrofit requirements included in the APS?		Yes ☐ No ☒
5.	Any special Railroad requirements?		Yes ☐ No ☒
	Shoofly required?		Yes ☐ No ☒
	Cost of shoofly included as a separate item in the project cost estimate?		Yes ☐ No ☒
6.	Any special foundation requirements, including scour critical work, special excavation such as Type A, Type D, and/or hazardous or contaminated material?		Yes ☐ No ☒
7.	Any special construction requirements, including limited site accessibility or seasonal work?		Yes ☐ No ☒
8.	Other items to be included in the cost such as slope paving, approach slabs, and/or adjacent retaining walls?		Yes ☒ No ☐
9.	Remove existing bridge? Total Deck Area: 2646 Sq Ft		Yes ☒ No ☐
10.	Any other unusual or special requirements?		Yes ☐ No ☒
11.	Provide and attach a consultant prepared Design Memo to summarize and document any important assumptions, discussions, decisions, unusual items, local agency requirements such as aesthetics, improvements in vicinity of the structure, airspace usage, other obstructions, or any items noted above.	Summary attached?	Yes ☒ No ☐

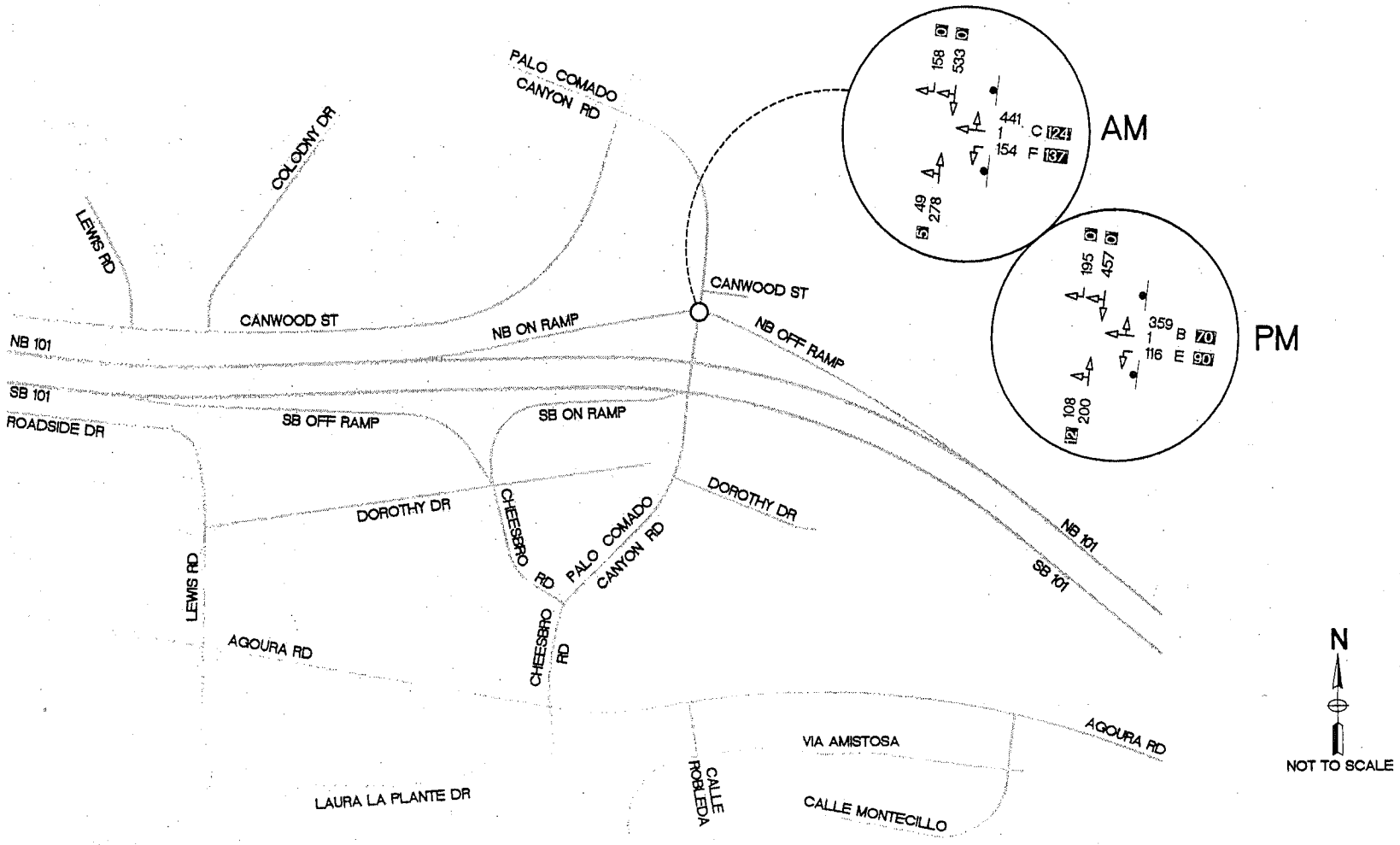
Designer: (Printed Name)	Designer's Signature:	Date:
Heather Okolo		9/11/2008

ATTACHMENT D

TRAFFIC DATA

1. **Intersection Level of Service and Traffic Volume Exhibits**

2. **Traffic Accident Data – US 101/Palo Comado Canyon Road Interchange**

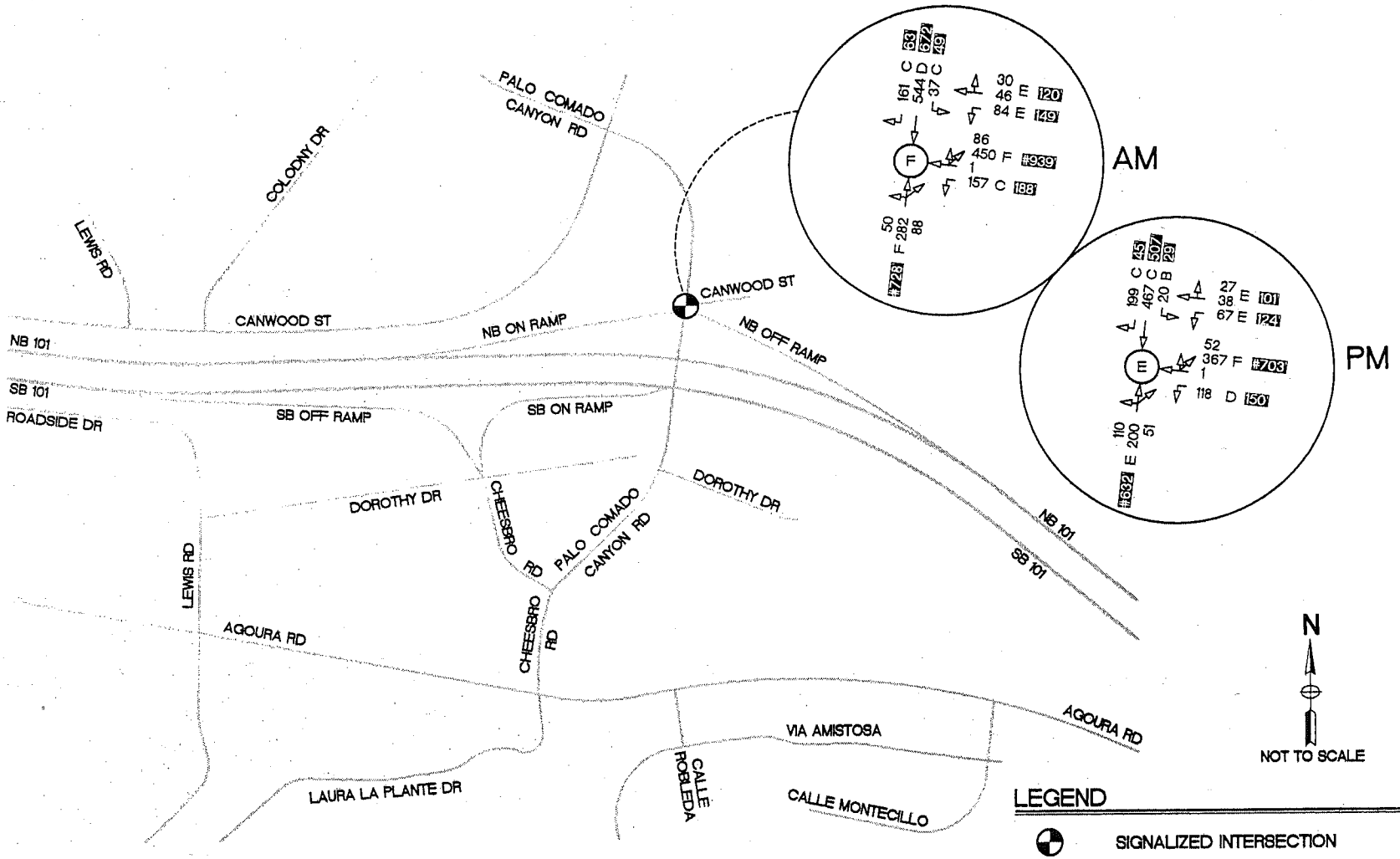


EXISTING 2008 PEAK HOUR TRAFFIC

FIGURE 1

LEGEND

- UNSIGNALIZED INTERSECTION
- EXISTING ROAD
- STOP SIGN
- XX QUEUE LENGTH



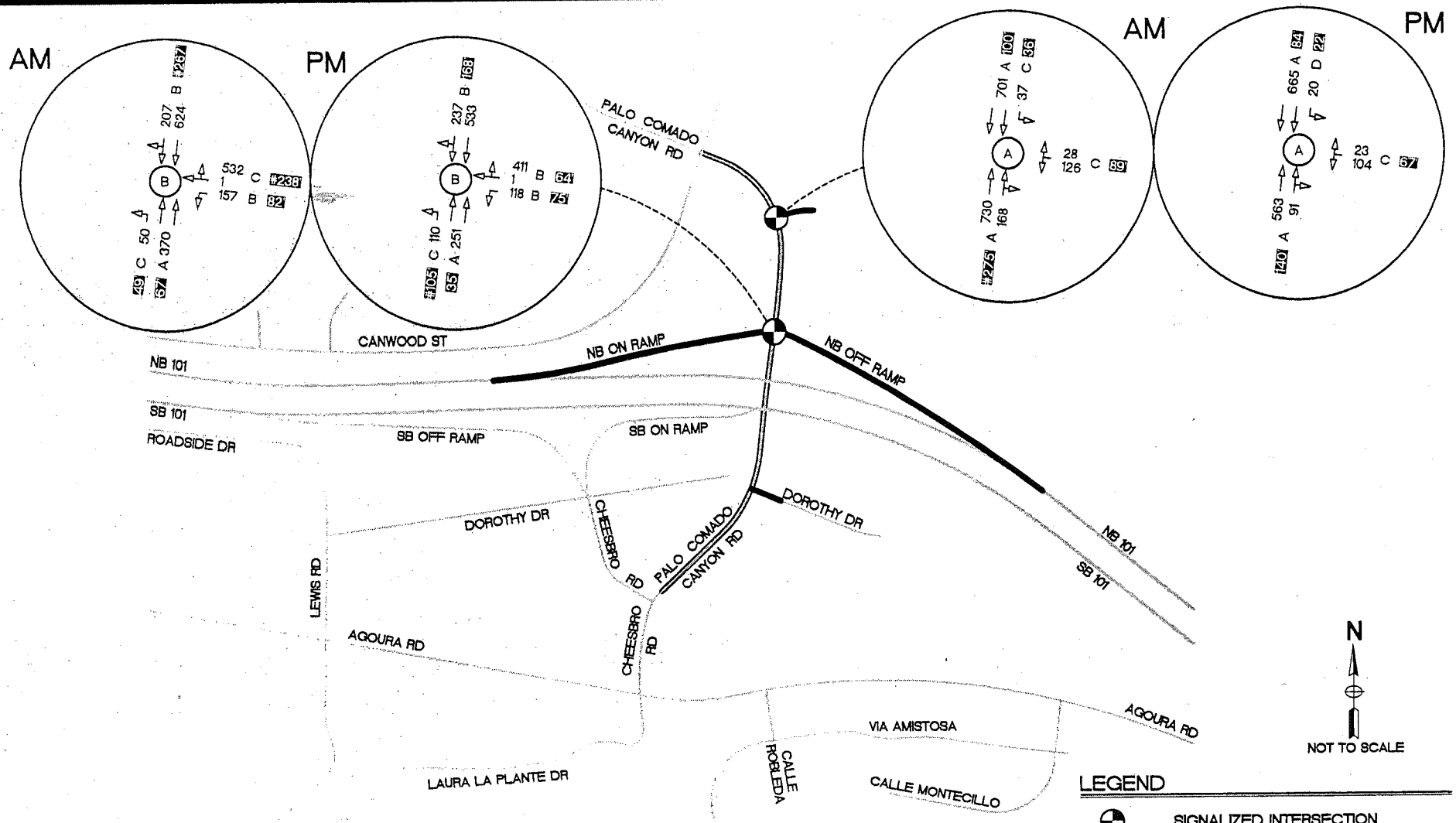
2015 PEAK HOUR ALTERNATIVE 1 NO BUILD

(WITH 5-LEGGED INTERSECTION PER HESCHEL SCHOOL PLANS)

FIGURE 2

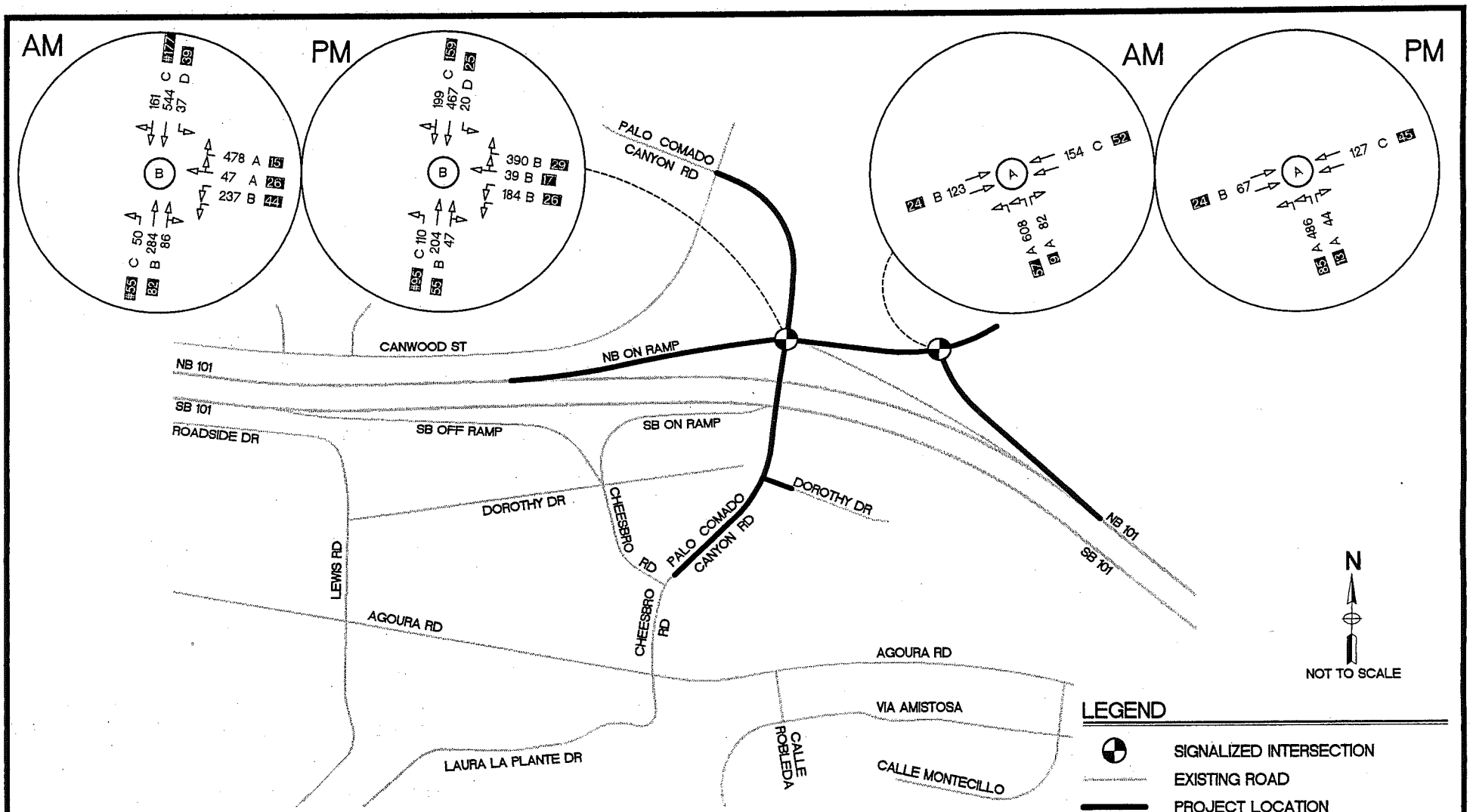
LEGEND

	SIGNALIZED INTERSECTION
	EXISTING ROAD
(A)	OVERALL INTERSECTION LEVEL OF SERVICE
XXX, A	PEAK HOUR VOLUME, MOVEMENT LEVEL OF SERVICE
AM	AM PEAK HOUR VOLUME
PM	PM PEAK HOUR VOLUME
#	95th PERCENTILE VOLUME EXCEEDS CAPACITY. QUEUE MAY BE LONGER
#XX	QUEUE LENGTH



