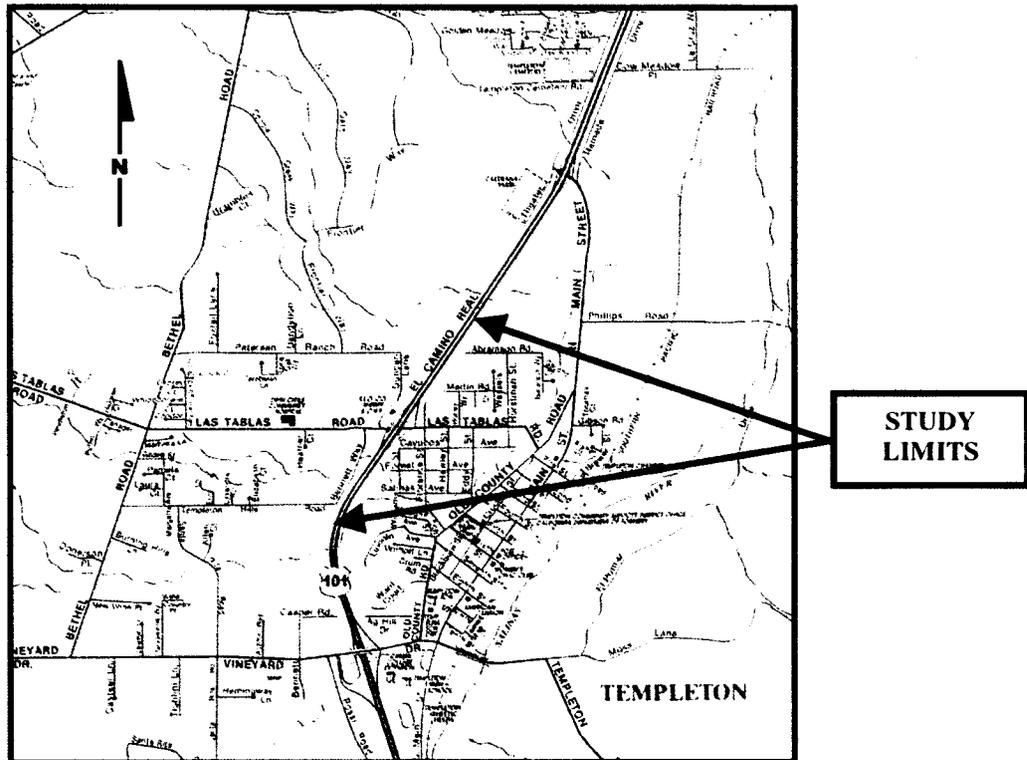


PROJECT STUDY REPORT (Project Development Support)

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

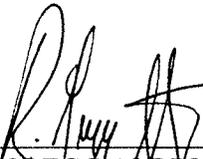


On U.S. Hwy 101
at Las Tablas Road Interchange
between Vineyard Drive and North Main Street

APPROVAL RECOMMENDED BY:


THOMAS E. HOUSTON, Project Manager

APPROVED BY:


R. GREGG ALBRIGHT
District 5 Director


Date

CONCURRED BY:


JAY NORVELL
Acting District 6 Director – Central Region

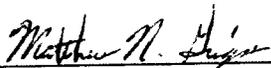
05-SLO-101
KP 81.6-83.2 (PM 51.0 – 52.0)
05-0G510K
Program: 20.xx.075.600 and 20.xx.400

PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

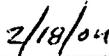
LAS TABLAS ROAD / U.S. 101 INTERCHANGE MODIFICATION

IN SAN LUIS OBISPO COUNTY

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



Matthew N. Griggs, P.E.
Dokken Engineering



Date



PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

FOR

LAS TABLAS ROAD / U.S. 101 INTERCHANGE MODIFICATION

Prepared for:

San Luis Obispo County
County Government Center
San Luis Obispo, CA 93408

Prepared by:



11171 Sun Center Drive, Suite 250
Rancho Cordova, CA 95670

February 2004

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PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

1. INTRODUCTION

This Project Study Report (Project Development Support) [PSR(PDS)] identifies improvements to the Las Tablas Road/US-101 interchange and on Las Tablas Road in the Community of Templeton in San Luis Obispo County through the year 2030. These improvements are in addition to operational improvements currently planned or under construction by Caltrans and San Luis Obispo County. The purpose of the proposed project is to maximize the efficiency of Las Tablas Road and the Las Tablas Road/US-101 interchange to preempt any degradation of traffic operations within the 20-year design period. This PSR(PDS) presents seven alternatives, including five alternatives that have been studied in depth. The study alternatives include several design features such as widening of Las Tablas Road, possible reconfiguration and/or widening of the interchange ramps, and the addition of bike lanes and sidewalks where lacking (See Exhibit A - Vicinity Map). The estimated cost ranges are \$9.0 - \$11.0 million for Alternative 1; \$12.0 - \$14.0 million for Alternative 2; \$8.5 - \$10.5 million for Alternative 3; \$19.0 - \$22.8 million for Alternative 5; and \$0.5 - \$2.0 million for Alternative 7. These cost estimates include project development, environmental documentation, design, right-of-way engineering and acquisition, construction and construction management. The improvements are to be funded with a combination of County funds and State Transportation Improvement Program funding. This project was initiated by San Luis Obispo County. The project is a non-capacity increasing operational improvement project with both 20.xx.075.600 Regional Improvement Program and 20.xx.400 Locally Funded State Highway Project funding. This report is for purposes of programming the Project Approval/Environmental Document (PA/ED) support component only.

2. BACKGROUND

San Luis Obispo County initiated this project for the following main reasons:

- Las Tablas Road is the most direct route for emergency response vehicles serving the Twin Cities Community Hospital and the medical services facilities located east of US-101, in the Community of Templeton. Improvements in traffic operations on Las Tablas Road are needed to ensure access to these important health care services.
- Planned development in the Templeton area will include an office complex and single-family housing on the west side of US-101 near the Las Tablas interchange. Since the area lacks continuous, parallel routes, the Las Tablas interchange will need to accommodate the traffic generated by this development.

US-101 – This portion of US-101 is a four-lane freeway with 3.6 m (12-foot) lanes, 2.4 m (8-foot) right shoulders, and a median width of 12.2 m (40 feet). The original two-lane roadway was built in 1933 and was replaced with a four-lane facility in 1954. The functional classification of this segment of US-101 is a Principal Arterial and is included in the National Highway System. Additionally, Route 101 is a Focus Route on the Interregional Road System, a SHELL (State Highway Extra Legal Load) route and an oversize truck route. Commute traffic is the primary use through this portion of US-101, but a large percentage of travel through the study area is interregional.

Las Tablas Road – Las Tablas Road is a two-lane east-west collector extending beyond Bethel Road to the west and terminates at Old County Road to the east. The Twin Cities Hospital and ancillary medical offices are major land uses located on Las Tablas Road. The hospital is located west of Bennett Way. Las Tablas Road is two lanes wide east of Bennett Way with left and right turn lanes provided at some intersections. West of Bennett Way, it is a three-lane road with one lane in each direction and a median two-way left turn lane. Bike lanes are delineated intermittently on both sides of Las Tablas Road within the project area.

Bennett Way – Bennett Way is a two-lane local road that provides access to Templeton Hills Road and existing development located south of Las Tablas Road.

Duncan Road – Duncan Road is a two-lane local road that provides access to Petersen Ranch Road and existing development located north of Las Tablas Road. It also provides access to the California Highway Patrol facility located north of Las Tablas Road and west of US-101.

Florence Street – Florence Street is a two-lane local street that extends between Las Tablas Road and Old County Road. It provides access to residential development located south of Las Tablas Road and the Templeton downtown area.

Las Tablas Road/US-101 interchange – The Las Tablas Road/US-101 interchange is a Type L-1 (tight diamond) undercrossing and consists of two, three-span undercrossing structures, Las Tablas Road between Duncan Road and Florence Street, the northbound on- and off-ramps, and the southbound on- and off-ramps. As it passes under the center spans of the undercrossing structures, Las Tablas Road consists of two 3.658 m (12') through lanes, two 1.524 m (5') bike lanes (one on each side) and a 1.524 m (5') sidewalk on the south side. The design speed on Las Tablas Road at the interchange is 48 kph (30 mph) based on the Stopping Sight Distance provided by the existing vertical alignment.

This interchange is one of three interchanges serving the community of Templeton. The study area includes five intersections. The existing interchange has non-standard features including interchange spacing as summarized in Table 1, intersection spacing as summarized in Table 2, angle of intersection at the ramp termini and design speeds on the ramps and Las Tablas Road.

**TABLE 1
 Non-Standard Interchange Spacing**

Location	Interchange Spacing
Vineyard Drive Overcrossing to Las Tablas Road Undercrossing	1.30 km (0.81 miles)
Las Tablas Road Undercrossing to Main Street Overcrossing	1.59 km (0.99 miles)

**TABLE 2 (See Exhibit B)
 Non-Standard Intersection Spacing**

Location	Intersection Spacing
Duncan Road to SB on- & off-ramps	48.8 m (160 feet)
NB on- & off-ramps to Florence Street	103.6 m (340 feet)

Local Road Network – The existing local road network in the Community of Templeton lacks a continuous parallel route on either side of US-101. Although Main Street connects all three interchanges on the east side of US-101, it is not visible from the freeway. On the west side of US-101, a portion of Bennett Way crosses Vineyard Drive and a separate portion connects Templeton

Hills Road with Las Tablas Road. There is no connection between Duncan Road and Theater Drive. Further to the west, Bethel Road connects Vineyard Drive and Las Tablas Road, but provides no access to Theater Drive and the Main Street interchange.

Regional Significance – The origins and destinations of trips utilizing the US-101/Las Tablas Road interchange were analyzed to establish the percentage of “regional” trips using the interchange. The assignments from the Templeton area traffic-forecasting model were used for this task. Tables 3 and 4 present the results of the analysis.

Table 3 shows the breakdown of trips based on the location of the trip origin and destination. Table 4 shows a breakdown of the local versus regional trips. The data summaries are based on the following assumptions:

1. Trips generated within the Templeton area with both trip ends within Templeton are categorized as “internal/internal” trips.
2. Trips with one trip end in Templeton and one trip end outside of Templeton are categorized as “internal/external-external/internal” trips.
3. Trips with neither trip end within Templeton are categorized as external/external trips.

Local/regional trips are categorized as follows:

- a. Internal/internal trips are considered local trips.
- b. Internal/external and external/internal trips that are generated by the Twin Cities Community Hospital and support development in the same zone as the hospital are considered regional trips.
- c. Internal/external and external/internal trips that are generated by the residential uses in the Templeton area and other non-hospital related land uses in Templeton are considered local trips.
- d. External/external trips are considered regional trips.

TABLE 3
Percentage of Interchange Volumes by Trip Type

Trip Type	2030 No Build	2030 Build
Total Without US-101 Through Volumes		
Internal/Internal	32%	18%
Internal/External - External/Internal	68%	82%
External/External	0%	0%
Total	100%	100%
Total With US-101 Through Volumes		
Internal/Internal	12%	5%
Internal/External - External/Internal	28%	28%
External/External	60%	67%
Total	100%	100%

Table 3 shows the breakdown of trips based on the location of the trip origin and destination. Separate table summaries are presented with and without US-101 mainline through volumes. The

percentages shown in Table 3 are based on volumes on the interchange ramps, on Las Tablas Road traveling through the interchange, but not using the ramps and, in the case of the lower summary table, through volumes on mainline US-101. As the table shows, when US-101 mainline volumes are excluded, about two-thirds of the trips using the interchange are internal/external or external/internal trips and about one-third are internal/internal trips under the no-build condition. Under the build condition, the percentage of trips using the interchange that are internal/external or external/internal trips increases. This is because the extension of Theater Drive to the south diverts a large amount of local (internal/internal) traffic away from the interchange.

TABLE 4
Percentage of Interchange Volumes – Local vs. Regional

	2030 No Build		2030 Build	
	Local Trips	Regional Trips	Local Trips	Regional Trips
Without US-101 Volumes	75%	25%	71%	29%
With US-101 Volumes	33%	67%	27%	73%

Table 4 shows the percentage breakdown of local vs. regional trips using the interchange. Under the no-build scenario, 75% of the trips using the interchange are estimated to be local trips, and under the build scenario, 71% of the trips using the interchange are estimated to be local trips. These percentages are based on categorizing internal/external-external/internal trips generated by the hospital and supporting development as regional trips as described above.

3. NEED & PURPOSE

The need for the project is to address the congestion and related degradation of the Level of Service (LOS) that is projected for Year 2030 at the Las Tablas Road/US-101 interchange and the adjacent intersections within the study area. Further, there is a need to improve safety for bicyclists and pedestrians, and to ensure safe and efficient access for emergency response vehicles. The purpose of this project is to maximize the efficiency of Las Tablas Road and the Las Tablas Road/US-101 interchange to preempt any degradation of traffic operations. The project is to be designed such that it will not preclude the planned ultimate widening of US-101 or future interchange improvements.

A California Highway Patrol (CHP) field office is located on Duncan Road near Las Tablas Road. The CHP officers and the County Sheriff's deputies attached to the field office make extensive use of the Las Tablas Road/US-101 interchange in the performance of their duties. The Twin Cities Community Hospital and the adjacent medical services facilities have been established as a centralized source of health care and emergency trauma services for the entire Templeton-Atascadero region. As such, these facilities will contribute significantly to the increasing traffic demand on Las Tablas Road as the community grows. The combined effects of other land use intensification around the Las Tablas Road corridor, the expected increase in pedestrian and bicycle traffic, the lack of alternative routes, limited highway crossing opportunities and the non-standard existing roadway geometrics will cause escalating congestion and safety concerns along Las Tablas Road and at the Las Tablas Road/US-101 interchange unless improvements are undertaken.

As shown in Table 5, the southbound (SB) US-101 ramp intersection with Las Tablas Road currently operates at LOS C during both AM and PM peak hours. The northbound (NB) US-101 ramp intersection with Las Tablas Road currently operates at LOS D during the AM peak hour and LOS C during the PM peak hour. The intersections of Las Tablas Road with Bennett Way, Duncan Road and Florence Street currently operate at LOS C or better during both AM and PM peak hours.

TABLE 5
Peak Hour Intersection LOS

INTERSECTION		Existing	Year 2030 Existing Road Network Existing Geometrics		Year 2030 Improved Road Network Existing Geometrics	
			Unsignalized	Signalized	Unsignalized	Signalized
		AM/PM	AM/PM	AM/PM	AM/PM	AM/PM
1	Las Tablas Road (E-W)	B/B	C/C	A/A	D/D	A/A
	Bennett Way (NB)					
2	Las Tablas Road (E-W)	C/C	F/F	C/B (C/B)*	F/F	D/F (D/F)*
	Duncan Road (SB)					
3	Las Tablas Road (E-W)	C/C	F/F	E/F (F/F)*	C/F	A/B (C/B)*
	US-101 SB Ramps (SB)					
4	Las Tablas Road (E-W)	D/C	F/F	F/F	F/F	B/B
	US-101 NB Ramps (NB)					
5	Las Tablas Road (E-W)	B/B	D/C	A/A	C/C	A/A
	Florence Street (N-S)					

* LOS in parentheses indicates coordination of signals between Intersections 2 and 3.

With the existing roadway geometrics, local road network, and unsignalized intersections, the 2030 projected traffic volumes will cause traffic operations at the Duncan Road intersection and both US-101 ramp intersections to deteriorate to LOS F for both AM and PM peak hours. The Florence Street intersection will experience LOS D in the AM peak hour. Adding traffic signals to the study intersections provides some improvements to traffic operations, but both US-101 ramp intersections would still experience LOS E or worse for both AM and PM peak hours.

Adjusting the projected 2030 traffic model to include an improved local road network with the existing roadway geometrics and unsignalized intersections on Las Tablas Road will cause the US-101 SB ramps intersection to experience LOS C for the AM peak hour and the Florence Street intersection to experience LOS C for both AM and PM peak hours. Traffic operations at the US-101 SB ramps intersection will deteriorate to LOS F for the PM peak hour, and Bennett Way, Duncan Road, and the US-101 NB ramp intersections will deteriorate to LOS D or worse for both AM and PM peak hours. Adding traffic signals to the study intersections greatly improves the traffic operations, but the Duncan Road intersections would still experience LOS D or worse for both AM and PM peak hours. Operational improvements to Las Tablas Road and the Las Tablas Road/US-101 interchange are necessary to maintain acceptable LOS along the Las Tablas Road corridor within the 20-year design period.

Intersection spacing in the project area does not meet the current standard of 125 m minimum. The proposed project includes alternatives for closing the Duncan Road intersection and moving the SB US-101 ramp intersection to achieve the minimum standard spacing and improve operations.

The future traffic demand will be accommodated by evaluating the widening of Las Tablas Road to four through lanes and dedicated left turn lanes in the project alternatives. Bicycle and pedestrian traffic will be accommodated by including bike lanes and sidewalks on both sides of Las Tablas Road in all project alternatives.

4. ALTERNATIVES

Seven alternatives have been studied, including six build alternatives and the no-build alternative. Alternative 4, the no-build alternative, would leave the project in its existing condition, with no improvements to Las Tablas Road or US-101. Alternative 3 would be considered the 'Minimum Build Alternative' since it does not require the replacement of the existing undercrossing structures. Alternative 5 meets current design standards for sight distance, design speed and superelevation transitions. Alternative 7 meets all current design standards by closing the ramps.

Concurrence by the Project Development Coordinator for further study of the viable alternatives included in this PSR(PDS) does not constitute approval of any non-standard features identified currently or in the future. Separate documentation and approval(s) will be required as per Chapter 21 of the Project Development Procedures Manual (PDPM).

The alternatives are presented below:

Alternative 1 (Exhibit B)

This alternative will widen Las Tablas Road between Bennett Way and Florence Street to provide five 3.6 m traffic lanes and two 1.5- m bike lanes. In addition, a dedicated right turn lane would also be provided in the WB direction beginning at the NB ramp intersection and terminating 40 m west of Florence Street. The center lane would be used as a median or a left turn lane, as needed. Between the NB ramps and the Florence Street intersection, the EB through lane adjacent to the bike lane would become a dedicated right turn lane and terminate at Florence Street. Curb, gutter and sidewalks will also be added, as needed, along both sides of Las Tablas Road.

The intersections of Las Tablas Road with Bennett Way, Florence Street and the NB and SB US-101 ramps will be adjusted to accommodate the widening of Las Tablas Road. Duncan Road will be widened at the intersection to accommodate a dedicated right turn lane. Traffic signals will be added to all five intersections. The signals at Duncan Road and the SB US-101 ramps will be interconnected to function as a single intersection.

All four US-101 ramps will be resurfaced. To accommodate future traffic demands, the NB and SB off-ramps will be widened to two lanes. A retaining wall will be needed along the widening of the NB off-ramp to avoid any impacts to the residential area adjacent to the State right-of-way.

The two existing two-lane, three-span undercrossing bridges on US-101 will be replaced with a single, six-lane, three-span structure to accommodate the ultimate widening of US-101, as indicated in Caltrans' Transportation Concept Report. At the interchange, the traffic lanes, bike lanes, curb, gutter and sidewalk on Las Tablas Road will pass under the center span of the undercrossing structure.

This alternative will require exceptions to Mandatory Design Standards for the following conditions:

- Non-standard intersection spacing [HDM 504.3(3)]
- Non-standard interchange spacing (HDM 501.3)
- Non-standard superelevation rates at ramp termini (HDM 202.2)
- Non-standard design speed on local facility (HDM 101.2)
- Non-standard shoulder width on a freeway (HDM 302.1)

This alternative will require exceptions to Advisory Design Standards for the following conditions:

- Non-standard design speeds at ramp termini [HDM 504.3(1)(a)]
- Non-standard side slope (HDM 304.1)

- Non-standard design speed at freeway exits [DM 504.2(4)(a)]
- Non-standard design speed at freeway entrances [HDM 504.2(4)(b)]
- Non-standard stopping sight distance at freeway exits [HDM 504.2(5)(a)]
- Non-standard angle of intersection (HDM 403.3)

Estimated cost (in current dollars) of construction, right-of-way acquisition and engineering for Alternative 1 is as follows:

<u>Estimated Construction Cost (Fiscal Year 2002)</u>	
Roadway	\$4,058,000
Structures	\$3,017,000
Subtotal	\$7,075,000
 <u>Right of Way Cost</u>	
Right-of-Way Capital	\$122,000
Right-of-Way Support	\$15,000
Subtotal	\$137,000
 <u>Engineering and Construction Administration</u>	
Engineering (PA/ED, PS&E) @ 13%	\$920,000
Construction Administration @ 12%	\$849,000
Subtotal	\$1,769,000
 TOTAL	 \$8,981,000

Alternative 2 (Exhibit B)

This alternative will widen Las Tablas Road between Bennett Way and Florence Street to provide five 3.6 m traffic lanes and two 1.5 m bike lanes. In addition, a dedicated right turn lane would also be provided in the WB direction beginning at the NB ramp intersection and terminating 40 m west of Florence Street. The center lane would be used as a median or a left turn lane, as needed. Between the NB ramps and the Florence Street intersection, the EB through lane adjacent to the bike lane would become a dedicated right turn lane and terminate at Florence Street. Curb, gutter and sidewalks will also be added, as needed, along both sides of Las Tablas Road.

The intersections of Las Tablas Road with Bennett Way, Florence Street and the NB US-101 ramps will be adjusted to accommodate the widening of Las Tablas Road. The Duncan Road intersection with Las Tablas Road will be deleted and Duncan Road will be obliterated between Las Tablas Road and the CHP facility. The SB US-101 ramp intersection with Las Tablas Road will be relocated to a position 125 m east of Bennett Way. Traffic signals will be added to the four intersections remaining in the project area.

The NB US-101 on-ramp will be resurfaced. To accommodate future traffic demands, the NB off-ramp will be widened to two lanes. A retaining wall will be needed along the widening of the NB off-ramp to avoid any impacts to the residential area adjacent to the State right-of-way. The existing, single lane SB US-101 ramps will be replaced with two-lane ramps that align with the relocated intersection. A retaining wall will be needed along a portion of the SB off-ramp to minimize any impacts to the CHP facility.

The two existing three-span undercrossing bridges on US-101 will be replaced with a single, six-lane, two-span structure to accommodate the ultimate width of Las Tablas Road and the ultimate widening of US-101, as indicated in Caltrans' Route Concept Report.

This alternative will require exceptions to Mandatory Design Standards for the following conditions:

- Non-standard intersection spacing [HDM 504.3(3)]
- Non-standard interchange spacing (HDM 501.3)
- Non-standard superelevation rates at ramp termini (HDM 202.2)
- Non-standard design speed on local facility (HDM 101.2)
- Non-standard shoulder width on a freeway (HDM 302.1)

This alternative will require exceptions to Advisory Design Standards for the following conditions:

- Non-standard design speeds at ramps [HDM 504.3(1)(a)]
- Non-standard side slope (HDM 304.1)
- Non-standard design speed at freeway exits [HDM 504.2(4)(a)]
- Non-standard design speed at freeway entrances [HDM 504.2(4)(b)]
- Non-standard stopping sight distance at freeway exits [HDM 504.2(5)(a)]
- Non-standard angle of intersection (HDM 403.3)
- Non-standard shoulder width on local facility (HDM 308.1)

Local road improvements would need to be in place before this alternative could be implemented. ennett Way would be extended north of Las Tablas Road to intersect Peterson Ranch Road at Frontier Way. Duncan Road would be realigned to intersect Bennett Way Extension.

This alternative could easily be implemented in two phases by constructing an interim project consisting of the SB US-101 ramp improvements and widening of Las Tablas Road west of US-101 on an expedited schedule. The remainder of the improvements, including the replacement of the undercrossing structures and the ultimate widening of Las Tablas Road, would be completed as the funding becomes available and when the traffic volumes warrant.

Estimated cost (in current dollars) of construction, right-of-way acquisition and engineering for Alternative 2 is as follows:

<u>Estimated Construction Cost (Fiscal Year 2002)</u>	
Roadway	\$6,010,000
Structures	\$3,047,000
Subtotal	\$9,057,000
<u>Right of Way Cost</u>	
Right-of-Way Capital	\$532,000
Right-of-Way Support	\$30,000
Subtotal	\$562,000
<u>Engineering and Construction Administration</u>	
Engineering (PA/ED, PS&E) @ 13%	\$1,177,000
Construction Administration @ 12%	\$1,087,000
Subtotal	\$2,264,000
TOTAL	\$11,883,000

Alternative 3 (Exhibit B)

To implement this alternative, the Duncan Road intersection with Las Tablas Road will be deleted and Duncan Road will be obliterated between Las Tablas Road and the CHP facility. The SB US-101 ramp intersection with Las Tablas Road will be relocated to a position 125 m east of Bennett Way.

Las Tablas Road will be widened between Bennett Way and the relocated SB US-101 ramp intersection to provide one 3.6 m median/left turn lane, four 3.6 m through lanes and two 1.5 m bike lanes. As it passes under the center spans of the existing undercrossing structures, Las Tablas Road will be re-configured to provide one 3.6 m left turn lane, two 3.6 m through lanes and two 1.07 m shoulders. Between the NB US-101 ramp intersection and Florence Street, Las Tablas Road will be widened to provide one 3.6 m median/left turn lane, two 3.6 m through lanes and two 1.5 m bike lanes. A dedicated right turn lane would also be provided in the WB direction beginning at the NB ramp intersection and terminating 40 m west of Florence Street.

The intersection of Las Tablas Road with Bennett Way will be adjusted to accommodate the widening of Las Tablas Road. Traffic signals will be added to the four intersections remaining in the project area.

The NB US-101 on-ramp will be resurfaced. To accommodate future traffic demands, the NB off-ramp will be widened to two lanes. A retaining wall will be needed along the widening of the NB off-ramp to avoid any impacts to the residential area adjacent to the State right-of-way. The existing, single lane SB US-101 ramps will be replaced with two-lane ramps that align with the relocated intersection. A retaining wall will be needed along a portion of the SB off-ramp to minimize any impacts to the CHP facility.

The existing undercrossing bridges on US-101 will remain, but the closure walls at abutments 1 and 4 will be removed. Tieback walls will be installed at each abutment to provide room for curb, gutter, sidewalks and bike lanes beneath spans 1 and 3 of the existing undercrossing structures. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road between Bennett Way and Florence Street.

This alternative will require exceptions to Mandatory Design Standards for the following conditions:

- Non-standard intersection spacing [HDM 504.3(3)]
- Non-standard interchange spacing (HDM 501.3)
- Non-standard superelevation rates at ramp termini (HDM 202.2)
- Non-standard design speed on local facility (HDM 101.2)
- Non-standard shoulders on local facility (HDM 308.1)

This alternative will require exceptions to Advisory Design Standards for the following conditions:

- Non-standard design speeds at ramps [HDM 504.3(1)(a)]
- Non-standard side slope (HDM 304.1)
- Non-standard design speed at freeway exits [HDM 504.2(4)(a)]
- Non-standard design speed at freeway entrances [HDM 504.2(4)(b)]
- Non-standard stopping sight distance at freeway exits [HDM 504.2(5)(a)]
- Non-standard angle of intersection (HDM 403.3)

Local road improvements would need to be in place before this alternative could be implemented. Bennett Way would be extended north of Las Tablas Road to intersect Peterson Ranch Road at Frontier Way. Duncan Road would be realigned to intersect Bennett Way Extension.

This alternative could easily be implemented in two phases by constructing an interim project consisting of the SB US-101 ramp improvements and widening of Las Tablas Road west of US-101 on an expedited schedule. The remainder of the improvements would be completed as the funding becomes available and when the traffic volumes warrant.

Estimated cost (in current dollars) of construction, right-of-way acquisition and engineering for Alternative 3 is as follows:

<u>Estimated Construction Cost (Fiscal Year 2002)</u>	
Roadway	\$5,602,000
Structures	\$790,000
Subtotal	\$6,392,000
 <u>Right of Way Cost</u>	
Right-of-Way Capital	\$423,000
Right-of-Way Support	\$15,000
Subtotal	\$438,000
 <u>Engineering and Construction Administration</u>	
Engineering (PA/ED, PS&E) @ 13%	\$831,000
Construction Administration @ 12%	\$767,000
Subtotal	\$1,598,000
 TOTAL	 \$8,428,000

Alternative 4

The No-Build Alternative would include no improvements to the interchange at Las Tablas Road/US-101.

Alternative 5 (Exhibit B)

This is a full standard alternative with respect to Caltrans design standards. This alternative proposes to widen Las Tablas Road between Bennett Way and Florence Street to provide five 3.6 m traffic lanes and two 1.5 m bike lanes. The vertical alignment will also be adjusted to provide stopping sight distance for the desired design speed of Las Tablas Road. Curb, gutter and sidewalks will also be added, as needed, along both sides of Las Tablas Road.

Both existing two-lane, three-span undercrossing structures are to be replaced with a single, six-lane, two-span structure to accommodate the ultimate width of Las Tablas Road and the ultimate widening of US-101, as indicated in Caltrans' Route Concept Report.

The intersection of Duncan Road and Las Tablas Road will be deleted, and Duncan Road will be obliterated to 140 m past the intersection. Bennett Way will be realigned approximately 100 m east and extended through Las Tablas Road to intersect Peterson Ranch Road at Frontier Way. Duncan Road would be realigned to intersect the Bennett Way Extension. The Florence Street access to Las Tablas Road will be closed.

The configuration of the existing diagonal ramps will be modified to achieve standard design speeds, sight distance, and superelevation transitions. The NB off-ramp and SB on- and off-ramps have two 3.6 m lanes to accommodate future traffic.

Additional effects for this alternative include the following:

1. Closing the north end of Williams Street and the west end of Cayucos Avenue.
2. The Park-and-Ride lot at the corner of Bennett Way and Las Tablas Road will be relocated.

3. The ramp configuration in the NW quadrant will cause the Pacific Bell installation and the CHP facilities to be relocated.
4. The driveway access on the NE quadrant connecting to Las Tablas Road will be closed and a new driveway access connecting to Hawley Street will be constructed.

The only design exception this alternative cannot address is the exception to Mandatory Design Standards for the following condition:

- Non-standard interchange spacing (HDM 501.3)

Estimated cost (in current dollars) of construction, right-of-way acquisition and engineering for Alternative 5 is as follows:

<u>Estimated Construction Cost (Fiscal Year 2002)</u>	
Roadway	\$7,704,000
Structures	\$3,097,000
Subtotal	\$10,801,000
<u>Right of Way Cost</u>	
Right-of-Way Capital	\$5,516,000
Right-of-Way Support	\$15,000
Subtotal	\$5,531,000
<u>Engineering and Construction Administration</u>	
Engineering (PA/ED, PS&E) @ 13%	\$1,404,000
Construction Administration @ 12%	\$1,296,000
Subtotal	\$2,700,000
TOTAL	\$19,032,000

Alternative 6

This alternative will widen Las Tablas Road between Bennett Way and Florence Street to provide five 3.6 m traffic lanes and two 1.5 m bike lanes. Between the NB ramps and the Florence Street intersection, the additional EB through lane would become a dedicated right turn lane and terminate at Florence Street. In addition, a dedicated right turn lane would also be provided in the WB direction beginning at the NB ramp intersection and terminating 40 m west of Florence Street. Curb, gutter and sidewalks will also be added, as needed, along both sides of Las Tablas Road. Both two-lane, three-span undercrossing structures would be replaced with a single, seven-lane, three-span structure. The existing diagonal SB on-ramp would be replaced with a loop ramp. The existing diagonal SB off-ramp would be realigned around the loop ramp. At the interchange, the traffic lanes, bike lanes, curb, gutter and sidewalk on Las Tablas Road will pass under the center span of the undercrossing structure.

Local road improvements would need to be in place before this alternative could be implemented. Bennett Way would be extended north of Las Tablas Road to intersect Peterson Ranch Road at Frontier Way. Duncan Road would be realigned to intersect Bennett Way Extension. The intersection of Duncan Road and Las Tablas Road would be deleted.

The benefits of this alternative include correction of the narrow opening beneath the undercrossing structure, and the sub-standard intersection spacing west of the undercrossing. Moving the SB ramps to the NW quadrant of the interchange allows ramp capacity to be improved without affecting the

Park-and-Ride lot in the SW quadrant. However, the ramp configuration in the NW quadrant would cause the Pacific Bell installation and the CHP facility to be relocated.

The Project Development Team agreed to drop this alternative from further consideration, primarily because relocating the CHP facility would delay construction of the proposed interchange improvements by at least five years. Additionally, the construction cost for this alternative was substantially higher than Alternatives 1, 2 or 3 while providing similar traffic operations.

Alternative 7 (Exhibit B)

This alternative will close all of the ramps at Las Tablas Road to eliminate access to the main line from the local street and convert the existing interchange to a simple undercrossing. Curb, gutter, sidewalk and bike lane delineation will be added along Las Tablas Road, where needed.