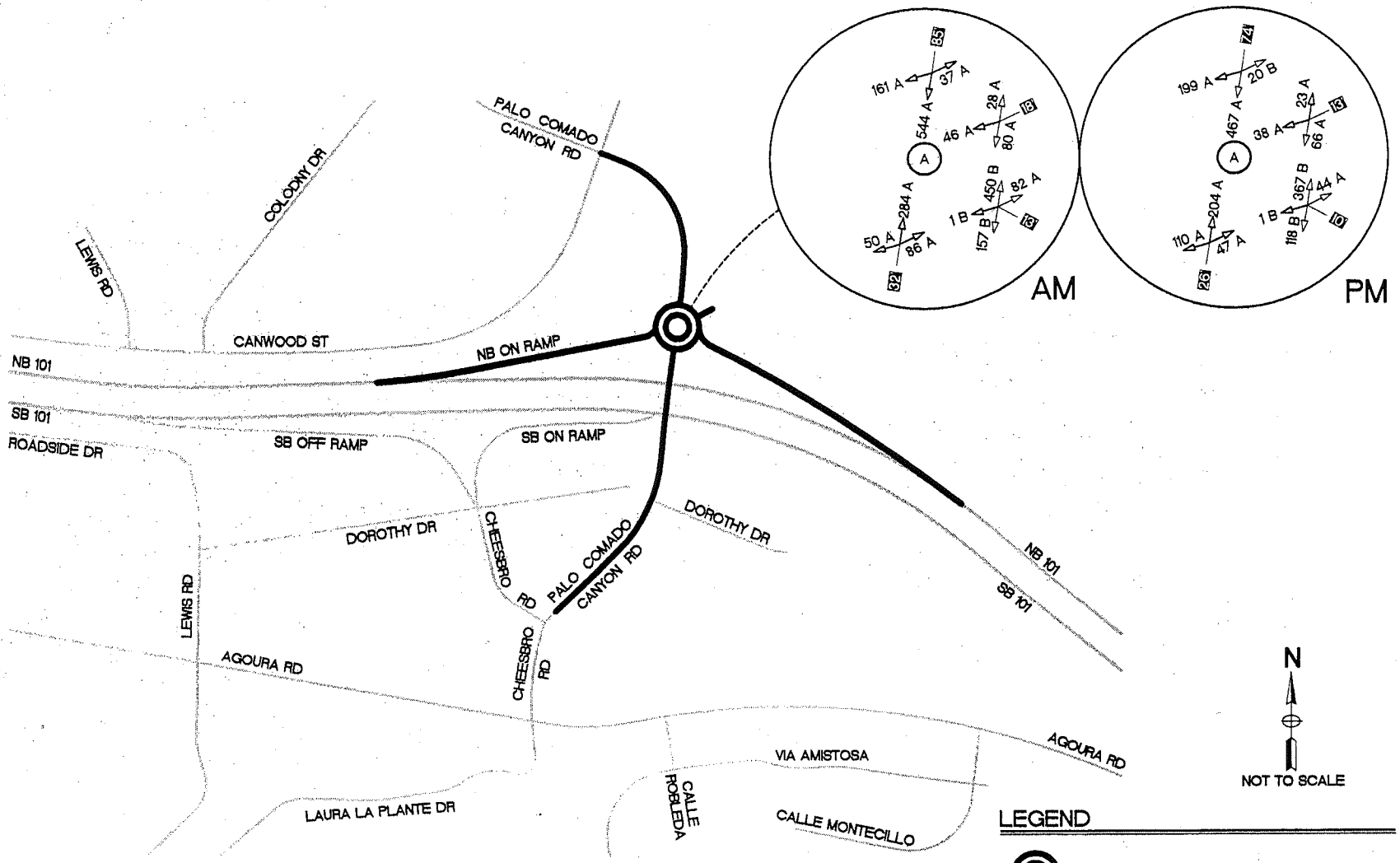
2015 PEAK HOUR TRAFFIC ALTERNATIVE 2

FIGURE 3



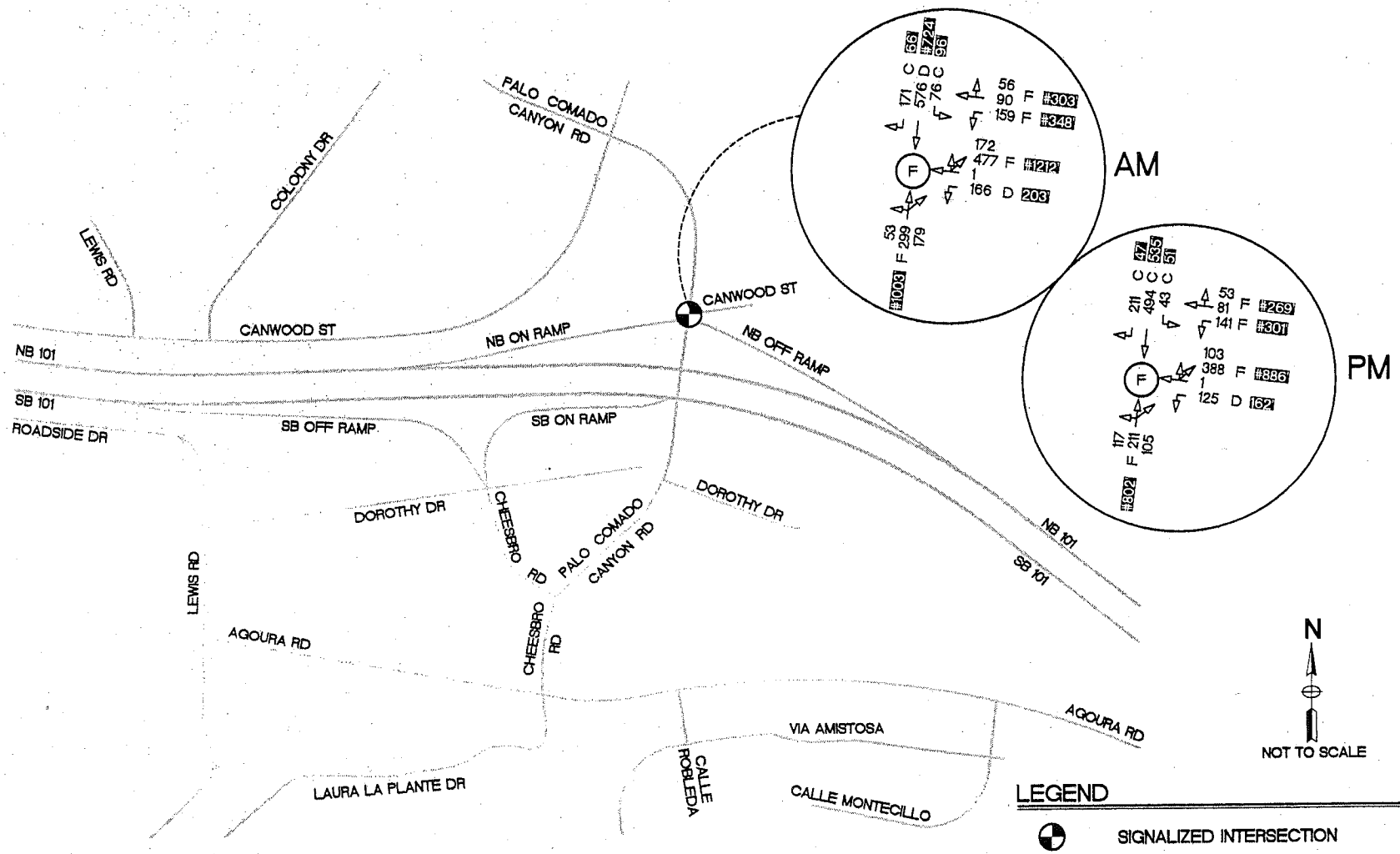
2015 PEAK HOUR ALTERNATIVE 3 AND 3A

FIGURE 4



2015 PEAK HOUR TRAFFIC ALTERNATIVE 4

FIGURE 5



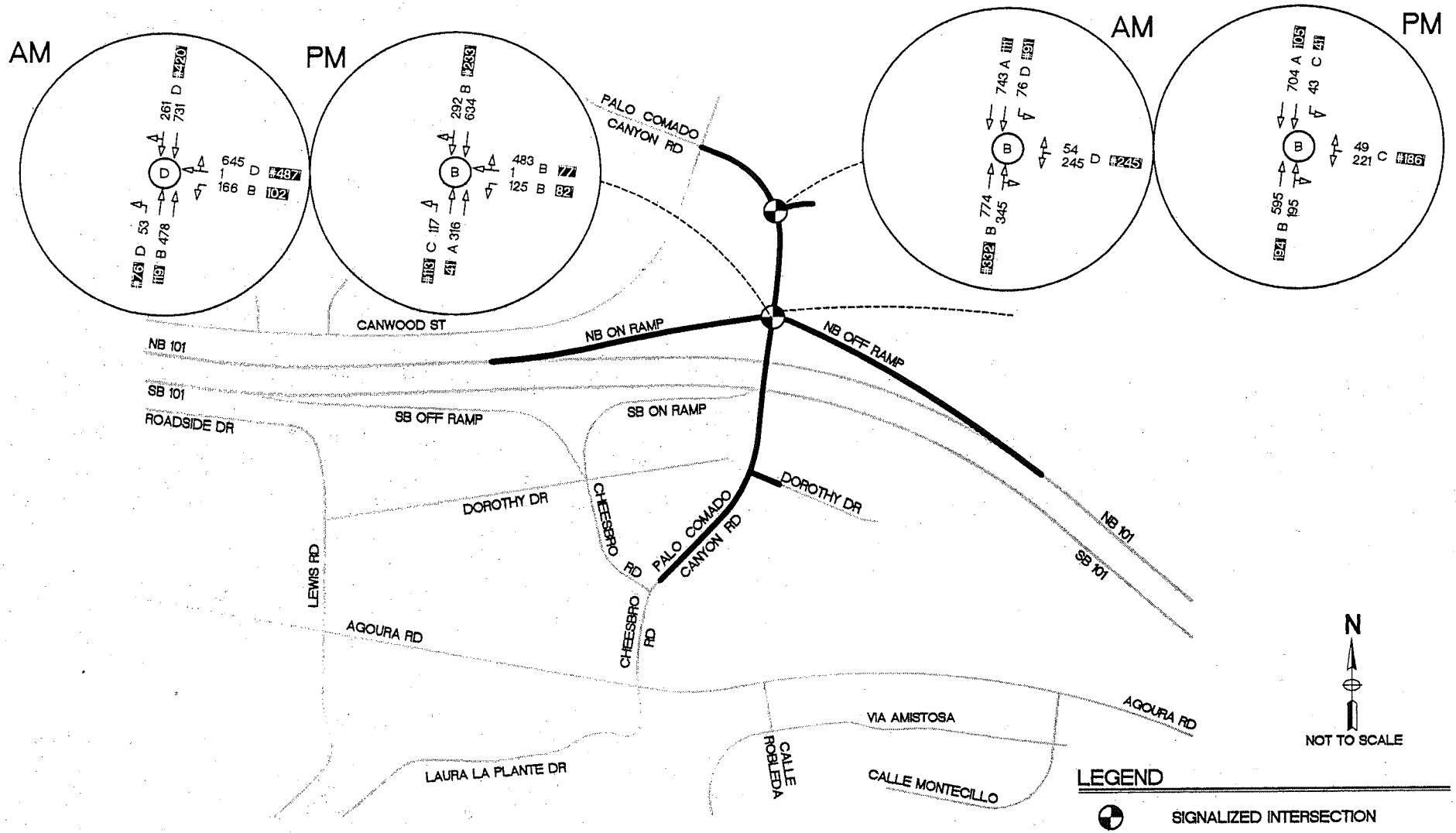
2035 PEAK HOUR ALTERNATIVE 1 NO BUILD

(WITH 5-LEGGED INTERSECTION PER HESCHEL SCHOOL PLANS)

FIGURE 6

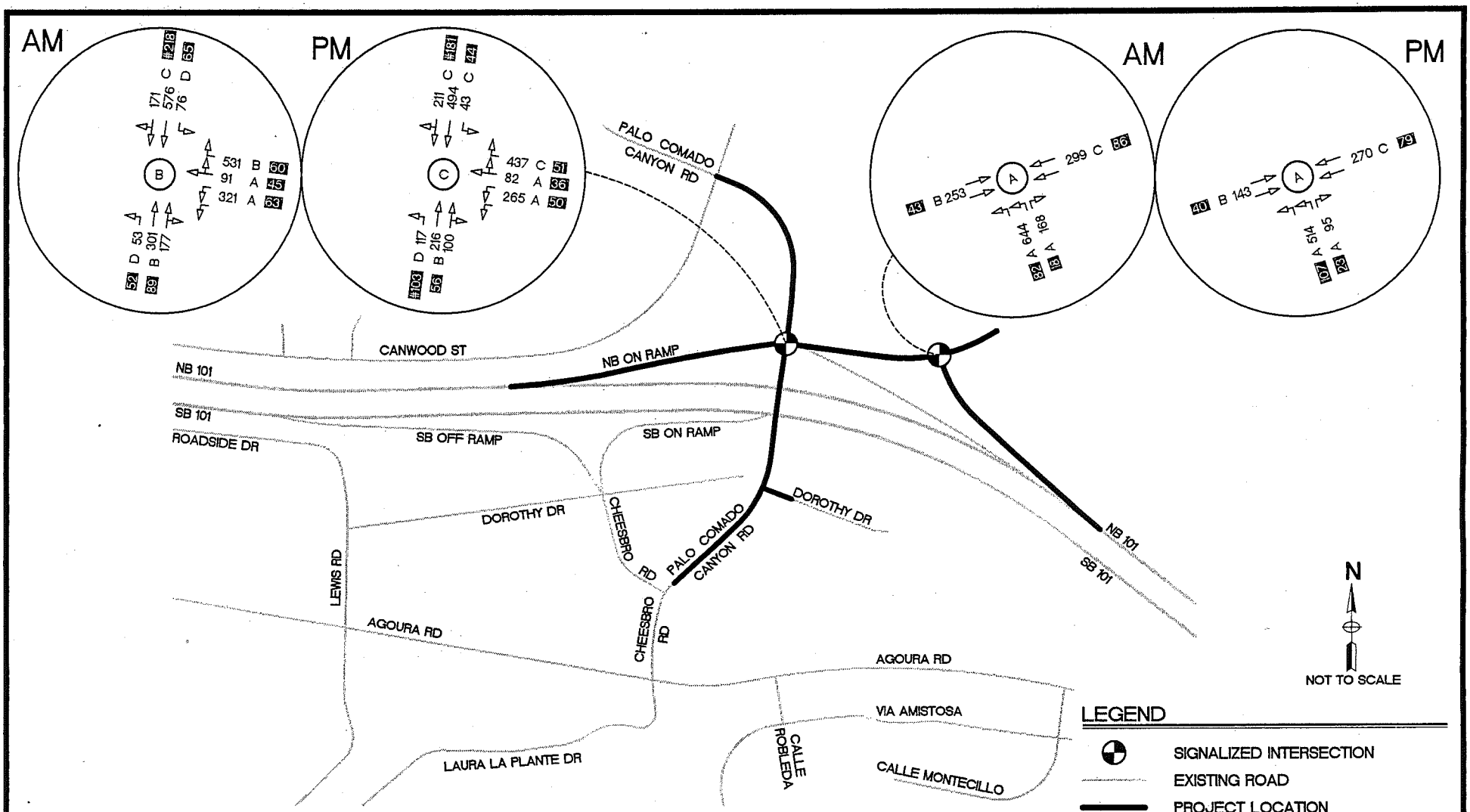
LEGEND

⊕	SIGNALIZED INTERSECTION
———	EXISTING ROAD
(A)	OVERALL INTERSECTION LEVEL OF SERVICE
XXX, A	PEAK HOUR VOLUME, MOVEMENT LEVEL OF SERVICE
AM	AM PEAK HOUR VOLUME
PM	PM PEAK HOUR VOLUME
#	95th PERCENTILE VOLUME EXCEEDS CAPACITY. QUEUE MAY BE LONGER
#XX	QUEUE LENGTH



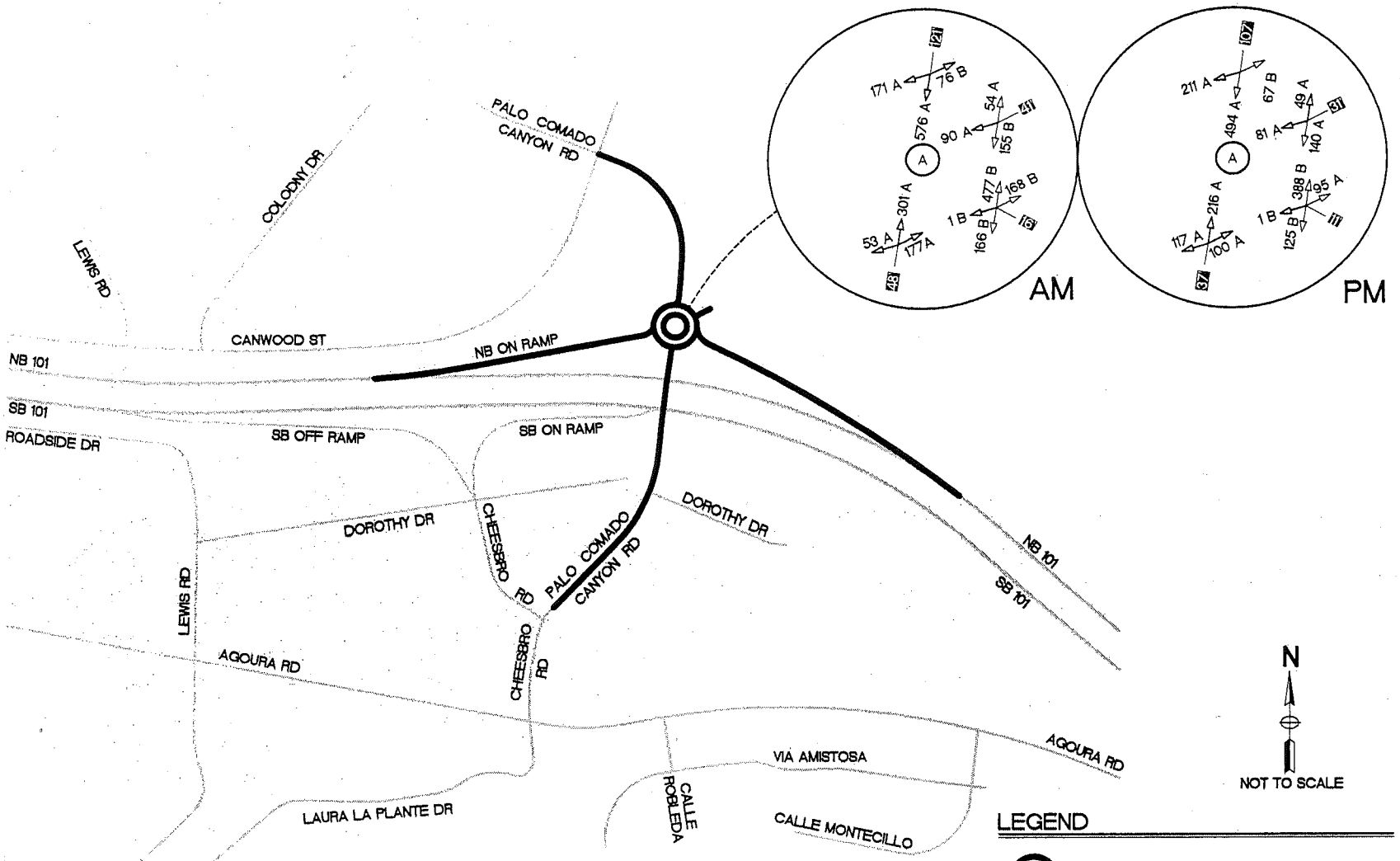
2035 PEAK HOUR TRAFFIC ALTERNATIVE 2

FIGURE 7



2035 PEAK HOUR ALTERNATIVE 3 AND 3A

FIGURE 8



2035 PEAK HOUR TRAFFIC ALTERNATIVE 4

FIGURE 9

LEGEND

	ROUNDABOUT
	EXISTING ROAD
	PROJECT LOCATION
(A)	OVERALL INTERSECTION LEVEL OF SERVICE
XXX, A	PEAK HOUR VOLUME, MOVEMENT LEVEL OF SERVICE
AM	AM PEAK HOUR VOLUME
PM	PM PEAK HOUR VOLUME
[XX]	QUEUE LENGTH

California Department of Transportation
Table B - Selective Accident Rate Calculation

Location Description	Rate Group (RUS)	No. of Accidents / Significance Tot	Fat	Inj	F+I	Multi Veh	Wet	Dark	Pers Kld Inj	ADT Main X-St	Total MV+ or MVM	Actual Fat	Actual F+I	Accident Rates Average Tot	Fat	F+I	Tot
07 LA 101 033.618 101/NB OFF TO CHEESEBRO RD 0001-0001 2005-01-01 2007-12-31 *36 mo.*	R 10 U	11	0	4	4	9	0	5	0 7	5.2 ,0	5.73 +	0.000	.70	1.92	0.005	.61	1.50
07 LA 101 033.764 101/SB ON PALO COMADO CYN 0001-0001 2005-01-01 2007-12-31 *36 mo.*	R 32 U	1	0	1	1	1	1	0	0 1	5.3 ,0	5.77 +	0.000	.17	.17	0.002	.19	.55
07 LA 101 033.798 101/NB ON FR CHEESEBRO RD 0001-0001 2005-01-01 2007-12-31 *36 mo.*	R 12 U	2	0	1	1	1	0	0	0 1	2.8 .0	3.07 +	0.000	.33	.65	0.002	.32	.80
07 LA 101 033.893 101/SB OFF TO CHEESEBRO RD 0001-0001 2005-01-01 2007-12-31 *36 mo.*	R 26 U	2	0	1	1	0	0	1	0 1	2.7 ,0	2.98 +	0.000	.34	.67	0.005	.39	1.15

Accident Rates expressed as: **# of accidents / Million vehicle miles**

+ denotes that **Million Vehicles** (MV) used in accident rates instead (for intersections and ramps).

TASAS SELECTIVE RECORD RETRIEVAL
TSAR - PARTY SUMMARY
All ramp acc. for LA 101, PM 33.4/34.0. For the time period of 01/01/05-12/31/07. T. Duong. Log# 791.

<---------- PARTY TYPE ---------->

NUMBER	PCT	CODE
14	87.5	A-PASNGR CAR/STA WAGON
0	0.0	B-PASNGR CAR W/TRAILER
2	12.5	C-MOTORCYCLE
2	12.5	D-PICKUP/PANEL TRUCK
0	0.0	E-PICKUP/PANEL W/TRAILER
0	0.0	F-TRUCK/TRUCK TRACTOR
2	12.5	G-TRUCK/TRACTOR & 1 TRAILER
0	0.0	2-TRUCK/TRACTOR & 2 TRAILER
0	0.0	3-TRUCK/TRACTOR & 3 TRAILER
0	0.0	4-SINGLE UNIT TANKER
0	0.0	5-TRUCK/TRA & 1 TANK TRALR
0	0.0	6-TRUCK/TRA & 2 TANK TRALR
0	0.0	H-SCHOOL BUS
0	0.0	I-OTHER BUS
0	0.0	J-EMERGENCY VEHICLE
0	0.0	K-HIGHWAY CONST EQUP.**
0	0.0	L-BICYCLE
0	0.0	M-OTHER-MOTOR VEH
0	0.0	N-OTHER-NON-MOTOR VEH
0	0.0	O-SPILLED LOADS
0	0.0	P-DISENGAGED TOW
0	0.0	Q-UNINVOLVED VEHICLE
0	0.0	R-MOPED
0	0.0	T-TRAIN
0	0.0	U-PEDESTRIAN
0	0.0	V-DISMOUNT PEDESTRIAN
0	0.0	W-ANIMAL - LIVESTOCK
0	0.0	X-ANIMAL - DEER
0	0.0	Z-ANIMAL - OTHER

<- MOVEMENT PRECEDING COLLISION ->

NUMBER	PCT	CODE
9	56.3	A-STOPPED
11	68.8	B-PROCEDED STRAIGHT
1	6.3	C-RAN OFF ROAD
0	0.0	D-MAKING RIGHT TURN
5	31.3	E-MAKING LEFT TURN
0	0.0	F-MAKING U TURN
0	0.0	G-BACKING
0	0.0	H-SLOWING, STOPPING
0	0.0	I-PASS OTHER VEHICLE
0	0.0	J-CHANGING LANES
0	0.0	K-PARKING
0	0.0	L-ENTER FROM SHLDR
0	0.0	M-OTHER UNSAFE TURN
0	0.0	N-CROSS INTO OPP LN
0	0.0	O-PARKED
0	0.0	P-MERGING
0	0.0	Q-TRAVEL WRONG WAY
1	6.3	R-OTHER
0	0.0	<-NOT STATED

PEDESTRIAN

NUMBER	PCT	CODE
0	0.0	2- XING XWALK - INTRST
0	0.0	3- XING XWALK - NOT INTR
0	0.0	4- XING NOT XWALK
0	0.0	5- ROADWAY - INCL SHLDR
0	0.0	6- NOT IN ROADWAY
0	0.0	7- APRH-LEAVE SCHL BUS
0	0.0	- INVALID CODES

<----- OTHER ASSOCIATED FACTORS ----->

#1 NUMBER	#1 PCT	#2 NUMBER	#2 PCT	CODE
0	0.0	0	0.0	1-INFLUENCE ALCOHOL
1	6.3	0	0.0	2-FOLLOW TOO CLOSE
0	0.0	0	0.0	3-FAILURE TO YIELD
1	6.3	0	0.0	4-IMPROPER TURN
2	12.5	0	0.0	5-SPEEDING
0	0.0	0	0.0	6-OTHER VIOLATIONS
0	0.0	0	0.0	A-CELL PHONE* (INATTN)
0	0.0	0	0.0	B-ELECTRC EQUIP*(INATTN)
0	0.0	0	0.0	C-RADIO/CD/HDPHN*(INATTN)
0	0.0	0	0.0	D-SMOKING* (INATTN)
1	6.3	0	0.0	E-VISION OBSCUREMENT
1	6.3	0	0.0	F-INATTENTION - OTHER
0	0.0	0	0.0	G-STOP & GO TRAFFIC
4	25.0	2	12.5	H-ENTER/LEAVE RAMP
0	0.0	0	0.0	I-PREVIOUS COLLISION
0	0.0	0	0.0	J-UNFAMILIAR WITH ROAD
0	0.0	0	0.0	K-DEFECT VEHICLE EQUIP
0	0.0	0	0.0	L-UNINVOLVED VEHICLE
0	0.0	0	0.0	M-OTHER
10	62.5	1	6.3	N-NONE APPARENT
0	0.0	0	0.0	P-WIND
0	0.0	0	0.0	R-RAMP ACCIDENT
0	0.0	0	0.0	S-RUNAWAY VEHICLE
0	0.0	0	0.0	T-EATING* (INATTN)
0	0.0	0	0.0	U-CHILDREN* (INATTN)
0	0.0	0	0.0	V-ANIMALS* (INATTN)
0	0.0	0	0.0	W-PERSNL HYGIENE*(INATTN)
0	0.0	0	0.0	X-READING* (INATTN)
1	6.3	15	93.8	<-NOT STATED
0	0.0	0	0.0	--DOES NOT APPLY

<---- DIRECTION OF TRAVEL ---->

NUMBER	PCT	CODE
11	68.8	N-N, NE, NW BOUND
5	31.3	S-S, SE, SW BOUND
0	0.0	E-EASTBOUND
3	18.8	W-WESTBOUND
0	0.0	<-NOT STATED
0	0.0	--DOES NOT APPLY
0	0.0	-INVALID CODES

<---- SPECIAL INFORMATION ---->

NUMBER	PCT	CODE
0	0.0	A-HAZARDOUS MATERIALS
1	6.3	B-CELL PHONE IN USE*
12	75.0	C-CELL PHONE NOT IN USE*
1	6.3	D-CELL PHONE NONE/UNKNOWN*
3	18.8	<-NOT STATED
0	0.0	--DOES NOT APPLY
0	0.0	-INVALID CODES

* INATTENTION CODES EFF. 01-01-01

** INCLUDES EQUIPMENT ENGAGED IN CONST/MAINT ACTIVITIES AS OF 00-02-22

* SPECIAL INFORMATION CODES EFF. 04-01-01

TASAS SELECTIVE RECORD RETRIEVAL
TSAR - PARTY SUMMARY
All ramp acc. for LA 101, PM 33.4/34.0. For the time period of 01/01/05-12/31/07. T. Duong. Log# 791.

<------------------- OBJECT STRUCK ------------------->

PRIMARY NUMBER	PRIMARY PCT	OTHERS NUMBER	OTHERS PCT	CODE
0	0.0	0	0.0	01-SIDE OF BRIDGE RAILING
0	0.0	0	0.0	02-END OF BRIDGE RAILING
0	0.0	0	0.0	03-PIER, COLUMN, ABUTMENT
0	0.0	0	0.0	04-BOTTOM OF STRUCTURE
0	0.0	0	0.0	05-BRIDGE END POST IN GORE
0	0.0	0	0.0	06-END OF GUARD RAIL
0	0.0	0	0.0	07-BRIDGE APPROACH GUARD RAIL
0	0.0	0	0.0	10-LIGHT OR SIGNAL POLE
0	0.0	0	0.0	11-UTILITY POLE
0	0.0	0	0.0	12-POLE (TYPE NOT STATED)
0	0.0	3	18.8	13-TRAFFIC SIGN/SIGN POST
0	0.0	0	0.0	14-OTHER SIGNS NOT TRAFFIC
0	0.0	0	0.0	15-GUARDRAIL
0	0.0	0	0.0	16-MEDIAN BARRIER
0	0.0	0	0.0	17-WALL (EXCEPT SOUND WALL)
2	12.5	2	12.5	18-DIKE OR CURB
0	0.0	0	12.5	19-TRAFFIC ISLAND
0	0.0	0	0.0	20-RAISED BARS
0	0.0	0	0.0	21-CONCRETE OBJ (HDWL, D.I.)
0	0.0	1	6.3	22-GUIDEPOST, CULVERT, PM
0	0.0	0	0.0	23-CUT SLOPE OR EMBANKMENT
1	6.3	0	0.0	24-OVER EMBANKMENT
0	0.0	0	0.0	25-IN WATER
0	0.0	0	0.0	26-DRAINAGE DITCH
0	0.0	1	6.3	27-FENCE
0	0.0	0	0.0	28-TREES
0	0.0	2	12.5	29-PLANTS
0	0.0	0	0.0	30-SOUND WALL
0	0.0	0	0.0	40-NATURAL MATRL ON ROAD
0	0.0	0	0.0	41-TEMP BARRICADES, CONES
0	0.0	0	0.0	42-OTHER OBJECT ON ROAD
0	0.0	3	18.8	43-OTHER OBJECT OFF ROAD
1	6.3	2	12.5	44-OVERTURNED
0	0.0	0	0.0	45-CRASH CUSHION (SAND)
0	0.0	0	0.0	46-CRASH CUSHION (OTHER)
0	0.0	0	0.0	51-CALL BOX
0	0.0	0	0.0	98-UNKNOWN OBJECT STRUCK
1	6.3	0	0.0	99- NO OBJECT INVOLVED
11	68.8	1	6.3	V1 THRU V9 VEHICLE 1 TO 9
0	0.0	0	0.0	<< NOT STATED
1	6.3	14	87.5	-- DOES NOT APPLY
0	0.0	0	0.0	- INVALID CODES

<------ LOCATION OF COLLISION ------>

PRIMARY NUMBER	PRIMARY PCT	OTHERS NUMBER	OTHERS PCT	CODE
0	0.0	0	0.0	A-BEYOND MEDIAN OR STRIPE-LEFT
4	25.0	2	12.5	B-BEYOND SHLDER DRIVERS LEFT
0	0.0	0	0.0	C-LEFT SHOULDER AREA
2	12.5	0	0.0	D-LEFT LANE
0	0.0	0	0.0	E-INTERIOR LANES
12	75.0	2	12.5	F-RIGHT LANE
1	6.3	1	6.3	G-RIGHT SHOULDER AREA
1	6.3	3	18.8	H-BEYOND SHLDER DRIVERS RIGHT
0	0.0	0	0.0	I-GORE AREA
0	0.0	0	0.0	J-OTHER
0	0.0	0	0.0	V-HOV LANE(S)
0	0.0	0	0.0	W-HOV LANE BUFFER AREA
0	0.0	0	0.0	<-NOT STATED
1	6.3	14	87.5	--DOES NOT APPLY
0	0.0	0	0.0	-INVALID CODES

<------ DRUG/PHYSICAL ------>

PRIMARY NUMBER	PRIMARY PCT	OTHERS NUMBER	OTHERS PCT	CODE
13	81.3	0	0.0	A-HAD NOT BEEN DRINKING
3	18.8	0	0.0	B-HBD - UNDER INFLUENCE
0	0.0	0	0.0	C-HBD - NOT UNDER INFLUENCE
0	0.0	0	0.0	D-HBD - IMPAIRMENT UNKNOWN
0	0.0	1	6.3	E-UNDER DRUG INFLUENCE
0	0.0	0	0.0	F-OTHER PHYSICAL IMPAIRMENT
2	12.5	0	0.0	G-IMPAIRMENT NOT KNOWN
0	0.0	0	0.0	H-NOT APPLICABLE
0	0.0	0	0.0	I-FATIGUE
1	6.3	16	100.0	< NOT STATED
0	0.0	0	0.0	--DOES NOT APPLY
0	0.0	0	0.0	-INVALID CODES

TASAS SELECTIVE RECORD RETRIEVAL
TSAR - ACCIDENT DETAIL
All ramp acc. for LA 101, PM 33.893. For the time period of 01/01/05-12/31/07. T. Duong. Log# 793.