Local road improvements would need to be in place before this alternative could be implemented. Bennett Way would be extended south from Templeton Hills Road to Turkey Ranch Place, and north of Las Tablas Road to intersect Peterson Ranch Road at Frontier Way. Abramson Road would be extended east to intersect North Main Street. (See Exhibit A, Future Road Network Improvements.) Additional traffic, environmental and right-of-way analysis will be required for this alternative to progress in the PA/ED phase.

The benefits of this alternative include elimination of traffic congestion on Las Tablas Road, the sub-standard interchange spacing between Vineyard Drive Overcrossing and Las Tablas Road, and the sub-standard intersection spacing west of the undercrossing. Additional safety for bicyclists and pedestrians will be achieved within the project area through the elimination of intersections and reduction in traffic volumes.

Estimated cost (in current dollars) of construction, right-of-way acquisition and engineering for Alternative 7 is as follows:

<u>Estimated Construction Cost (Fiscal Year 2002)</u>	
Roadway	\$373,000
Structures	\$0
Subtotal	\$373,000
 <u>Right of Way Cost</u>	
Right-of-Way Capital	\$0
Right-of-Way Support	\$0
Subtotal	\$ 0
 <u>Engineering and Construction Administration</u>	
Engineering (PA/ED, PS&E) @ 13%	\$48,000
Construction Administration @ 12%	\$45,000
Subtotal	\$93,000
 TOTAL	 \$466,000

5. ANALYSIS OF PROPOSAL

Traffic Analysis

A Traffic Analysis Report was prepared to evaluate the traffic operations of proposed project alternatives, including the no-build alternative. The PDS Traffic Scoping Checklist is included as Exhibit E.

The study includes analysis of the following intersections:

1. Las Tablas Road/Bennett Way
2. Las Tablas Road/Duncan Road
3. Las Tablas Road/SB US-101 Ramps
4. Las Tablas Road/NB US-101 Ramps
5. Las Tablas Road/Florence Street

Year 2030 travel demand forecasts were developed to provide a basis for evaluating future interchange operations and evaluate the alternative geometric designs. Year 2030 PM peak-hour travel forecasts were prepared using an update of a travel demand model for the Templeton area. The original model was developed in 1991 for the Templeton Traffic Circulation Study. The model was updated to include a year 2000/2001 base condition. The model forecasts PM peak hour conditions. The AM peak hour travel forecasts were derived from the PM peak hour forecasts for use in this study.

Existing traffic volumes are summarized in the Traffic Analysis. Intersection traffic operations were evaluated using technical procedures documented in the *2000 Highway Capacity Manual (HCM)*. The 2000 HCM methodology evaluates intersection operations using control delay per vehicle. Control delay includes not only the actual time stopped but also time to slow down, accelerate and travel at reduced speeds in queues. Overall intersection delays presented in this report are based on a weighted averaging of the control delay on each individual lane grouping on all intersection approaches. For unsignalized intersections, levels of service are presented for the worst-case minor street approach.

Highway segment operations were evaluated using technical procedures documented in the 2000 HCM. The operation of the ramp merge and diverge influence areas on US-101 at the Las Tablas Road interchange was also evaluated using technical procedures documented the 2000 HCM. LOS values for existing conditions are summarized in Tables 6, 7 and 8, below:

**TABLE 6
 Existing Freeway Segment LOS**

STUDY SEGMENT	AM PEAK HOUR				PM PEAK HOUR			
	4 Lanes			6 Lanes	4 Lanes			6 Lanes
	Volume	Density	LOS	LOS	Volume	Density	LOS	LOS
NB US-101								
North of Las Tablas Road	1393	12.0	B		1881	16.1	B	
South of Las Tablas Road	1456	12.5	B		1836	15.8	B	
SB US-101								
North of Las Tablas Road	1554	13.3	B		1793	15.4	B	
South of Las Tablas Road	1504	12.9	B		1839	15.8	B	

Currently, the NB and SB US-101 segments north and south of Las Tablas Road operate at LOS B during the AM and PM peak hours. These levels of service are within the LOS D standard for the facility.

**TABLE 7
 Existing Ramp Influence Area LOS**

Study Ramp		AM Peak Hour	PM Peak Hour
Main Street	SB On-Ramp	B	B
Las Tablas Road	SB Off-Ramp	B	B
Las Tablas Road	SB On-Ramp	B	B
Las Tablas Road	NB Off-Ramp	B	B
Las Tablas Road	NB On-Ramp	B	B
Vineyard Drive	NB On-Ramp	B	B

Currently, all Las Tablas Road interchange ramp influence areas operate at LOS B during the AM and PM peak hours. The ramp influence areas at the adjacent interchanges also operate at LOS B during the AM and PM peak hours.

Table 8 shows the existing AM and PM peak hour LOS on the minor street approaches to Las Tablas Road. At all study intersections except the Las Tablas Road/NB US-101 ramp intersection, the minor street approach operates at LOS C or better. The Las Tablas Road/NB US-101 ramp intersection currently operates at LOS D during the AM peak hour. Existing peak hour volumes at the Las Tablas Road/NB US-101 ramp intersection currently meets Caltrans Peak Hour Signal Warrant criteria for signalization. Existing peak hour volumes at the Las Tablas Road/SB US-101 ramp intersection indicate that monitoring is needed to test for compliance with signalization warrants. Most of the vehicles from the SB off-ramp turn right, and these vehicles would not usually require the traffic control provided by signalization.

**TABLE 8
 Existing Peak Hour Intersection LOS**

Intersection		Existing Traffic Control		AM Peak Hour		PM Peak Hour	
				DEL	LOS	DEL	LOS
1	Las Tablas Road (E-W)	NB Stop Control	Overall Intersection				
	Bennett Way (NB)		NB Approach	11.5	B	10.8	B
2	Las Tablas Road (E-W)	SB Stop Control	Overall Intersection				
	Duncan Road (SB)		SB Approach	21.7	C	17.4	C
3	Las Tablas Road (E-W)	SB Stop Control	Overall Intersection				
	US-101 SB Ramps (SB)		SB Approach	16.2	C	15.3	C
4	Las Tablas Road (E-W)	NB Stop Control	Overall Intersection				
	US-101 NB Ramps (NB)		NB Approach	29.6	D	20.6	C
5	Las Tablas Road (E-W)	NB Stop Control	Overall Intersection				
	Florence Street (N-S)		NB Approach	12.4	B	10.8	B

DEL = Delay

Weaving operations on US-101 were reviewed using the Leisch Method weaving analysis methodology outlined in the Caltrans Highway Design Manual (Section 504.7). However, given the

Column C of Tables 9 and 10 depict Year 2030 traffic conditions with existing Las Tablas Road geometrics, but with road improvements anticipated in the Templeton area to be constructed by Year 2030. These include: (See Exhibit A - Future Road Network Improvements Map)

1. Completion of Bennett Way between Templeton Hills Road and Turkey Ranch Place;
2. The southerly extension of Theater Drive to Duncan Road/Peterson Ranch Road;
3. The connection of Abramson Road and Main Street east of US-101

Levels of Service for the minor street approaches to Las Tablas Road under existing stop sign control are shown in Column C of Tables 9 and 10. The addition of the anticipated road network improvements will provide alternative routes for area traffic and traffic volumes at the Las Tablas Road/US-101 interchange are lower with this assignment alternative compared with the previously described “no-build” alternative. While LOS on the minor street approaches to Las Tablas Road are, generally, better than those depicted in Column B, the LOS results indicate that traffic operations on the minor street approaches to Las Tablas Road will be significantly congested, particularly on the interchange off-ramps. In addition, significant queuing and congestion will occur on Las Tablas Road due to inadequate capacity on Las Tablas Road.

All study intersections will warrant signalization for this scenario and intersection LOS with signalization are shown on Tables 9 and 10. With the exception of the Duncan Road intersection, the LOS with signalized control are acceptable (LOS D or better). The Las Tablas Road/Duncan Road intersection operates at LOS F during the PM peak hour under this condition. The LOS F condition and the decrease in operating efficiency compared to the no-build condition is the result of additional turning movements at this intersection as a result of the Theater Drive extension.

TABLE 10
Year 2030 PM Peak Hour Intersection LOS

Intersection	Existing Traffic Control		B		C		D		E		F		
			Existing Road Network / Existing Geometrics		2030 Road Network/ Existing Geometrics		Design Alt 1		Design Alt 2		Design Alt 3		
			DEL	LOS	DEL	LOS	DEL	LOS	DEL	LOS	DEL	LOS	
1	Las Tablas Road (E-W) Bennett Way (NB)	NB Stop Control	Unsignalized	19.6	C	27.1	D						
			Signalized	3.9	A	8.0	A	4.6	A	33.8	C	33.8	C
2	Las Tablas Road (E-W) Duncan Road(SB)	SB Stop Control	Unsignalized	*	F	*	F						
			Signalized	19.7	B	97.7	F	62.6	E	-	-	-	-
3	Las Tablas Road (E-W) US-101 SB Ramps (SB)	SB Stop Control	Unsignalized	*	F	84.2	F						
			Signalized	121.5	F	15.7	B	9.0	A	9.0	A	10.3	B
4	Las Tablas Road (E-W) US-101 NB Ramps (NB)	NB Stop Control	Unsignalized	*	F	184.7	F						
			Signalized	118.2	F	14.5	B	12.5	B	16.6	B	16.4	B
5	Las Tablas Road (E-W) Florence Street (N-S)	NB Stop Control	Unsignalized	23.1	C	15.2	C						
			Signalized	7.2	A	8.3	A	8.0	A	8.0	A	8.0	A

* Delay exceeds 200 seconds per vehicle.

As with the no-build condition, significant queuing would occur at the study intersections under this scenario. Based on the Sim Traffic simulation, with the Duncan Road and SB ramps intersections signals coordinated, the vehicle queue on WB Las Tablas Road would extend from the intersection at the SB ramps through the intersection with the NB ramps 58% of the time during the AM peak hour and 48% of the time during the PM peak hour. The vehicle queue on WB Las Tablas Road would

extend from the intersection at the NB ramps through the intersection with Florence Street 43% of the time during the AM peak hour and 61% of the time during the PM peak hour.

The analysis of the no-build and build conditions without physical improvements to the interchange indicates that additional capacity is required on Las Tablas Road to serve future traffic demands. Interchange operations for the design alternatives are described in the sections that follow. The results of the Level of Service analysis for Design Alternative 1 are shown in Column D of Tables 9 and 10. With the exception of the Duncan Road intersection, the study intersections will operate at acceptable LOS with Design Alternative 1. While the Duncan Road intersection is shown to operate at LOS F during the PM peak hour, with the Duncan Road and SB US-101 ramp intersections synchronized based on the HCM 2000 calculations, the LOS calculation does not fully reflect the opportunity for right-turn-on-red movements from the SB Duncan Road approach. When the SB right-turn movement is adjusted to account for the right-turns-on-red that will occur when the EB left turn movement is provided green time, the Synchro calculations indicate the intersection operates at LOS B analyzed as an independent intersection and LOS C with intersection coordination.

An alternative Level of Service calculation was performed to evaluate the operation of the coordinated Duncan Road and SB US-101 intersections with Design Alternative 1. Treating the two intersections as a single intersection, the total delay experienced at both intersections was averaged over the vehicles entering both intersections. Vehicles traveling through both intersections were included only once in the calculation. For example, during the AM peak hour, an adjusted volume of 2,090 vehicles is forecasted to enter the Duncan Road intersection and 1,701 vehicles are forecasted to enter the SB ramps intersection. Of these total 3,791 vehicles, there are only 2,247 vehicles entering the two intersections during the AM peak hour when the vehicles traveling through both intersections are counted once. On this basis, the average delay experienced during the AM peak hour at the two intersections considered as a single intersection is 34.5 seconds (LOS C) and the average delay during the PM peak hour is 30.6 seconds (LOS C). These calculations assume that right-turn-on-red movements are allowed from SB Duncan Road to Las Tablas Road with Design Alternative 1.

As shown in Column E of Tables 9 and 10, LOS C or better operations are anticipated at the study intersections with Design Alternative 2. In addition, the elimination of the Duncan Road intersection will reduce the number of signalized intersections on the corridor. The vehicle queue in the left turn lane on the WB Las Tablas Road approach to the SB ramps is expected to exceed the storage bay occasionally during the AM and PM peak hours, and the left turn storage bay could occasionally be blocked by the vehicle queue on the WB Las Tablas Road approach to the SB ramps. Otherwise, queue spillover to adjacent intersections is not anticipated with this alternative.

As shown in Column F of Tables 9 and 10, LOS C or better operations are anticipated with Design Alternative 3. Occasional vehicle spillover could occur in the left turn lanes on the WB Las Tablas Road approach to the SB ramps and the EB approach to the NB ramps. Otherwise, no significant queue spillover between intersections is anticipated with this design alternative based on the Year 2030 forecast-volumes.

It should be noted that the left turn movement from the NB US-101 off-ramp is 295 vehicles during the PM peak hour. Also, the left turn volume on the EB Las Tablas Road approach to Duncan Road is 293 vehicles during the AM peak hour and 296 vehicles during the PM peak hour with Design Alternative 1. These volumes are just under the 300-vehicle threshold recommended in the Highway Design Manual for consideration of dual left turn lanes. The Sim Traffic analysis indicates that the left turn queue will exceed the storage capacity of the left turn lane provided on the EB Las Tablas Road approach to Duncan Road. Therefore, the addition of a second left turn lane on

the EB Las Tablas Road approach to Duncan Road is recommended. It is also recommended that two left turn lanes be provided for the left turn movement from the NB US-101 off-ramp. Design Alternative 3 would preclude the opportunity to provide dual left turns on the NB US 101 off-ramp because only one lane is provided on WB Las Tablas Road west of the NB ramps.

With other anticipated network improvements constructed, US-101 segments north and south of Las Tablas Road will operate at LOS C during the AM peak hour and LOS D during the PM peak hour in the NB and SB directions. As with the no-build condition, widening US-101 to a six-lane facility would be required to improve traffic operations to LOS C or better conditions.

TABLE 11
Year 2030 Freeway Segment LOS

Study Segment	AM Peak Hour				PM Peak Hour			
	4 Lanes		6 Lanes		4 Lanes		6 Lanes	
	Volume	Density	LOS	LOS	Volume	Density	LOS	LOS
NB US-101	YEAR 2030 (NO BUILD)							
North of Las Tablas	3025	26.1	D	B	3430	30.5	D	C
South of Las Tablas	2767	23.8	C	B	3521	31.7	D	C
SB US-101								
North of Las Tablas	2793	24.0	C	B	3826	36.4	E	C
South of Las Tablas	2848	24.5	C	B	3470	31.0	D	C
NB US-101	YEAR 2030 (BUILD)							
North of Las Tablas	2669	22.9	C	B	3239	28.3	D	C
South of Las Tablas	2749	23.6	C	B	3476	31.1	D	C
SB US-101								
North of Las Tablas	2640	22.7	C	B	3388	30.0	D	C
South of Las Tablas	2812	24.2	C	B	3453	30.8	D	C

TABLE 12
Year 2030 Ramp Influence Area LOS

Study Ramp		YEAR 2030 (NO BUILD)		YEAR 2030 (BUILD)	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Main Street	SB On-Ramp	C	D	C	D
Las Tablas Road	SB Off-Ramp	C	E	C	D
Las Tablas Road	SB On-Ramp	C	D	C	D
Las Tablas Road	NB Off-Ramp	C	D	C	D
Las Tablas Road	NB On-Ramp	C	D	C	D
Vineyard Drive	NB On-Ramp	C	D	C	D

Traffic Accident Analysis

Caltrans and the County of San Luis Obispo provided accident data for this traffic analysis. Caltrans provided accident data for US-101 north and south of the Las Tablas Road interchange for the 3-year period between February 1, 1999 and January 31, 2002. During this period, there were 36 reported accidents on US-101 and eight accidents on the interchange ramps or ramp intersection. As shown in Table 13, the accident rate on US-101 adjacent to the Las Tablas Road interchange is less than the statewide average.

San Luis Obispo County provided accident data for Las Tablas Road between Bennett Way and Florence Street for the 5-year period between January 1, 1996 and December 31, 2000. During this period, there were seven reported accidents on the subject road segment. Five accidents occurred at or near the Bennett Way and Duncan Road intersections, one accident occurred on Las Tablas Road at the intersection with the SB US-101 ramps, and one accident occurred at the Las Tablas Road intersection with Florence Street.

TABLE 13
Accident Summary (February 1, 1999 to January 31, 2002)

Location KP to KP		Total No. of Accidents	ACTUAL RATES (acc./million veh.)			AVERAGE RATE (acc./million veh.)		
			F	F+I	TOTAL	F	F+I	TOTAL
US-101 (Mainline)	51.0 / 51.9	36	0.000	0.24	0.79	0.017	0.24	0.54
SB On from Las Tablas	51.31	0	0.000	0.00	0.00	0.007	0.21	0.55
NB Off to Las Tablas	51.35	3	0.000	0.37	1.12	0.014	0.43	1.15
SB Off to Las Tablas	51.56	4	0.000	0.39	1.55	0.014	0.43	1.15
NB On from Las Tablas	51.6	1	0.000	0.37	0.37	0.007	0.21	0.55

Of the 36 accidents that occurred on US-101 at Las Tablas Road, almost half (16 accidents) were rear end collisions attributed to speeding (14 accidents), following too close (1 accident) and other unspecified violations. The eight accidents that occurred on the ramps and at the ramp intersections were attributed to failing to yield (2 accidents), improper turn movements (4 accidents) and other unspecified violations.

5. SYSTEM AND REGIONAL PLANNING

The Transportation Concept Report (TCR), dated 2001, identifies the concept level of service for this sub-segment of Segment 6 of US-101 as LOS D for the year 2020. The TCR recommends that US-101 be expanded to a six-lane freeway through this segment to provide for the concept LOS. This project is consistent with the route concept in accommodating an ultimate six-lane freeway with each of the project alternatives.

The 1988 District 5 System Management Plan has not been updated to reflect current conditions. However, it showed that US-101 through the study area would become deficient by 1998.

The improvements developed in this PSR(PDS) are also consistent with the North County Route 101 Study, which was prepared in 1998. Three general strategies for reducing congestion were identified in the study: Transportation Demand Management (TDM) programs which increase vehicle occupancy; Operational Improvements which maximize carrying efficiency within the study horizon (2010); and ultimate widening or six-laning through sections of the corridor as needed to accommodate the projected traffic demand after 2010.

The Las Tablas Road/US-101 interchange will not require auxiliary lanes or ramp metering as part of subsequent development phases for year 2030 traffic conditions.

The County has identified the southerly extension of Theater Drive to the intersection of Duncan Road and Peterson Ranch Road as providing regional benefits by reducing the local traffic load on the US-101 corridor, thereby reducing the project construction cost at the Las Tablas/US-101 interchange. Moreover, the County is interested in developing a financing partnership with SLOGOG

- Right-of-way acquisition (CHP, and Pacific Bell displacement)
- Hazardous waste removal
- Potential presence of California red-legged frogs, spadefoot toads, burrowing owl, and shining navarretia, as well as riparian jurisdictional impacts and kit fox habitat loss
- Paleontological resource impacts
- Noise impacts
- Visual resources

Responsibility for compliance with the CEQA rests with the Lead Agency, the County of San Luis Obispo Public Works Department. The California Department of Transportation (Caltrans) will participate in the environmental review process as a Responsible Agency.

Table 14 provides a summary of the environmental issues that are relevant to the site and will be addressed in the IS/EA document. Items marked as “yes” or “maybe” will require a technical study to determine whether impacts are significant and, if significant, whether mitigation measures can be implemented that will reduce the impact to a level below significance.

TABLE 14
Summary of Environmental Issues

Environmental Issue	Impact	Significant	Mitigable
Biological Resources	Maybe	Maybe	Yes
Hazardous Waste	Maybe	Maybe	Probably
Cultural Resources	No	No	N/A
Paleontological Resources	Maybe	Maybe	Yes
Socio-Economic	Maybe	Maybe	Probably
Water Quality	Maybe	Maybe	Yes
Noise	Maybe	Maybe	Probably
Air Quality	Maybe	No	Yes
Visual Resources	Maybe	Maybe	Probably

The time necessary to prepare the environmental document would be affected by the required technical studies, as indicated in Table 14. These studies are not expected to be overly complex or time consuming. It is estimated that the total preparation time for the CEQA environmental document would be approximately 12 to 15 months and the preparation time for the NEPA document would be approximately 15 to 20 months.

A Phase I Initial Site Assessment (ISA) was prepared for the PSR(PDS) in April 2001. This report was prepared to determine whether the proposed project could be affected by any recorded or visible hazardous waste problems. The study was also needed to determine whether recommendations for additional site assessment work were necessary prior to completion of the Draft Environmental Document for the proposed project. Subsurface investigations, soil and groundwater sampling, chemical testing, and a detailed geologic mapping study were not conducted as a part of the investigation.

San Luis Obispo County Environmental Health Services (EHS), the California Regional Water Quality Control Board (CRWQCB), Environmental Data Resources (EDR), and the VISTA Information Solution, Site Assessment Plus Report dated March 27, 2001, were consulted to obtain records of any known hazardous wastes sites, hazardous waste incidents, or hazardous waste

generators within a one-mile radius from the project sites. The alternate sites were surveyed on foot to identify any conditions not listed in the literature.

These hazardous material/waste sites are described in detail below. Following each site description is an evaluation of the potential impact that would occur if any alternative lies within the bounds of or immediately adjacent to the hazardous material/waste site.

- BP Templeton Prod Pfindlayson, 701 Las Tablas Road, Templeton, CA 93465

This address is currently a Chevron Service Station and is undergoing active site remediation. Fourth Quarter 2001 Groundwater Monitoring and Remediation Status Report from SECOR International, reviewed at the CRWQCB on May 27, 2002, states that 17,566 pounds of hydrocarbon have been recovered to date. Currently, this service station has operational USTs. The service station holds >10,000 gallons of gasoline.

Alternatives 1, 2, 3 and 5 lie adjacent to and may require right-of-way takes at the location of the Chevron station. Because each alternative has the potential to require removal of contaminated soil/groundwater at this site, additional Phase II testing should be performed within the proposed area of impact to determine the extent of the impact.

- Pacific Bell, 513 Main Street, Templeton, CA 93465

This address is listed as being a small quantity generator. This implies that they handle less than 1,000 kilograms per month of hazardous materials. This material is not identified in the source materials.

Implementation of Alternatives 1, 2, 3 and 5 would require right-of-way takes that would result in relocation of the Pac-Bell facility. The record search does not indicate the type of hazardous waste generated at the Pac-Bell facility. Further investigation would be required to determine the extent of the impact and whether removal of contaminated material would be necessary.

- Templeton Market Deli, 390 Main Street, Templeton, CA 93465

This address is listed as having a registered UST. No amount is given or is the material identified.

This UST is located beyond the bounds of the project area and would not impact implementation of any of the four alternatives.

- Templeton Unified School District, 870 Old County Road, Templeton, CA 93465

This address has two registered UST, which hold gasoline and diesel fuel for the bus depot. This address also has a Hazardous Materials Business Plan on file with the San Luis Obispo County EHS, which list hazardous material that is stored on site. These materials are small quantities of fertilizer and waste oil that are all stored in properly maintained storage containers.

This site is located beyond the bounds of the project area and would not impact implementation of any of the four alternatives.

- California Highway Patrol, 101 Duncan Road, Templeton, CA 93465

This address operates a 12,000-gallon gasoline UST. This address also has a Hazardous Materials Business Plan on file with San Luis Obispo County EHS, which lists hazardous materials stored on site. These materials are small quantities of waste oil, which are stored in properly maintained storage containers.

Implementation of Alternative 1 would not have hazardous materials impacts associated with the CHP facility because the project lies outside of the footprint of the project area. However,

Alternatives 2, 3 and 5 require a right-of-way take at the CHP facility. Further investigation of the area of impact would be required to determine if the right-of-way take at this location requires removal of any contaminated material.

The Initial Site Assessment (ISA) has been prepared as part of the PSR(PDS) development process and the results of the study are summarized in the Initial Site Assessment (ISA) Checklist.

8. RIGHT-OF-WAY

Alternatives 1, 2, 3 and 5 will require the acquisition of additional State right-of-way. The right-of-way impacts for each alternative are as follows:

- Alternative 1 would require approximately 0.07 hectares (0.16 acres) of additional right-of-way, affecting six parcels of rural properties. Two new driveways would need to be constructed to serve the Chevron Station.
- Alternative 2 would require approximately 0.67 hectares (1.65 acres) of additional right-of-way, affecting 11 parcels of commercial, office and residential properties. Two new driveways would need to be constructed to serve the Chevron Station.
- Alternative 3 would require approximately 0.63 hectares (1.57 acres) of additional right-of-way, affecting seven parcels. Two new driveways would need to be constructed to serve the Chevron Station.
- Alternative 5 would require approximately 3.36 hectare (8.31 acres) of additional right-of-way, affecting 31 parcels. One new driveway would need to be constructed to serve the Chevron Station. Nine residences and the CHP facility would have to be relocated.

Utilities - Existing utilities in the project area include the following:

- | | |
|---|---|
| ▪ Charter Communications (Cable) | ▪ PG&E (Electrical) |
| ▪ Templeton Community Services District (Water & Sewer) | ▪ AT&T Communications (Telephone) |
| ▪ Pacific Bell (Telephone) | ▪ Southern California Gas Company (Natural Gas) |

Potential utility conflicts have been identified in the attached Utility Information Sheet (Exhibit G). The cost for the project share of potential utility relocation for each of the alternatives has been included in the Preliminary Estimate of Project Cost (Exhibit F).

9. FUNDING & SCHEDULING

The project is expected to be funded through a combination of local, State and Federal funding, including STIP funds as a candidate project for 2004 STIP funding. The Capital Outlay Estimate in Table 16 indicates that the County of San Luis Obispo anticipates funding 71% of the Capital Outlay costs for PS&E and Construction based on the projected percentages of regional and local trips using the interchange. (See Background Section) Other funding sources are expected to be in place to supplement the STIP funding allocated for the PA/ED phase. The balance of the Capital Outlay costs for PS&E and Construction will be provided through RIP/STIP funding. However, because of current budget constraints, STIP funds programmed in the 2004 STIP will not be available until 2008, and STIP funds programmed in the 2006 STIP will be not available until 2010. If the County desires to move this project into PA/ED in 2004 (as shown in Table 17), the County will have to fund 100% of the PA/ED support costs.

TABLE 15
Capital Outlay Support Estimate for PA/ED

Fiscal Year	STIP	County Funds
03/04	--	--
04/05	--	\$350,000
05/06	--	--
Total Support Cost	--	\$350,000

TABLE 16
Capital Outlay Estimate (in millions)

	Range for Total Cost	STIP Funds	County Funds	Other Funding Sources
Alternative 1	\$7.2 - \$11	\$2.5 - \$3.5	\$6.1 - \$8.5	--
Alternative 2	\$9.6 - \$14	\$3.2 - \$4.4	\$7.8 - \$10.6	--
Alternative 3	\$7 - \$10	\$2.3 - \$3.2	\$5.7 - \$7.8	--
Alternative 5	\$19 - \$23	7.6 - 9.2	11.4 - 13.8	--
Alternative 7	\$0.1 - \$2	--	--	--

The level of detail available to develop these Capital Cost Estimates is only accurate to within the above ranges and is useful for long range planning purposes only. The capital costs should not be used to program or commit capital funds. The Project Report will serve as the appropriate document from which the remaining support and capital components of the project will be programmed.

Only the "PA/ED" milestone is to be used for programming commitments. All other milestones are used to indicate relative time frames for planning purposes.

The PA/ED support costs and the schedule shown for the approval of the environmental document are based on the County being the lead agency for the PA/ED phase of this project.

TABLE 17
Tentative Project Schedule

	County Funds 100% of PA/ED	2004 STIP Funds Part of PA/ED	2006 STIP Funds Part of PA/ED
Milestone	Fiscal Year	Fiscal Year	Fiscal Year
Begin Project Report/ Draft ED	07/2004	07/2008	07/2010
Circulate Draft Project Report/ Draft ED	04/2005	04/2009	04/2011
Public Hearing	04/2005	04/2009	04/2011
PA/ED	05/2006	05/2010	05/2012
PS&E	07/2008	07/2012	07/2014
Construction Completion	09/2010	09/2014	09/2016

The County will be the Lead Agency for CEQA and the State will be the State Lead Agency for NEPA. The Federal Highway Administration (FHWA) will be the Federal Lead Agency for NEPA. The County will assess impacts of the project on the environment and, if necessary, the County will prepare the Environmental Document(s) (ED) to meet the requirements of CEQA and NEPA. The draft and final ED will require Federal and State review and approval prior to public circulation. The County will provide all data for and prepare drafts of the Draft Project Report (DPR) and the Project

Report (PR). The State will review and process the reports and request approval of the project and ED by the FHWA. The County will be responsible for the public hearing process.

If it is later requested that Caltrans be the Lead Agency for the PA/ED phase, the PA/ED support costs and the schedule will have to be revised based upon the availability of the Caltrans resources.

A Cooperative Agreement will be prepared during the PA/ED phase. Responsibility for future phases of the project will be determined during the PA/ED phase and appropriate Cooperative Agreements will be executed prior to the PS&E and R/W Phase and prior to the Construction phase.

10. PROGRAMMING RECOMMENDATION

It is recommended that the County fund 100% of the Project Approval/Environmental Document support component for this project to improve the Las Tablas Road/US-101 interchange in San Luis Obispo County. It is further recommended that the project alternatives identified in the *Alternatives* section of this PSR(PDS) be advanced to the PA/ED phase for additional study. It is assumed that the County will pursue local road improvements to supplement the alternatives presented in this PSR(PDS), and that the improvements will be in place in advance of or concurrent with the construction phase of this project. Should it become apparent that the construction phase of this project would precede the local road improvements, the alternatives would need to be expanded to include a temporary connection between the CHP facility driveway and the Las Tablas Road/Bennett Way intersection. During the PA/ED phase, the original alternatives may be revised and new alternatives may be added as more information becomes available. The PA/ED phase of project development will result in final determination of the preferred alternative. The remaining support and capital components for PS&E, R/W and Construction for the project are preliminary estimates and are not suitable for programming purposes. Either an approved Supplemental PSR or an approved Project Report will be required as the programming document for those components in the 2006 or 2008 STIP.