DI	RTE NO	S U F	CO	P R E	POST MILE	HIGHWAY: H G	A C	M T	B A	LANES LT	LANES RT	R U	F T	R L	I R O H	S O	D A Y	P C F	ENVIR COND W	L	S	R C	R W C	T O C	NO MTR VEH	D P	I T	R	V H I	S I	PERSON K	I	O S P	L O C	O S O	L O C	O S O	L O C	O S O	L O C	OA F 12	M O V	SD P 12
07	101		LA		033.893	D	F	H	E	04	04	U	R	2	S	4		5	A	A	A	H	D	E	01		A	S	1	<	00	01	18	B	44	B	13	B	43	B	N<	B	G<
07	101		LA		033.893	D	F	H	E	04	04	U	R	2	S	5		1	A	C	A	D	D	E	01		A	S	1	C	00	00	18	B	22	B	43	B	29	B	5H	C	B<

Total Accidents: 2

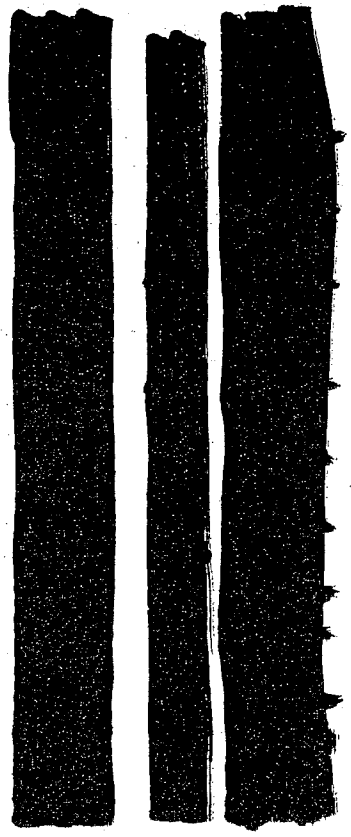
TASAS SELECTIVE RECORD RETRIEVAL
TSAR - ACCIDENT DETAIL
All ramp acc. for LA 101, PM 33.764. For the time period of 01/01/05-12/31/07. T. Duong. Log# 792.

DI	RTE NO	S U F	CO	P R E	POST MILE	HIGHWAY: H G	A C	M T	B A	LANES LT	LANES RT	R U	F T	R L	I O H	S A Y	D	P C F	ENVIR COND W	L	S	R C	W C	T O C	NO MTR VEH	P T	D I R	V H I	S I	PERSON K	I	O S P	L O C	S O C	L O C	S O C	L O C	S O C	OA F 12	M O V	SD P 12
07	101		LA		033.764	D	F	H	E	04	04	U	R	4	S	3		5	C	A	B	H	D	C	02	A	N	2	C	00	01	V2	F	----	----	----	2<	B	A<
																										A	N	2	C	00	00	V1	F	----	----	----	N<	A	A<

Total Accidents: 1

TASAS SELECTIVE RECORD RETRIEVAL
TSAR - ACCIDENT DETAIL
All ramp acc. for LA 101, PM 33.618. For the time period of 01/01/05-12/31/07. T. Duong. Log# 794.

DI	RTE NO	S U F	CO	P R E	POST MILE	HIGHWAY: H G	A C	M T	B A	LANES LT	LANES RT	R U	F T	I R L	S O H	D A Y
07	101		LA		033.618	D	F	H	E	04	04	U	R	1	N	2
07	101		LA		033.618	D	F	H	E	04	04	U	R	1	N	1
07	101		LA		033.618	D	F	H	E	04	04	U	R	2	N	3
07	101		LA		033.618	D	F	H	E	04	04	U	R	1	N	3
07	101		LA		033.618	D	F	H	E	04	04	U	R	1	N	5
07	101		LA		033.618	D	F	H	E	04	04	U	R	1	N	4
07	101		LA		033.618	D	F	H	E	04	04	U	R	4	N	7
07	101		LA		033.618	D	F	H	E	04	04	U	R	1	N	7
07	101		LA		033.618	D	F	H	E	04	04	U	R	2	N	7
07	101		LA		033.618	D	F	H	E	04	04	U	R	4	N	1
07	101		LA		033.618	D	F	H	E	04	04	U	R	4	N	4



PC FW	ENVIR COND L	S	RC	RWC	TOC	NO MTR VEH	PT	D IR I	V H I	S I	PERSON K	I	OS P	L OS C	OS O	L OS C	OS O	L OS C	OS O	OA F 12	M OV	SD P 12
6 A	A	A	H	D	<	02	A	N 1	C	00	00		V2	F	----		----		----	F<	B	A<
							A	N 1	C	00	02		V1	F	----		----		----	N<	A	A<
6 A	A	A	H	A	C	02	A	N 1	C	00	00		V2	F	----		----		----	H<	B	A<
							A	N 1	C	00	01		V1	F	----		----		----	H<	A	A<
1 A	D	A	H	D	C	03	G	N 1	<	00	01		V2	F	18	H	43	H	13 H	5<	B	<E
							D	N 1	C	00	01		V1	F	V3	G	18	H	27 H	N<	B	B<
							A	N 1	C	00	01		----		V2	F	----		----	N<	A	A<
5 A	C	A	H	D	B	02	A	N 1	C	00	00		V2	F	----		----		----	N<	B	G<
							A	N 1	C	00	00		V1	F	----		----		----	N<	A	A<
5 A	A	A	H	D	B	02	A	N 1	B	00	00		V2	G	18	H	13	H	----	H<	B	A<
							A	N 1	B	00	00		V1	F	----		----		----	H<	A	A<
4 A	A	A	H	D	B	02	G	N 1	C	00	00		V2	F	----		----		----	H<	E	A<
							A	N 1	C	00	00		V1	D	----		----		----	H<	A	A<
4 A	A	A	H	D	H	01	C	S 1	<	00	01		44	B	----		----		----	N<	E	A<
6 A	A	A	H	A	C	02	C	W 1	C	00	00		V2	F	44	F	----		----	HN	B	A<
							A	W 1	C	00	00		V1	F	----		----		----	N<	A	A<
1 A	C	A	H	D	E	01	A	N 1	C	00	00		24	H	29	H	----		----	4<	R	B<
3 A	C	A	H	D	D	02	A	W 1	C	00	00		V2	B	----		----		----	EH	E	A<
							A	N 2	C	00	00		V1	F	----		----		----	N<	B	A<
3 A	C	A	H	A	D	02	A	W 1	C	00	00		V2	F	----		----		----	N<	E	A<
							A	S 2	C	00	00		V1	F	----		----		----	N<	B	A<

Total Accidents: 11

TASAS SELECTIVE RECORD RETRIEVAL
TSAR - ACCIDENT SUMMARY
All ramp acc. for LA 101, PM 33.618. For the time period of 01/01/05-12/31/07. T. Duong. Log# 794.

TOTAL ACCIDENTS	FATAL	INJURY	PDO	PERSONS KILLED	PERSONS INJURED
11	0	4	7	0	7

MOTOR VEHICLES INVOLVED NUMBER	PCT	CODE
2	18.2	1
8	72.7	2
1	9.1	3
0	0.0	>3

<---LINES CODED---> NUMBER	PCT	CODE
2	18.2	1
8	72.7	2
1	9.1	3
0	0.0	4
0	0.0	5
0	0.0	6
0	0.0	7
0	0.0	8
0	0.0	9

<---- HOUR OF DAY ----> NUMBER	PCT	CODE
0	0.0	00- 12 MID.
1	9.1	01- 1 A.M.
0	0.0	02- 2 A.M.
0	0.0	03- 3 A.M.
0	0.0	04- 4 A.M.
0	0.0	05- 5 A.M.
0	0.0	06- 6 A.M.
0	0.0	07- 7 A.M.
0	0.0	08- 8 A.M.
0	0.0	09- 9 A.M.
0	0.0	10- 10 A.M.
2	18.2	11- 11 A.M.
0	0.0	12- 12 NOON
0	0.0	13- 1 P.M.
0	0.0	14- 2 P.M.
1	9.1	15- 3 P.M.
1	9.1	16- 4 P.M.
0	0.0	17- 5 P.M.
3	27.3	18- 6 P.M.
2	18.2	19- 7 P.M.
0	0.0	20- 8 P.M.
1	9.1	21- 9 P.M.
0	0.0	22- 10 P.M.
0	0.0	23- 11 P.M.
0	0.0	25- UNKNOWN

<--- ACCESS CONTROL ---> NUMBER	PCT	CODE
0	0.0	C-CONVENTIONAL
0	0.0	E-EXPRESSWAY
11	100.0	F-FREEWAY
0	0.0	S-1-WAY CITY ST
0	0.0	--INVALID DATA
0	0.0	+-NO DATA

<--- SIDE OF HIGHWAY ---> NUMBER	PCT	CODE
11	100.0	N-NORTHBOUND
0	0.0	S-SOUTHBOUND
0	0.0	E-EASTBOUND
0	0.0	W-WESTBOUND

<----- YEAR -----> NUMBER	PCT	CODE
0	0.0	1997
0	0.0	1998
0	0.0	1999
0	0.0	2000
0	0.0	2001
0	0.0	2002
0	0.0	2003
0	0.0	2004
4	36.4	2005
2	18.2	2006
5	45.5	2007
0	0.0	2008

<----- MONTH -----> NUMBER	PCT	CODE
0	0.0	01-JANUARY
0	0.0	02-FEBRUARY
0	0.0	03-MARCH
0	0.0	04-APRIL
1	9.1	05-MAY
1	9.1	06-JUNE
0	0.0	07-JULY
4	36.4	08-AUGUST
2	18.2	09-SEPTEMBER
2	18.2	10-OCTOBER
1	9.1	11-NOVEMBER
0	0.0	12-DECEMBER

<---- DAY OF WEEK ----> NUMBER	PCT	CODE
2	18.2	1-SUNDAY
1	9.1	2-MONDAY
2	18.2	3-TUESDAY
2	18.2	4-WEDNESDAY
1	9.1	5-THURSDAY
0	0.0	6-FRIDAY
3	27.3	7-SATURDAY

TASAS SELECTIVE RECORD RETRIEVAL
TSAR - ACCIDENT SUMMARY
All ramp acc. for LA 101, PM 33.618. For the time period of 01/01/05-12/31/07. T. Duong. Log# 794.

<-- PRIMARY COLLISION FACTOR -->

NUMBER	PCT	CODE
2	18.2	1-INFLUENCE ALCOHOL
0	0.0	2-FOLLOW TOO CLOSE
2	18.2	3-FAILURE TO YIELD
2	18.2	4-IMPROPER TURN
2	18.2	5-SPEEDING
3	27.3	6-OTHER VIOLATIONS
0	0.0	B-IMPROPER DRIVING
0	0.0	C-OTHER THAN DRIVER
0	0.0	D-UNKNOWN
0	0.0	E-FELL SLEEP
0	0.0	<-NOT STATED
0	0.0	-INVALID CODES

<--- TYPE OF COLLISION --->

NUMBER	PCT	CODE
0	0.0	A-HEAD-ON
3	27.3	B-SIDESWIPE
3	27.3	C-REAR END
2	18.2	D-BROADSIDE
1	9.1	E-HIT OBJECT
0	0.0	F-OVERTURN
0	0.0	G-AUTO-PEDESTRIAN
1	9.1	H-OTHER
1	9.1	<-NOT STATED
0	0.0	-INVALID CODES

<--- ROADWAY CONDITION --->

NUMBER	PCT	CODE
0	0.0	A-HOLES, RUTS
0	0.0	B-LOOSE MATERIAL
0	0.0	C-OBSTRUCTION ON ROAD
0	0.0	D-CONSTRUCT-REPAIR-ZONE
0	0.0	E-REDUCED ROAD WIDTH
0	0.0	F-FLOODED
0	0.0	G-OTHER
11	100.0	H-NO UNUSUAL CONDITION
0	0.0	<-NOT STATED
0	0.0	-INVALID CODES

<--------- WEATHER --------->

NUMBER	PCT	CODE
11	100.0	A-CLEAR
0	0.0	B-CLOUDY
0	0.0	C-RAINING
0	0.0	D-SNOWING
0	0.0	E-FOG
0	0.0	F-OTHER
0	0.0	G-WIND
0	0.0	<-NOT STATED
0	0.0	-INVALID CODES

<------------ LIGHTING ------------>

NUMBER	PCT	CODE
6	54.5	A-DAY LIGHT
0	0.0	B-DUSK/DAWN
4	36.4	C-DARK-STREET LIGHT
1	9.1	D-DARK-NO STREET LIGHT
0	0.0	E-DARK-INOPR STREET LIGHT
0	0.0	F-DARK-NOT STATED
0	0.0	<-NOT STATED
0	0.0	-INVALID CODES

<----- ROAD SURFACE ----->

NUMBER	PCT	CODE
11	100.0	A-DRY
0	0.0	B-WET
0	0.0	C-SNOWY, ICY
0	0.0	D-SLIPPERY
0	0.0	<-NOT STATED
0	0.0	-INVALID CODES

<------ RIGHT OF WAY CONTROL ------>

NUMBER	PCT	CODE
3	27.3	A-CONTROL FUNCTIONING
0	0.0	B-CONTROL NOT FUNCTIONING
0	0.0	C-CONTROLS OBSCURED
8	72.7	D-NO CONTROLS PRESENT
0	0.0	<-NOT STATED
0	0.0	-INVALID CODES

<--------- HIGHWAY GROUP --------->

NUMBER	PCT	CODE
0	0.0	R-IND. ALIGN RIGHT
0	0.0	L-IND. ALIGN LEFT
11	100.0	D-DIVIDED
0	0.0	U-UNDIVIDED

<- INTERSECTION/RAMP ACCIDENT LOCATION ->

NUMBER	PCT	CODE
6	54.5	1-RAMP INTERSECTION (EXIT)
2	18.2	2-RAMP
0	0.0	3-RAMP ENTRY
3	27.3	4-RAMP AREA, INTERSECTION STREET
0	0.0	5-IN INTERSECTION
0	0.0	6-OUTSIDE INTRSCT-NONSTATE RTE
0	0.0	--DOES NOT APPLY

TASAS SELECTIVE RECORD RETRIEVAL
TSAR - PARTY SUMMARY
All ramp acc. for LA 101, PM 33.618. For the time period of 01/01/05-12/31/07. T. Duong. Log# 794.

<---------- PARTY TYPE ---------->

NUMBER	PCT	CODE
10	90.9	A-PASNGR CAR/STA WAGON
0	0.0	B-PASNGR CAR W/TRAILER
2	18.2	C-MOTORCYCLE
1	9.1	D-PICKUP/PANEL TRUCK
0	0.0	E-PICKUP/PANEL W/TRAILER
0	0.0	F-TRUCK/TRUCK TRACTOR
2	18.2	G-TRUCK/TRACTOR & 1 TRAILER
0	0.0	2-TRUCK/TRACTOR & 2 TRAILER
0	0.0	3-TRUCK/TRACTOR & 3 TRAILER
0	0.0	4-SINGLE UNIT TANKER
0	0.0	5-TRUCK/TRA & 1 TANK TRALR
0	0.0	6-TRUCK/TRA & 2 TANK TRALR
0	0.0	H-SCHOOL BUS
0	0.0	I-OTHER BUS
0	0.0	J-EMERGENCY VEHICLE
0	0.0	K-HIGHWAY CONST EQUP.**
0	0.0	L-BICYCLE
0	0.0	M-OTHER-MOTOR VEH
0	0.0	N-OTHER-NON-MOTOR VEH
0	0.0	O-SPILLED LOADS
0	0.0	P-DISENGAGED TOW
0	0.0	Q-UNINVOLVED VEHICLE
0	0.0	R-MOPED
0	0.0	T-TRAIN
0	0.0	U-PEDESTRIAN
0	0.0	V-DISMOUNT PEDESTRIAN
0	0.0	W-ANIMAL - LIVESTOCK
0	0.0	X-ANIMAL - DEER
0	0.0	Z-ANIMAL - OTHER

<- MOVEMENT PRECEDING COLLISION ->

NUMBER	PCT	CODE
7	63.6	A-STOPPED
8	72.7	B-PROCEDED STRAIGHT
0	0.0	C-RAN OFF ROAD
0	0.0	D-MAKING RIGHT TURN
4	36.4	E-MAKING LEFT TURN
0	0.0	F-MAKING U TURN
0	0.0	G-BACKING
0	0.0	H-SLOWING, STOPPING
0	0.0	I-PASS OTHER VEHICLE
0	0.0	J-CHANGING LANES
0	0.0	K-PARKING
0	0.0	L-ENTER FROM SHLDR
0	0.0	M-OTHER UNSAFE TURN
0	0.0	N-CROSS INTO OPP LN
0	0.0	O-PARKED
0	0.0	P-MERGING
0	0.0	Q-TRAVEL WRONG WAY
1	9.1	R-OTHER
0	0.0	<-NOT STATED

PEDESTRIAN

0	0.0	2- XING XWALK - INTRST
0	0.0	3- XING XWALK - NOT INTR
0	0.0	4- XING NOT XWALK
0	0.0	5- ROADWAY - INCL SHLDR
0	0.0	6- NOT IN ROADWAY
0	0.0	7- APRH-LEAVE SCHL BUS
0	0.0	- INVALID CODES

<---- OTHER ASSOCIATED FACTORS ---->

#1 NUMBER	#1 PCT	#2 NUMBER	#2 PCT	CODE
0	0.0	0	0.0	1-INFLUENCE ALCOHOL
0	0.0	0	0.0	2-FOLLOW TOO CLOSE
0	0.0	0	0.0	3-FAILURE TO YIELD
1	9.1	0	0.0	4-IMPROPER TURN
1	9.1	0	0.0	5-SPEEDING
0	0.0	0	0.0	6-OTHER VIOLATIONS
0	0.0	0	0.0	A-CELL PHONE* (INATTN)
0	0.0	0	0.0	B-ELECTRC EQUIP*(INATTN)
0	0.0	0	0.0	C-RADIO/CD/HDPHN*(INATTN)
0	0.0	0	0.0	D-SMOKING* (INATTN)
1	9.1	0	0.0	E-VISION OBSCUREMENT
1	9.1	0	0.0	F-INATTENTION - OTHER
0	0.0	0	0.0	G-STOP & GO TRAFFIC
4	36.4	1	9.1	H-ENTER/LEAVE RAMP
0	0.0	0	0.0	I-PREVIOUS COLLISION
0	0.0	0	0.0	J-UNFAMILIAR WITH ROAD
0	0.0	0	0.0	K-DEFECT VEHICLE EQUIP
0	0.0	0	0.0	L-UNINVOLVED VEHICLE
0	0.0	0	0.0	M-OTHER
7	63.6	1	9.1	N-NONE APPARENT
0	0.0	0	0.0	P-WIND
0	0.0	0	0.0	R-RAMP ACCIDENT
0	0.0	0	0.0	S-RUNAWAY VEHICLE
0	0.0	0	0.0	T-EATING* (INATTN)
0	0.0	0	0.0	U-CHILDREN* (INATTN)
0	0.0	0	0.0	V-ANIMALS* (INATTN)
0	0.0	0	0.0	W-PERSNL HYGIENE*(INATTN)
0	0.0	0	0.0	X-READING* (INATTN)
0	0.0	11	100.0	<-NOT STATED
0	0.0	0	0.0	--DOES NOT APPLY

* INATTENTION CODES EFF. 01-01-01

<---- DIRECTION OF TRAVEL ---->

NUMBER	PCT	CODE
8	72.7	N-N, NE, NW BOUND
2	18.2	S-S, SE, SW BOUND
0	0.0	E-EASTBOUND
3	27.3	W-WESTBOUND
0	0.0	<-NOT STATED
0	0.0	--DOES NOT APPLY
0	0.0	-INVALID CODES

** INCLUDES EQUIPMENT ENGAGED IN CONST/MAINT ACTIVITIES AS OF 00-02-22

<---- SPECIAL INFORMATION ---->

NUMBER	PCT	CODE
0	0.0	A-HAZARDOUS MATERIALS
1	9.1	B-CELL PHONE IN USE*
9	81.8	C-CELL PHONE NOT IN USE*
0	0.0	D-CELL PHONE NONE/UNKNOWN*
2	18.2	<-NOT STATED
0	0.0	--DOES NOT APPLY
0	0.0	-INVALID CODES

* SPECIAL INFORMATION CODES EFF. 04-01-01

TASAS SELECTIVE RECORD RETRIEVAL
TSAR - PARTY SUMMARY
All ramp acc. for LA 101, PM 33.618. For the time period of 01/01/05-12/31/07. T. Duong. Log# 794.

<------------------- OBJECT STRUCK ------------------->

PRIMARY NUMBER	PRIMARY PCT	OTHERS NUMBER	OTHERS PCT	CODE
0	0.0	0	0.0	01-SIDE OF BRIDGE RAILING
0	0.0	0	0.0	02-END OF BRIDGE RAILING
0	0.0	0	0.0	03-PIER, COLUMN, ABUTMENT
0	0.0	0	0.0	04-BOTTOM OF STRUCTURE
0	0.0	0	0.0	05-BRIDGE END POST IN GORE
0	0.0	0	0.0	06-END OF GUARD RAIL
0	0.0	0	0.0	07-BRIDGE APPROACH GUARD RAIL
0	0.0	0	0.0	10-LIGHT OR SIGNAL POLE
0	0.0	0	0.0	11-UTILITY POLE
0	0.0	0	0.0	12-POLE (TYPE NOT STATED)
0	0.0	2	18.2	13-TRAFFIC SIGN/SIGN POST
0	0.0	0	0.0	14-OTHER SIGNS NOT TRAFFIC
0	0.0	0	0.0	15-GUARDRAIL
0	0.0	0	0.0	16-MEDIAN BARRIER
0	0.0	0	0.0	17-WALL (EXCEPT SOUND WALL)
0	0.0	2	18.2	18-DIKE OR CURB
0	0.0	0	18.2	19-TRAFFIC ISLAND
0	0.0	0	0.0	20-RAISED BARS
0	0.0	0	0.0	21-CONCRETE OBJ (HDWL, D.I.)
0	0.0	0	0.0	22-GUIDEPOST, CULVERT, PM
0	0.0	0	0.0	23-CUT SLOPE OR EMBANKMENT
1	9.1	0	0.0	24-OVER EMBANKMENT
0	0.0	0	0.0	25-IN WATER
0	0.0	0	0.0	26-DRAINAGE DITCH
0	0.0	1	9.1	27-FENCE
0	0.0	0	0.0	28-TREES
0	0.0	1	9.1	29-PLANTS
0	0.0	0	0.0	30-SOUND WALL
0	0.0	0	0.0	40-NATURAL MATRL ON ROAD
0	0.0	0	0.0	41-TEMP BARRICADES, CONES
0	0.0	0	0.0	42-OTHER OBJECT ON ROAD
0	0.0	1	9.1	43-OTHER OBJECT OFF ROAD
1	9.1	1	9.1	44-OVERTURNED
0	0.0	0	0.0	45-CRASH CUSHION (SAND)
0	0.0	0	0.0	46-CRASH CUSHION (OTHER)
0	0.0	0	0.0	51-CALL BOX
0	0.0	0	0.0	98-UNKNOWN OBJECT STRUCK
0	0.0	0	0.0	99- NO OBJECT INVOLVED
9	81.8	1	9.1	V1 THRU V9 VEHICLE 1 TO 9
0	0.0	0	0.0	<< NOT STATED
1	9.1	11	100.0	-- DOES NOT APPLY
0	0.0	0	0.0	- INVALID CODES

<------ LOCATION OF COLLISION ------>

PRIMARY NUMBER	PRIMARY PCT	OTHERS NUMBER	OTHERS PCT	CODE
0	0.0	0	0.0	A-BEYOND MEDIAN OR STRIPE-LEFT
2	18.2	0	0.0	B-BEYOND SHLDER DRIVERS LEFT
0	0.0	0	0.0	C-LEFT SHOULDER AREA
1	9.1	0	0.0	D-LEFT LANE
0	0.0	0	0.0	E-INTERIOR LANES
9	81.8	2	18.2	F-RIGHT LANE
1	9.1	1	9.1	G-RIGHT SHOULDER AREA
1	9.1	3	27.3	H-BEYOND SHLDER DRIVERS RIGHT
0	0.0	0	0.0	I-GORE AREA
0	0.0	0	0.0	J-OTHER
0	0.0	0	0.0	V-HOV LANE(S)
0	0.0	0	0.0	W-HOV LANE BUFFER AREA
0	0.0	0	0.0	<-NOT STATED
1	9.1	11	100.0	--DOES NOT APPLY
0	0.0	0	0.0	-INVALID CODES

<------ DRUG/PHYSICAL ------>

PRIMARY NUMBER	PRIMARY PCT	OTHERS NUMBER	OTHERS PCT	CODE
10	90.9	0	0.0	A-HAD NOT BEEN DRINKING
2	18.2	0	0.0	B-HBD - UNDER INFLUENCE
0	0.0	0	0.0	C-HBD - NOT UNDER INFLUENCE
0	0.0	0	0.0	D-HBD - IMPAIRMENT UNKNOWN
0	0.0	1	9.1	E-UNDER DRUG INFLUENCE
0	0.0	0	0.0	F-OTHER PHYSICAL IMPAIRMENT
1	9.1	0	0.0	G-IMPAIRMENT NOT KNOWN
0	0.0	0	0.0	H-NOT APPLICABLE
0	0.0	0	0.0	I-FATIGUE
1	9.1	11	100.0	< NOT STATED
0	0.0	0	0.0	--DOES NOT APPLY
0	0.0	0	0.0	-INVALID CODES

TASAS SELECTIVE RECORD RETRIEVAL
TSAR - ACCIDENT DETAIL
All ramp acc. for LA 101, PM 33.798. For the time period of 01/01/05-12/31/07. T. Duong. Log# 795.

DI	RTE NO	S U F	CO	P R E	POST MILE	HIGHWAY: H G	A C	M T	B A	LANES LT	RT	U	T	I R L	S O H	D A Y	P C F	ENVIR COND W	L	S	R C	R W C	T O C	NO MTR VEH	D P T	I R	V H I	S I	PERSON K	I	O S P	L O C	S O O	L O C	S O O	L O C	S O O	L O C	OA F 12	M O V	SD P 12
07	101		LA		033.798	D	F	H	E	04	04	U	R	2 N 4			C	A	A	A	H	D	H	01	D	N	1	D	00	00	99	F	----	----	----	----	N<	A	A<
07	101		LA		033.798	D	F	H	E	04	04	U	R	4 N 7			3	A	A	A	H	D	A	02	A	N	2	C	00	00	V2	D	----	----	----	----	<<	E	A<
																									A	S	2	C	00	01	V1	F	----	----	----	----	<<	B	A<

Total Accidents: 2

ATTACHMENT E

PROJECT COST ESTIMATE SUMMARY

1. **For improvements within the State right-of-way**

2. **For improvements outside of the State right-of-way**

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE	07 - LA - 101
Type of Estimate	PSR
Program Code:	
Post Miles	33.4/33.9
EA	25720K
Project No.	

PROJECT DESCRIPTION

Project Title: Palo Comado Canyon Rd Interchange

Limits: Post Mile 33.4/33.9

Proposed Improvements: Overcrossing widening . US 101 NB off-ramp and on-ramp modification.

Alternative Project: Alternative 2 **(Improvements Within Caltrans R/W)**

Project Costs		
	ROADWAY ITEMS	$5,270,000
	STRUCTURE ITEMS	$2,943,000
	SUBTOTAL CONSTRUCTION	$8,213,000
	RIGHT OF WAY (Current Value)	$0
	TOTAL PROJECT CAPITAL OUTLAY COSTS	$8,213,000
	ENGINEERING, CONSTRUCTION MANAGEMENT & PROJECT ADMINISTRATION	$1,232,000
	TOTAL PROJECT COST	$9,445,000

Prepared By: Hui Lui Date: 2/25/2009

Reviewed By: Surafael Lee Date: 2/25/2009

I. ROADWAY ITEMS

Section 1 - Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Clearing & Grubbing	1	LS	$8,000.00	$8,000	
Roadway Excavation	3,752	CY	$25.65	$96,251	
Import Borrow		CY		$0	
Develop Water Supply	1	LS	$5,000.00	$5,000	
Structure Approach Embankment	2,178	CY	$20.22	$44,049	
				Total Earthwork	$153,299

Section 2 - Structural Section	Quantity	Unit	Unit Price	Unit Cost	Section Cost
PCC Pavement		CY		$0	
Asphalt Concrete (Type B)	1,318	TON	$76.00	$100,169	
Asphalt Concrete (Misc. Area)		SQ FT		$0	
Asphalt Concrete Dike (Type C)		LF		$0	
Asphalt Concrete Dike (Type D)		LF		$0	
JPCP	704	CY	$545.09	$383,864	
Asphalt Concrete (Open Graded)		TON		$0	
LCB (Rapid Setting)	1,005	CY	$174.68	$175,503	
Cold Plane Asphalt Concrete Pavement		SQ YD		$0	
Minor Concrete (Sidewalk and C&G Type A2-6)	0	CY	$441.60	$0	
Aggregate Base (Class 3)	1,788	CY	$68.97	$123,292	
				Total Structural Items	$782,827

Section 3 - Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Project Drainage	1	LS	$140,419	$140,419	
Storm Drains	1	LS	$93,613	$93,613	
				Total Drainage	$234,032

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Wall	1,212	SQFT	$100.00	$121,201	
Erosion Control	1	LS	$11,000	$11,000	
Water Pollution Control	1	LS	$250,860	$250,860	
Treatment BMP's	1	LS	$277,200	$277,200	
Barriers and Guardrails	1	LS	$30,000	$30,000	
Highway Planting	1	LS	$40,000	$40,000	
Resident Engineer Office	1	LS	$120,000	$120,000	
Hazardous Waste Work	1	LS	$250,000	$250,000	
Enviromental Mitigation	1	LS	$100,000	$100,000	
Landscape and Irrigation	1	LS	$20,000	$20,000	
Slope Protection	1	LS	$5,000	$5,000	
Plant Establishment Work	1	LS	$20,000	$20,000	
				Total Specialty Items	$1,245,261

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Traffic Delineation Items	1	LS	$23,403	$23,403	
Traffic Signal and Lighting	1	LS	$175,000	$175,000	
Roadside Signs (new and relocate)	1	LS	$25,000	$25,000	
Transportation Management Plan	1	LS	$133,920	$133,920	
Traffic Control System (Relocate Ramp Metering Cabinets)	1	LS	$45,000	$45,000	
				Total Traffic Items	**$402,323**
				SUBTOTAL SECTIONS 1-5	**$2,817,743**

Section 6 - Minor Items				Unit Price	Section Cost
10% of Subtotal Sections 1-5	2,817,743	X	10%	$281,774	
				Total Minor Items	$281,774

Section 7 - Roadway Mobilization				Unit Price	Section Cost
Subtotal Sections 1-5	2,817,743				
Minor Items	281,774				
Sum	3,099,517	X	10%	$309,952	
				Total Mobilization	$309,952

Section 8 - Roadway Additions					
Supplemental					
Subtotal Sections 1-5	2,817,743				
Minor Items	281,774				
Sum	3,099,517	X	10%	$309,952	
Contingencies					
Subtotal Sections 1-5	2,817,743				
Minor Items	281,774				
Sum	3,099,517	X	25%	$774,879	
Escalation					
Subtotal Sections 1-5	2,817,743				
Minor Items	281,774				
Sum	3,099,517	X	15%	$464,928	
				TOTAL ROADWAY ADDITIONS	$1,549,758

Section 9 - Time Related Overhead		
	Time Related Overhead 10%	$309,952
	TOTAL ROADWAY ITEMS, SECTIONS 1 - 9	$5,269,179

II. STRUCTURES ITEMS

Bridge Name	Chesebro Rd Overcrossing (Widen)	
Structure Type		
Width ft (out to out)	49.58	
Span Lengths, ft	234	
Total Area, Sq Ft	11,602	
Footing Type (Pile/Spread)		
Cost Per Sq Ft (incl. 10% mobilization , 25% contingency and 15% escalation)	$254	
Total Cost for Structure	$2,943,000	
		$2,943,000
Roadway Related Costs (Flag Man & Inspection)		$0
		$2,943,000

III. RIGHT OF WAY

	Current Values (Future Use)
A. Acquisition, including excess lands and damages to remainder(s)	$0
B. Utility Relocation	$0
C. Clearance/Demolition	
D. RAP	
E. Title and Escrow Fees	$0
F. Construction Contract Work	
Total Right of Way (Current Value)	$0

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE	07 - LA - 101
Type of Estimate	PSR
Program Code:	
Post Miles	33.4/33.9
EA	25720K
Project No.	

PROJECT DESCRIPTION

Project Title: Palo Comado Canyon Rd Interchange

Limits: Post Mile 33.4/33.9

Proposed Improvements: Overcrossing widening . US 101 NB off-ramp and on-ramp modification.