11. PROJECT PERSONNEL

Tom Houston (805) 549-3016
Project Manager
Caltrans District 5
Externally Financed Projects
1150 Laurel Lane, Room 1-105
San Luis Obispo, CA 93401-8616

Larry Rohloff (805) 788-2757
Project Manager
County of San Luis Obispo
County Government Center
San Luis Obispo, CA 93408

Matt Griggs (916) 858-0642
Project Manager
Dokken Engineering
11171 Sun Center Drive, Suite 250
Rancho Cordova, CA 95670

Dave Flynn (805) 781-5252
Traffic Engineer
County of San Luis Obispo
County Government Center
San Luis Obispo, CA 93408

Nathan Donnelly (916) 858-0642
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J. Daniel Takacs (408) 848-3122
Traffic Analysis
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Gilroy, CA 95020

Mary Reents (805) 543-7095
Environmental Analysis
Morro Group, Inc.
1422 Monterey Street, Suite C200
San Luis Obispo, CA 93401

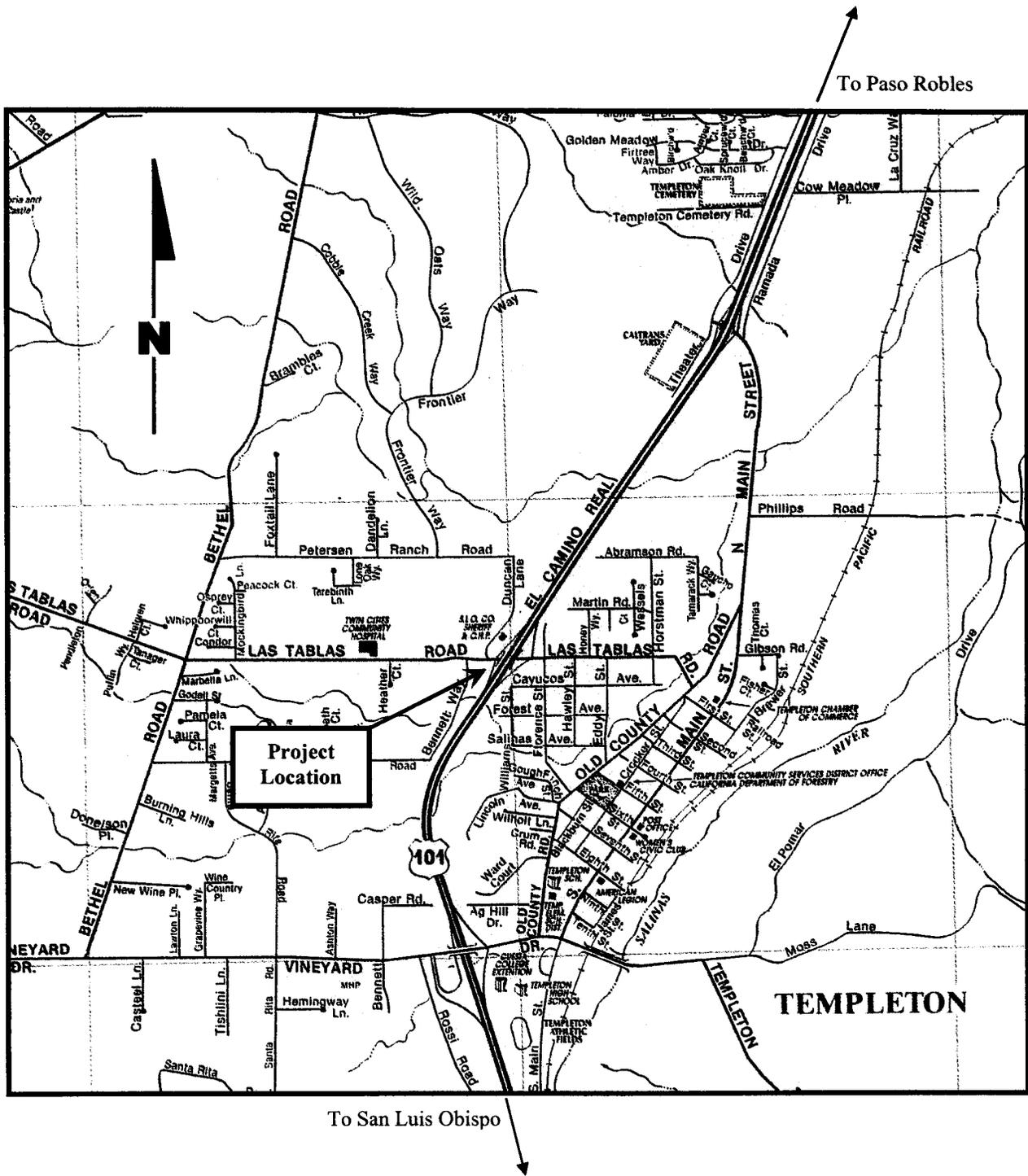
Michael Stanton (805) 543-1794
Topographic Mapping
RRM Design Group
3765 South Higuera Street, Suite 102
San Luis Obispo, CA 93401

Bob Tarvin (805) 489-0147
R/W Estimates
Tarvin & Associates
229 Miller Way
Arroyo Grande, CA 93420

12. EXHIBITS

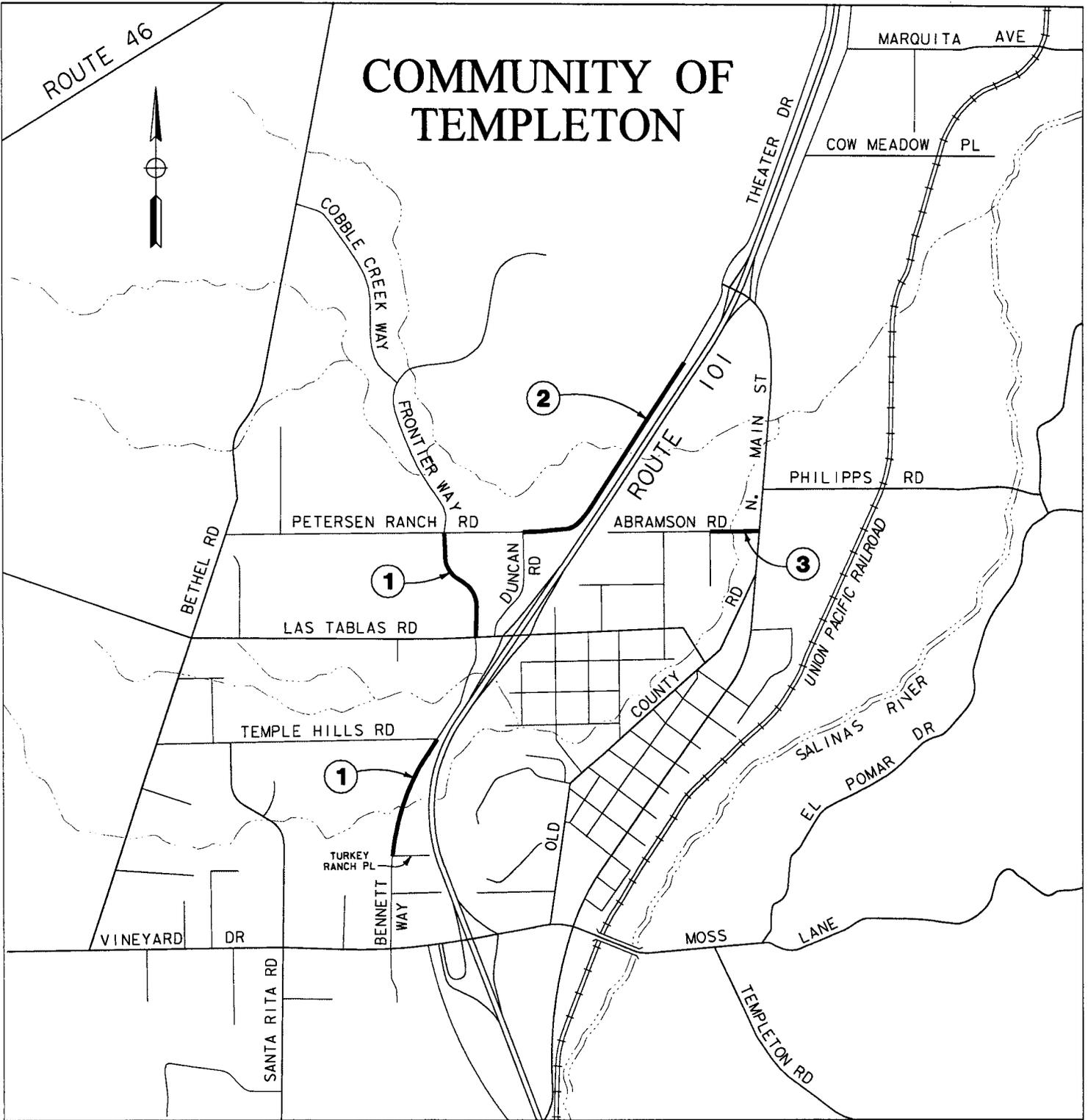
- A. Vicinity and Future Road Network Improvements Maps
- B. Conceptual Geometric Drawings and Typical Cross Sections – Alternatives 1, 2, 3, 5 and 7
- C. Bridge Advance Planning Studies – Las Tablas Undercrossing
- D. Preliminary Environmental Assessment Report (PEAR)
- E. PDS Traffic Scoping Checklist
- F. Preliminary Estimate of Project Cost
- G. Right-of-Way Data Sheets & Utility Information Sheets
- H. Storm Water Data Report Approval Sheet
- I. PDS Design Scoping Checklist
- J. Traffic Management Plan Data Sheet/Checklist
- K. Distribution List

**EXHIBIT A - Vicinity & Future Improvement
Maps**



VICINITY MAP

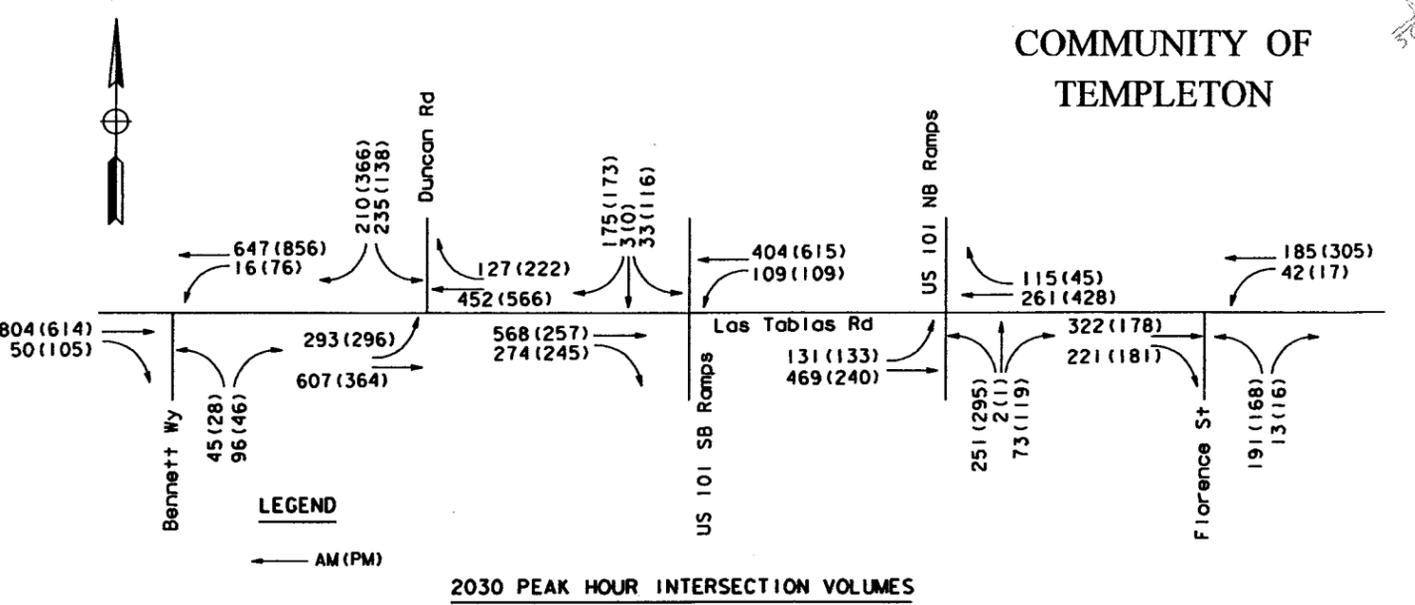
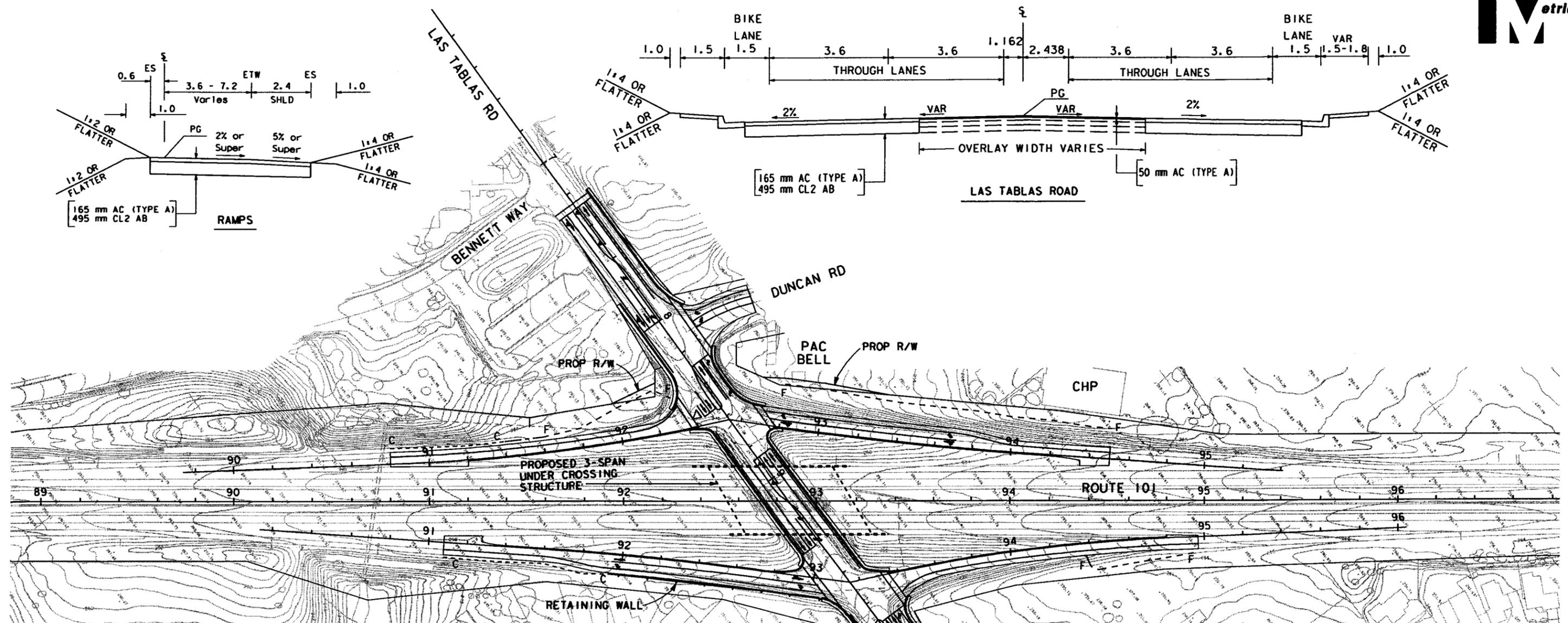
**INTERCHANGE IMPROVEMENTS ON ROUTE 101 AT
LAS TABLAS ROAD IN THE COMMUNITY OF TEMPLETON**



FUTURE ROAD NETWORK IMPROVEMENTS

1. Completion of Bennett Way
2. Southerly Extension of Theater Drive
3. Abramson Road / Main Street Connection

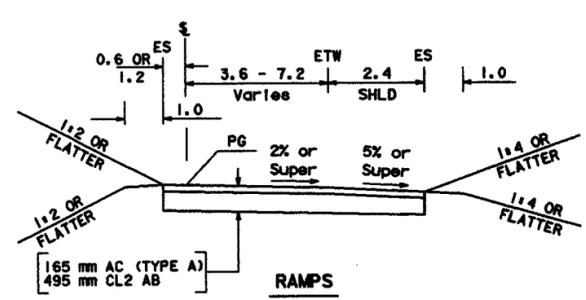
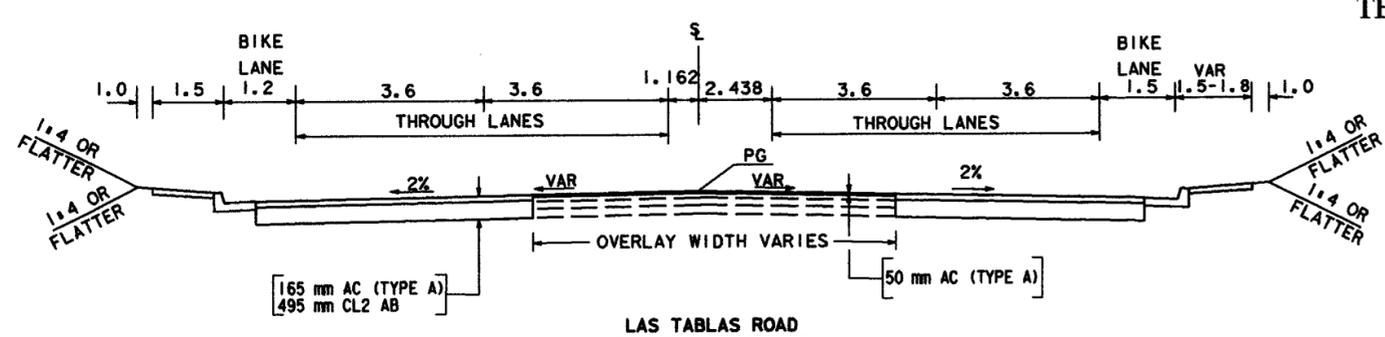
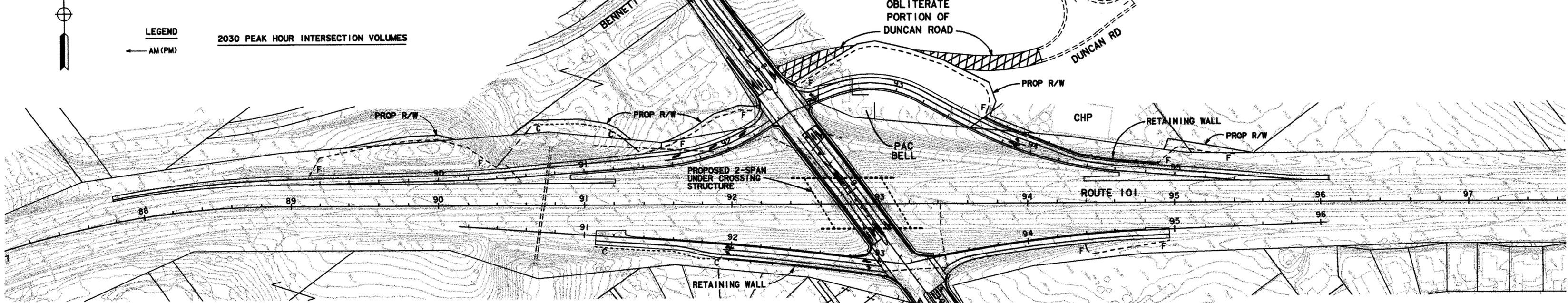
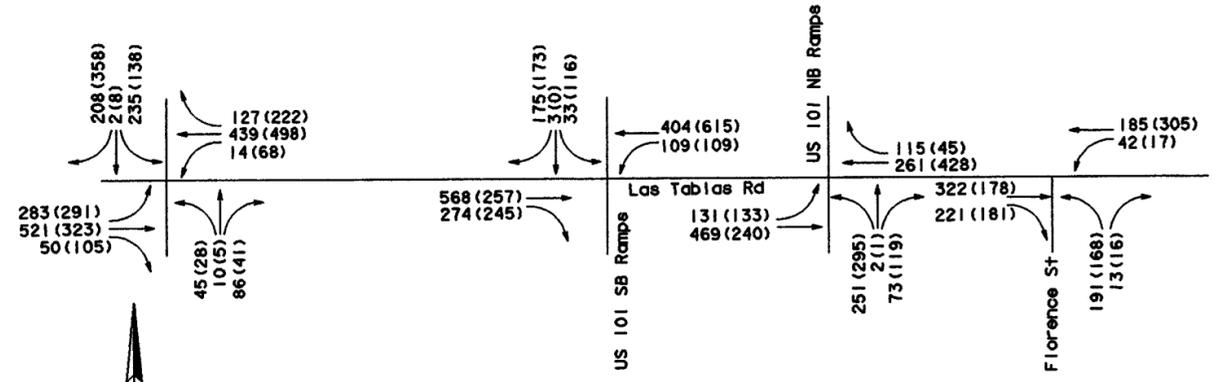
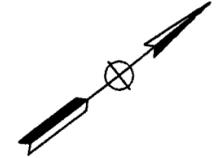
**EXHIBIT B – Conceptual Geometrics &
Typical Cross Sections –
Alts. 1, 2, 3, 5, 7**



DOKKEN ENGINEERING
11171 SUN CENTER DRIVE, SUITE 250
RANCHO CORDOVA, CA 95670
(916) 858-0642

PROJECT NUMBER	Janette A. Ruesga
PROJECT ENGINEER	Janette A. Ruesga
DETAILS	B. Gregorio
DATE	April 2003
METRIC SCALE	1 = 1000

PROJECT	LAS TABLAS RD/ROUTE 101 IMPROVEMENTS
ALTERNATIVE	ALTERNATIVE 1

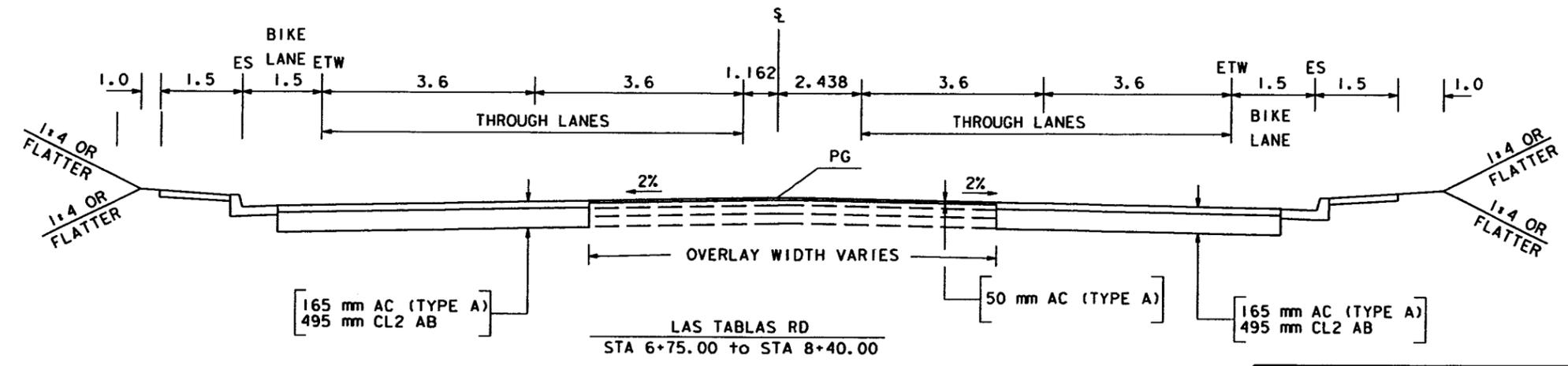
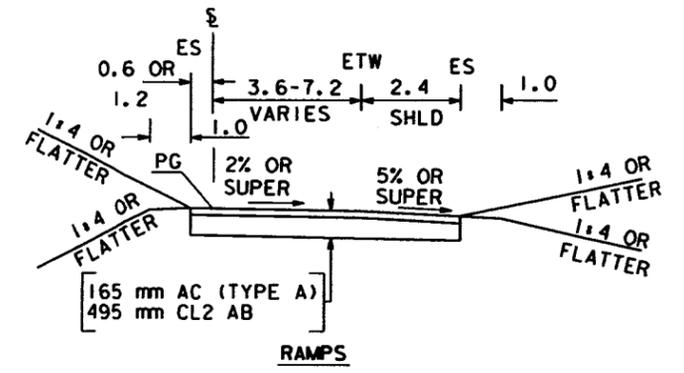
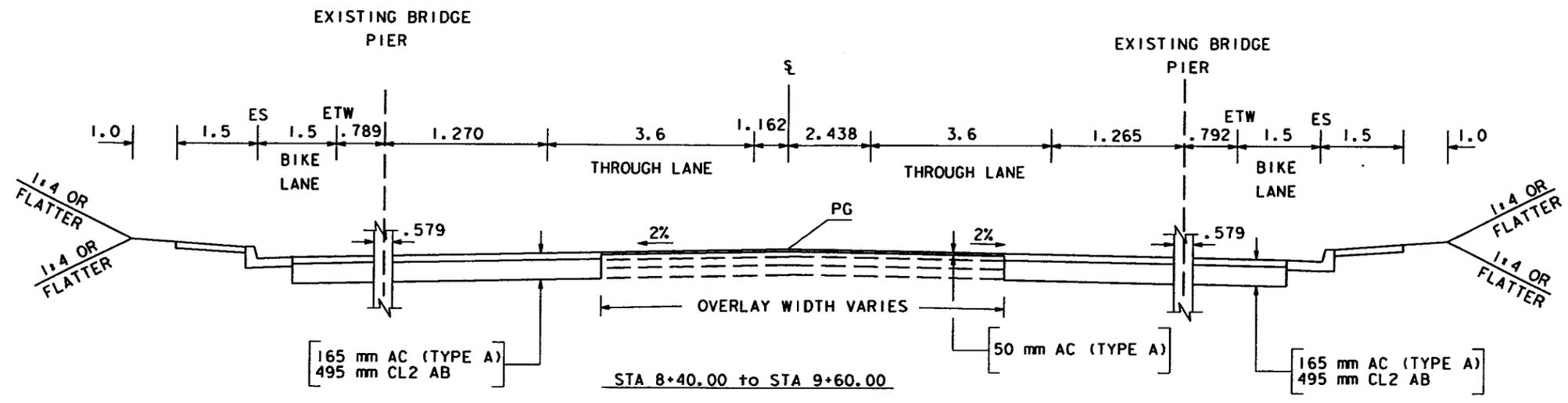
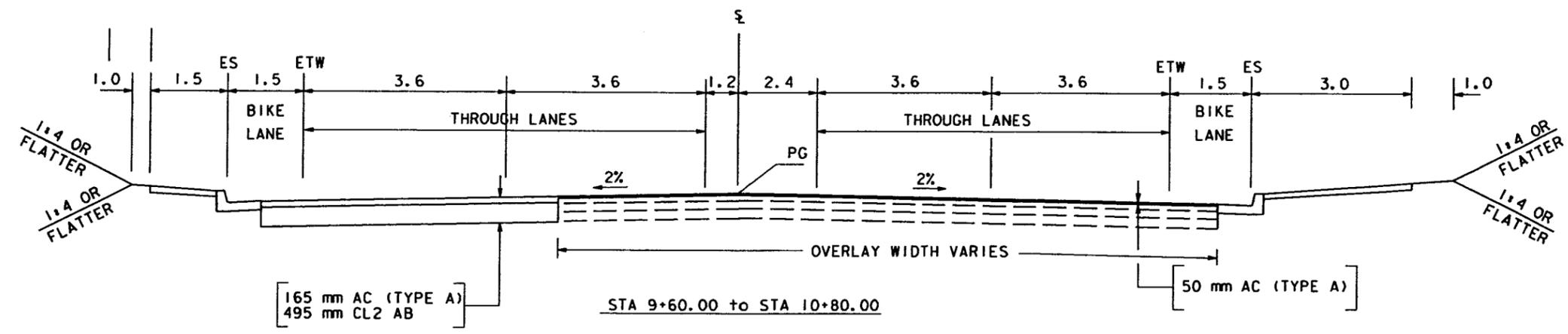


DOKKEN ENGINEERING

11171 SUN CENTER DRIVE, SUITE 250
 MANHATTAN, CA 95670
 (916) 888-0642

PROJECT MANAGER	Janette A. Ruesga
PROJECT ENGINEER	Janette A. Ruesga
DETAILS	B. Gregorio
DATE	April 2003
METRIC SCALE	1:2000

PROJECT	LAS TABLAS RD/ROUTE 101 IMPROVEMENTS
ALTERNATIVE	ALTERNATIVE 2



TYPICAL SECTIONS
NO SCALE

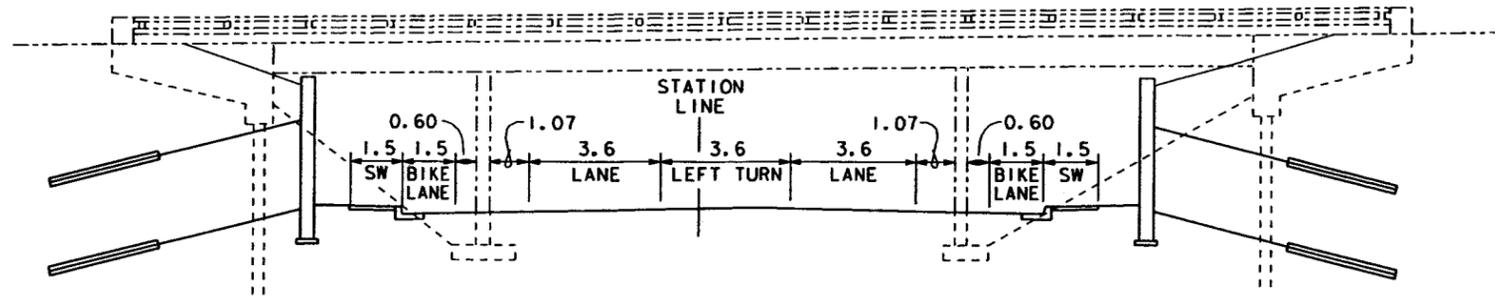
DOKKEN
ENGINEERING

11171 SUN CENTER DRIVE, SUITE 250
RANCHO CORDOVA, CA 95670

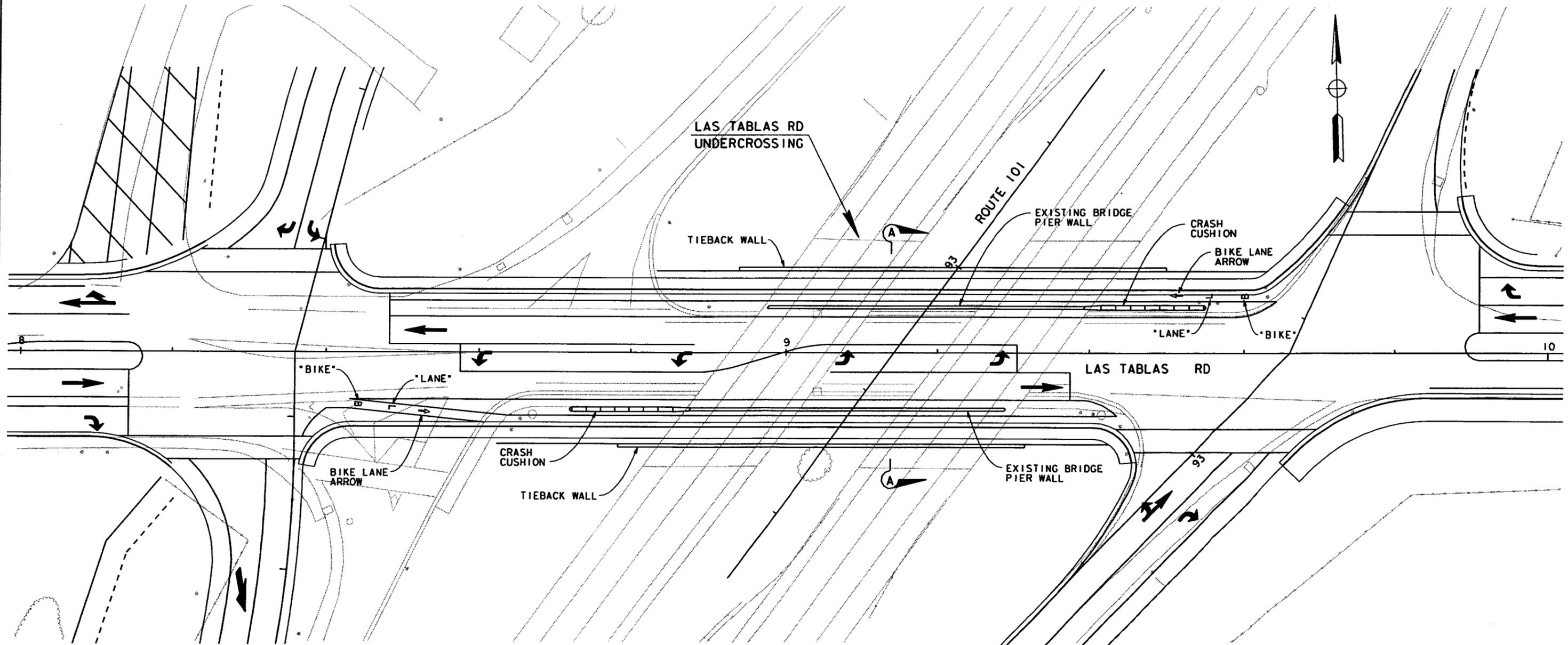
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PROJECT MANAGER	Janette A. Ruesga
PROJECT ENGINEER	Janette A. Ruesga
DETAILS	B. Gregorio
DATE	April 2003
METRIC SCALE	

PROJECT	LAS TABLAS RD/ROUTE 101 IMPROVEMENT
	ALTERNATIVE 3



SECTION A-A
NO SCALE



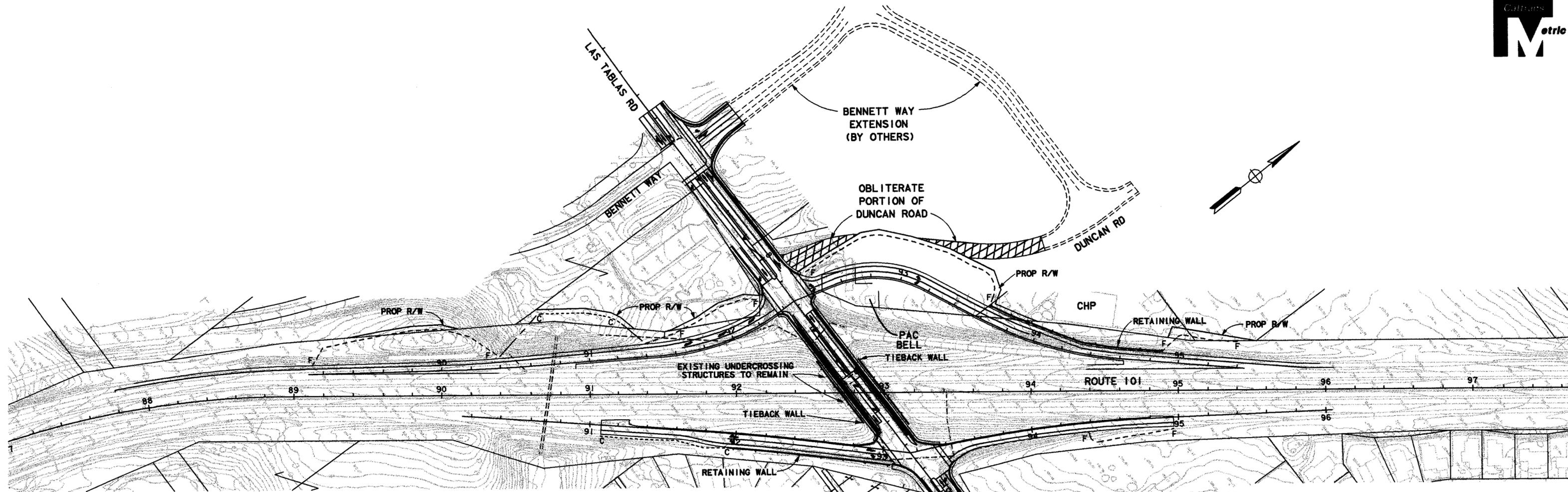
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DE DOKKEN
ENGINEERING