Alternative Project: Alternative 2 **(Improvements Outside Caltrans R/W)**

Project Costs		
	ROADWAY ITEMS	$3,320,000
	STRUCTURE ITEMS	$0
	SUBTOTAL CONSTRUCTION	$3,320,000
	RIGHT OF WAY (Current Value)	$1,082,500
	TOTAL PROJECT CAPITAL OUTLAY COSTS	$4,402,500
	ENGINEERING, CONSTRUCTION MANAGEMENT & PROJECT ADMINISTRATION	$498,000
	TOTAL PROJECT COST	$4,900,500

Prepared By: _____ Date: 2/25/2009

Reviewed By: _____ Date: 2/25/2009

I. ROADWAY ITEMS

Section 1 - Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Clearing & Grubbing	1	LS	$4,000	$4,000	
Roadway Excavation	5,187	CY	$25.65	$133,043	
Import Borrow		CY		$0	
Develop Water Supply	1	LS	$7,000	$7,000	
Structure Approach Embankment	0	CY	$20.22	$0	
				Total Earthwork	$144,043

Section 2 - Structural Section	Quantity	Unit	Unit Price	Unit Cost	Section Cost
PCC Pavement		CY		$0	
Asphalt Concrete (Type B)	1,635	TON	$76.00	$124,269	
Asphalt Concrete (Misc. Area)		SQ FT		$0	
Asphalt Concrete Dike (Type C)		LF		$0	
Asphalt Concrete Dike (Type D)		LF		$0	
JPCP	0	CY	$545.09	$0	
Asphalt Concrete (Open Graded)		TON		$0	
LCB (Rapid Setting)	835	CY	$174.68	$145,912	
Cold Plane Asphalt Concrete Pavement		SQ YD		$0	
Minor Concrete (Sidewalk and C&G Type A2-6)	300	CY	$441.60	$132,273	
Aggregate Base (Class 3)	1,601	CY	$68.97	$110,422	
				Total Structural Items	$512,876

Section 3 - Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Project Drainage	1	LS	$98,538	$98,538	
Storm Drains	1	LS	$65,692	$65,692	
				Total Drainage	$164,230

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Wall	7,735	SQFT	$100.00	$773,542	
Erosion Control	1	LS	$7,390	$7,390	
Water Pollution Control	1	LS	$99,000	$99,000	
Barriers and Guardrails		LS		$0	
Highway Planting		LS		$0	
Resident Engineer Office		LS		$0	
Hazardous Waste Mitigation		LS		$0	
Slope Protection	1	LS	$5,000	$5,000	
				Total Specialty Items	$884,932

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Relocate Ramp Metering Cabinets		LS		$0	
Traffic Delineation Items	1	LS	$16,423	$16,423	
Traffic Signal		LS		$0	
Roadside Signs		LS		$0	
Transportation Management Plan	1	LS	$33,480.00	$33,480	
Construction Area Signs	1	LS	$20,000	$20,000	
				Total Traffic Items	**$69,903**
				SUBTOTAL SECTIONS 1-5	**$1,775,984**

Section 6 - Minor Items				Unit Price	Section Cost
10% of Subtotal Sections 1-5	1,775,984	X	10%	$177,598	
				Total Minor Items	$177,598

Section 7 - Roadway Mobilization				Unit Price	Section Cost
Subtotal Sections 1-5	1,775,984				
Minor Items	177,598				
Sum	1,953,583	X	10%	$195,358	
				Total Mobilization	$195,358

Section 8 - Roadway Additions					
Supplemental					
Subtotal Sections 1-5	1,775,984				
Minor Items	177,598				
Sum	1,953,583	X	10%	$195,358	
Contingencies					
Subtotal Sections 1-5	1,775,984				
Minor Items	177,598				
Sum	1,953,583	X	25%	$488,396	
Escalation					
Subtotal Sections 1-5	1,775,984				
Minor Items	177,598				
Sum	1,953,583	X	15%	$293,037	
				TOTAL ROADWAY ADDITIONS	$976,791

Section 9 - Time Related Overhead				
			Time Related Overhead 10%	$195,358
			TOTAL ROADWAY ITEMS, SECTIONS 1 - 9	$3,321,091

II. STRUCTURES ITEMS

Bridge Name		
Structure Type		
Width ft (out to out)		
Span Lengths, ft		
Total Area, Sq Ft		
Footing Type (Pile/Spread)		
Cost Per Sq Ft (incl. 10% mobilization , 25% contingency and 15% escalation)		
Total Cost for Structure		$0
Roadway Related Costs (Flag Man & Inspection)		$0
		$0

III. RIGHT OF WAY

	Current Values (Future Use)
A. Acquisition, including excess lands and damages to remainder(s)	$619,000
B. Utility Relocation	$433,500
C. Clearance/Demolition	
D. RAP	
E. Title and Escrow Fees	$30,000
F. Construction Contract Work	
Total Right of Way (Current Value)	$1,082,500

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE	07 - LA - 101
Type of Estimate	PSR
Program Code:	
Post Miles	33.4/33.9
EA	25720K
Project No.	

PROJECT DESCRIPTION

Project Title: Palo Comado Canyon Rd Interchange

Limits: Post Mile 33.4/33.9

Proposed Improvements: Overcrossing widening . US 101 NB off-ramp and on-ramp modification.

Alternative Project: Alternative 3 **(Improvements Within Caltrans R/W)**

Project Costs		
	ROADWAY ITEMS	$9,410,000
	STRUCTURE ITEMS	$2,943,000
	SUBTOTAL CONSTRUCTION	$12,353,000
	RIGHT OF WAY (Current Value)	$174,000
	TOTAL PROJECT CAPITAL OUTLAY COSTS	$12,527,000
	ENGINEERING, CONSTRUCTION MANAGEMENT & PROJECT ADMINISTRATION	$1,853,000
	TOTAL PROJECT COST	$14,380,000

Prepared By: Hui Lui Date: 2/25/2009

Reviewed By: Surafael Tesfu Date: 2/25/2009

I. ROADWAY ITEMS

Section 1 - Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Clearing & Grubbing	1	LS	$16,000	$16,000	
Roadway Excavation	8,344	CY	$25.65	$214,025	
Import Borrow		CY		$0	
Develop Water Supply	1	LS	$11,000	$11,000	
Structure Approach Embankment	2,178	CY	$20.22	$44,049	
				Total Earthwork	$285,074

Section 2 - Structural Section	Quantity	Unit	Unit Price	Unit Cost	Section Cost
PCC Pavement		CY		$0	
Asphalt Concrete (Type B)	1,340	TON	$76.00	$101,830	
Asphalt Concrete (Misc. Area)		SQ FT		$0	
Asphalt Concrete Dike (Type C)		LF		$0	
Asphalt Concrete Dike (Type D)		LF		$0	
JPCP	890	CY	$545.09	$485,360	
Asphalt Concrete (Open Graded)		TON		$0	
LCB (Rapid Setting)	1,104	CY	$174.68	$192,760	
Cold Plane Asphalt Concrete Pavement		SQ YD		$0	
Minor Concrete (Sidewalk and C&G Type A2-6)	39	CY	$441.60	$17,384	
Aggregate Base (Class 3)	1,940	CY	$68.97	$133,833	
				Total Structural Items	$931,167

Section 3 - Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Project Drainage	1	LS	$182,436	$182,436	
Storm Drains	1	LS	$121,624	$121,624	
				Total Drainage	$304,060

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Wall	18,463	SQFT	$100.00	$1,846,274	
Erosion Control	1	LS	$11,000	$11,000	
Water Pollution Control	1	LS	$250,860	$250,860	
Treatment BMP's	1	LS	$277,200	$277,200	
Barriers and Guardrails	1	LS	$30,000	$30,000	
Highway Planting	1	LS	$40,000	$40,000	
Resident Engineer Office	1	LS	$120,000	$120,000	
Hazardous Waste Work	1	LS	$250,000	$250,000	
Enviromental Mitigation	1	LS	$100,000	$100,000	
Landscape and Irrigation	1	LS	$50,000	$50,000	
Slope Protection	1	LS	$15,000	$15,000	
Plant Establishment Work	1	LS	$20,000	$20,000	
				Total Specialty Items	$3,010,334

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Traffic Delineation Items	1	LS	$30,406	$30,406	
Traffic Signal and Lighting	1	LS	$175,000	$175,000	
Roadside Signs (new and relocate)	1	LS	$25,000	$25,000	
Transportation Management Plan	1	LS	$147,360	$147,360	
Overhead Guide Sign	1	LS	$80,000	$80,000	
Traffic Control System (Relocate Ramp Metering Cabinets)	1	LS	$45,000	$45,000	
				Total Traffic Items	**$502,766**
				SUBTOTAL SECTIONS 1-5	**$5,033,401**

Section 6 - Minor Items				Unit Price	Section Cost
10% of Subtotal Sections 1-5	5,033,401	X	10%	$503,340	
				Total Minor Items	$503,340

Section 7 - Roadway Mobilization				Unit Price	Section Cost
Subtotal Sections 1-5	5,033,401				
Minor Items	503,340				
Sum	5,536,742	X	10%	$553,674	
				Total Mobilization	$553,674

Section 8 - Roadway Additions					
Supplemental					
Subtotal Sections 1-5	5,033,401				
Minor Items	503,340				
Sum	5,536,742	X	10%	$553,674	
Contingencies					
Subtotal Sections 1-5	5,033,401				
Minor Items	503,340				
Sum	5,536,742	X	25%	$1,384,185	
Escalation					
Subtotal Sections 1-5	5,033,401				
Minor Items	503,340				
Sum	5,536,742	X	15%	$830,511	
				TOTAL ROADWAY ADDITIONS	$2,768,371

Section 9 - Time Related Overhead					
				Time Related Overhead 10%	$553,674
				TOTAL ROADWAY ITEMS, SECTIONS 1 - 9	$9,412,461

II. STRUCTURES ITEMS

Bridge Name	Chesebro Rd Overcrossing (Widen)		
Structure Type			
Width ft (out to out)	49.58		
Span Lengths, ft	234		
Total Area, Sq Ft	11,602		
Footing Type (Pile/Spread)			
Cost Per Sq Ft (incl. 10% mobilization , 25% contingency and 15% escalation)	$254		
Total Cost for Structure	$2,943,000		
			$2,943,000
Roadway Related Costs (Flag Man & Inspection)			$0
			$2,943,000

III. RIGHT OF WAY

	Current Values (Future Use)
A. Acquisition, including excess lands and damages to remainder(s)	$129,000
B. Utility Relocation	$0
C. Clearance/Demolition	
D. RAP	
E. Title and Escrow Fees	$45,000
F. Construction Contract Work	
Total Right of Way (Current Value)	$174,000

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE	07 - LA - 101
Type of Estimate	PSR
Program Code:	
Post Miles	33.4/33.9
EA	25720K
Project No.	

PROJECT DESCRIPTION

Project Title: Palo Comado Canyon Rd Interchange

Limits: Post Mile 33.4/33.9

Proposed Improvements: Overcrossing widening . US 101 NB off-ramp and on-ramp modification.

Alternative Project: Alternative 3 **(Improvements Outside Caltrans R/W)**

Project Costs		
	ROADWAY ITEMS	$5,140,000
	STRUCTURE ITEMS	$0
	SUBTOTAL CONSTRUCTION	$5,140,000
	RIGHT OF WAY (Current Value)	$1,317,500
	TOTAL PROJECT CAPITAL OUTLAY COSTS	$6,457,500
	ENGINEERING, CONSTRUCTION MANAGEMENT & PROJECT ADMINISTRATION	$771,000
	TOTAL PROJECT COST	$7,228,500

Prepared By: Hui Lui Date: 2/25/2009

Reviewed By: Susan Hale Date: 2/25/2009

I. ROADWAY ITEMS

Section 1 - Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Clearing & Grubbing	1	LS	$7,000	$7,000	
Roadway Excavation	13,603	CY	$25.65	$348,911	
Import Borrow		CY		$0	
Develop Water Supply	1	LS	$18,000	$18,000	
Structure Approach Embankment	0	CY	$20.22	$0	
				Total Earthwork	$373,911

Section 2 - Structural Section	Quantity	Unit	Unit Price	Unit Cost	Section Cost
PCC Pavement		CY		$0	
Asphalt Concrete (Type B)	3,117	TON	$76.00	$236,875	
Asphalt Concrete (Misc. Area)		SQ FT		$0	
Asphalt Concrete Dike (Type C)		LF		$0	
Asphalt Concrete Dike (Type D)		LF		$0	
JPCP	0	CY	$545.09	$0	
Asphalt Concrete (Open Graded)		TON		$0	
LCB (Rapid Setting)	1,592	CY	$174.68	$278,130	
Cold Plane Asphalt Concrete Pavement		SQ YD		$0	
Minor Concrete (Sidewalk and C&G Type A2-6)	329	CY	$441.60	$145,358	
Aggregate Base (Class 3)	3,052	CY	$68.97	$210,480	
				Total Structural Items	$870,843

Section 3 - Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Project Drainage	1	LS	$186,713	$186,713	
Storm Drains	1	LS	$124,475	$124,475	
				Total Drainage	$311,189

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Wall	9,754	SQFT	$100.00	$975,354	
Erosion Control	1	LS	$14,003	$14,003	
Water Pollution Control	1	LS	$99,000	$99,000	
Barriers and Guardrails		LS		$0	
Highway Planting		LS		$0	
Resident Engineer Office		LS		$0	
Hazardous Waste Mitigation		LS		$0	
Slope Protection	1	LS	$10,000	$10,000	
				Total Specialty Items	$1,098,357

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Relocate Ramp Metering Cabinets		LS		$0	
Traffic Delineation Items	1	LS	$31,119	$31,119	
Traffic Signal		LS		$0	
Roadside Signs		LS	$8,000.00	$8,000	
Transportation Management Plan	1	LS	$36,840	$36,840	
Construction Area Signs	1	LS	$20,000	$20,000	
				Total Traffic Items	**$95,959**
				SUBTOTAL SECTIONS 1-5	**$2,750,260**

Section 6 - Minor Items				Unit Price	Section Cost
10% of Subtotal Sections 1-5	2,750,260	X	10%	$275,026	
				Total Minor Items	$275,026

Section 7 - Roadway Mobilization				Unit Price	Section Cost
Subtotal Sections 1-5	2,750,260				
Minor Items	275,026				
Sum	3,025,286	X	10%	$302,529	
				Total Mobilization	$302,529

Section 8 - Roadway Additions					
Supplemental					
Subtotal Sections 1-5	2,750,260				
Minor Items	275,026				
Sum	3,025,286	X	10%	$302,529	
Contingencies					
Subtotal Sections 1-5	2,750,260				
Minor Items	275,026				
Sum	3,025,286	X	25%	$756,321	
Escalation					
Subtotal Sections 1-5	2,750,260				
Minor Items	275,026				
Sum	3,025,286	X	15%	$453,793	
				TOTAL ROADWAY ADDITIONS	$1,512,643

Section 9 - Time Related Overhead					
				Time Related Overhead 10%	$302,529
				TOTAL ROADWAY ITEMS, SECTIONS 1 - 9	$5,142,986

II. STRUCTURES ITEMS

Bridge Name		
Structure Type		
Width ft (out to out)		
Span Lengths, ft		
Total Area, Sq Ft		
Footing Type (Pile/Spread)		
Cost Per Sq Ft (incl. 10% mobilization , 25% contingency and 15% escalation)		
Total Cost for Structure		$0
Roadway Related Costs (Flag Man & Inspection)		$0
		$0

III. RIGHT OF WAY

	Current Values (Future Use)
A. Acquisition, including excess lands and damages to remainder(s)	$839,000
B. Utility Relocation	$433,500
C. Clearance/Demolition	
D. RAP	
E. Title and Escrow Fees	$45,000
F. Construction Contract Work	$150,000
Total Right of Way (Current Value)	$1,317,500

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE	07 - LA - 101
Type of Estimate	PSR
Program Code:	
Post Miles	33.4/33.9
EA	25720K
Project No.	

PROJECT DESCRIPTION

Project Title: Palo Comado Canyon Rd Interchange

Limits: Post Mile 33.4/33.9

Proposed Improvements: Overcrossing widening . US 101 NB off-ramp and on-ramp modification.

Alternative Project: Alternative 3A **(Improvements Within Caltrans R/W)**

Project Costs		
	ROADWAY ITEMS	$9,480,000
	STRUCTURE ITEMS	$4,812,000
	SUBTOTAL CONSTRUCTION	$14,292,000
	RIGHT OF WAY (Current Value)	$174,000
	TOTAL PROJECT CAPITAL OUTLAY COSTS	$14,466,000
	ENGINEERING, CONSTRUCTION MANAGEMENT & PROJECT ADMINISTRATION	$2,144,000
	TOTAL PROJECT COST	$16,610,000

Prepared By: Hui Lui Date: 2/25/2009

Reviewed By: Sura Faithlek Date: 2/25/2009

I. ROADWAY ITEMS

Section 1 - Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Clearing & Grubbing	1	LS	$16,000.00	$16,000	
Roadway Excavation	8,344	CY	$25.65	$214,025	
Import Borrow		CY		$0	
Develop Water Supply	1	LS	$11,000.00	$11,000	
Structure Approach Embankment	2,178	CY	$20.22	$44,049	
				Total Earthwork	$285,074

Section 2 - Structural Section	Quantity	Unit	Unit Price	Unit Cost	Section Cost
PCC Pavement		CY		$0	
Asphalt Concrete (Type B)	1,340	TON	$76.00	$101,830	
Asphalt Concrete (Misc. Area)		SQ FT		$0	
Asphalt Concrete Dike (Type C)		LF		$0	
Asphalt Concrete Dike (Type D)		LF		$0	
JPCP	890	CY	$545.09	$485,360	
Asphalt Concrete (Open Graded)		TON		$0	
LCB (Rapid Setting)	1,104	CY	$174.68	$192,760	
Cold Plane Asphalt Concrete Pavement		SQ YD		$0	
Minor Concrete (Sidewalk and C&G Type A2-6)	39	CY	$441.60	$17,384	
Aggregate Base (Class 3)	1,940	CY	$68.97	$133,833	
				Total Structural Items	$931,167

Section 3 - Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Project Drainage	1	LS	$182,436	$182,436	
Storm Drains	1	LS	$121,624	$121,624	
				Total Drainage	$304,060

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Wall	18,463	SQFT	$100.00	$1,846,274	
Erosion Control	1	LS	$11,000	$11,000	
Water Pollution Control	1	LS	$285,840	$285,840	
Treatment BMP's	1	LS	$277,200	$277,200	
Barriers and Guardrails	1	LS	$30,000	$30,000	
Highway Planting	1	LS	$40,000	$40,000	
Resident Engineer Office	1	LS	$120,000	$120,000	
Hazardous Waste Work	1	LS	$250,000	$250,000	
Enviromental Mitigation	1	LS	$100,000	$100,000	
Landscape and Irrigation	1	LS	$50,000	$50,000	
Slope Protection	1	LS	$15,000	$15,000	
Plant Establishment Work	1	LS	$20,000	$20,000	
				Total Specialty Items	$3,045,314

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Traffic Delineation Items	1	LS	$30,406	$30,406	
Traffic Signal and Lighting	1	LS	$175,000	$175,000	
Roadside Signs (new and relocate)	1	LS	$25,000	$25,000	
Transportation Management Plan	1	LS	$147,360	$147,360	
Overhead Guide Sign	1	LS	$80,000	$80,000	
Traffic Control System (Relocate Ramp Metering Cabinets)	1	LS	$45,000	$45,000	
				Total Traffic Items	**$502,766**
				SUBTOTAL SECTIONS 1-5	**$5,068,381**

Section 6 - Minor Items				Unit Price	Section Cost
10% of Subtotal Sections 1-5	5,068,381	X	10%	$506,838	
				Total Minor Items	$506,838

Section 7 - Roadway Mobilization				Unit Price	Section Cost
Subtotal Sections 1-5	5,068,381				
Minor Items	506,838				
Sum	5,575,220	X	10%	$557,522	
				Total Mobilization	$557,522

Section 8 - Roadway Additions					
Supplemental					
Subtotal Sections 1-5	5,068,381				
Minor Items	506,838				
Sum	5,575,220	X	10%	$557,522	
Contingencies					
Subtotal Sections 1-5	5,068,381				
Minor Items	506,838				
Sum	5,575,220	X	25%	$1,393,805	
Escalation					
Subtotal Sections 1-5	5,068,381				
Minor Items	506,838				
Sum	5,575,220	X	15%	$836,283	
				TOTAL ROADWAY ADDITIONS	$2,787,610

Section 9 - Time Related Overhead		
	Time Related Overhead 10%	$557,522
	TOTAL ROADWAY ITEMS, SECTIONS 1 - 9	$9,477,873

II. STRUCTURES ITEMS

Bridge Name	Chesebro Rd Overcrossing (Widen)	
Structure Type		
Width ft (out to out)	90.00	
Span Lengths, ft	234	
Total Area, Sq Ft	21,060	
Footing Type (Pile/Spread)		
Cost Per Sq Ft (incl. 10% mobilization , 25% contingency and 15% escalation)	$228	
Total Cost for Structure	$4,812,000	
		$4,812,000
Roadway Related Costs (Flag Man & Inspection)		$0
		$4,812,000

III. RIGHT OF WAY

	Current Values (Future Use)
A. Acquisition, including excess lands and damages to remainder(s)	$129,000
B. Utility Relocation	$0
C. Clearance/Demolition	
D. RAP	
E. Title and Escrow Fees	$45,000
F. Construction Contract Work	
Total Right of Way (Current Value)	$174,000

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE	07 - LA - 101
Type of Estimate	PSR
Program Code:	
Post Miles	33.4/33.9
EA	25720K
Project No.	

PROJECT DESCRIPTION

Project Title: Palo Comado Canyon Rd Interchange

Limits: Post Mile 33.4/33.9

Proposed Improvements: Overcrossing widening . US 101 NB off-ramp and on-ramp modification.

Alternative Project: Alternative 3A **(Improvements Outside Caltrans R/W)**

Project Costs		
	ROADWAY ITEMS	$5,520,000
	STRUCTURE ITEMS	$0
	SUBTOTAL CONSTRUCTION	$5,520,000
	RIGHT OF WAY (Current Value)	$1,317,500
	TOTAL PROJECT CAPITAL OUTLAY COSTS	$6,837,500
	ENGINEERING, CONSTRUCTION MANAGEMENT & PROJECT ADMINISTRATION	$828,000
	TOTAL PROJECT COST	$7,665,500

Prepared By: Hui Lui Date: 2/25/2009

Reviewed By: Surafachdeke Date: 2/25/2009

I. ROADWAY ITEMS

Section 1 - Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Clearing & Grubbing	1	LS	$7,000	$7,000	
Roadway Excavation	13,603	CY	$25.65	$348,911	
Import Borrow		CY		$0	
Develop Water Supply	1	LS	$18,000	$18,000	
Structure Approach Embankment	0	CY	$20.22	$0	
				Total Earthwork	$373,911

Section 2 - Structural Section	Quantity	Unit	Unit Price	Unit Cost	Section Cost
PCC Pavement		CY		$0	
Asphalt Concrete (Type B)	3,522	TON	$76.00	$267,655	
Asphalt Concrete (Misc. Area)		SQ FT		$0	
Asphalt Concrete Dike (Type C)		LF		$0	
Asphalt Concrete Dike (Type D)		LF		$0	
JPCP	0	CY	$545.09	$0	
Asphalt Concrete (Open Graded)		TON		$0	
LCB (Rapid Setting)	1,799	CY	$174.68	$314,270	
Cold Plane Asphalt Concrete Pavement		SQ YD		$0	
Minor Concrete (Sidewalk and C&G Type A2-6)	329	CY	$441.60	$145,358	
Aggregate Base (Class 3)	3,448	CY	$68.97	$237,830	
				Total Structural Items	$965,113

Section 3 - Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Project Drainage	1	LS	$200,854	$200,854	
Storm Drains	1	LS	$133,902	$133,902	
				Total Drainage	$334,756

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Wall	10,504	SQFT	$100.00	$1,050,354	
Erosion Control	1	LS	$15,064	$15,064	
Water Pollution Control	1	LS	$110,400	$110,400	
Barriers and Guardrails		LS		$0	
Highway Planting		LS		$0	
Resident Engineer Office		LS		$0	
Hazardous Waste Mitigation		LS		$0	
Slope Protection	1	LS	$6,000	$6,000	
				Total Specialty Items	$1,181,818

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Relocate Ramp Metering Cabinets		LS		$0	
Traffic Delineation Items	1	LS	$33,476	$33,476	
Traffic Signal		LS		$0	
Roadside Signs		LS	$8,000	$8,000	
Transportation Management Plan	1	LS	$36,840	$36,840	
Construction Area Signs	1	LS	$20,000	$20,000	
				Total Traffic Items	**$98,316**
				SUBTOTAL SECTIONS 1-5	**$2,953,914**

Section 6 - Minor Items				Unit Price	Section Cost
10% of Subtotal Sections 1-5	2,953,914	X	10%	$295,391	
				Total Minor Items	$295,391

Section 7 - Roadway Mobilization				Unit Price	Section Cost
Subtotal Sections 1-5	2,953,914				
Minor Items	295,391				
Sum	3,249,305	X	10%	$324,931	
				Total Mobilization	$324,931

Section 8 - Roadway Additions					
Supplemental					
Subtotal Sections 1-5	2,953,914				
Minor Items	295,391				
Sum	3,249,305	X	10%	$324,931	
Contingencies					
Subtotal Sections 1-5	2,953,914				
Minor Items	295,391				
Sum	3,249,305	X	25%	$812,326	
Escalation					
Subtotal Sections 1-5	2,953,914				
Minor Items	295,391				
Sum	3,249,305	X	15%	$487,396	
				TOTAL ROADWAY ADDITIONS	$1,624,653

Section 9 - Time Related Overhead					
				Time Related Overhead 10%	$324,931
				TOTAL ROADWAY ITEMS, SECTIONS 1 - 9	$5,523,819

II. STRUCTURES ITEMS

Bridge Name		
Structure Type		
Width ft (out to out)		
Span Lengths, ft		
Total Area, Sq Ft		
Footing Type (Pile/Spread)		
Cost Per Sq Ft (incl. 10% mobilization , 25% contingency and 15% escalation)		
Total Cost for Structure		$0
Roadway Related Costs (Flag Man & Inspection)		$0
		$0

III. RIGHT OF WAY

	Current Values (Future Use)
A. Acquisition, including excess lands and damages to remainder(s)	$839,000
B. Utility Relocation	$433,500
C. Clearance/Demolition	
D. RAP	
E. Title and Escrow Fees	$45,000
F. Construction Contract Work	$150,000
Total Right of Way (Current Value)	$1,317,500

ATTACHMENT F

PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT (PEAR)

Preliminary Environmental Analysis Report

FOR

U.S. 101/PALO COMADO CANYON ROAD INTERCHANGE IMPROVEMENT PROJECT

CITY OF AGOURA HILLS

LOS ANGELES COUNTY

Prepared by

PARSONS

February 2009

Preliminary Environmental Analysis Report

Project Information

District 07 County Los Angeles Route U.S. 101 Kilometer Post (Post Mile) 33.0/34.4 EA 25720K

Project Title: U.S. 101/Palo Comado Canyon Road Interchange Improvement Project

Project Manager: Ravi B. Ghate Phone # 213-897-5593

Project Engineer: Trilly Nguyen Phone # 213-897-7825

Environmental Branch Chief: Carlos Montez Phone # 213-897-9116

Environmental Coordinator: Carlos Montez Phone # 213-897-9116

Prepared by Consultant: Parsons, Angela Schnapp Phone # 626-440-2427

Project Description

The City of Agoura Hills (City) proposes to improve the US-101 Palo Comado Canyon Road Interchange and the Palo Comado Canyon Road/Chesebro Road Intersection adjacent to the interchange, in Los Angeles County from post mile 33.0 to 34.4. The proposed work includes the widening of the US-101 Palo Comado Canyon Road Overcrossing (OC) from 1-lane to 2-lanes in each direction with median and sidewalks and the modification of the northbound on-ramps and the modification of signalized intersections to facilitate the increased volume of traffic using the interchange, improve flow, and enhance safety.

Purpose and Need

Purpose:

The purposes of the Palo Comado Canyon Road Interchange improvement project are:

- Provide improved access to the proposed new school
- Improve traffic circulation on the roadway network adjacent to the Palo Comado Canyon Road Interchange.
- Accommodate the forecasted increases in traffic volume resulting from future developments.
- Improve the safety and operational level-of-service for the US-101 Palo Comado Canyon Road Interchange.

Need:

Currently, the distance between the existing Canwood Street intersection with Palo Comado Canyon Road and the US-101 northbound ramps at Chesebro Road is less than 100 feet. This configuration presents a non-standard access control distance beyond the northbound off-ramp termini and it does not have the capacity to handle the forecasted increase traffic demand. Furthermore, the planned developments around Chesebro Road, Palo Comado Canyon Road, and Canwood Street west of the Palo Comado Canyon Road, will increase the traffic volumes on the local roadway network as well as the US-

101 interchange substantially. Roadway improvements are needed to keep traffic operation Level-of-Service (LOS) on the roadways and intersections within acceptable range.

The needs for this project are:

- Proposed development of the vacant lands adjacent to the interchange will increase traffic volumes around the area and improvements to the interchange and the roadway network are needed to accommodate the additional traffic demands and relieve congestion.

- The existing access road, Canwood Street, has an intersection approximately 50 feet from the existing northbound on-ramp intersection at the Palo Comado Canyon Road Interchange. Improvements are needed to provide better access control and traffic circulation.

Proposed Alternatives

Alternative 1: No Build

The No Build Alternative would maintain the configuration of the US 101/Palo Comado Canyon Road interchange and the Palo Comado Canyon Road/Canwood Street intersection as proposed under the Heschel School project. The northbound ramp intersection at Palo Comado Canyon Road will include a fifth leg to Canwood Street, and the intersection will be signalized. The Palo Comado Canyon Road Overcrossing would remain as a two-lane road and would not accommodate the future traffic demand. Congestion would not be alleviated, and the situation would deteriorate with time. There are no construction or right-of-way costs associated with this alternative.

Alternative 2: Widen Palo Comado Canyon Road and Overcrossing and Maintain Tight Diamond Ramps

This alternative proposes to maintain the existing tight diamond configuration of the northbound ramps and widen the entire length of Palo Comado Canyon Road and the existing overcrossing from 2 lanes to 4 lanes. The project would provide access to Heschel School via a new signalized intersection on Palo Comado Canyon Road between the northbound ramps and Driver Avenue. The project would eliminate the fifth leg (i.e. Canwood Street) at the existing Palo Comado Canyon Road, northbound ramps, and Canwood Street intersection that is proposed as part of the school project. Canwood Street, east of Palo Comado Canyon Road, would be closed. The northbound ramps intersection would be modified to provide standard approach angles, and the traffic signals would be modified.

Alternative 3: Widen Palo Comado Canyon Road and Construct Northbound Hook Off-Ramp

This alternative proposes to reconfigure the northbound off-ramp to a partial Type L-6 hook ramp and widen the entire length of Palo Comado Canyon Road and the existing overcrossing from 2 lanes to 4 lanes. The school driveway would be relocated to the eastern end of Canwood Street approximately 60 feet east of the proposed hook off-ramp. The existing tight diamond northbound off-ramp would be removed, and the frontage road (i.e., Canwood Street) would be realigned and reconstructed to provide 2 lanes in each direction. The intersection at Palo Comado Canyon Road and Canwood Street would be signalized and reconfigured so that westbound Canwood Street would have dual left-turn lanes to southbound Palo Comado Canyon Road, one shared through/right-turn lane to the northbound on-ramp and northbound Palo Comado Canyon Road, and one right-turn lane to northbound Palo Comado Canyon Road. The intersection at the proposed hook off-ramp and Canwood Street would be signalized, and the hook off-ramp would be configured with a right-turn lane and dual left-turn lanes to eastbound and westbound Canwood Street, respectively. Overhead lane usage signs and traffic markings are recommended to guide motorists on the northbound off-ramp and westbound Canwood Street. This alternative would widen the existing overcrossing and its approaches from 2 lanes to 4 lanes, similar to Alternative 2. The existing northbound tight diamond on-ramp would be modified to provide a standard approach angle at the intersection with Palo Comado Canyon Road.

Alternative 3A: Widen Palo Comado Canyon Road with Full Overcrossing Replacement and Construct Northbound Hook Off-Ramp

This alternative is identical to Alternative 3 except that the existing Palo Comado Canyon Road overcrossing will be replaced instead of being widened. The overcrossing and its approaches will be constructed at a higher vertical profile to allow for a standard vertical clearance over the US 101.

Anticipated Environmental Approval

CEQA		NEPA	
☐	Categorical/Statutory Exemption	☐	Categorical Exclusion
☒	Initial Study (IS)/Mitigated Negative Declaration (MND)	☒	Environmental Assessment (EA)/ Finding of No Significant Impact (FONSI)
☐	Environmental Impact Report	☐	Environmental Impact Statement

The project would require the preparation of environmental documentation pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The California Department of Transportation (Caltrans) would be the lead agency under CEQA and would be the lead agency under the assumption of responsibility pursuant to the 23 U.S.C. 327, NEPA delegation. Based on preliminary review and subject to confirmation after the completion of appropriate supporting technical studies, there do not appear to be any significant impacts after the application of appropriate mitigation measures associated with the proposed Build Alternative. Further study is expected to confirm that the project features and mitigation would reduce the project impacts to a less than significant level pursuant to CEQA. Therefore, it is recommended that an Initial Study (IS)/Environmental Assessment (EA) be prepared, which is expected to lead to a Mitigated Negative Declaration (MND) (pursuant to CEQA) and Finding of No Significant Impact (FONSI) (pursuant to NEPA). It is expected that approximately 8 to 12 months would be needed to complete the required technical studies and process the environmental documentation. A final determination on the type of documentation to be produced will be determined based on findings of the technical studies and evaluation of proposed mitigation measures.

Summary Statement

The preliminary investigation of the proposed project focused on impacts associated with Palo Comado Canyon Road/U.S. 101 interchange improvements. Based upon this Preliminary Environmental Analysis Report (PEAR), it does not appear that there are any significant impacts associated with the proposed Build Alternative for the proposed project with mitigation measures incorporated.

The following technical studies will be prepared as part of this Project Study Report (PSR) and the PEAR to provide support to the type of environmental compliance decision and to address the impacts and necessary mitigation measures of the proposed action:

- ✓ Initial Site Assessment (Attachments G and H of the PSR)
- ✓ Storm Water Data Report (Attachment I of the PSR)
- ✓ Preliminary Noise Assessment (Appendix A of the PEAR)
- ✓ Preliminary Air Quality Assessment (Appendix B of the PEAR)
- ✓ Preliminary Cultural Resources Assessment (provided as part of the PEAR)
- ✓ Paleontological Resources Records Check (Appendix C of the PEAR)
- ✓ Initial Biological Reconnaissance Technical Memorandum (provided as part of the PEAR)

Environmental issues under the proposed Build Alternative that could affect cost and/or schedules include noise, air quality, and hazardous materials.

The following table presents potential and anticipated permits required for this proposed project.

Regulation and Description	Resource Agency
National Pollutant Discharge Elimination System (NPDES) – Storm Water Pollution Prevention Plan	California Water Resources Control Board

Special Considerations

Implementation of the Build Alternative would require completion of a few technical studies and further evaluation of some environmental components as part of the environmental document preparation to evaluate and/or confirm potential environmental impacts. Preparation of the recommended technical studies and environmental document would require approximately 8 to 12 months to be completed. An environmental area that requires further study and/or mitigation, which has the potential to affect project costs and schedule, includes noise impacts. No other unusual, exceptional, or extended environmental processes are anticipated.