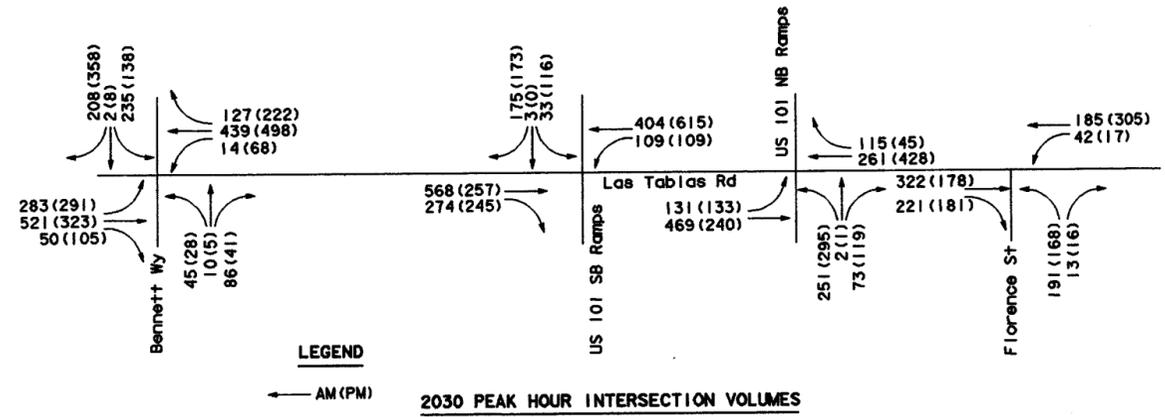
11171 SUN CENTER DRIVE, SUITE 250
RANCHO CORDOVA, CA 95670
(916) 858-0642

PROJECT MANAGER	Janette A. Ruesga
PROJECT ENGINEER	Janette A. Ruesga
DETAILS	B. Gregorio
DATE	April 2003
METRIC SCALE	AS SHOWN

PROJECT	LAS TABLAS RD/ROUTE 101 IMPROVEMENTS
ALTERNATIVE	ALTERNATIVE 3



COMMUNITY OF
TEMPLETON



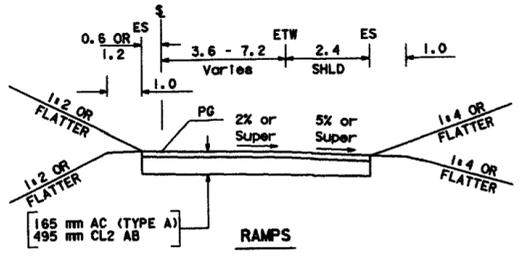
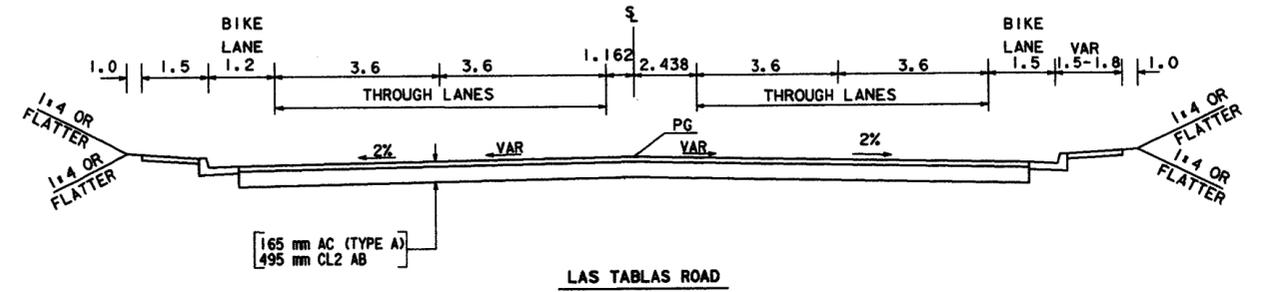
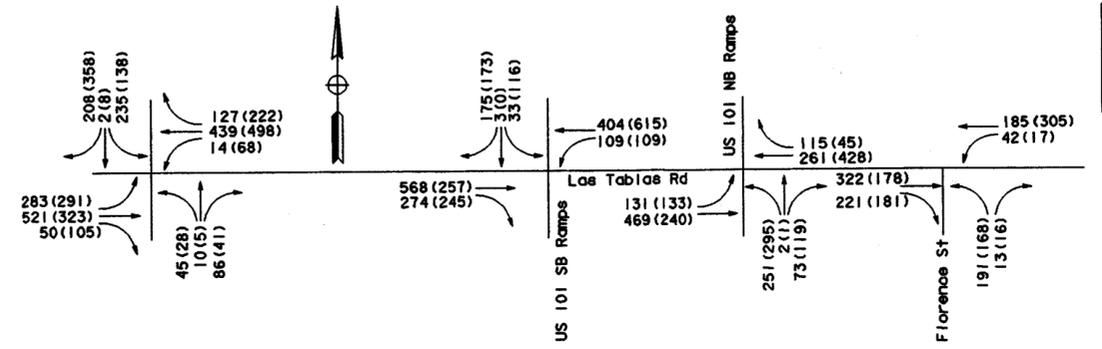
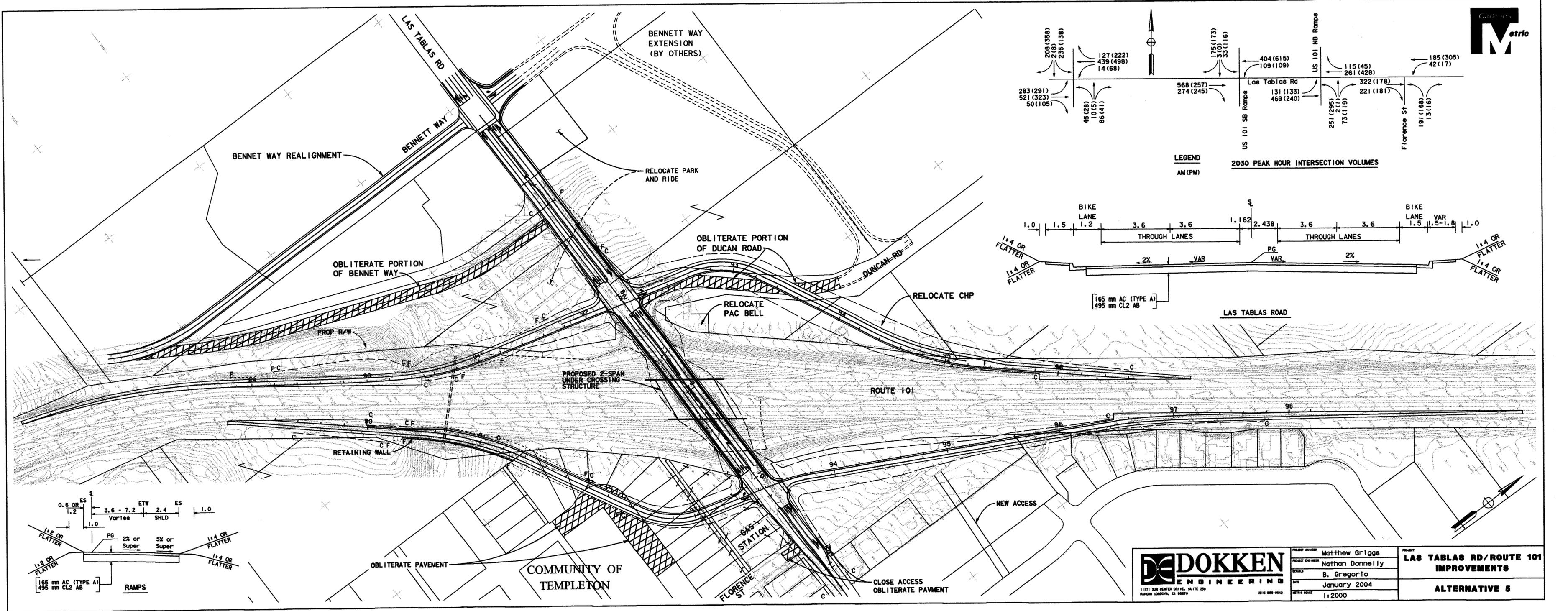
DOKKEN
ENGINEERING

11171 SEM CENTER DRIVE, SUITE 250
RANCHO CORDOVA, CA 95870

(916) 868-0642

PROJECT MANAGER	Janette A. Ruesga
PROJECT ENGINEER	Janette A. Ruesga
DETAILS	B. Gregorio
DATE	April 2003
METRIC SCALE	1:2000

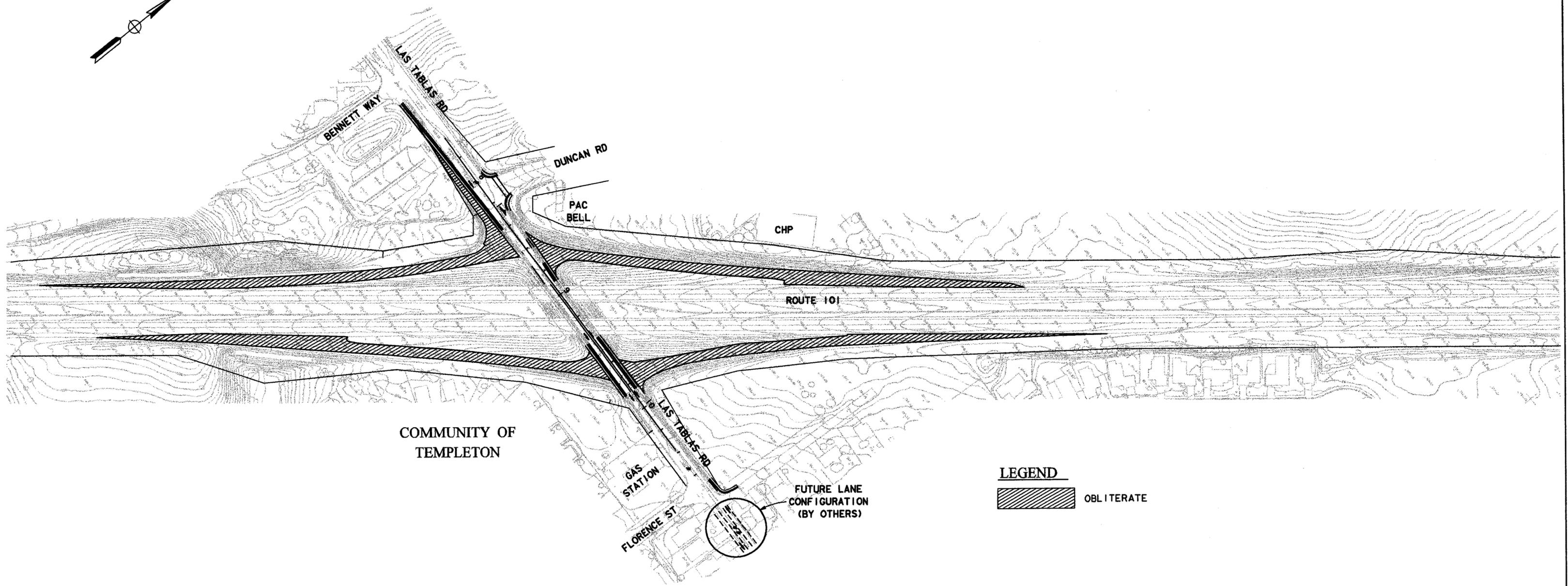
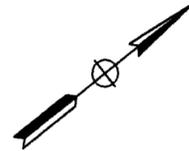
PROJECT	LAS TABLAS RD/ROUTE 101 IMPROVEMENTS
ALTERNATIVE	ALTERNATIVE 3



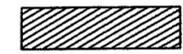
DOKKEN ENGINEERING
 1171 SUN CENTER DRIVE, SUITE 250
 RANCHO CONCORDIA, CA 94670
 (916) 888-0442

PROJECT NUMBER	Matthew Griggs
PROJECT ENGINEER	Nathan Donnelly
DETAILS	B. Gregorio
DATE	January 2004
METRIC SCALE	1:2000

PROJECT
LAS TABLAS RD/ROUTE 101 IMPROVEMENTS
ALTERNATIVE 5



LEGEND

 OBLITERATE

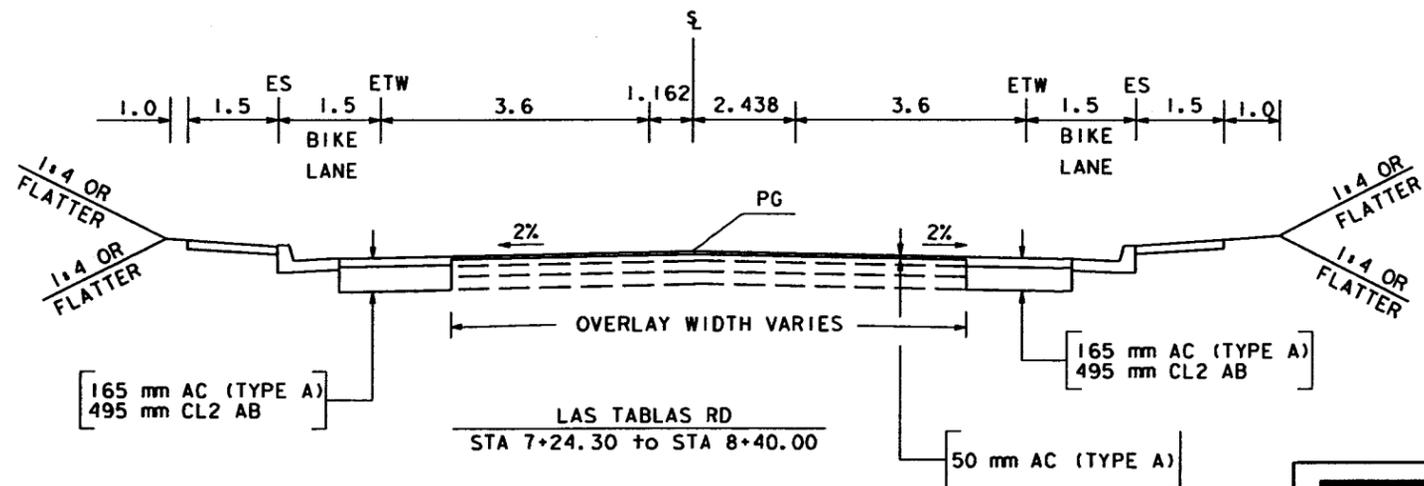
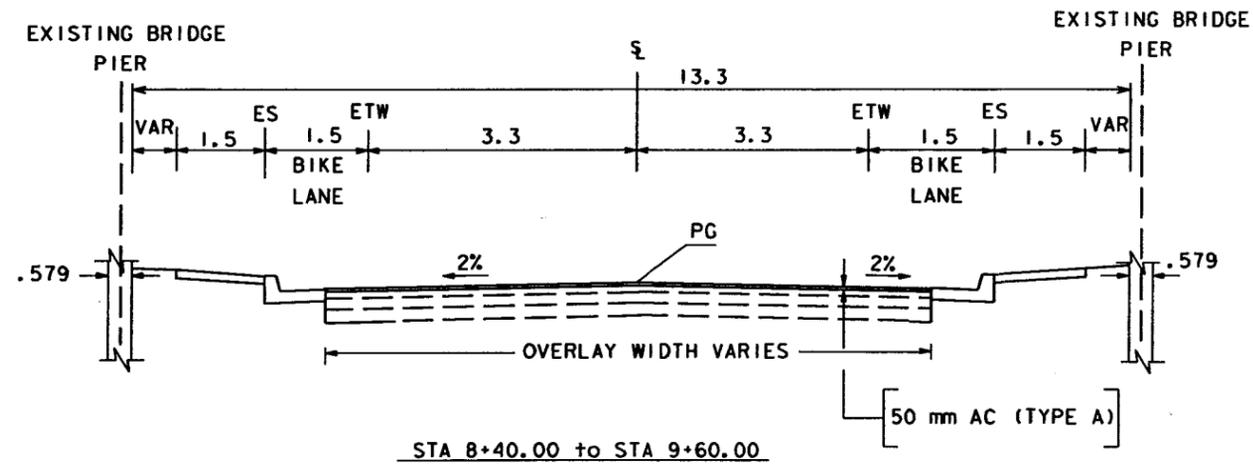
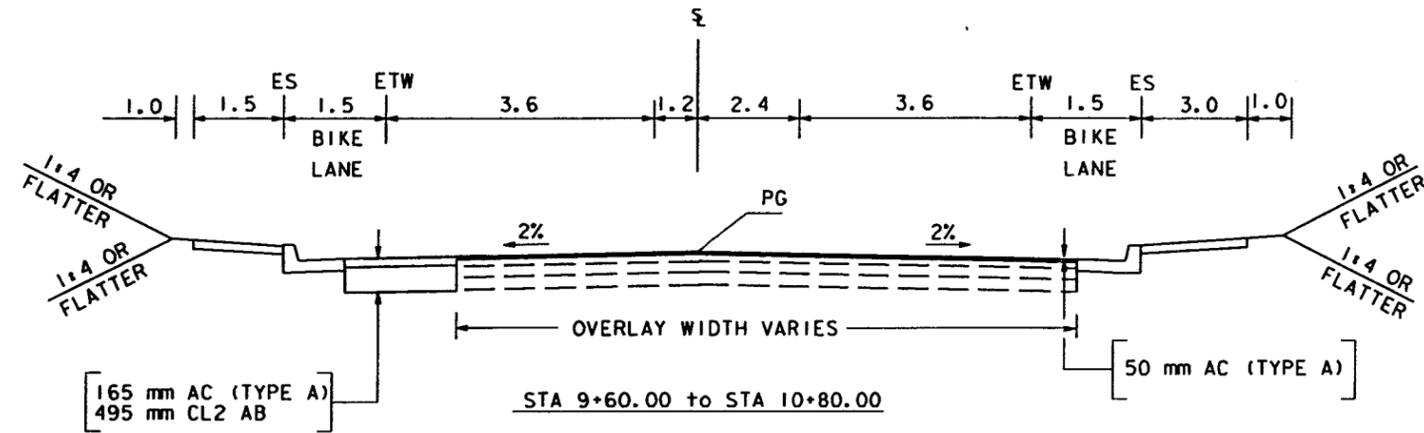
DOKKEN
ENGINEERING

11171 SUN CENTER DRIVE, SUITE 250
RANCHO CONROYA, CA 90670

(916) 866-0642

PROJECT MANAGER	Janette A. Ruesga
PROJECT ENGINEER	Janette A. Ruesga
DETAILS	Valerie Villa
DATE	April 2003
METRIC SCALE	1:1000

PROJECT	LAS TABLAS RD/ROUTE 101 IMPROVEMENT
	ALTERNATIVE 7



TYPICAL SECTIONS
NO SCALE

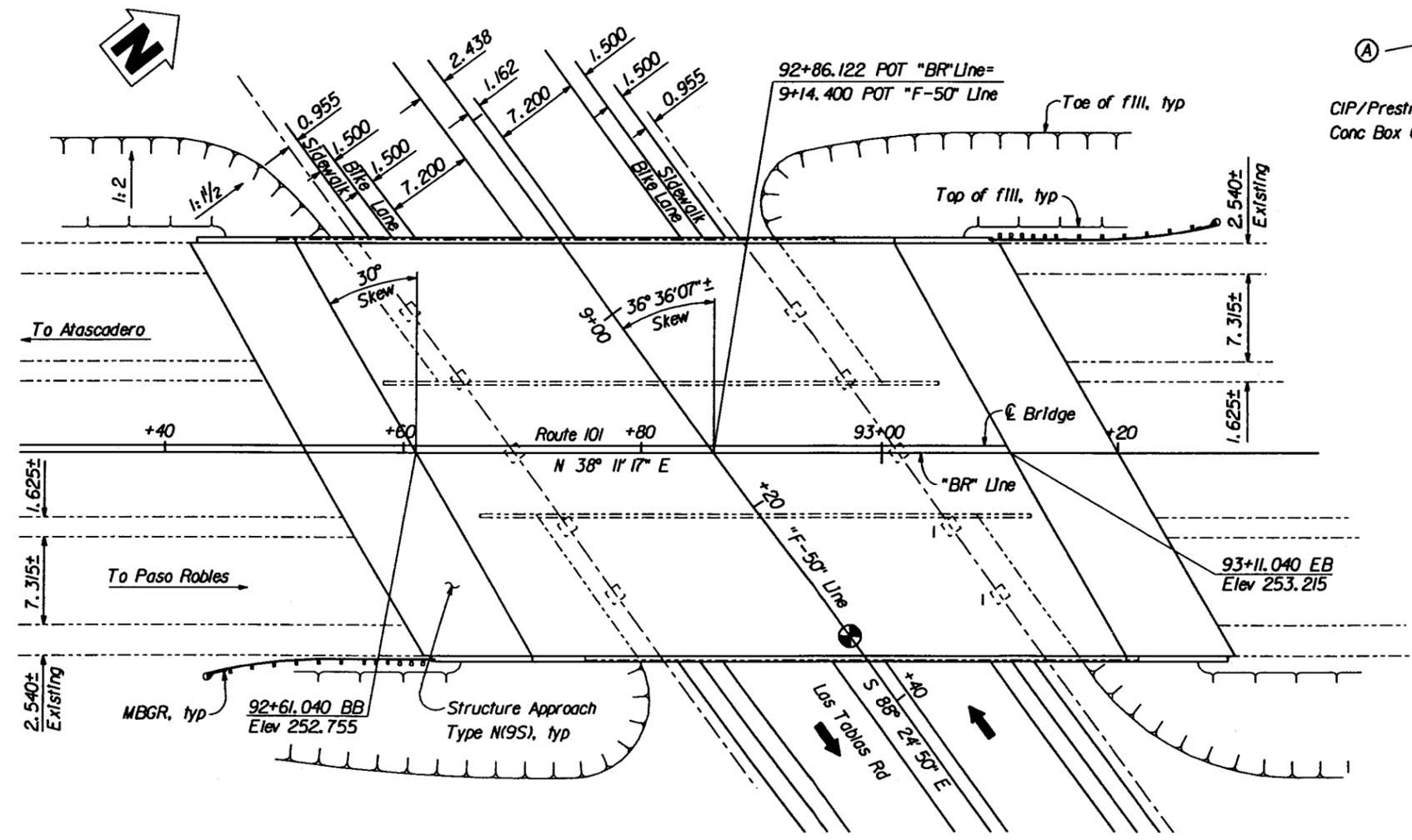
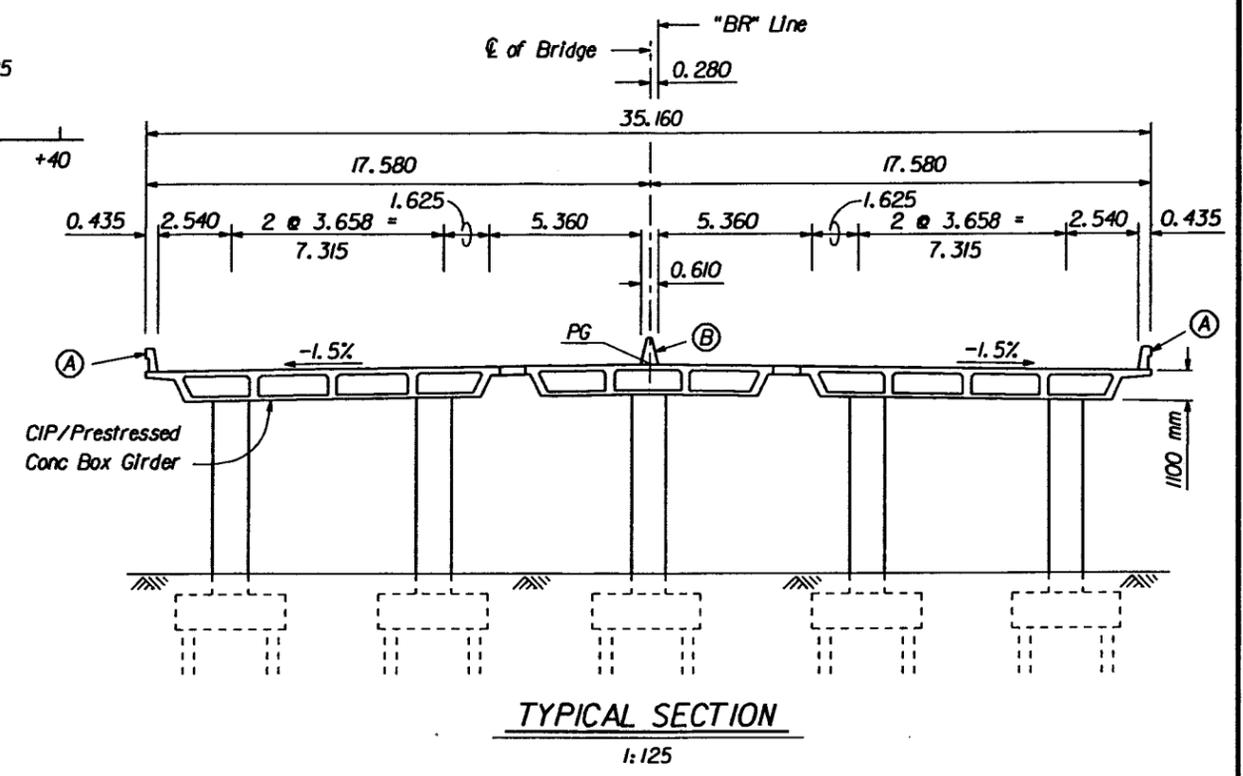
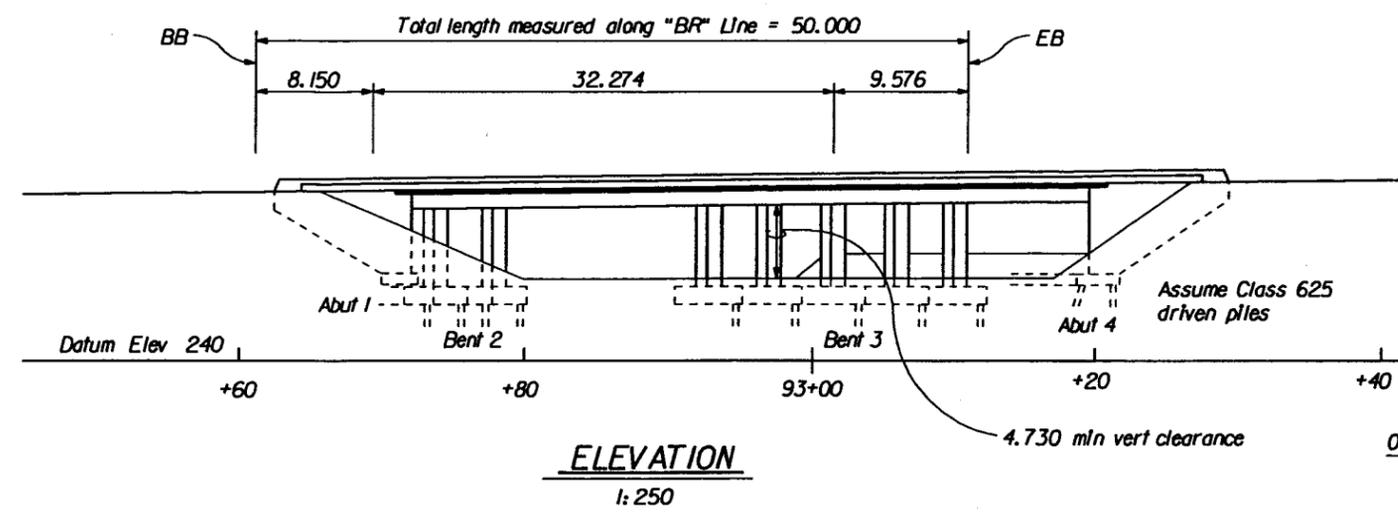
DOKKEN
ENGINEERING

11171 SUN CENTER DRIVE, SUITE 250
RANCHO CORDOVA, CA 95670

(916) 858-0642

PROJECT MANAGER	Janette A. Ruesga
PROJECT ENGINEER	Janette A. Ruesga
DETAILS	Valerie Villa
DATE	April 2003
METRIC SCALE	NOT TO SCALE

PROJECT	LAS TABLAS RD/ROUTE 101 IMPROVEMENT
ALTERNATIVE	ALTERNATIVE 7



Notes:
All dimensions are in meters unless otherwise shown.
Existing bridges to be removed

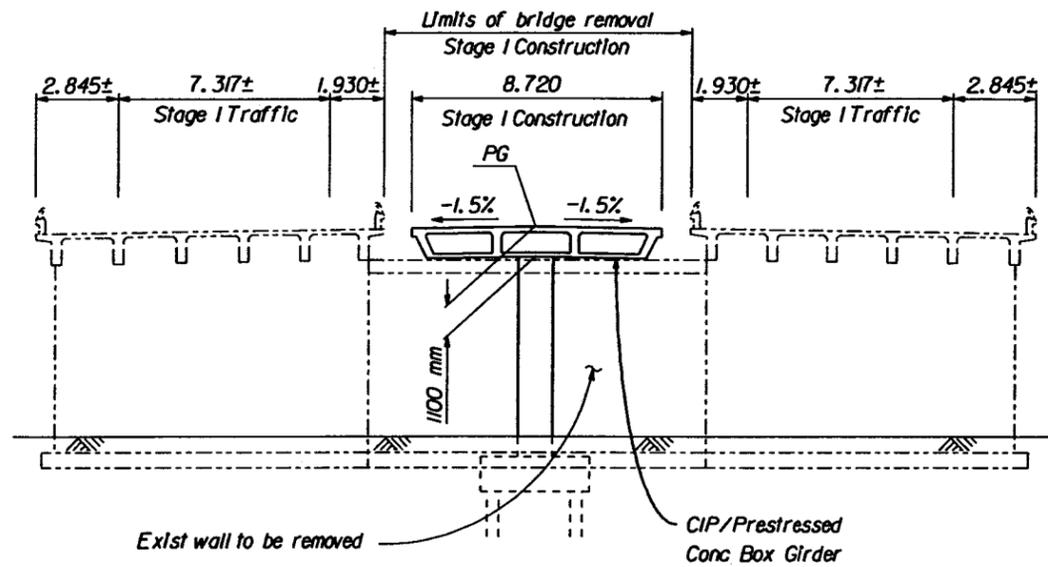
- LEGEND**
- Denotes existing structure
 - (A) Concrete Barrier Type 732
 - (B) Concrete Barrier Type 60A
 - ⊙ Point of min vert clearance

Date of estimate	=	8-3-01
Structure depth	=	1.300
Length	=	50.000
Width	=	35.160
Area	=	1758.000
Cost/m including 10% mobilization & 25% contingency	=	\$1,475
Bridge removal	=	\$400,000
Total Cost	=	\$3,017,000

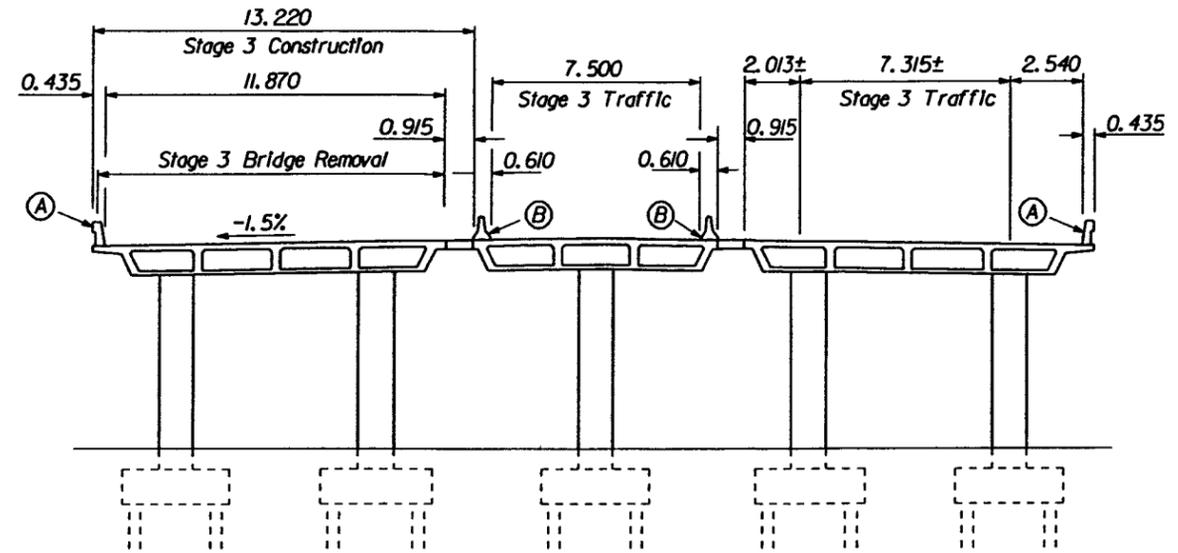
DOKKEN ENGINEERING	DES. C. T.				
	DR. C. F.				
	CHK.				
	APPD.				
	NO.	DATE	REVISION	BY	APPD.

ADVANCE PLANNING STUDY - ALTERNATIVE I
LAS TABLAS ROAD UNDERCROSSING (REPLACE)

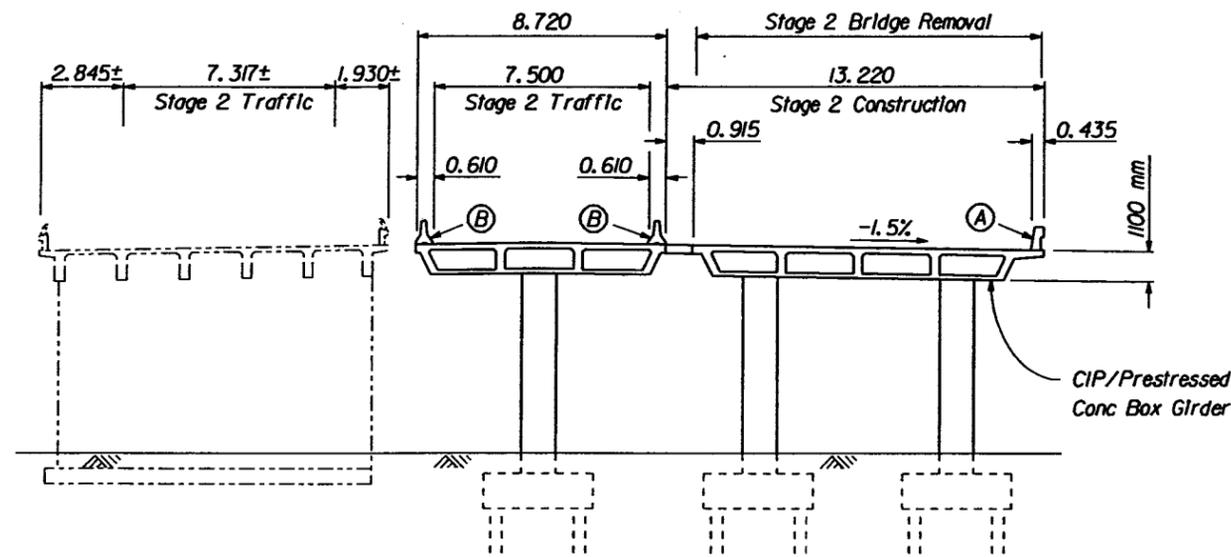
SHEET	1
OF	2
DATE	6-25-02
DWG. NO.	



TYPICAL SECTION - STAGE 1
1:125



TYPICAL SECTION - STAGE 3
1:125



TYPICAL SECTION - STAGE 2
1:125

LEGEND

- Denotes existing structure
- (A) Concrete Barrier Type 732
- (B) Temporary Railing Type K

Notes:

All dimensions are in meters unless otherwise shown.
Existing bridges to be removed

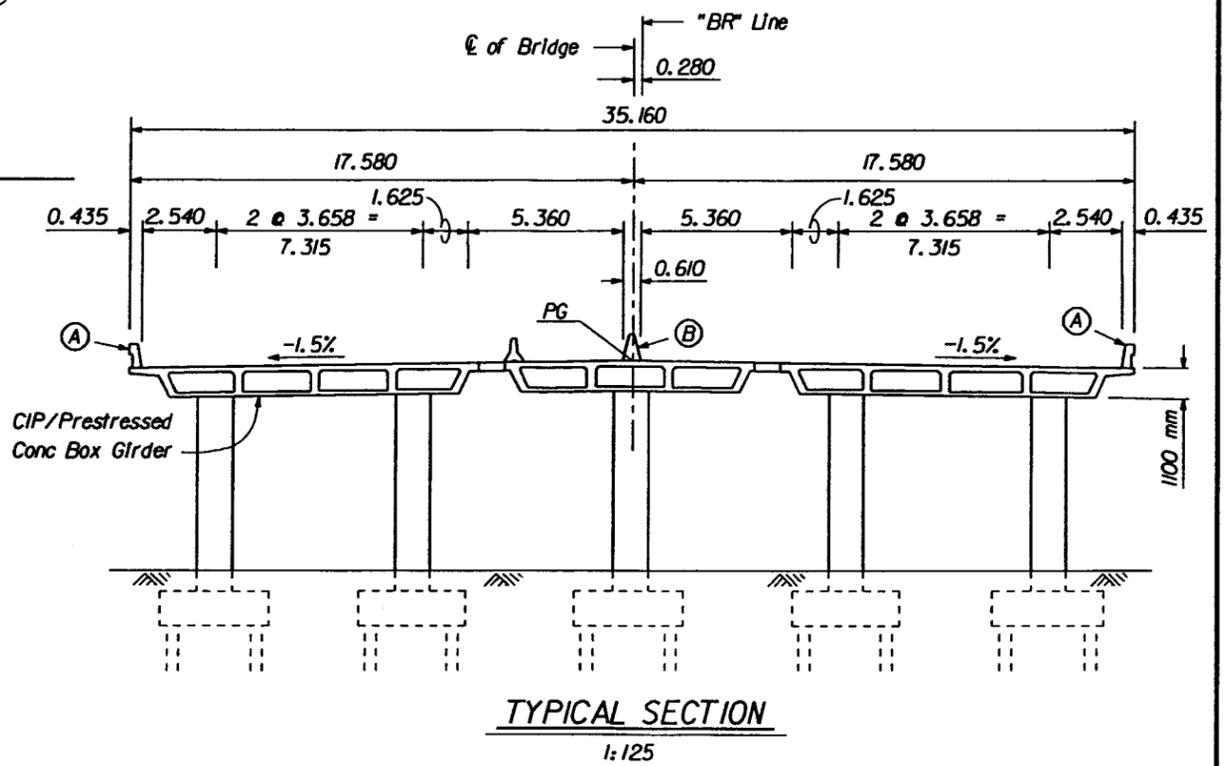
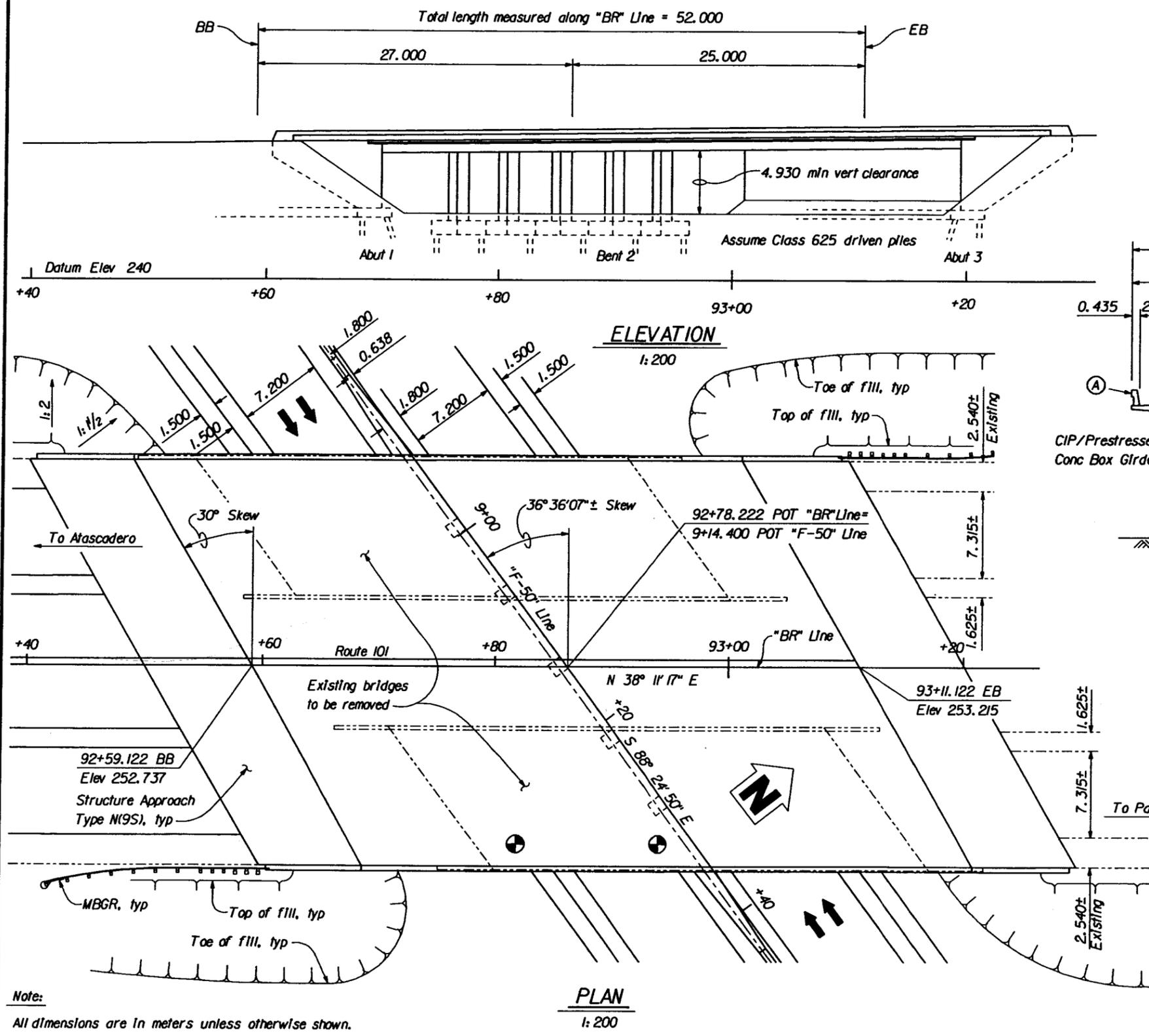


DES. C.T.					
DR. C.F.					
CHK.					
APPD.	NO.	DATE	REVISION	BY	APPD

**ADVANCE PLANNING STUDY - ALTERNATIVE 1
LAS TABLAS ROAD UNDERCROSSING (REPLACE)**

SHEET	2
OF	2
DATE	6-25-02
DWG. NO.	

EXHIBIT C – Bridge Advance Planning Studies



Note:
All dimensions are in meters unless otherwise shown.

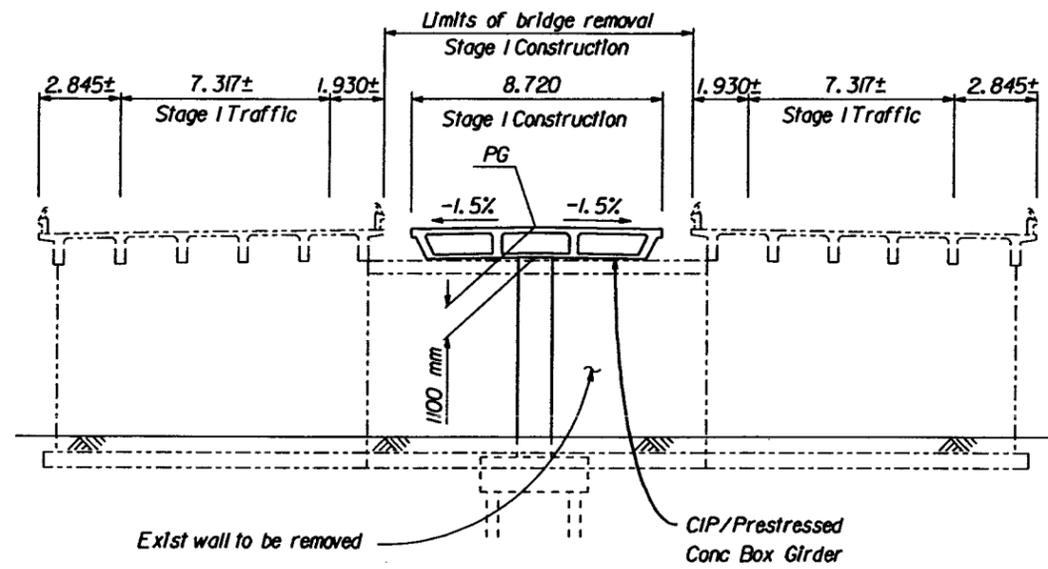
- LEGEND**
- Denotes existing structure
 - (A) Concrete Barrier Type 732
 - (B) Concrete Barrier Type 60A
 - Point of min vert clearance

Date of estimate	=	8-3-01
Structure depth	=	1.100
Length	=	52.000
Width	=	35.160
Area	=	1828.320
Cost/m ² including 10% mobilization & 25% contingency	=	\$1,475
Bridge removal	=	\$400,000
Total Cost	=	\$3,047,000

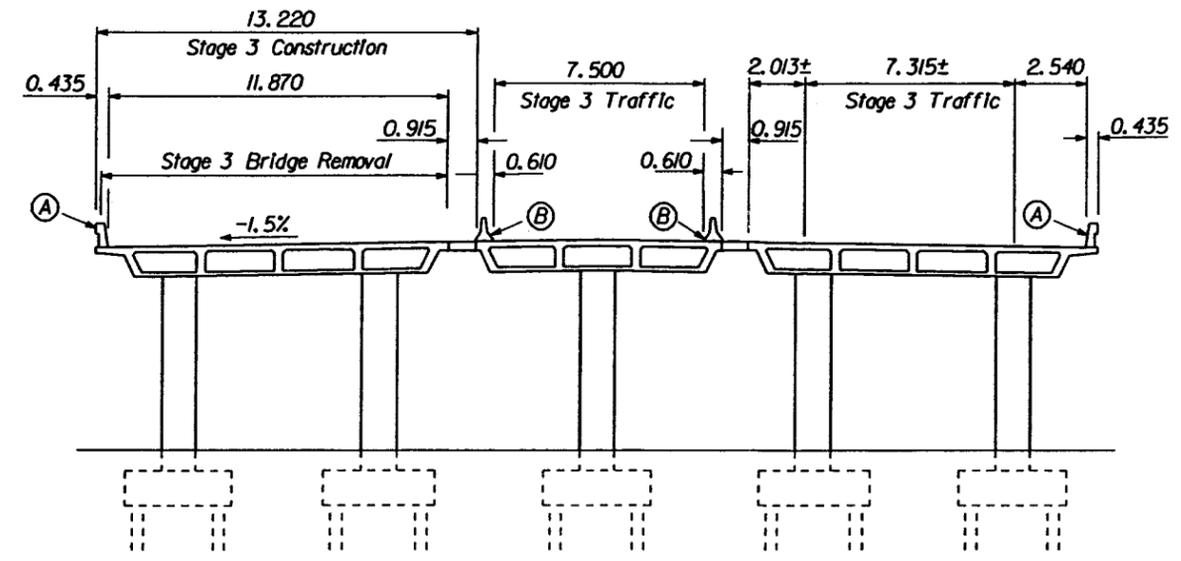
DOKKEN ENGINEERING	DES. C.T.				
	DR. C.F.				
	CHK.				
	APPD.				
	NO.	DATE	REVISION	BY	APPD.

ADVANCE PLANNING STUDY - ALTERNATIVE 2 & 5
LAS TABLAS ROAD UNDERCROSSING (REPLACE)

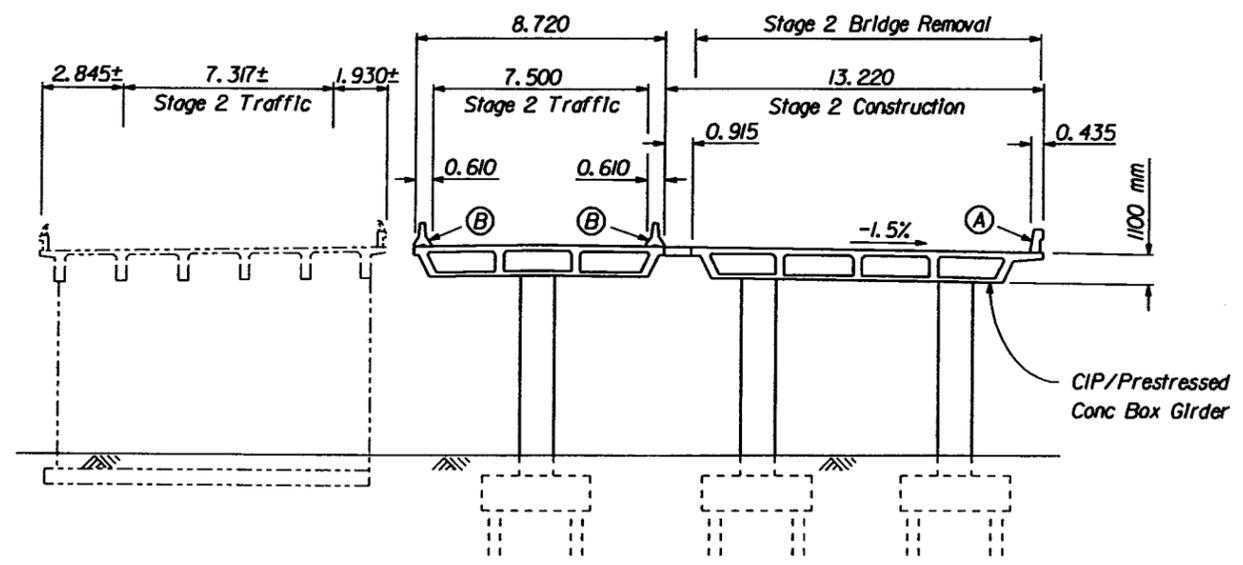
SHEET	1
OF	2
DATE	6-25-02
DWG. NO.	



TYPICAL SECTION - STAGE 1
1:125



TYPICAL SECTION - STAGE 3
1:125



TYPICAL SECTION - STAGE 2
1:125

LEGEND

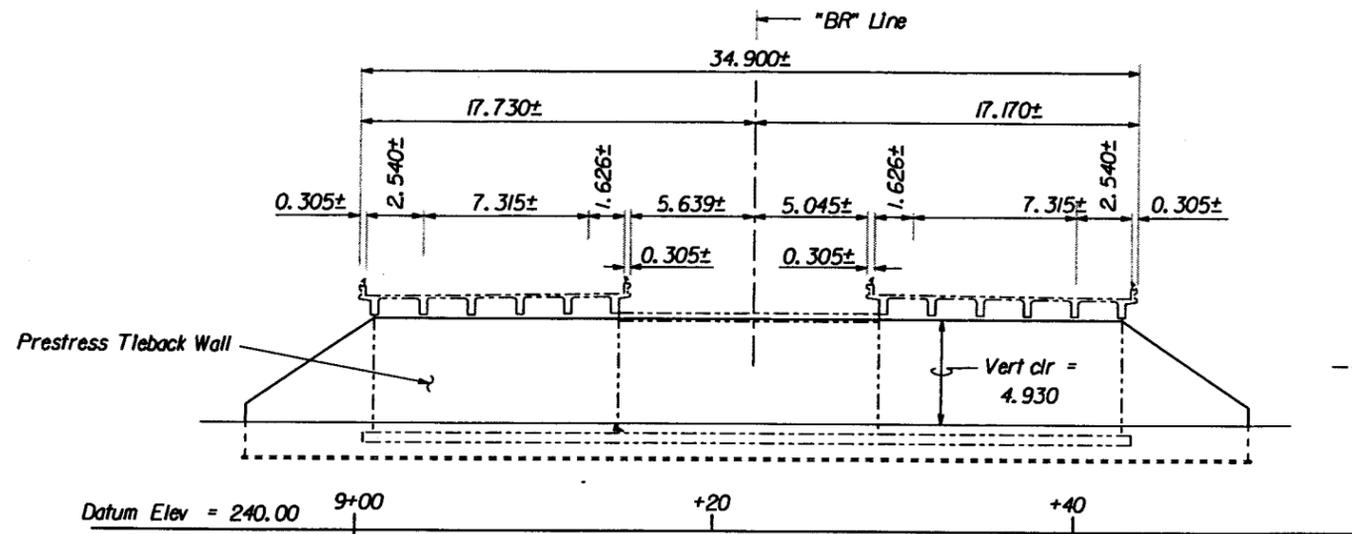
- Denotes existing structure
- (A) Concrete Barrier Type 732
- (B) Temporary Railing Type K

Notes:
All dimensions are in meters unless otherwise shown.
Existing bridges to be removed

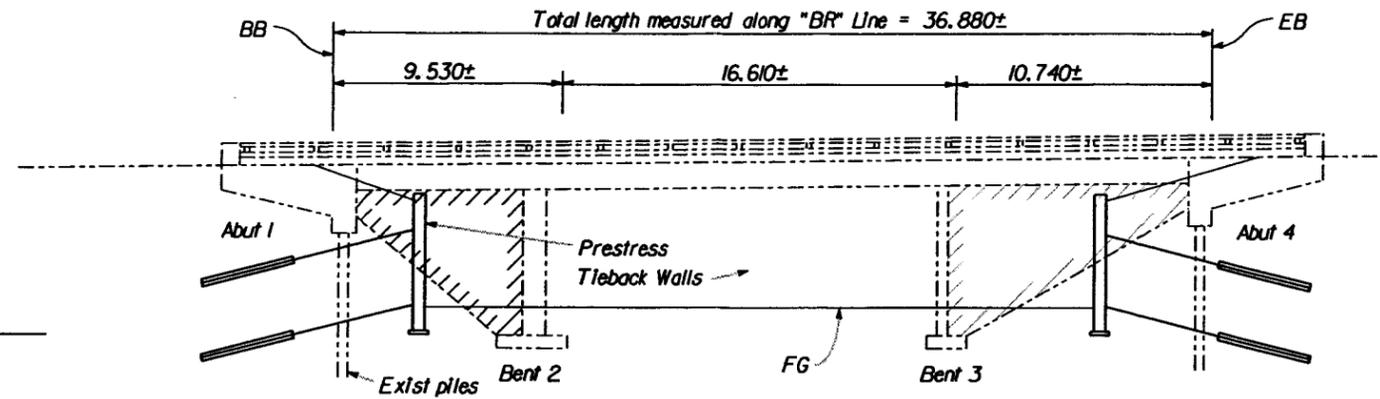
DOKKEN ENGINEERING	DES. C.T.				
	DR. C.F.				
	CHK.				
	APPD.				
	NO.	DATE	REVISION	BY	APPD

ADVANCE PLANNING STUDY - ALTERNATIVE 2 & 5
LAS TABLAS ROAD UNDERCROSSING (REPLACE)

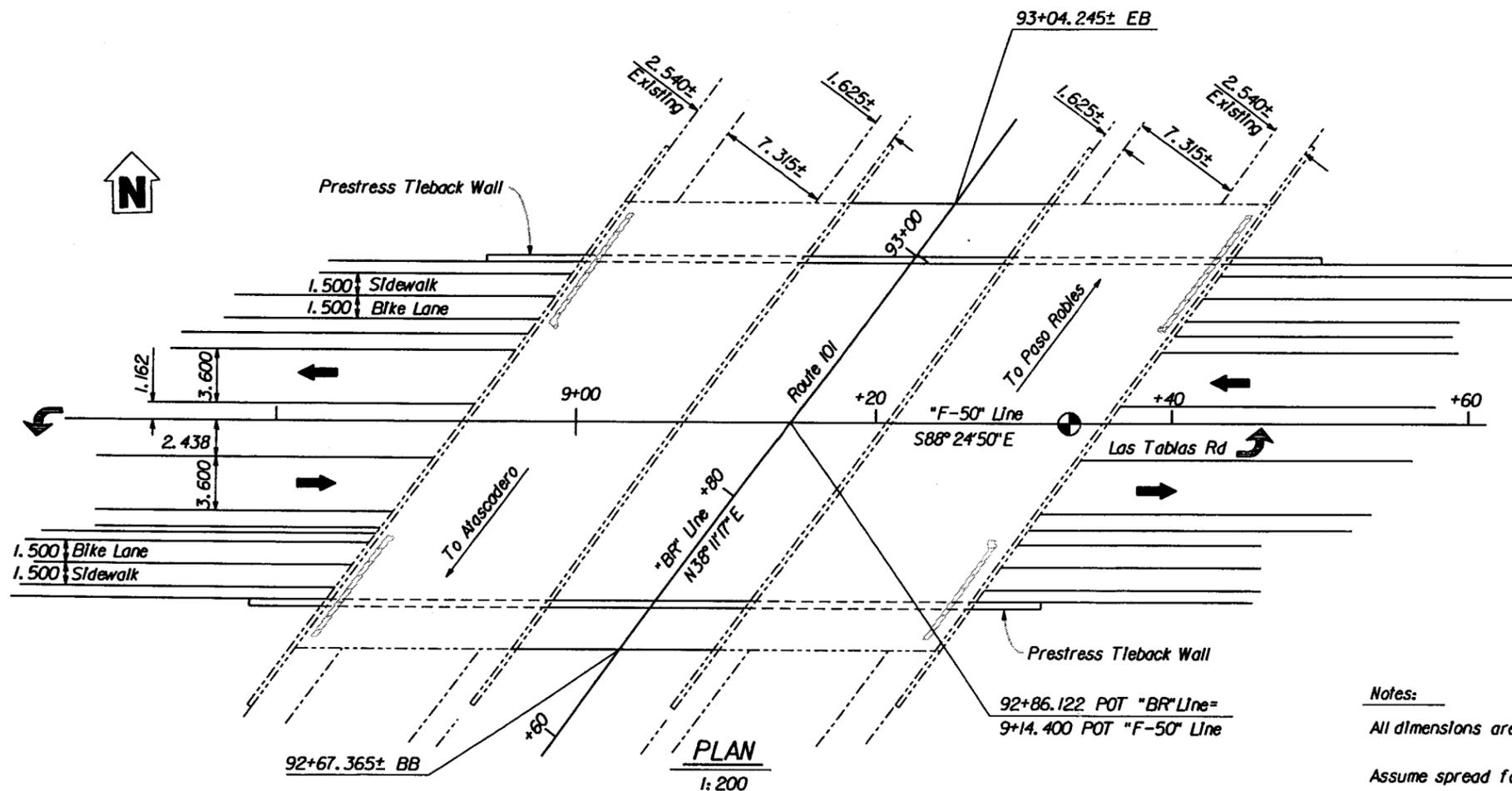
SHEET	2
OF	2
DATE	6-25-02
DWG. NO.	



ELEVATION (Abut 1 shown, Abut 4 similar by opposite hand)
1:200



TYPICAL SECTION
1:150



PLAN
1:200

LEGEND

- Denotes new construction
- - - Denotes existing structure
- ⊙ Point of min vert clearance
- ▨ Denotes limits of curtain wall removal

Date of estimate	=	02-06-02
Partial wall removal	=	\$20,000
Tieback Wall m ²	=	385
Cost/m ² Including 10% mobilization & 25% contingency	=	\$2000
Total Cost	=	\$790,000

Notes:

All dimensions are in meters unless otherwise shown.

Assume spread footing foundations.



DES. C.T.					
DR. C.H.					
CHK.					
APPD.	NO.	DATE	REVISION	BY	APPD.

ADVANCE PLANNING STUDY - ALTERNATIVE 3
LAS TABLAS ROAD UNDERCROSSING

SHEET OF	
DATE	8-2-01
DWG. NO.	

**EXHIBIT D – Preliminary Environmental
Assessment Report (PEAR)**

Las Tablas Road / U.S. 101 Interchange

**PRELIMINARY ENVIRONMENTAL
ANALYSIS REPORT**

ADDENDUM

Prepared for:

Matt Griggs
Dokken Engineering
11171 Sun Center Drive, Suite 250
Rancho Cordova, CA 95670

Prepared by:



February 18, 2004

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I. INTRODUCTION AND PROJECT DESCRIPTION

The proposed project is located in the northern portion of San Luis Obispo County, at the U.S. Highway 101 and Las Tablas Road interchange. The proposed project includes widening Las Tablas Road to include two additional lanes and bike lanes at the Las Tablas Road/U.S. Highway 101 interchange and realignment of the on and off-ramps. Three alternative interchange configurations were studied in the Preliminary Environmental Analysis Report (PEAR) completed for the project in 2002. These three alternatives are described and shown in the Las Tablas Road/U.S. 101 Interchange Project Study Report (Dokken, 2002) incorporated herein by reference.

This addendum provides information regarding the potential environmental effects of additional alternatives not covered in the PEAR. In total, seven alternatives have been considered for this project. Alternatives 1 through 3 were covered in the PEAR. Alternative 4 is the "No Build" alternative. Alternative 7 is the "Ramp Closure" alternative. This addendum will address the environmental effects of Alternative 5 (refer to Figure 1) as well as any impacts from Alternatives 4 and 7. Alternative 6 is no longer being considered as an alternative and therefore has been omitted from this addendum.

Alternative 5 is a Caltrans full standard alternative. This alternative will widen Las Tablas Road between Bennett Way and Florence Street by adding one through lane and one bike lane to both sides of the road as well as a center turn aisle. The vertical alignment will be adjusted to provide stopping sight distance for the desired design speed for Las Tablas Road. Curb, gutter and sidewalks will be added as needed along both sides of Las Tablas Road. Bennett Way will be realigned to intersect Peterson Ranch Road at Frontier Way. The intersection with Duncan Road and Las Tablas Road will be deleted and Duncan Road will be realigned to intersect the realigned Bennett Way Extension. Duncan Road will be obliterated between Las Tablas Road and the southbound off ramp. The north end of William Street and the west end of Cayucos Avenue will be closed. Access for the driveway on the northeast quadrant that connects to Las Tablas Road will be deleted and a new access point to Hawley Street will be constructed. The existing northbound and southbound on and off ramps will be realigned to achieve standard design speeds, sight distance, and superelevation transitions and widened to two lanes to accommodate future traffic. The two existing 3-span, undercrossing bridges on US-101 will be replaced with a single 2-span structure to accommodate the ultimate widening of US-101 as indicated in Caltrans' Route Concept Report.

The following sections provide a summary of the potential environmental constraints of Alternatives 4, 5, and 7.

II. SUMMARY OF FINDINGS

In addition to the potentially significant impacts outlined in the PEAR for Alternatives 1 through 3, Alternative 5 includes socioeconomic impacts to residential properties requiring right-of-way acquisition and resident relocation.

A. PERMITS AND APPROVALS

Permits, approvals, and coordination efforts would be required prior to construction of Alternative 5 as discussed in the PEAR. Permits would not be required for Alternatives 4 and 7.

III. METHODS AND FINDINGS

The environmental resources present in and near the proposed project along U.S. Highway 101 at Las Tablas Road are detailed in the PEAR. The following sections describe the potential environmental impacts of Alternatives 4, 5, and 7.

A. BIOLOGICAL RESOURCES

1. Botanical

a. Alternatives 4 and 7

No impact to botanical resources.

b. Alternative 5

ROW acquisition for Alternative 5 has the potential to affect shining navarretia if found to be present in the area of impact. A spring survey should be performed during late May to determine whether the CDFG protected species exists within the project area and whether impacts are likely. This Alternative involves the greatest area of grassland disturbance due to the alignment of the southbound off ramp, the obliteration of Duncan Road, and the future alignment of a Bennett Way extension. Potential for oak tree impacts exists if the proposed project effects any of the sparse oaks present.

2. Wildlife

a. Alternatives 4 and 7

No impact to wildlife resources.

b. Alternative 5

Implementation of this alternative would have greater potential for impacts to SJKF, and burrowing owl than Alternatives 1 through 3, due to the proposed realignment of the southbound off-ramp. This alternative would have a greater potential for impacts to riparian-associated resources, CRLF, and nesting /migratory birds than Alternatives 1 through 3 due to the proximity of the northbound off ramp and southbound on ramp alignments to Toad Creek. The Bennett Way realignment on the southwestern portion of the project would involve work within Toad Creek and would require regulatory agency permitting.

B. HAZARDOUS WASTE

a. Alternative 4 and 7

No hazardous waste impacts associated with these alternatives.

b. Alternative 5

Implementation of Alternative 5 has the same potential for impacts as Alternative 1 with respect to the ADL along the edges of the freeway and lead paint/asbestos containing materials at the existing undercrossing structure. Implementation of this alternative would necessitate relocation of the Pac-Bell and the California Highway Patrol facilities due to realignment of the southbound freeway off ramp, similar to Alternative 2. This alternative would require property acquisition of a portion of the Chevron station and adjacent property for the southbound off ramp. The amount of potentially hazardous property acquisition required for Alternative 5 creates a greater potential for impacts than Alternatives 1 through 3.