Anticipated Project Mitiga tion

Community Impacts: Impacts to the community during project construction could be minimized by keeping area residents and business owners informed of the project schedule, and coordinating closely with utility service providers to ensure that minimum disruption would occur. In addition, the contractor would develop a Traffic Management Plan for implementation during project construction to ensure that traffic impacts are minimized.

Air quality: An Air Quality Analysis would be conducted during the environmental document preparation phase when the detailed engineering design is developed. Air quality impacts during the construction phase could be minimized by implementing SCAQMD Rule 403 (PM_{10} Control Measures) and requiring the contractor to follow current standard procedures to reduce/control construction equipment emissions. If potentially significant impacts on air quality are identified during the implementation phase, mitigation measures to minimize the impacts would be proposed.

Noise: A preliminary noise study was conducted. Based on the available information and the preliminary assessment, a soundwall appears to be required for first row residences located in the northwest quadrant of the Palo Comado Canyon Road/U.S. 101 interchange. A detailed noise study would be conducted to identify the specific length, appropriate heights, and exact location of the barrier, which can only be determined upon reviewing project drawings and plans. The feasibility and reasonability of recommended soundwalls would be determined during the detailed analysis.

Water Quality: Stormwater pollution prevention and treatment Best Management Practices (BMPs) would be incorporated in the project design to ensure that impacts to water quality are minimized.

Paleontology: Areas of deep excavation (i.e., deeper than 5 feet below surface grade) would be monitored for any vertebrate fossils. If found, the excavation activities would be temporarily halted to allow samples to be collected and analyzed for paleontological potential. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution.

Hazardous Waste/Materials: Prior to disposal of drilled soil and groundwater from the piling areas, sampling and analysis of the subject soil and groundwater would be conducted to determine the level of contamination to identify proper handling and disposal methods.

Prior to project construction, sampling and analysis of the liquids in the pole-top transformers would be conducted to determine if PCBs are present in the pole-top transformer fluid and to determine proper

disposal methods if the transformers are to be removed or properly handling methods if the transformers are to be relocated.

Prior to project construction, sampling and analysis of the joint compound in the overcrossing would be conducted to determine whether or not ACM is present in the joint compound and to determine proper disposal methods if ACM is found.

Prior to project construction, sampling and analysis of the paint striping on the roadways would be conducted to determine whether LBP is present in the lane striping paint and to determine proper disposal methods if lead is found.

Prior to project construction, sampling and analysis of surface soils from unpaved areas along the U.S. 101/Palo Comado Canyon Road interchange that are subject to excavation would be conducted to determine the level of total and soluble lead to allow proper excavated soil management, including onsite placement or offsite disposal.

Prior to project construction, sampling and analysis of soils from landscaped areas along U.S. 101/Palo Comado Canyon Road interchange that are subject to excavation would be conducted to determine the level of pesticides/herbicides contamination to identify a proper handling method.

Biological Resources: Mitigation for permanent impacts to sensitive biological resources (oak trees) may be required. Such mitigation may include avoidance (alignment modification) or tree replacement. The removal of any large trees would be scheduled outside the nesting and fledging season (i.e., after August).

Invasive Species: Exposed soil areas would be replanted with noninvasive vegetation, and equipment inspection and control would be performed to ensure that they are cleaned of potential noxious weed sources (i.e., mud and vegetation) before and after entering the project area. To the extent applicable, any topsoil removed to a depth of 6 inches during construction should be stockpiled onsite for subsequent use as fill needed directly onsite to avoid the spread of existing invasive plant species at the project site.

Cost estimate for the proposed mitigations are presented in Attachment A to this PEAR.

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. Changes in project scope, alternatives, or environmental laws will require a re-evaluation of this report.

Reviewed by:

Environmental Office Chief — Date: 2/24/09

Project Manager — Date: 2/25/09

Environmental Technical Reports or Studies Required

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

Discussion of Technical Review

Alternative 1: No Build Alternative

Under the No Build Alternative, there would be no change to existing environmental conditions.

Alternative 2: Build Alternative

Socioeconomic and Community Effects

The project site is located in the City of Agoura Hills. According to the General Plan for the City of Agoura Hills, the project site does not have a specific land use designation. Existing land uses adjacent to the project area consist of commercial auto related, commercial retail/services, office, low density residential neighborhoods, business park offices, and local park uses. Zoning designations around the immediate vicinity of the project site include: P – Local Park; RL – Low Density Residential; CRS – Commercial Retail/Service; and BP-OR (Business Park – Office Retail).

Potential Impacts

During project construction, residents within the vicinity of the project site and motorists traveling along the nearby roadways may occasionally experience some inconvenience due to construction equipment and material obstruction. The impacts from roadway obstruction would cease at the completion of the project. The proposed project is intended to enhance roadway operation and safety; no potential adverse impacts to adjacent community members are foreseen.

Mitigation Measures

Community impacts during project construction could be minimized by keeping area residents and business owners informed of the project schedule and coordinating closely with utility service providers to ensure that minimum disruption would occur. In addition, the contractor would develop a Traffic Management Plan for implementation during project construction to ensure that traffic impacts are minimized.

Farmlands

The project site is not located within designated agricultural land. No impacts to farmland would occur.

4(f) Impacts

Section 4(f) of the U.S. Department of Transportation Act of 1966 mandates that special efforts be made to preserve public parks, recreation land, wildlife and waterfowl refuges, and historic sites. The proposed project would not involve the use of Section 4(f) properties; therefore, no impact to Section 4(f) properties would occur.

Visual Effects

The proposed U.S. 101/Palo Comado Canyon Road interchange improvements would occur primarily within the right-of-way of the existing roadway. Views from the project area and its vicinity are primarily of associated transportation and commercial infrastructures. No visual resources, including mature trees, exist within the project area. The majority of the proposed project would be constructed at or near existing grade; therefore, no obstruction of views to any group of viewers would occur.

Water Quality

The project site is located within the upper reach of the Malibu Creek Watershed, which is within the Santa Monica Bay Watershed Area. More specifically, the project area resides in the Santa Monica Bay Hydrologic Unit, Malibu Creek Hydrologic Area, and is within the Lindero Canyon Sub-Area, 404.23. Surface water from the proposed project site and immediate project vicinity is collected by designed flood control/storm drain facilities, and is eventually routed to Chesebro Creek, which is a tributary to Malibu Creek.

There are two Total Maximum Daily Loads (TMDLs) established within the Malibu Creek Watershed, which are:

Malibu Creek Nutrients TMDL

On March 21, 2003, in absence of State versions, the US Environmental Protection Agency (EPA) issued the Nutrients TMDL for the Malibu Creek watershed. The TMDL requires a special monitoring program to evaluate effectiveness of actions to reduce both dry and wet weather urban runoff.

Malibu Creek Watershed Bacteria TMDL

The Malibu Creek Watershed Bacteria TMDL became effective on January 24, 2006. Caltrans is working cooperatively with a group of Responsible Agencies to jointly comply with the TMDL. Project Engineer of projects located where dry weather diversion exists needs only consider infiltration devices for bacteria removal; however, all other projects shall consider both dry weather flow diversion and infiltration devices.

Potential Impacts

Construction Phase

The estimated soil disturbance area for this project is 4.8 acres, and was based on the alternative with the largest project footprint, which is Alternative 3. The project could result in water quality impacts to stormwater runoff during construction. Grading and excavation could result in soil erosion.

The major pollutant expected from construction sites is erosion related, where sediment-laden water flows into storm drains. Currently, the California Department of Transportation (Caltrans) has a statewide NPDES stormwater permit that covers all Caltrans work and projects within the state. All projects within Caltrans jurisdiction must conform to the requirements of the Caltrans Statewide NPDES Storm Water Permit, Order No. 99-06-DWQ, NPDES No. CAS000003, adopted by the State Water Resources Control Board (SWRCB) on July 15, 1999. This permit allows Caltrans to operate, maintain, and construct on state right-of-way without applying for individual General Permits for each construction project. The permit requires Caltrans to adhere to the provisions of the Statewide General NPDES Permit for Construction Activities, Order No. 99-08-DWQ, NPDES No. CAS000002. The local agency project with construction activity within Caltrans right-of-way and has a total disturbed soil area greater than 1 acre, the local agency shall submit a Notice of Intent (NOI) to SWRCB at least 30 days prior to any soil disturbing activities. In addition, all projects are subject to the BMPs specified in the Caltrans Storm Water Management Plan (SWMP). The provisions and requirements of the permit are enforced by RWQCBs.

The SWPPP and Monitoring Program would be prepared and implemented prior to construction activities. The SWPPP would identify construction-period BMPs to reduce water quality impacts. The SWPPP would emphasize (1) temporary erosion control measures to reduce sedimentation and turbidity of surface runoff from disturbed areas, (2) personnel training, (3) scheduling and implementation of BMPs during construction and for the various seasons (noting that the rainy season is from October 1 to May 1), (4) identification of non-stormwater discharge BMPs, and (5) mitigation and monitoring during construction.

Typical erosion control measures to be used to address site soil stabilization and reduce deposition of sediments in the adjacent surface waters would include the application of soil stabilizers such as hydroseeding, netting, erosion control mats, rock slope protection, velocity dissipation devices, and flared end sections for culverts.

The proposed project would be constructed to minimize erosion by incorporating retaining walls to reduce the steepness of slopes or to shorten slopes; providing cut and fill slopes flat enough to allow revegetation and limit erosion to preconstruction rates; and collecting concentrated flows in stabilized drains and channels. Alternative materials or facilities could also be utilized to reduce future maintenance impacts on water quality, and the design of the project would allow for the ease of maintenance. Additionally, the project could be scheduled and phased to minimize soil-disturbing work during the rainy season.

Implementation Phase

The project would result in an increase of 2.2 acres in impervious surface in the project area. This could be expected to translate into localized increases in urban runoff. Potential pollutants found on streets and freeways include heavy metals, organic compounds (including petroleum hydrocarbons), sediments, trash, debris, oil, and grease. Drainage along the freeway alignment is away from the freeway pavement towards designed collection along the roadway.

As described in the Caltrans SWMP, BMPs are designed and implemented to reduce the discharge of pollutants from the Caltrans storm drain system to the maximum extent practicable. This would require the onsite drainage system to be designed with a BMP concept in place that maximizes pollutant removal while taking into account economic constraints related to maintenance, right-of-way, and construction costs. According to the Stormwater Data Report prepared for this project, permanent treatment BMPs that are deemed appropriated and are evaluated for the project include biofiltration swales. Adequate space does not exist for the placement of infiltration basins, detention basins, or media filters within the project limits. Traction Sand Traps, Dry Weather Flow Diversion, and Wet Basins are not feasible. Gross Solids Removal Devices are not proposed because the receiving waters are not on the 303(d) list for trash. None of the proposed treatment BMP locations serve a "critical source area"; therefore, multi-chambered treatment trains are not feasible and are not proposed. The selected BMP would be designed to treat 100 percent of the water quality volume generated from the project site.

Mitigation Measures

With incorporation of the BMPs described above in the project design, no additional mitigation measures would be required.

Floodplain Evaluation

The project site is included on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map Community Panel Number 065072 0002B (Effective December 18, 1986). The project site is located entirely in Zone C, which is an area determined to have minimal flooding and is outside the 100-year and 500-year floodplains. Thus, no flood flows would be impeded or redirected. No further floodplain evaluation is required.

Noise

A preliminary noise analysis has been performed to determine the potential noise impacts resulting from the proposed project. Noise-sensitive land uses in the project area include primarily the existing residences located along Chesebro Road and the pre-school, kindergarten and Montessori schools located at the intersection of Chesebro Road, Driver Avenue and Palo Comado Canyon Road. Additionally, the Heschel West School is planned to be located on the hill in the northeast quadrant of the proposed project. Residents and occupants in the Senior Retreat may experience elevated noise levels during project construction due to equipment operation.

According to the Caltrans Traffic Noise Analysis Protocol (Caltrans, 2006), traffic noise impacts occur when it is determined that the proposed Type I project will cause a substantial noise increase or when the predicted traffic noise levels approach within 1 decibel A (dBA) or exceed the Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) after project completion. A noise increase is considered substantial when the future predicted noise levels exceed existing noise levels by 12 dBA, Leq(h).

Parsons personnel conducted short-term noise measurements on July 10, 2008 at five residential locations that are representative of residences around the existing Palo Comado Canyon Road/U.S. 101 interchange. The short-term measurements were conducted for periods of 20 minutes and taken during the morning peak hours and the traffic was observed to be free flowing. The locations and results are presented in Appendix A of this PEAR.

Potential Impacts

Potential traffic noise impacts will be analyzed in accordance with the impact screening procedures identified in the Caltrans Technical Noise Supplement, TENS (Caltrans, 1998). According to the screening procedure, there is potential impact which would warrant a detailed noise study if the existing peak hour noise levels are within 5 dBA of the NAC. This implies that if existing noise levels are at least 62 dBA, within 5 dBA of the NAC of 67 dBA for residential land uses, a detailed noise analysis would be required. Existing noise levels at residences adjacent to the project have been found to be between 58 and 71 dBA; therefore a detailed analysis should be performed according to the procedures outlined in the Traffic Noise Analysis Protocol.

The preliminary traffic noise evaluation indicated that noise impacts would potentially occur at nearby residences because of their close proximity to the freeway and project site. Existing noise levels at some of these residences already exceed the NAC; therefore, future noise levels would also exceed the NAC.

Residents and occupants in the Agoura Hills Senior Retreat, Villa Park Agoura Apartments may also experience elevated noise levels during project construction due to equipment operation. The construction noise impacts would be temporary and would cease after the construction is completed. Implementation of standard construction noise mitigation measures would minimize noise impacts during the construction period.

Potential Traffic Noise Abatement

As prescribed in 23CFR772 and the Traffic Noise Analysis Protocol, noise abatement has only been considered where noise impacts are predicted, and where frequent human use occurs, or where a lowered noise level would be beneficial. Based on available information and the preliminary assessment, a soundwall appears to be required for first row residences located in the northwest quadrant of the Palo Comado Canyon Road/U.S. 101 interchange. A detailed noise study will be required to identify the specific length, appropriate heights, and exact location of the barrier, which can only be determined upon reviewing project drawings and plans. The feasibility and reasonability of recommended soundwalls shall be determined during the detailed analysis.

Air Quality

The project site is located within the City of Agoura Hills, in the 6,745-square-mile South Coast Air Basin (SCAB or Basin). The SCAB is defined as encompassing all of Orange County, Los Angeles County, with the exception of Antelope Valley, and the non-desert portions of Riverside and San Bernardino Counties. It consists of a coastal plain with interconnecting broad valleys and low hills. Elevations range from sea level to over 11,000 ft (3,353 m) above mean sea level (MSL). The South Coast Air Quality Management District (SCAQMD) has jurisdiction over air quality issues within the SCAB.

The SCAB is currently designated as a nonattainment area for Ozone (O3) and particulate matters (PM10 and PM2.5), and is in maintenance for Nitrogen dioxide (NO2) and Carbon Monoxide (CO). Table 1 summarizes the SCAB's attainment status, based on federal standards (NAAQS) and the state standards (CAAQS).

Table 1. South Coast Air Basin Attainment Status

Pollutant	National Standards	California Standards
Ozone (O_3) – 1-hour	— [a]	Non-attainment
Ozone (O_3) – 8-hour	Severe – 17	Non-attainment
PM_{10}	Serious	Non-attainment
$PM_{2.5}$	Non-attainment	Non-attainment
Carbon Monoxide (CO)	Attainment/Maintenance	Attainment
Nitrogen Dioxide (NO_2)	Attainment/Maintenance [b]	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead (Pb)	Attainment	Attainment

[a] *The 1-hour Ozone standard (NAAQS) was revoked by EPA on June 15, 2005 and thus, is no longer in effect for the State of California .*

[b] *.Attainment of NO_2 based on national standards was approved on October 7, 2003.*

Source: California Air Resources Board, 2008.

The project site is located in an urbanized portion of Southern California (Figure 1). The immediate vicinity of the proposed project consist mostly commercial properties on both the north and south sides of US-101. Along Canwood Street, there is a Montessori kindergarten and pre-school, multi-family residences, a senior community facility, condominiums, and single-family residences. The Old Agoura Park is located immediately to the northeast of the project location.

Sensitive land uses in the project vicinity include residences, a senior community, and the Montessori kindergarten and pre-school. The closest residences are the homes on the northeast corner of Driver Street, Canwood Street and Palo Comado Canyon Road. These residences are located approximately 25 feet from the project site boundary. The multi-family residences, senior community, and condominiums are approximately 75 ft, 100 ft, and 150 ft from the proposed project, respectively. The nearest school to the project site is the Montessori kindergarten and pre-school is approximately 25 ft west of the project site. Other potentially sensitive uses in the more distant area include multi-family and single-family residences.

Potential Impacts

Following is a summary of the air quality assessment and analysis to be provided in the Air Quality Technical Report:

- The project is located in an ozone non-attainment area for federal and state standards.
- The project will increase capacity and it should be included with other projects that will be modeled for conformity. The project sponsor will employ appropriate procedures to ensure the project will be included in the SCAG transportation plans and that it would conform to CAA and state and federal air quality requirements and plans.
- A qualitative or quantitative local CO impact analysis will be conducted in accordance with the CO Protocol. The traffic data required for project-level hot-spot analysis for CO and particulate matter including ADT, truck ADT and percentage, peak hour (AM and PM) traffic volumes for all