C. CULTURAL RESOURCES

a. Alternatives 4 and 7

No impact to cultural resources.

b. Alternative 5

Alternative 5, which includes the realignment of the southbound off ramp, the obliteration of Duncan Road, and the extension of Bennett Way, appears to require the most property acquisition northwest of the Las Tablas Road/U.S. Highway 101 intersection as compared to Alternatives 1 through 3. As with all studied alternatives, it is recommended that a qualified, properly equipped, professional paleontologist be on call or present during all earth moving activity on the project.

D. SOCIOECONOMIC ISSUES

a. Alternative 4

No impacts are associated with Alternative 4.

b. Alternative 5

The proposed realignment of the northbound off ramp would require acquisition of approximately eleven residential parcels in addition to the commercial acquisitions required for Alternatives 1 through 3. Alternative 5 is the only alternative that requires residential acquisitions for right-of-way and may have significant impacts due to resident relocation. Alternative 5 has the greatest potential for socioeconomic impacts.

c. Alternative 7

Although no property acquisitions would be required, the ramp closure alternative would cause socioeconomic impacts to businesses located near the interchange, such as the Chevron gas station and the medical center.

E. WATER QUALITY

a. Alternatives 4 and 7

These alternatives would not increase impermeable surfaces or require construction activities near Toad Creek. No impacts to water quality would occur.

b. Alternative 5

Alternative 5 has greater potential for water quality impacts than Alternatives 1 through 3, due to an increase in impermeable surface and realignment of the southbound on ramp and northbound off ramp located above Toad Creek. It is not anticipated the subsurface culvert can be avoided during implementation of this alternative. This alternative also includes realignment of Bennett Way, which would require construction of a bridge structure over Toad Creek west of the interchange and regulatory agency permitting.

Erosion and sedimentation would be addressed prior to construction by the permitting agencies such as the CDFG, ACOE, and RWQCB and these agencies would likely require the development of an erosion control plan. Water quality impacts may be mitigated to a level of insignificance with proper erosion control measures.

F. NOISE

a. Alternatives 4 and 7

No noise impacts would occur.

b. Alternative 5

Similar impacts as discussed for Alternatives 1, 2, and 3. The potential for noise impacts in the southeastern portion of the interchange are increased due to the realignment traversing through a residential neighborhood. The proposed retaining wall may reduce the need for noise barriers.

G. AIR QUALITY

a. Alternatives 4 and 7

No air quality impacts would occur.

b. Alternative 5

Similar impacts as discussed for Alternatives 1, 2, and 3. Temporary construction emissions would likely be greater for Alternative 5, since this alternative realigns all Highway 101 ramps.

I. VISUAL RESOURCES

a. Alternatives 4 and 7

No visual resources impacts would occur.

b. Alternative 5

Alternative 5 has similar impacts as discussed for Alternatives 2 and 3 with respect to the extension of Bennett Way northerly of Las Tablas Road; however, this alternative also requires obliteration of Bennett Way and realignment of this roadway in a currently undeveloped location. In addition, the northbound off ramp realignment will require removal of several houses, changing the visual character of the neighborhood.

IV. CONCLUSIONS

The alternatives addressed in this Addendum to the PEAR indicate that the studied alternatives may have significant environmental impacts associated with project implementation. Figure 1 summarizes the potential areas of environmental impact that would be associated with implementing Alternative 5. After study of the additional alternative, the initial finding in the PEAR stands, with Alternative 1 associated with the lowest potential for environmental impacts.

As shown in the table below, Alternative 1 is the preferred alternative for seven out of nine resource areas. Alternative 5 has the greatest potential for impacts to wildlife, hazardous waste, water quality, noise, and visual resources.

Table 1
Summary of Preferred Alternatives for Reduction of Environmental
Impacts Based on the Preliminary Analysis

Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 5
Botanical	X			
Wildlife	X			+
Hazardous Waste	X			+
Cultural	--	--	--	--
Socioeconomic	X			
Water Quality	X			+
Noise	--	--	--	+
Air quality	X			
Visual	X			+

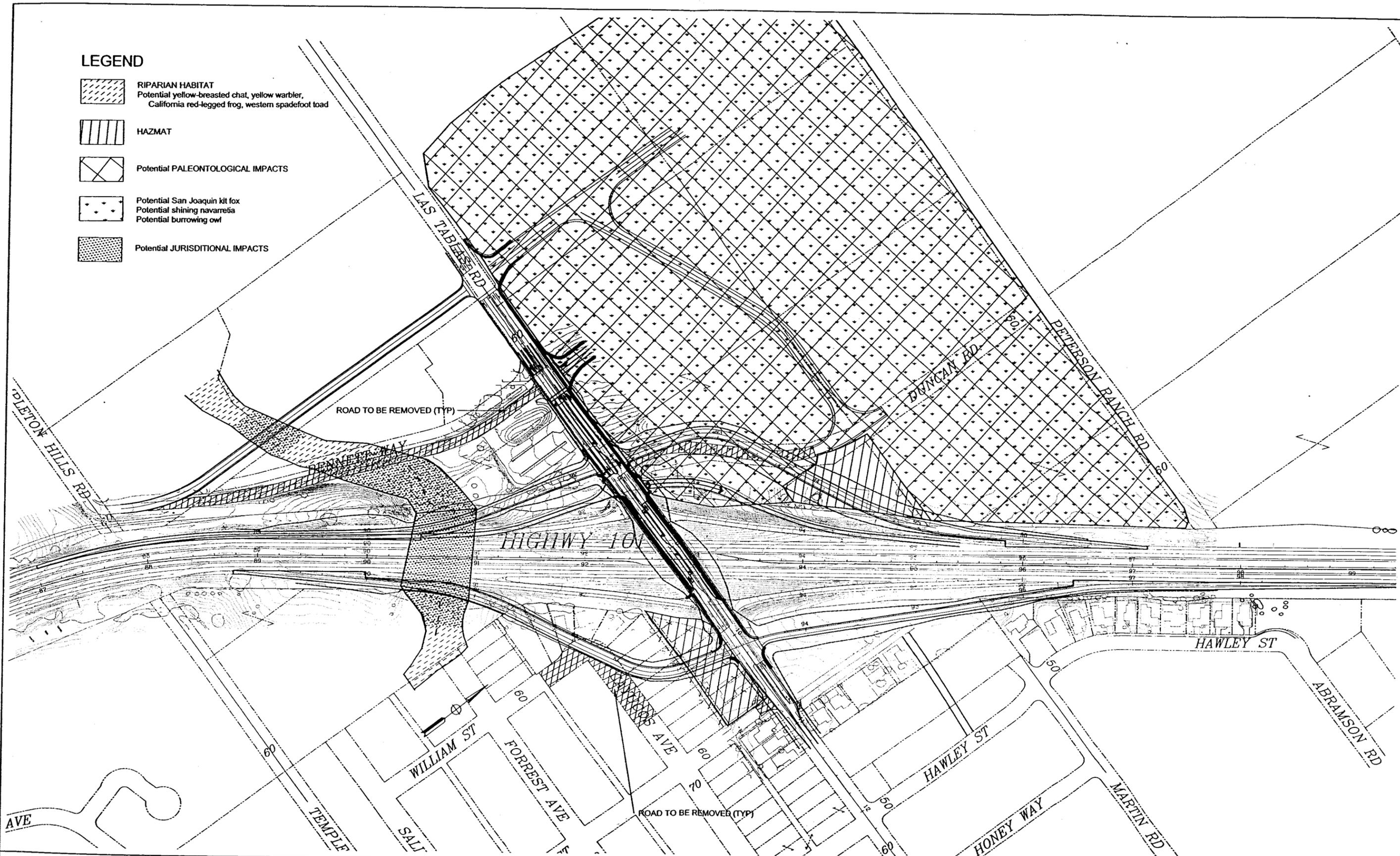
(X-Least Environmental Impacts; --No difference; +Increased Impacts)

V. RECOMMENDATIONS

The recommendations of the PEAR are not changed by the results of this study. Please refer to the PEAR for additional environmental recommendations in association with this project.

LEGEND

-  RIPARIAN HABITAT
Potential yellow-breasted chat, yellow warbler,
California red-legged frog, western spadefoot toad
-  HAZMAT
-  Potential PALEONTOLOGICAL IMPACTS
-  Potential San Joaquin kit fox
Potential shining navarretia
Potential burrowing owl
-  Potential JURISDICTIONAL IMPACTS



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SCALE: 1" = 80'

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DATE: 02-12-04

BY: DH

REV.



MORRO
GROUP, INC.
Environmental Services

LAS TABLAS / U.S. HWY 101
PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT - ADDENDUM

SENSITIVE RESOURCE AREAS
ALTERNATIVE 5

FIGURE 1

Las Tablas Road / U.S. 101 Interchange

**PRELIMINARY ENVIRONMENTAL
ANALYSIS REPORT**

Prepared for:

Dokken Engineering
11171 Sun Center Drive, Suite 50
Rancho Cordova, CA 95670

Prepared by:



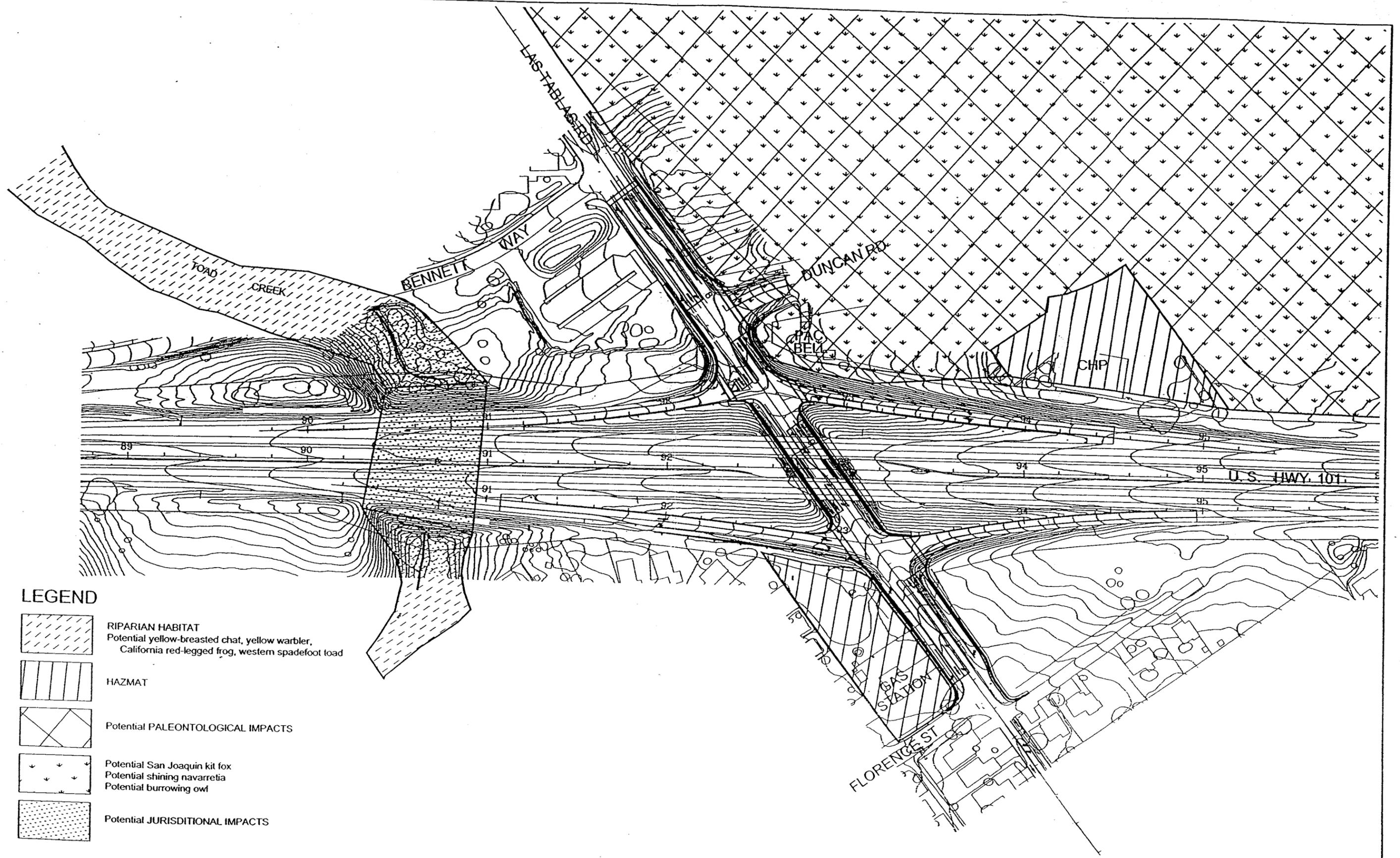
Revised June 18, 2002



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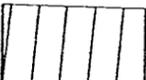
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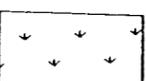


LEGEND

- 

RIPARIAN HABITAT
Potential yellow-breasted chat, yellow warbler,
California red-legged frog, western spadefoot toad
- 

HAZMAT
- 

Potential PALEONTOLOGICAL IMPACTS
- 

Potential San Joaquin kit fox
Potential shining navarretia
Potential burrowing owl
- 

Potential JURISDICTIONAL IMPACTS

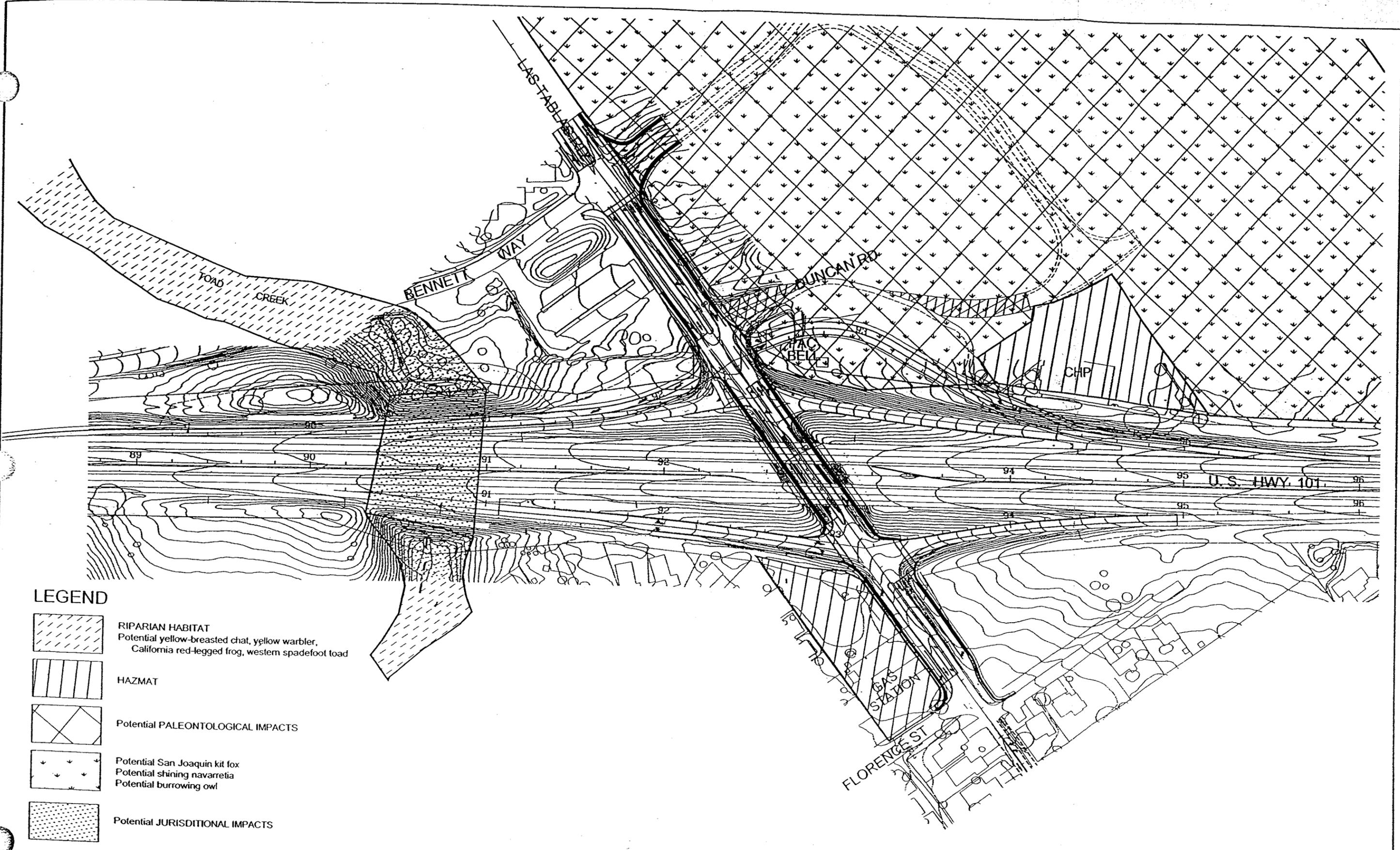
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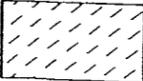
**LAS TABLAS / U.S. HWY 101
 PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT**

**SENSITIVE RESOURCE AREAS
 ALTERNATIVE 1**

FIGURE 3



LEGEND

- 
RIPARIAN HABITAT
 Potential yellow-breasted chat, yellow warbler,
 California red-legged frog, western spadefoot toad
- 
HAZMAT
- 
Potential PALEONTOLOGICAL IMPACTS
- 
Potential San Joaquin kit fox
Potential shining navarretia
Potential burrowing owl
- 
Potential JURISDICTIONAL IMPACTS

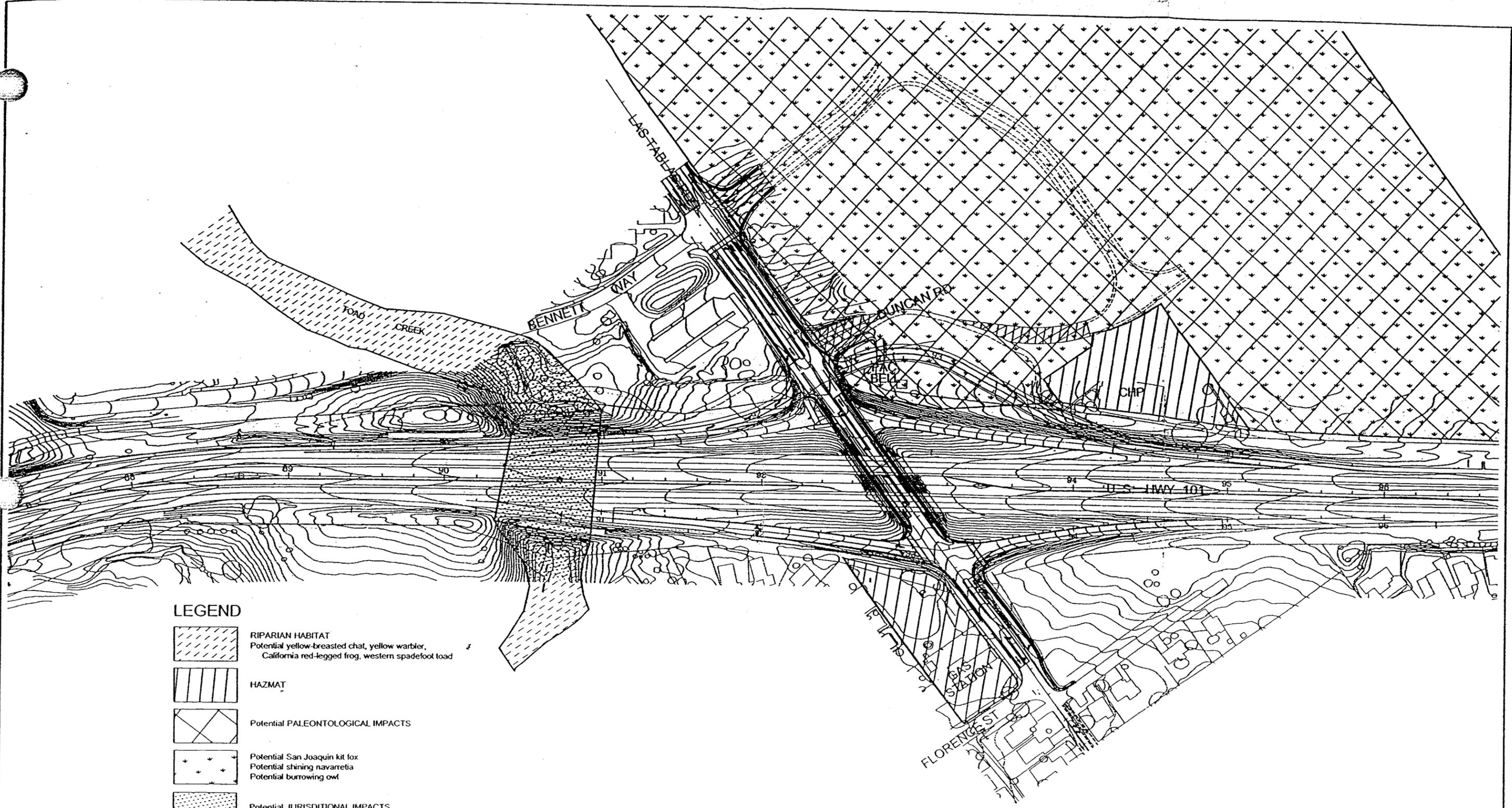
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LAS TABLAS / U.S. HWY 101
PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT

SENSITIVE RESOURCE AREAS
ALTERNATIVE 2

FIGURE 4



LEGEND

- 
 RIPARIAN HABITAT
 Potential yellow-breasted chat, yellow warbler,
 California red-legged frog, western spadefoot toad
- 
 HAZMAT
- 
 Potential PALEONTOLOGICAL IMPACTS
- 
 Potential San Joaquin kit fox
 Potential shining navarretia
 Potential burrowing owl
- 
 Potential JURISDITIONAL IMPACTS

The selected alternatives for this project are summarized below:

1. Alternative 1: This alternative will widen Las Tablas Road between Bennett Way and Florence Street by adding one through lane and one bike lane to both sides of the road. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road. The intersections of Las Tablas Road with Bennett Way, Duncan Road, Florence Street and the northbound and southbound US-101 ramps will be adjusted to accommodate the widening of Las Tablas Road. The two existing 3-span, undercrossing bridges on US-101 will be replaced with a single 3-span structure that will accommodate the ultimate widening of US-101 as indicated in Caltrans' US-Concept Report. At the interchange, the traffic lanes on Las Tablas Road will pass under the center span of the undercrossing structure while the bike lanes, curb, gutter and sidewalk pass under the end spans of the structure.
2. Alternative 2: Alternative 2 will widen Las Tablas Road between Bennett Way and Florence Street by adding one through lane and one bike lane to both sides of the road. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road. The intersections of Las Tablas Road with Bennett Way, Florence Street and the northbound US-101 ramps will be adjusted to accommodate the widening of Las Tablas Road. The Duncan Road intersection with Las Tablas Road will be deleted and Duncan Road will be obliterated between Las Tablas Road and the CHP facility. The southbound US-101 ramps intersection with Las Tablas Road will be relocated and the ramps will be realigned. The two existing 3-span, undercrossing bridges on US-101 will be replaced with a single 2-span structure to accommodate the ultimate width of Las Tablas Road and the ultimate widening of US-101 as indicated in Caltrans' Route Concept Report.
3. Alternative 3: This alternative will widen Las Tablas Road between Bennett Way and the southbound US-101 ramps by adding one through lane and one bike lane to both sides of the road. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road between Bennett Way and Florence Street. The intersection of Las Tablas Road with Bennett Way will be adjusted to accommodate the widening of Las Tablas Road. The Duncan Road intersection with Las Tablas Road will be deleted and Duncan Road will be obliterated between Las Tablas Road and the CHP facility. The southbound US-101 ramps intersection with Las Tablas Road will be relocated and the ramps will be realigned. The existing undercrossing bridges on US-101 will remain, but the closure walls at abutments 1 and 3 will be removed. Tieback walls will be installed at each abutment to provide room for curb, gutter, sidewalks and bike lanes beneath spans 1 and 3 of the existing undercrossing structures.

Land use in the vicinity of the proposed improvements is predominantly residential (east of U.S. Highway 101) and open space (west of U.S. Highway 101). The selected alternatives require additional study before making the final determination of the preferred alternative.

Implementation of any of these project alternatives could be constrained by several environmental issues. The following sections provide a summary of these potential constraints and their potential effect on each alternative.

II. SUMMARY OF FINDINGS

A. ENVIRONMENTAL DOCUMENTS

It appears from the initial investigations that potentially significant, but mitigable environmental impacts may occur as a result of implementation of the proposed project, necessitating preparation of an Initial Study (IS) leading to a Negative Declaration (ND) that would satisfy the requirements of the California Environmental Quality Act (CEQA), and an Environmental Assessment (EA) leading to a Finding of No Significant Impact (FONSI) that would satisfy the requirements of the National Environmental Policy Act (NEPA). Biological, paleontological, hazardous materials, socioeconomic, water quality, noise, air quality, and visual impacts are probable if any of the alternatives are implemented. At this time, it appears that all of the impacts are mitigable; however, some of the more detailed studies may change this conclusion and prove that unmitigable Class I impacts exist, thereby necessitating preparation of an Environmental Impact Report/Statement (EIR/S). The California Department of Transportation (Caltrans) would consider this Preliminary Environmental Analysis Report (PEAR) during approval of a Project Study Report (PSR). Potentially significant impacts that could affect project schedule and design include:

- right-of-way acquisition (CHP, and Pac Bell displacement)
- hazardous waste removal
- potential presence of California red-legged frogs, spadefoot toads, burrowing owl, and shining navarretia, as well as riparian jurisdictional impacts and kit fox habitat loss
- paleontological resource impacts
- noise impacts
- visual resources impacts

Responsibility for compliance with NEPA rests with Caltrans, the lead agency. Caltrans will participate in the review process as a responsible agency for CEQA compliance, but the County of San Luis Obispo is the lead agency for CEQA, thus responsible for CEQA compliance. Environmental concerns associated with this project are presented in Table 1, which provides a summary of the environmental issues that are relevant to the site and should be addressed in the Draft Environmental Document (DED). Items marked as "yes" or "maybe" would require a technical study to determine whether impacts are significant, and if significant, whether mitigation measures can be implemented that would reduce the impact to a level of insignificance. Detailed evaluations of these concerns are listed in the appropriate sections of this report.

At this preliminary stage, it is difficult to choose a best avoidance Alternative. Each of the alternatives has potential Class II significant impacts as determined through CEQA and NEPA. Refer to the following analyses for supporting information.

Table 1
Summary of Environmental Issue Impacts

Environmental Issue	Impact	Significant	Mitigable
Biological Resources	Maybe	Maybe	Yes
Hazardous Waste	Maybe	Maybe	Probably
Cultural Resources	No	No	N/A
Paleontological Resources	Maybe	Maybe	Yes
Socioeconomic	Maybe	Maybe	Probably
Water Quality	Maybe	Maybe	Yes
Noise	Maybe	Maybe	Probably
Air Quality	Maybe	No	Yes
Visual Resources	Maybe	Maybe	Probably

B. TIMING OF DOCUMENT PREPARATION

The time necessary to prepare the environmental document would be affected by the required technical studies, including biological, hazardous waste, right-of-way, noise, visual, socio-economic and air quality studies. These studies are not expected to be overly complex or time consuming. It is estimated that the total preparation time for the CEQA environmental document would be approximately 12-15 months and the preparation time for the NEPA document would be approximately 15-20 months.

C. PERMITS AND APPROVALS

The following permits, approvals, and coordination efforts would be required prior to construction of the proposed improvements.

1. Permits

- Section 404 Permit: A U.S. Army Corps of Engineers (USACE) permit may be required for Alternative 2 or 3, since these alternatives have the potential to affect jurisdictional areas of Toad Creek. However, if work can be conducted without entering the jurisdictional area of the underground culvert, no USACE permit would be necessary.
- Section 401 Water Quality Certification: If a USACE permit is required for Alternative 2 or 3, this certification would also be required and is issued by the Regional Water Quality Control Board (RWQCB).
- Section 1601 Streambed Alteration Agreement: A Section 1601 Agreement may also be necessary, since implementation of Alternative 2 or 3 has the potential to affect Toad Creek, under the jurisdiction of the California Department of Fish and Game (CDFG). However, if work can be conducted without entering the jurisdictional area of the underground culvert, no CDFG permit would be necessary.

- Prior to construction, the County must obtain an Encroachment Permit from Caltrans for construction within U.S. Highway 101 right-of-way.

2. Approvals and Coordination

- A PSR must be approved by Caltrans. This PEAR would be considered by Caltrans prior to PSR approval.
- A Draft Project Report (PR) must be approved by Caltrans. Given the existing conditions and proposed project locations, it is expected that a Mitigated Negative Declaration/Environmental Assessment (EA) leading to a Mitigated Finding of No Significant Impact (FONSI) would be required by the County and Caltrans. The Draft Environmental Document (DED) would follow the procedures outlined in the Caltrans Environmental Handbook. Once the DED is completed, it would be circulated for a 30-day public review and comment period. Responses to comments would be prepared and combined with the DED.
- A Final Project Report would be prepared for approval by Caltrans concurrent with the Final Environmental Document (FED). Approval of the Final Project Report would authorize final design (preparation of plans, specifications, and cost estimates for bidding purposes).
- Coordination with various utility providers would be required where utilities may be upgraded, relocated, or otherwise affected by proposed construction.
- Because the project involves right-of-way acquisition, the County must approve the area to be acquired. Property acquisition activities can be initiated and negotiated with individual property owners once the FED is approved.
- Prior to construction, local construction approvals would be necessary from the County, including the issuance of construction permits, grading permits, and other engineering related approvals.
- Oak trees removed or impacted within County limits are subject to the County's oak tree standards and mitigation measures.

III. METHODS AND FINDINGS

Various Morro Group staff conducted site visits in April 2001. Records searches and contacts with Federal, State, and local agency experts were also conducted as needed to collect data and confirm existing information. Information obtained from the Salinas River Area Plan was used to assist in characterizing the project issues and conditions and ensure project consistency with prevailing County policy. This Preliminary Environmental Assessment details the environmental resources present in and near Alternatives 1-3, along U.S. Highway 101 at Las Tablas Road.

A. BIOLOGICAL RESOURCES

1. Botanical

Assessment of the botanical resources associated with the alternatives was based on a search of the California Natural Diversity Data Base (CNDDDB), and field surveys conducted on April 20, 2001. The CNDDDB search was conducted on the Templeton 7.5 Minute Quadrangle. The CNDDDB contained no documented occurrences of special-status plant species in the project footprint. However, the grassland habitat was found to be suitable for shining navarretia (*Navarretia nigelliformis* ssp. *radians*).

The following table provides survey season information and habitat requirements for the above-mentioned species.

Table 2
Special-status Plant Species Potentially Affected by the Project

Species Name	Potential Habitat	Status	Survey Season
shining navarretia	<i>Navarretia nigelliformis</i> ssp. <i>radians</i>	--/--/CNPS 1B	Annual herb, which occurs in oak woodland and annual grassland. Documented as occurring in areas located north of project site (approx. 5 miles north). Typical flowering period is May through June. Has potential to occur in project area.
Legal Status Codes:		State:--	California Native Plant Society (CNPS):
Federal:			List 1B: Rare, threatened or endangered in California and elsewhere
SSC: Species of Special Concern			

a. Alternative 1

ROW acquisition for Alternative 1 has the potential to affect shining navarretia if found to be present in the area of impact. However, ROW acquisition will affect a relatively small area of the open space areas located northwest of intersection of Las Tablas Road and U.S. Highway 101. A spring survey should be performed during late May to determine whether the CDFG protected species exists within the project area and whether impacts are likely. Of the three alternatives under consideration, this alternative appears to have the least potential for impacts to shining navarretia or oak trees. Alternative 1 appears to have the least potential for adverse impacts associated with botanical resources.

b. Alternative 2

ROW acquisition for Alternative 2 has the potential to affect shining navarretia if found to be present in the area of impact. A spring survey should be performed during late May to determine whether the CDFG protected species exists within the project area and whether impacts are likely. This Alternative involves a greater area of grassland disturbance due to the improvements that are proposed for the southbound on and off ramps, the obliteration of Duncan Road, and the future alignment of a Bennett Way extension. Potential for oak tree impacts exists if the proposed project affects any of the sparse oaks present; however, it is not possible to tell at this

gas station and the northbound U.S. Highway 101 on ramp. For all three alternatives, additional investigation of the Pac-Bell facility should occur to determine the type of hazardous waste generated, and the potential for removal of contaminated soil or water at that site since relocation of the facility would be necessary. For all three alternatives, Phase II soil testing is also recommended along the edges of the freeway where disposal of soil containing ADL might be warranted if excavation of contaminated soil were to occur. For all three alternatives, the existing undercrossing structure should be sampled for lead based paint and asbestos containing materials. Alternative 2 or 3 would require further investigation to determine whether impacts are associated with the ROW take due to the UST and waste oil that is stored at the CHP facility site.

C. CULTURAL RESOURCES

The study area has a low potential for archaeological resources, and no additional survey work or monitoring would be required for implementation of any of the alternatives. However, paleontological resources were discovered during a field survey of the property, and monitoring during ground disturbing/excavation activities is recommended for all alternatives.

D. SOCIOECONOMIC ISSUES

A right-of-way impact study would be necessary as a result of the need for right-of-way acquisition. The acquisition of additional right-of-way would be required from undeveloped and commercial uses in conjunction with highway realignment and road widening.

E. WATER QUALITY

Coordination between the City, Caltrans, and RWQCB may be necessary during the planning phase of the project, if Alternative 2 or 3 requires opening or relocating the culvert that encloses Toad Creek. A NOI and SWPPP may be required for any alternative impacting greater than one acre of land.

F. NOISE

A noise study would be necessary to determine the noise impacts from the changes in roadway alignment and projected traffic use. In addition, this study would be used to determine the potential mitigation requirements for adjacent sensitive receptors (i.e., residential uses), should the interior or exterior noise standards be exceeded from highway noise and from the construction process itself.

G. AIR QUALITY

Conformity with the State Implementation Plan for air quality should be investigated through an analysis of air quality impacts, consistent with Caltrans Transportation Project Level Protocol (May 1996). This analysis would determine the project's benefit or detriment to local air quality conditions, including contributions to an existing or projected air quality violation.

H. VISUAL RESOURCES

A visual resource study should be performed for the selected Alternative to determine if Class I impacts exist. Both Las Tablas Road and U.S. Highway 101 are highly visible from public roadways.

APPENDIX A

- **Phase I Cultural Resource Survey**

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INTRODUCTION

This report describes an archaeological surface survey completed on August 15th to 17th, 2001 in response to plans for widening Las Tablas Road at Highway 101 and in Templeton, San Luis Obispo County (Figure 1). The study was done to determine whether prehistoric or historic cultural resources were present in the proposed project area in compliance with Section 106 of the National Historic Preservation Act.

The field survey, background research and report were done by Thor Conway, President, Heritage Discoveries Inc., San Luis Obispo through the Morro Group, Inc., Job #00-494. The Preliminary Environmental Assessment Report was prepared for Dokken Engineering. Thor Conway, M.A. Anthropology, has thirty-two years archaeological experience across North America including fourteen years in California.

PROJECT DESCRIPTION

The California Department of Transportation (Caltrans) has proposed improvements for widening Las Tablas Road at the junction of Highway 101 and Las Tablas Road in Templeton, San Luis Obispo County (Figures 1 & 2). Several alternatives, including areas on both sides of Highway 101, were identified. The project area includes property outside of the Highway 101 right-of-way as well as the existing right-of-way for Highway 101 and Las Tablas Road. The survey area on the west side of Highway 101 included a field extending north from Las Tablas Road to Petersen Ranch Road and bounded by Duncan Road on the east side. It measured approximately 800 feet north to south by 600 feet east to west. Part of the archaeological survey study area was situated on the east side of Highway 101 at a vacant field north of Las Tablas Road. This area measured approximately 200 feet east to west by 300 feet north to south. The third section of the study area was vacant land located west of Highway 101 on the south side of Las Tablas Road with Bennett Way forming the western boundary of that area. It measured approximately 200 feet east to west by 300 feet north to south.

SOURCES CONSULTED

A search was made for pertinent background information relating to prehistoric and historic land use in the project area. An archaeological sites record search from the Central Coast Information Center of the California Historical Resources Information System at the University of California at Santa Barbara included recorded archaeological sites and surveys within a one-half mile radius of the Las Tablas Road study area (Appendix A). The results showed that the specific study area had never been subject to an archaeological survey; but several surveys have taken place in the general vicinity. No historic properties listed on the OHP Historic Property Data file were located within the search area.

The upper Salinas River Valley formed a geographical setting for prehistoric settlement in the areas that later became the locations for the communities of Atascadero and Templeton. A series of archaeological site surveys have taken place near the current study area. Several surveys with negative results had taken place in the town of Templeton (Gibson, 1973, 1975, 1989 & 1998; McLean, 1998; Seidel 1994). Immediately west of the study area on Los Tablas Road, an archaeological surface survey of the Twin Cities Community Hospital expansion produced negative results (Conway, 2001). This survey covered an area with the same geo-morphological setting as the study area.

BACKGROUND

Environment

The study area lies at the northwest edge of the town of Templeton in an area changing from agricultural use to residential and commercial usages. The study area is part of the Salinas River Valley. Native oak vegetation occurs in the hills above the river and local streams. The project area, which can be characterized as rolling hills and swales, retains very little native vegetation due to past agricultural land use.

Ethnography

Most of San Luis Obispo County, including all of the project area, was home to the Northern Chumash, or Obispeno, for over 9,000 years (Grant, 1978). The earliest recorded visit to an Obispeno village took place in 1595 when the Spanish sailed into San Luis Obispo Bay under the command of Cermeno. He anchored in front of the premiere village named *Sepjato* which was located at the mouth of San Luis Obispo Creek on the hill now occupied by the San Luis Bay Inn. The Spanish account noted that these Indians "... are fishermen and there is fish and some shell-fish with which they sustain themselves"—a statement which applied to the descendants of this village who resided at the San Luis Obispo mission two hundred years later (Wagner, 1929: 161).

By the time of the Spanish expansion into California at the end of the 1700's, Chief Buchon lived at *Sepjato* and held the status of a grand-chief leader of several villages in the greater San Luis Obispo area from Avila to Pismo Beach to Morro Bay.

The area re-entered the historic era on September 1st, 1772 when the first mission was founded beside San Luis Obispo Creek. This first mission within Chumash territory gradually expanded in size and importance. In its first decade, some Obispeno Chumash were dissatisfied with the mission and attempted to burn it down (Kocher, 1972). The influence of the mission increased in the 1780's when Pedro Fages reported that the Indians at the San Luis Obispo mission "...have readily adapted themselves to what it was sought to teach them" (Englehardt, 1933: 39). Judging from the mission records listing the number of Indians recruited by this mission, in 1803 most of the numerous Obispeno Chumash groups had moved away from their traditional villages to the vicinity of the mission (King, 1984: 14).

Archaeology

San Luis Obispo County was home to the Northern Chumash, or Obispeno, for over 9,000 years. Archaeologists have established a detailed cultural chronology based upon excavations and site surveys across the county. Over 2,100 archaeological sites have been recorded in San Luis Obispo County, although many of these heritage resources have been destroyed or damaged by development.

The study of Chumash prehistory has become increasingly divided into chronological and regional divisions starting with earlier syntheses (Greenwood, 1972; Gibson, 1994) and continuing with comprehensive recent studies (Bouey & Basgall, 1991). While archaeological surveys are commonly made throughout the Northern Chumash territory, sizeable excavations had been more limited and generally located at coastal sites (Clemmer, 1962; Hines, 1986). More recent studies have identified regional trends and adaptations such as work at Pico Creek and Little Pico Creek (Jones & Waugh, 1995).

a series of sites at Morro Bay (Jones et al., 1994), and early settlement inland at Cross Creek (Fitzgerald & Jones, 1999).

The prehistory of the Northern Chumash follows the same chronological outline of three basic periods sub-divided into numerous phases established for the Santa Barbara region (King, 1981). The main periods—Early, Middle, and Late—cover over 9,000 years of social, economic, and technological adaptations to central and southern California's climate and resources.

The Early Period generally dates between 7,500 B.C. for the Northern Chumash, a site at Diablo canyon, SLO-2, was dated to the era between 8,900 and 9,300 years ago (Greenwood, 1972). The important Lodge Hill site in Cambria also has a substantial Early Period component which has been radiocarbon dated to 8,000 years ago. It shows extensive use of local raw materials and coastal marine food resources (Pierce, 1979; Gibson, 1979b; Conway, 1995). At least 37 Early Period sites have been recorded in San Luis Obispo County (Gibson, 1994).

Early Period sites often contain milling stones and manos indicating extensive use of seed plants. A basic array of rectangular shell bead ornaments also occurs throughout the Early Period. Village life was organized with formal cemeteries and specialized resource sites being used.

The Middle Period of Chumash prehistory spans the centuries between 500 B.C. and 1150 A.D. At this point in time, Chumash society shifted into a very organized state with hereditary rights to political and religious power. Artifact types change in the Middle Period and shell ornaments become more diverse. An important economic adaptation, the use of acorns, is indicated by the decline in milling stones and the increased use of mortars and pestles. Populations in size and trade networks become very well established.

The Late Period covers the years between 1150 A.D. and 1805 A.D. Economic changes continued within the Chumash world. Bead jewelry indicates that there were divisions in wealth between family lines. Money was invented and extensively used as an indication of political as well as economic power. The long process of localized adaptation evident throughout Chumash prehistory became even more established. With the arrival of the Spanish, especially after 1769 A.D., rapid changes altered Chumash political and economic achievements as well as reducing the size of the population. By the end of the Mission era, the Chumash continued to live on their ancestral lands; but their former cultural achievements were largely changed forever. Many contemporary Chumash maintain spiritual and cultural links to their rich heritage.

A number of archaeological surveys and test excavations have been done in northern San Luis Obispo County showing that archaeological sites are widespread throughout the area; but larger prehistoric settlements are clustered along the Salinas River. In the vicinity of modern Paso Robles, several hot springs were once located along the Salinas River; and prior to damming, the river offered an important seasonal fishery to aboriginal groups as well as later settlers.

The greater Paso Robles, Templeton and Atascadero areas have strong cultural importance, since the border between traditional Northern Chumash lands and the Salinan tribal territory is located nearby. Originally, California researchers placed the division between these groups at the Santa Lucia Mountain Range just north of San Luis Obispo. As mission records were examined for more details, it became apparent that the Northern Chumash once lived along the upper Salinas River. A series of villages and hamlets were located near the river or along tributary streams.

Several archaeological studies completed a few miles north and south of the study area have begun to define regional settlement and chronologies.

The Woodland Plaza site (CA-SLO-992) was discovered during an archaeological survey in 1980 (Gibson, 1980). Ten years later, archeological testing and mitigation were done in advance of commercial developments of the property (Singer, Gibson, & Atwood, 1990). The excavations and controlled surface collections at SLO-992 revealed a prehistoric Chumash site with two areas of archaeological deposits. The main habitation area occurred on the western part of the site nearer to the Salinas River and the creek mouth. Further east, indications of a stone tool workshop area were documented.

Archaeological salvage excavations at the Quail site on the Salinas River in Paso Robles revealed the presence of a Middle Period camp (Conway, 1996b). A series of Chumash settlements have also been located nearer to the Los Tablas Road study area further up the Salinas River in the communities of Templeton and Atascadero (Gibson, 1988a & b; Singer 1985). But few large scale excavations have taken place at these and other related sites.

South of the present study area, two single component prehistoric campsites were recorded as CA-SLO-1331 and 1332 during a previous study completed for the Templeton Community Services District (Gibson, 1991). Sites CA-SLO-1331 and CA-SLO-1332 were recorded and tested at that time.

The Paso Robles Creek #1 Site (CA-SLO-1331) contained sparse to medium density cultural remains including marine shellfish fragments and flaked stone tool remains. It was tested with six test pits that demonstrated that cultural materials were concentrated between 20 cm. and 30 cm. depth. SLO-1331 occurs on the southern edge of a stream terrace at 780 feet elevation.

The Paso Robles Creek #1 Site (CA-SLO-1331) had a dozen species of Pacific Ocean shellfish, an Olivella cup bead, bead manufacturing debris, a mortar fragment, pestles, hammer stone, chert cores and chert debitage. The shell bead can be dated to the Late Period of Chumash prehistory between 1150 and 1500 A.D.

History

The greater Templeton area grew during the late 19th century into a center of agricultural commerce (Angel, 1883). Templeton is a community strongly related to the railroad. Originally named Crocker after Charles Crocker of the Big Four, Templeton was planned by C.H. Phillips lobbied the railroad to bring the new line through his Rancho El Paso de Robles property. When the Southern Pacific Railway reached the community, growth resulted as agricultural products were shipped to distant markets (Nicholson 1980).

Field Methods

A detailed archaeological surface survey was made of the Las Tablas Road widening study area on August 5th to 17th, 2001 by walking the project area at two meter intervals. The project area was defined as three areas including the edges of the Highway 101 right-of-way and areas outside of the right-of-way (Figure 2).

The first survey area was situated on the west side of Highway 101. It is a field extending north from Las Tablas Road to Petersen Ranch Road and bounded by Duncan Road on the east side. This field, which has rolling hills and swales topography, measured approximately 800 feet north to south by 600 feet east to west. Surface visibility was very good with over 60% presence of ground surface for observations. No cultural materials were found, although natural chert cobbles do occur there.

The second part of the archaeological survey study area was situated on the east side of Highway 101 at a vacant field north of Las Tablas Road. This area measured approximately 200 feet east to west by 300 feet north to south. It had impacts from past grading as well as intact areas. Cultural materials were not present. Surface visibility was average with about 40% ground exposure.

The third section of the study area was vacant land located west of Highway 101 on the south side of Las Tablas Road with Bennett Way forming the western boundary of that area. It measured approximately 200 feet east to west by 300 feet north to south. It too had been partially graded. No cultural items were present there.

Findings And Conclusions

The surface survey of the alternatives for the Las Tablas Road study area did not find archaeological remains. The literature search and records search also suggest that this part of the Salinas River Valley did not have geographical features, such as springs or major streams, or special food resource concentrations to attract prehistoric settlement. The closest nearby archaeological sites have been found on terraces directly above streams flowing into the Salinas River.

The archaeological study does not affect the choice of alternatives for widening the Las Tablas Road corridor in the vicinity of Highway 101.

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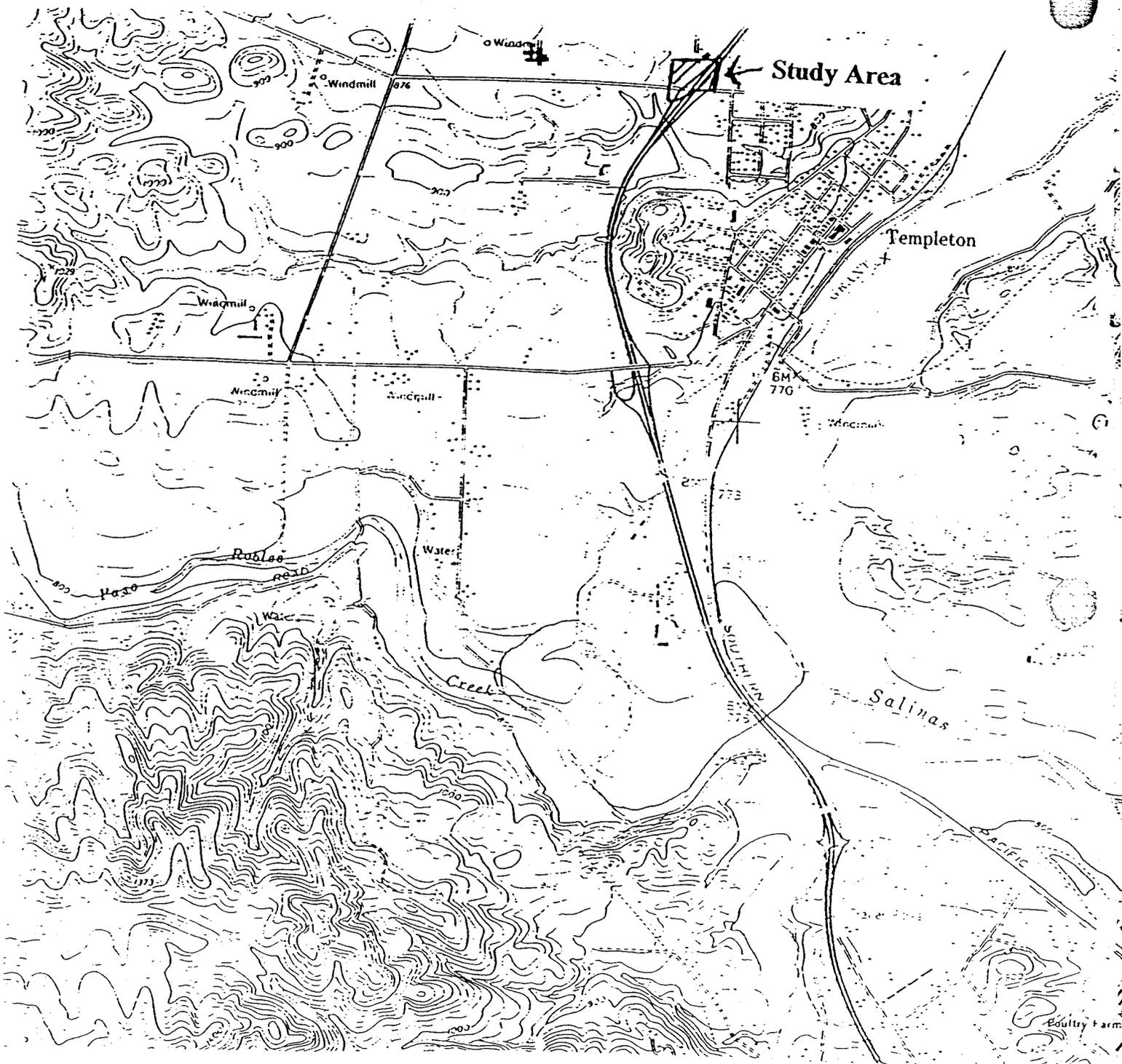


Figure 2—Location of study area at Los Tablas Road and Highway 101 at Templeton.

Appendix A—Archaeological Records Search Documents
(San Luis Obispo County, Route 101, Post Mile 51.45)
(Confidential)



June 13, 2002

Thor Conway
Heritage Discoveries, Inc.
PMB 109, 793A Foothill Blvd
San Luis Obispo, Ca 93405

Re: Two Record Searches
1) Halcyon
2) Templeton

Dear Mr. Conway:

Enclosed are the results of the record searches you requested for San Luis Obispo county. Our records were consulted for all known archaeological sites, historic properties, and previous cultural resource studies within the search area indicated on the quad map portion faxed to our office. I will discuss the two searches separately.

In the Halcyon record search, 14 archaeological sites and 77 previous cultural resource studies were found. These were mapped in color pencil onto a portion of the Oceano quad. A bibliography of survey reports is also included. According to our records, no historic properties listed on the OHP Historic Property Data File are located within the search area.

In the Templeton record search, 1 archaeological site, 1 isolate, and 20 previous cultural resource studies were found. These were mapped in color pencil onto a portion of the Templeton quad. A bibliography of survey reports is also included. According to our records, no historic properties listed on the OHP Historic Property Data File are located within the search area.

According to our records, portions of the project area have been previously surveyed. Therefore, a cultural resource survey is recommended for any unsurveyed areas affected by development or construction.

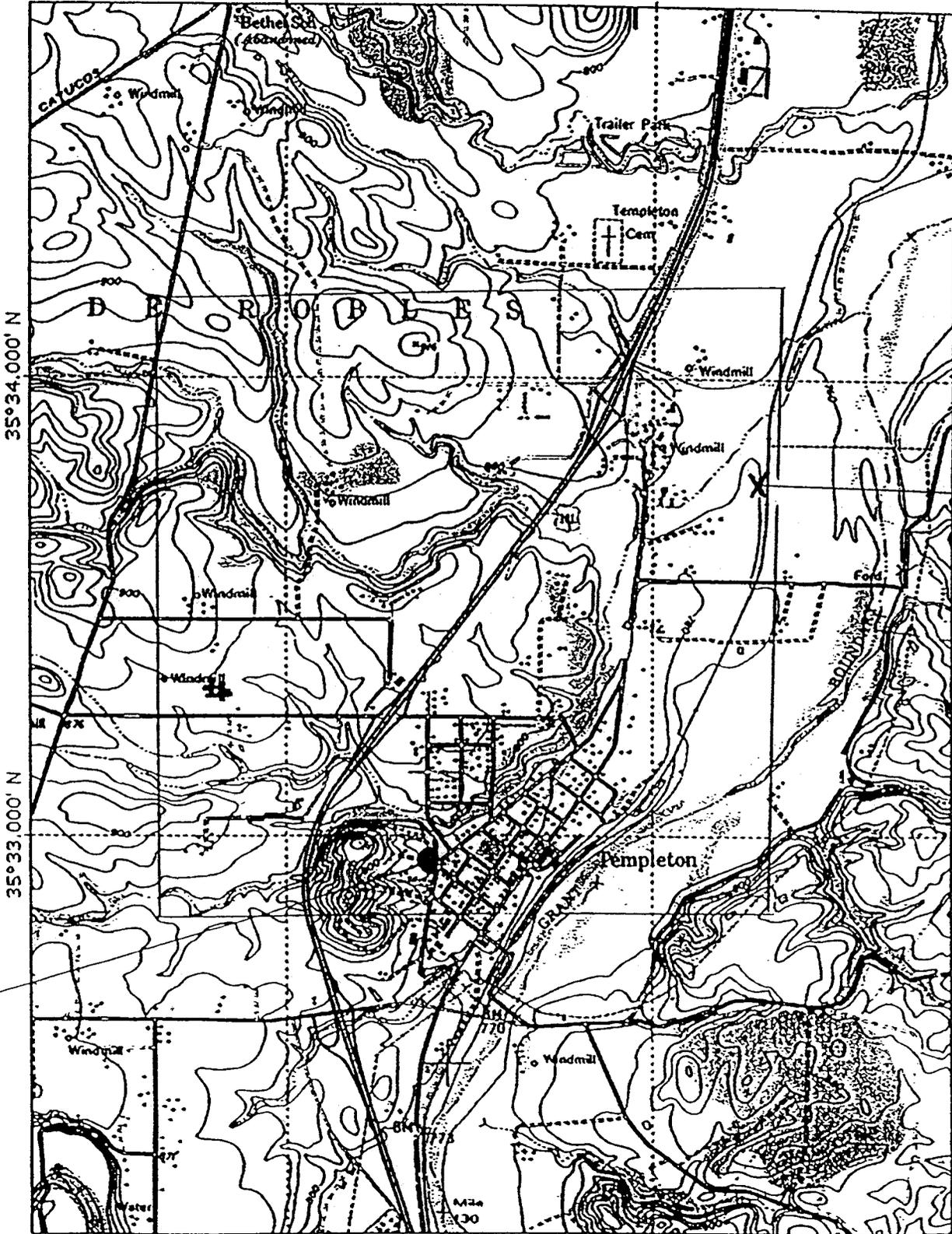
Please contact me if you have any questions about this search or require any survey or site reports.

Sincerely,

Corina M. Kellner
Assistant Coordinator

120°43.000' W

WGS84 120°42.000' W



35°34.000' N

35°34.000' N

35°33.000' N

35°33.000' N

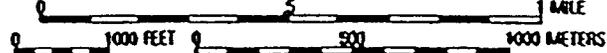
18-17

1425

120°43.000' W

WGS84 120°42.000' W

TN + MN
1:62,500

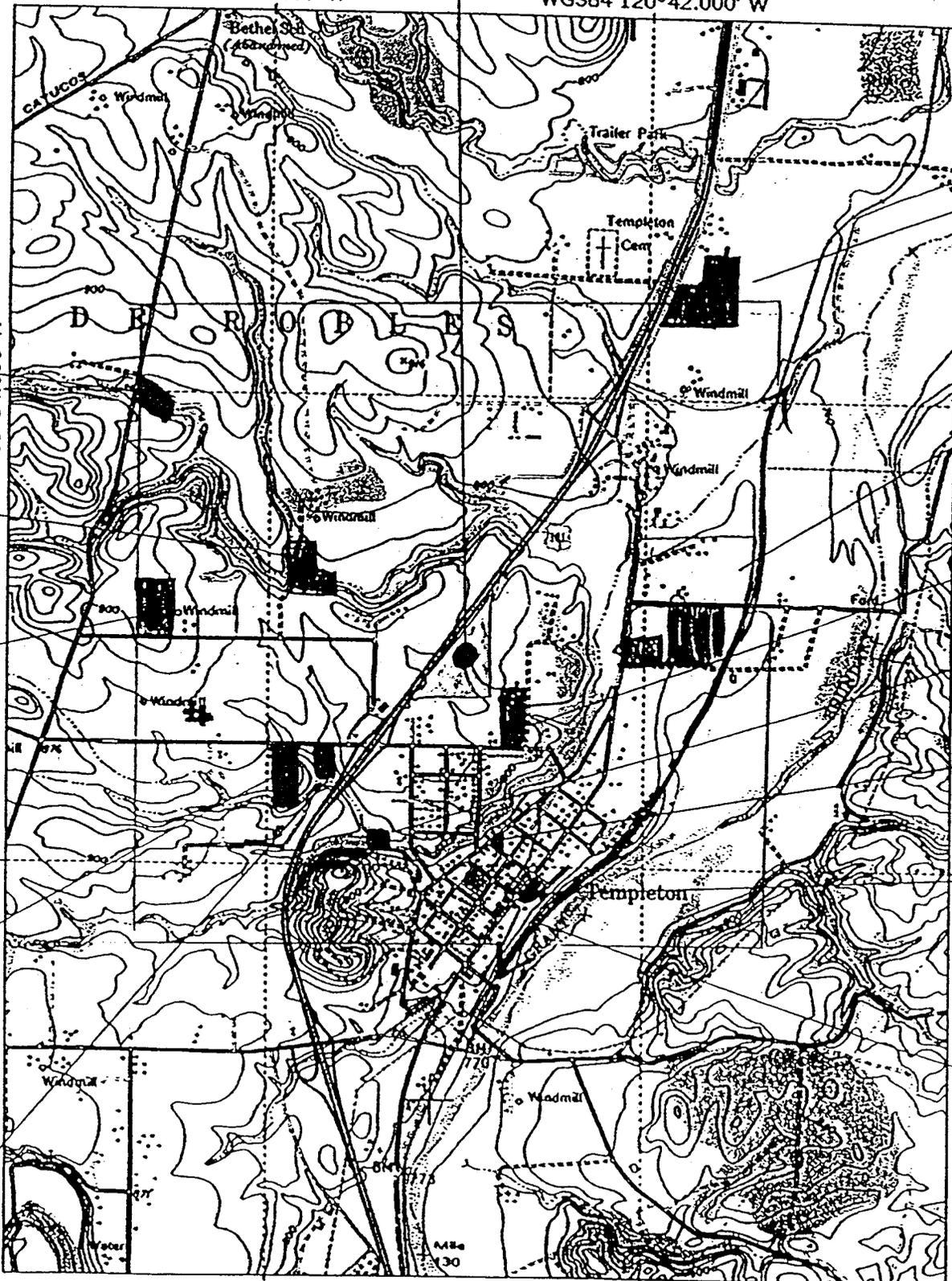


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E2683,
E2597

120°43.000' W

WGS84 120°42.000' W



1446

1920

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736

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35°34.000' N

35°33.000' N

35°34.000' N

35°33.000' N

120°43.000' W

WGS84 120°42.000' W

TN / MN
14x°

0 1000 FEET 0 500 1000 METERS

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312

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E2
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E20

APPENDIX B

- **Paleontological Resources Survey**
- **Paleontological Resources Assessment**

DEEP TIME

**Paleontological Site Survey
San Luis Obispo County, California**

Vineyard Rd,
CASTABLAS RD/ Templeton
101 improvement
Site# paleo, Survey #1

Date 4-20-2001 Time 8:30

Site# paleo, Survey #1

Locality Templeton California Residential Commercial

Paleontological Impact No Paleontological Impact

Sensitivity Rating: High Impact Low Impact

Formation(s) Monterey Shale, Vaqueros, Paso Robles

Fossil Type:

Vertebrate Invertebrate Flora

Archeological Impact Non-archeological Impact

Material collected:

x2 miocene bone fragments age 10-12 mill yrs old
late Oligocene to early & middle miocene.

Paleontological Monitoring Required During Excavation(s): Yes No

Type of Excavation(s):

Trenching Dozing Boring

Pot-Holing Manual

Paleontologist Rex Saint-Onge 6 hrs field

Arrival Time: 8:30 Departure Time 2:30 ~~2 hrs field~~
~~1874 8 hrs~~

Signature Rex Saint-Onge Date 4-20-2001

(bone's in storage):

For appointment, contact: DEEP TIME P O Box 342 San Miguel, Ca 93451
(805) 467-3710 Cell: (805) 610-2713

HIGHWAY 101 IMPROVEMENT PROJECT, TEMPLETON, CA

PALEONTOLOGICAL RESOURCES ASSESSMENT

Sherri Gust, Qualified Paleontologist

Introduction

The California Department of Transportation proposes improvements to Highway 101 in Templeton, San Luis Obispo County, California in the vicinity of Las Tablas Rd. (refer to Figures 1 and 2 in the PEAR - Exhibit F in the Draft PSR). Rex Saint'Onge of Deep Time surveyed the area on April 20, 2001. Geological maps were consulted to determine the geological formations present in the area. Geological and paleontological sources were consulted for information on potential of project formations to yield fossils.

Results

Highway 101 at Las Tablas Rd. is situated mostly on rocks of the Paso Robles Formation (Jenkins 1992). At the easternmost extreme of the project area, there is a small possibility that Quaternary Terrace deposits might be encountered. The field survey reported the Monterey Formation and the Vaqueros Formation in addition to these. The Monterey Formation is mapped north, west and south of the project area but not directly within its boundaries. The Vaqueros Formation is mapped as small outcrops both north and south of the project area. It is possible that both formations do occur within the project area, but it is considered unlikely that professional geologists mapping the area would have missed either.

Two unidentifiable fragments of fossil bone were recovered during the field survey. Both were recovered west of Duncan Rd. and north of Las Tablas Rd. in the vacant field. The location of the recovered fragments was mapped onto a sketch map only and thus the exact coordinates are not known. Both are most likely from the Paso Robles Formation and are indicative of the formation's potential to yield fossils. However, unidentifiable fragments do not meet the significance criteria used for fossils under CEQA or section 106 and the fragments may be discarded.

Stratigraphy and Paleontology of Project Geological Formations

Quaternary Terrace Deposits

Terrace deposits are the result of local uplift that increases the elevation of these coastal deposits. Multiple terraces (also called benches) occur with multiple uplift events. As the area is uplifted, streams seek a new base level attempting to enter the ocean and incise

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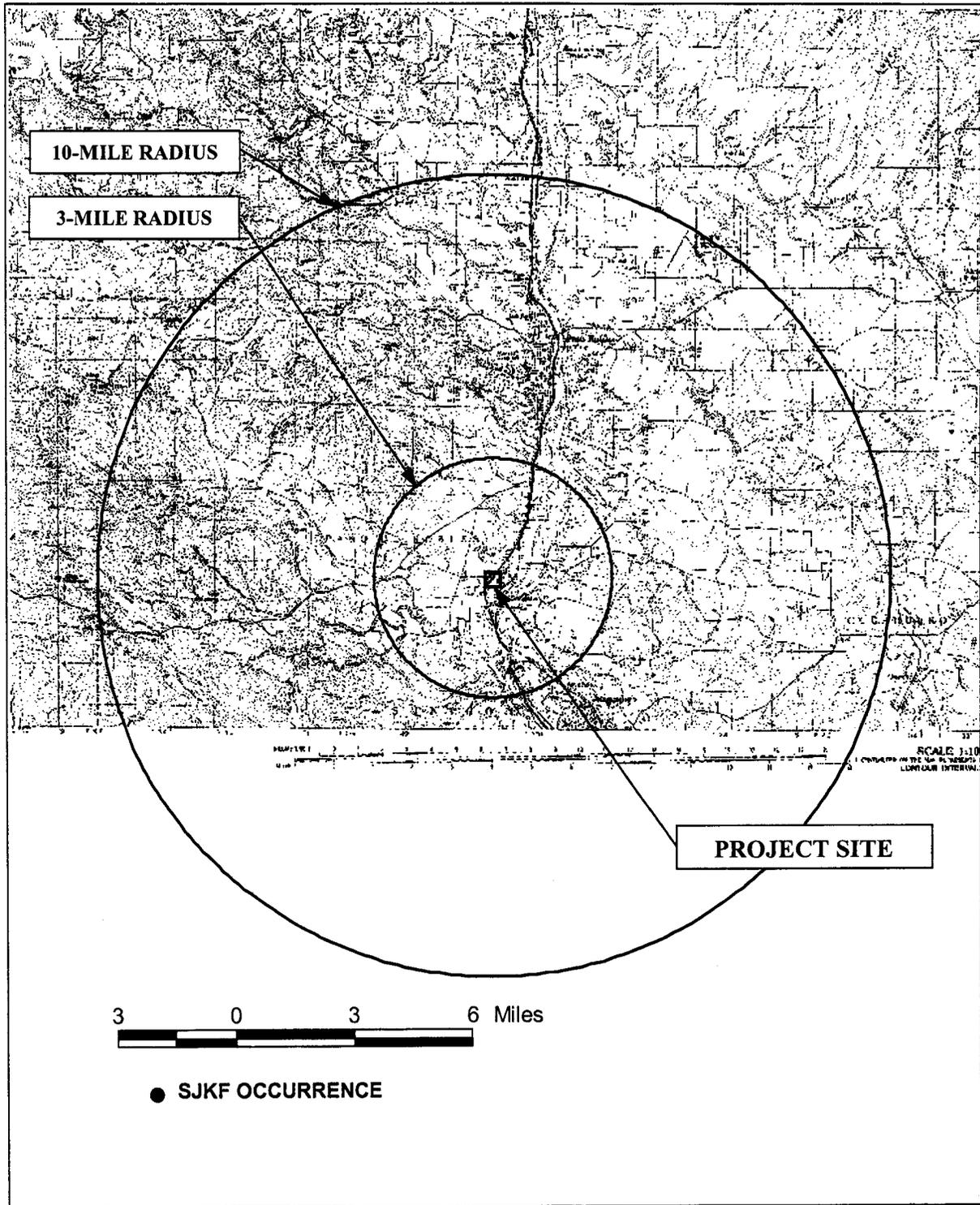
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APPENDIX C

- **San Joaquin Kit Fox Occurrence Map**



SJKF OCCURRENCE MAP

APPENDIX D

- **Response to Comments**

**Responses to Caltrans Review Comments dated April 26, 2002
on the Draft PSR (PDS) for
Las Tablas Road / US-101 Interchange**

Reviewed by: Tom Houston, Project Manager

Comment 11c (7. Hazardous Material/Waste) – ¹Briefly describe the known inventory of environmental resources and identify environmental issues. ²Identify existing known hazardous material/waste sites within or immediately adjacent to the proposed project. ³Are there potential adverse impacts that would affect the viability of alternatives? ⁴Based on the inventory of known environmental resources, describe the anticipated type of environmental document to be obtained for CEQA and identify who should be the lead agency. ⁵Describe the anticipated type of environmental determination for compliance with NEPA when involved.

Response – ¹Please refer to Exhibit F of the Draft PSR, Figures 3, 4, and 5 for maps depicting the known inventory of environmental resources and to page 8-9 of Exhibit F for a summary of the environmental issues.

²Existing known hazardous material/waste sites within one mile of the proposed project were compiled from the VISTA Information Solution, Site Assessment Plus Report dated March 27, 2001. These addresses were listed in various databases, and are described in detail below. ³Following each site description is an evaluation of the potential impact that would occur if any alternative lies within the bounds of or immediately adjacent to the hazardous material/waste site.

- BP Templeton Prod Pfindlayson, 701 Las Tablas Road, Templeton CA., 93465. This address is currently a Chevron Service Station and is currently under active site remediation. Fourth Quarter 2001 Groundwater Monitoring and Remediation Status Report from SECOR International, reviewed at the CRWQCB on May 27, 2002 states that to date 17,566 pounds of hydrocarbon have been recovered to date. Currently this service station has operational USTs. The Service station holds >10,000 gallons of gasoline.

All three alternatives lie adjacent to and may require right-of-way takes at the location of the Chevron station. Because each alternative has the potential to require removal of contaminated soil/groundwater at this site, additional phase II testing should be performed within the proposed area of impact to determine the extent of the impact.

- Pacific Bell, 513 Main Street, Templeton, Ca., 93465. This address is listed as being a small quantity generator. This implies that they handle less than 1000 kilograms per month of hazardous materials. This material is not stated in the report.

Implementation of each of the three alternatives would require right of way takes at the location of the Pac Bell facility. The right-of-way take associated with Alternative 1

appears to intersect the Pac-Bell facility structure, thereby necessitating relocation of the structure. Right-of-way takes associated with implementation of Alternatives 2 and 3 would result in relocating the southbound off-ramp thereby necessitating relocation of the Pac-Bell facility because Caltrans does not permit structures to reside between the freeway and a ramp. The record search does not indicate the type of hazardous waste generated at the Pac-Bell facility and further investigation would be required to determine the extent of the impact and whether removal of contaminated material is necessary.

- Templeton Market Deli, 390 Main Street, Templeton, Ca., 93465. This address is listed as having a registered UST. No amount is given nor is the material identified.

This UST is located beyond the bounds of the project area and would not impact implementation of any of the three alternatives.

- Templeton Unified School District, 870 Old County Road, Templeton Ca., 93465. This address has two registered UST, which hold gasoline and diesel fuel for the bus depot. This address also has a Hazardous Materials Business Plan on file with the San Luis Obispo County Environmental Health, which list hazardous material that is stored on site. These materials are small quantities of fertilizer and waste oil that are all stored in properly maintained storage containers.

This site is located beyond the bounds of the project area and would not impact implementation of any of the three alternatives.

- California Highway Patrol, 101 Duncan Road, Templeton CA., 93465. This address operates a 12,000-gallon gasoline UST. This address also has a Hazardous Materials business Plan on file with the San Luis Obispo County Environmental Health, which list hazardous materials stored on site. These materials are small quantities of waste oil, which are stored in properly maintained storage containers.

Implementation of Alternative 1 would not have hazardous materials impacts associated with the CHP facility because the project lies outside of the footprint of the project area. However, Alternatives 2 and 3 require a right-of-way take at the CHP facility. Further investigation of the area of impact would be required to determine if the right-of-way take at this location requires removal of any contaminated material.

⁴Based on the inventory of known environmental resources and from the initial investigations that potentially significant, but mitigable environmental impacts may occur as a result of implementation of the proposed project, preparation of an Initial Study (IS) leading to a Negative Declaration (ND) would satisfy the requirements of the California Environmental Quality Act (CEQA). Responsibility for compliance with CEQA rests with the County of San Luis Obispo (Lead Agency). ⁵Caltrans will participate in the review process as a responsible agency for CEQA and is the lead agency for NEPA. For NEPA compliance, an Environmental Assessment (EA) leading to a Finding of No

Significant Impact (FONSI) would be required provided that no Class I impacts are identified during subsequent studies.

Comment 11d (7. Hazardous Material/Waste) – Provide the timeframe for completing the environmental document (CEQA only and NEPA-- if appropriate).

Response – It is estimated that the total preparation time for the CEQA environmental document would be approximately 12-15 months and the preparation time for the NEPA environmental document would be approximately 15-20 months.

Reviewed by: David Farris, Preliminary Environmental Analysis

Comment 71 – ¹The 12-15 Months to complete the NEPA document is tight but doable if FHWA sticks to its agreed to review times. ²I also am wondering if we are anticipating Formal Consultation with Fish and Wildlife. This project could be borderline for having to do that. If Formal Consultation is necessary I think the 15 month timeline unrealistic. It depends on how much risk they want to take in their programming.

Response – ¹As a result of this and other comments pertaining to the timeline, the timeline is being extended and is currently estimated at 15 to 20 months. ²We concur that this project is borderline for consultation with USFWS due to the potential for CRLF issues.

Reviewed by: Eric Covington, Hazardous Waste

Comment 72 (Hazardous Material/Waste, Bullet 3, Sentence 2) – The Initial Site Assessment (ISA) reports two monitoring wells adjacent to the property located on the northeast corner of Las Tablas and State Route (SR) 101. This indicates that contamination has moved into the footprint of Alt 3 from the Chevron station.

Response – The paragraph for which comment 72 was issued (page 14 of the Draft Project Study Report) is outdated and was revised in February 2002 when the conceptual geometrics for Alternative 3 were amended to include improvements along Las Tablas Road between Route 101 and Florence Street. The revised paragraph delineated Alternative 3 as having potential hazardous waste impacts as a result of proximity to the Chevron Station and was included in the Draft Project Study Report (Exhibit F of the Draft PSR, page 15, paragraph 1).

SECOR International Inc., is the environmental firm under contract by the owners of the Chevron Service Station at 701 Las Tablas Road. SECOR has installed ground-water monitoring wells adjacent to the current Chevron station to delineate the extent of contamination. Monitoring well #10 is the closest well to station on Las Tablas Road northeast of Chevron Service Station, this well is currently showing detectable levels of Total Petroleum Hydrocarbons and MTBE, although compared to previous readings, this



June 5, 2002
Project No. SL02127-1

Morro Group, Inc.

1422 Monterey Street, Suite C200
San Luis Obispo, California 93401

Attn: Lisa Phillip

**SUBJECT: Response to Comments on Phase I Environmental Site Assessment for
U.S. Highway 101 Improvements from Las Tablas Road/US-101
Interchange**

Dear Ms. Phillip,

Here are our responses to comments pertaining to GeoSolutions report dated April 25, 2001.

Comment 11c

RESPONSE From the VISTA Information Solution, Site Assessment Plus Report dated March 27, 2001, these addresses were listed in various databases, and are described in detail below.

- BP Templeton Prod Pfindlayson, 701 Las Tablas Road, Templeton CA., 93465. This address is currently a Chevron Service Station and is currently under active site remediation. Fourth Quarter 2001 Groundwater Monitoring and Remediation Status Report from SECOR International, reviewed at the CRWQCB on May 27, 2002 states that to date 17,566 pounds of hydrocarbon have been recovered to date. Currently this service station has operational USTs. The Service station holds >10,000 gallons of gasoline
- Pacific Bell, 513 Main Street, Templeton, Ca., 93465. This address is listed as being a small quantity generator. This implies that they handle less than 1000 kilograms per month of hazardous materials. This material is not stated in the report.
- Templeton Market Deli, 390 Main Street, Templeton, Ca., 93465. This address is listed as having a registered UST. No amount is given nor is the material identified.
- Templeton Unified School District, 870 Old County Road, Templeton Ca., 93465. This address has two registered UST which hold gasoline and diesel fuel for the bus depot. This address also has a Hazardous Materials Business Plan on file

with the San Luis Obispo County Environmental Health, which list hazardous material that is stored on site. These materials are small quantities of fertilizer and waste oil that are all stored in properly maintained storage containers.

- California Highway Patrol, 101 Duncan Road, Templeton CA., 93465. This address operates a 12,000-gallon gasoline UST. This address also has a Hazardous Materials business Plan on file with the San Luis Obispo County Environmental Health, which list hazardous materials stored on site. These materials are small quantities of waste oil, which are stored in properly maintained storage containers.

Comment 72

RESPONSE SECOR International Inc., is the environmental firm under contract by the owners of the Chevron Service Station at 701 Las Tablas Road. SECOR has installed ground-water monitoring wells adjacent to the current Chevron station to delineate the extent of contamination. Monitoring well #10 is the closest well to station on Las Tablas Road northeast of Chevron Service Station, this well is currently showing detectable levels of Total Petroleum Hydrocarbons and MTBE, although compared to previous readings, this is a decrease in contaminant levels. Well #11, did not contain detectable levels of TPH or MTBE. A site plan from the SECOR International report is provided as Attachment 1.

Comment 74

RESPONSE Given the experience of others with ADL, it would be appropriate to test site soil adjacent to roadways prior to design implementation.

Comment 76

RESPONSE Groundwater contour and concentration maps provided by SECOR International showing groundwater depth, direction of flow, and detectable levels of contamination are provided as Attachment 1.

Comment 77

RESPONSE

The following personal information regarding the "REC" property owners are:

- REC #1 Joshua Yagauda, 701 Las Tables Road, Arroyo Grande, California 93420, 805-.238-6570
- REC #2 SAME AS ABOVE
- REC #3 Legaya Reyes, 860 Stillwater Road, West Sacramento, California 95605, 916-.375-2940

Comment 78

RESPONSE See figures provided by SECOR International Inc.

Comment 79

RESPONSE See figures provided by SECOR International Inc.

Comment 80

RESPONSE Two monitoring wells are located on this property. Based on the figures provided by SECOR International Inc. these monitoring wells are located northeast of service station. GeoSolutions Inc., mistakenly stated that monitoring wells are west of the property, whereas they are both east of property.

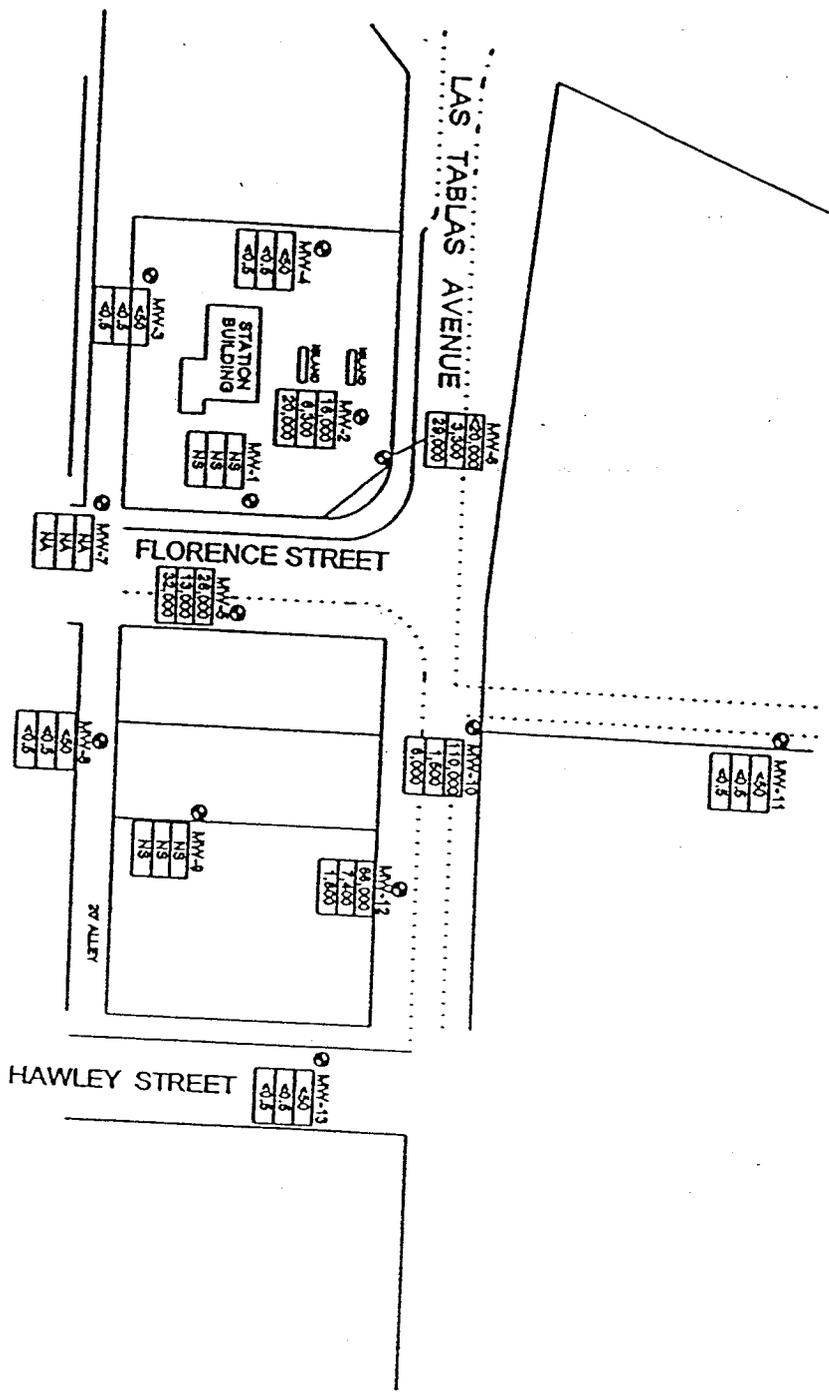
We appreciate the opportunity to provide you with professional services. If you should have any questions, please do not hesitate to contact us at (805) 543-8539.

Sincerely,

GEOSOLUTIONS, INC.

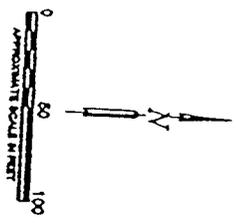
Patrick B. McNeill, PE
Principal

\\Server\Geosolutions\Environmental\Environmental Site Assessments\SL02127-1 101 & Las Tablas Rd - Morro Group\Comment 11c.doc



LEO-BVD
 GROUNDWATER MONITORING WELL
 TPH, B, AND P CONCENTRATIONS IN MICROGRAMS PER LITER (µg/l)
 NA NOT ANALYZED
 NS NOT SAMPLED

NOTE: GROUNDWATER SAMPLES OBTAINED ON AUGUST 16-17, 2000.



SECOR
 International Incorporated
 TEMPLETON PRODUCTS

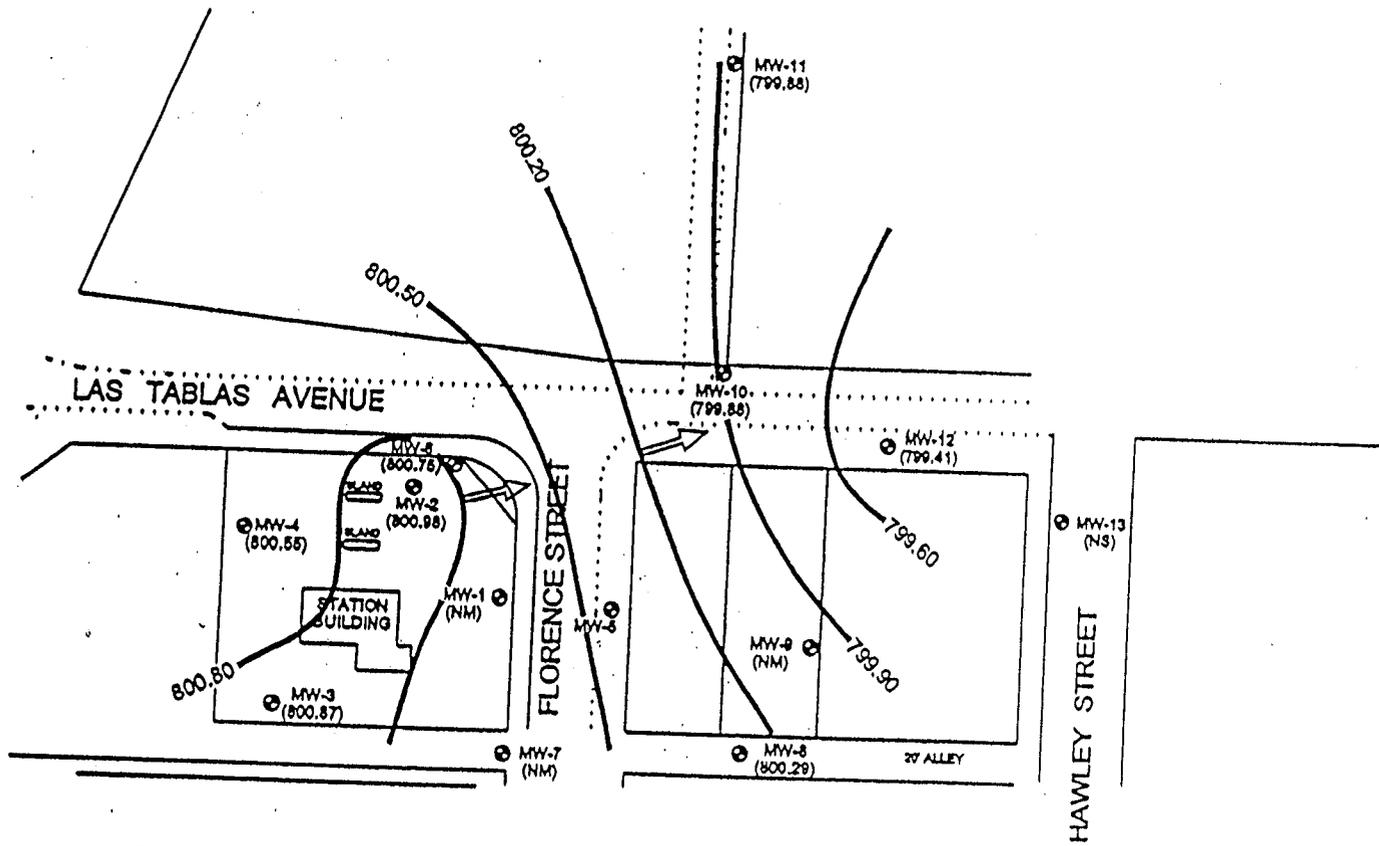
701 LAS TABLAS ROAD
 TEMPLETON, CA

GROUNDWATER CONCENTRATION MAP

PROJECT NUMBER: 010.05542
 DRAWDING DATE: 6 OCT 00

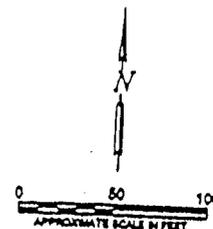
DRAWN BY: MLUNA
 CAD FILE: CAD/BP/BP_0800C

REVISION NUMBER: 3



- LEGEND**
- ⊙ GROUNDWATER MONITORING WELL
 - (800.29) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
 - ~ GROUNDWATER ELEVATION CONTOUR LINE
 - ➔ GROUNDWATER FLOW DIRECTION
 - NM NOT MEASURED
 - NS NOT SURVEYED

NOTE: GROUNDWATER ELEVATION DATA OBTAINED ON AUGUST 18, 2000.



SECOR
International Incorporated

TEMPLETON PRODUCTS

701 LAS TABLAS ROAD
TEMPLETON, CA

GROUNDWATER CONTOUR MAP

PROJECT NUMBER: 010.05542	DRAWING DATE: 8 OCT 00
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DRAFTED BY: MLUNA	CAD FILE: CAD/BP/ BP_08000
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REVISION NUMBER	FIGURE: 2
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Table - Groundwater Elevation Data 2011 - 2012 Road Reimbursement California (All depths measured in feet)				
Well ID and Wellhead Elevation	Date	Depth to Groundwater	Groundwater Elevation	
MW-1 822.78	8/24/94	26.35	796.43	
	5/23/95	19.89	803.09	
	6/3/96	20.79	801.99	
	9/11/96	23.50	799.28	
	12/19/96	21.93	800.85	
	4/14/97	19.48	803.30	
	6/12/97	21.29	801.49	
	9/23/97	FP	NA	
	12/16/97	FP	NA	
	3/16/98	FP	NA	
	6/15/98	FP	NA	
	12/16/98	FP	NA	
	MW-2 824.03	8/24/94	26.91	797.12
		5/23/95	20.31	803.72
6/3/96		21.30	802.73	
9/11/96		24.08	799.95	
12/19/96		22.91	801.12	
4/14/97		20.07	803.96	
6/12/97		21.89	802.14	
9/23/97		24.35	799.68	
12/16/97		22.55	801.48	
3/16/98		14.85	809.18	
6/15/98		21.16	802.87	
9/14/98		21.80	802.23	
12/16/98		22.80	801.23	
3/11/99		22.61	801.42	
6/8/99		22.79	801.24	
8/30/99		24.03	800.00	
12/7/99		25.61	798.42	
3/29/00		19.60	804.43	
6/19/00		21.66	802.37	
8/16/00		23.05	800.98	
12/14/00		24.83	799.20	
3/5/01		13.11	810.92	
5/23/01		20.31	803.72	
8/16/01	22.46	801.57		
11/27/01	24.13	799.90		
2/20/02	23.48	800.55		
MW-3 824.83	8/24/94	28.56	796.07	
	5/23/95	20.89	803.74	
	6/3/96	21.95	802.88	
	12/19/96	23.24	801.39	

Title: Groundwater Elevation Data All Gas Plant Area, Turlock, California (All depths measured in feet)			
Well ID Wellhead Elevation	Date	Depth to Groundwater	Groundwater Elevation
	6/12/97	22.52	802.11
	9/23/97	25.00	799.63
	12/16/97	21.98	802.65
	3/16/98	15.95	808.68
	6/15/98	18.52	806.11
	9/14/98	21.92	802.71
	12/16/98	23.68	800.95
	3/11/99	23.35	801.28
	6/9/99	23.37	801.26
	8/30/99	25.00	799.63
	12/7/99	26.37	798.26
	3/29/00	20.36	804.27
	6/19/00	22.34	802.29
	8/16/00	23.76	800.87
	12/14/00	25.65	798.98
	3/5/01	18.85	805.68
	5/23/01	21.91	802.72
	8/16/01	23.15	801.48
	11/27/01	24.52	800.11
	2/20/02	24.05	800.68
MW-4 823.33	8/24/94	25.54	797.79
	6/23/95	18.94	804.39
	6/3/96	20.04	803.29
	9/11/96	20.04	803.29
	12/18/96	21.68	801.65
	4/14/97	17.69	805.64
	6/12/97	20.43	802.90
	9/23/97	23.07	800.26
	12/16/97	21.14	802.19
	3/16/98	13.62	808.71
	6/15/98	16.45	806.88
	9/14/98	19.60	803.73
	12/16/98	21.59	801.74
	3/11/99	21.75	801.58
	6/9/99	21.53	801.80
	8/30/99	23.02	800.31
	12/7/99	24.46	798.87
	3/29/00	18.38	804.95
	6/19/00	20.15	803.18
	8/16/00	22.78	800.55
	12/14/00	24.55	798.78
	3/5/01	18.35	804.98
	5/23/01	19.75	803.58

Table 1 - Groundwater Elevation Data Well: Table 1 - Groundwater Elevation Data All depths measured in feet			
Well ID and Wellhead Elevation	Date	Depth to Groundwater	Groundwater Elevation
	12/14/00	23.10	798.46
	3/5/01	16.36	805.20
	5/23/01	18.40	803.16
	8/16/01	19.64	801.92
	11/27/01	22.03	799.53
	2/20/02	21.51	800.05
MW-9	8/24/94	NM	-
NS	5/23/95	NM	-
MW-10 824.71	8/24/94	28.65	796.06
	5/23/95	22.09	802.62
	6/3/96	23.18	801.53
	9/11/96	25.90	798.81
	12/19/96	24.28	800.43
	4/14/97	21.86	802.85
	6/12/97	23.69	801.02
	9/23/97	26.11	798.60
	12/16/97	23.97	800.74
	3/16/98	16.76	807.96
	6/15/98	19.67	805.04
	9/14/98	FP	NA
	12/16/98	FP	NA
	3/11/99	24.46	800.25
	6/9/99	24.67	800.04
	8/30/99	26.42	798.29
	12/7/99	FP	NA
	3/28/00	21.32	803.39
	6/19/00	23.41	801.30
	8/16/00	24.83	798.88
	12/14/00	25.72	797.99
	3/5/01	19.40	805.31
	8/16/01	24.26	800.46
	11/27/01	25.81	798.90
	2/20/02	25.08	799.63
MW-11 827.38	8/24/94	31.75	795.63
	5/23/95	24.48	802.90
	6/3/96	25.65	801.73
	9/11/96	28.23	798.15
	12/19/96	25.78	801.60
	4/14/97	24.09	803.29
	6/12/97	25.73	801.65
	9/23/97	28.37	799.01
	12/16/97	29.13	798.25

Table 1 - Groundwater Elevation Data for the 1980s and 1990s at the 1000-foot depth			
Well ID	Date	Depth to Groundwater	Groundwater Elevation
	3/16/98	19.52	807.86
	6/15/98	21.36	806.02
	9/14/98	24.76	802.62
	12/16/98	27.04	800.34
	3/11/99	27.37	800.01
	6/9/99	27.37	800.01
	8/30/99	28.70	798.66
	12/7/99	30.38	797.00
	3/29/00	24.98	802.40
	6/19/00	26.18	801.20
	8/16/00	27.50	799.88
	12/14/00	29.85	797.53
	3/5/01	26.28	801.10
	5/23/01	26.14	802.24
	8/16/01	27.09	800.29
	11/27/01	28.97	798.41
	2/20/02	28.71	798.67
MW-12 824.75	8/24/94	29.16	795.59
	5/23/95	22.68	802.07
	6/3/96	23.72	801.03
	9/11/96	26.45	798.30
	12/19/96	24.82	799.93
	4/14/97	22.47	802.28
	6/12/97	24.23	800.52
	9/23/97	26.65	798.10
	12/16/97	24.49	800.26
	3/16/98	17.40	807.35
	6/15/98	18.31	806.44
	9/14/98	23.62	801.13
	12/16/98	25.30	799.45
	3/11/99	24.95	799.80
	6/9/99	24.95	799.80
	8/30/99	26.52	798.23
	12/7/99	28.78	795.87
	3/29/00	21.86	802.89
	6/19/00	23.92	800.83
	8/16/00	25.34	798.41
	12/14/00	FP	FP
	3/5/01	19.94	804.81
	8/16/01	24.89	799.86
	11/27/01	26.17	798.58
	2/20/02	25.38	799.37

Table 1. Groundwater Elevation Data at the Point of Entry, California at the Maximum Day Flow			
Well ID and Wellhead Elevation	Date	Depth to Groundwater	Groundwater Elevation
MW-13	8/24/94	28.45	-
NS	5/23/95	22.08	-
	6/3/96	23.10	-
	9/11/96	25.61	-
	12/19/96	24.13	-
	4/14/97	21.88	-
	6/12/97	23.63	-
	9/23/97	26.00	-
	12/16/97	23.80	-
	3/16/98	16.82	-
	6/15/98	19.74	-
	9/14/98	23.06	-
	12/16/98	24.63	-
	3/11/99	24.25	-
	6/9/99	24.28	-
	8/30/99	25.86	-
	12/7/99	27.21	-
	3/29/00	21.18	-
	6/19/00	23.25	-
	8/16/00	24.68	-
	12/14/00	26.45	-
	3/5/01	19.98	-
	5/23/01	21.78	-
	8/16/01	24.00	-
	11/27/01	25.38	-
	2/20/02	24.83	-

Notes:

NS: Groundwater monitoring well not surveyed.
 NM: Groundwater monitoring well not measured.
 NA: Not Available.

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002
MW-1	8/24/94	280,000	14,000	23,000	5,300	27,000	NA	NA	
	5/23/95	110,000	<750	<750	<750	<1,500	NA	NA	
	6/4/96	80,000	11,000	13,000	2,200	14,000	<100	NA	
	9/12/96	130,000	20,000	23,000	3,200	17,000	<100	NA	
	12/20/96	520,000	14,000	25,000	4,800	38,700	ZZ	4,630	
	4/15/97	300,000	3,400	28,000	3,400	27,800	11	8,580	
6/13/97	155,000	18,000	16,800	1,800	18,200	7.7	8,100		
MW-2	8/24/94	2,700	830	16	80	12	NA	NA	
	5/23/95	0,300	920	300	290	370	NA	NA	
	6/4/96	2,700	340	53	180	33	<5.0	NA	
	9/12/96	1,100	460	28	140	9.3	<5.0	NA	
	12/20/96	4,000	450	14	250	21.3	0.8	330	
	4/15/97	9,500	1,200	110	590	205.8	<0.5	<3.0	
	6/13/97	4,900	540	19	340	21	<10	980	
	9/24/97	3,800	1,200	6	220	17	<5.0	240	
	12/17/97	2,100	800	25	100	16	<5.0	280	
	3/17/98	11,000	3,100	340	1,200	540	<50	470	
	6/15/98	8,800	1,800	240	530	180	<50	220	
	9/15/98	6,200	2,000	550	280	310	<50	100	
	12/17/98	38,000	15,000	370	2,500	1,400	<100	8,500	
	3/11/99	65,800	22,000	450	3,700	1,200	<50	16,000	
	6/9/99	73,000	10,000	380	4,800	1,100	<100	10,000	
	8/31/99	110,000	21,000	1,700	5,100	3,800	<600	41,000	
	12/8/99	28,000	14,000	120	2,400	510	<100	30,000	
	3/28/00	21,000	11,000	88	2,900	560	<50	38,000	
	6/20/00	15,000	6,200	23	2,000	180	<20	17,000	
	8/17/00	18,000	5,300	<100	1,800	<100	NA	20,000	
	12/15/00	16,000	3,700	35	1,300	100	NA	17,000	
	3/5/01	<50,000	<500	<500	<500	<500	NA	45,000	
5/24/01	14,000	3,700	<20	1,800	31	NA	15,000		
8/17/01	64,000	1,800	<100	1,000	<100	NA	12,000		
11/28/01	<10,000	2,800	<100	1,100	<100	NA	38,000		
2/21/02	25,000	4,400	<20	4,100	130	NA	24,000		
MW-3	8/24/94	<50	<0.5	<0.5	<0.5	<0.6	NA	NA	
	6/23/95	<40	<0.3	<0.3	<0.3	<0.6	NA	NA	
	6/4/96	<50	<0.5	<0.5	<0.5	<0.6	<0.5	NA	
	12/19/96	<20	<0.5	<0.5	<0.5	<1.0	<0.5	39	
	6/13/97	<20	<0.5	<0.5	<0.5	<1.0	<0.5	4	
	9/24/97	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	12/17/97	<50	<0.5	<0.6	<0.5	<0.5	<0.6	<0.5	
	3/17/98	<50	<0.5	<0.5	<0.5	<0.5	<0.5	2	
	6/15/98	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1	
	9/15/98	<50	<0.5	3	<0.5	3.1	<0.5	1	
	12/16/98	<50	<0.6	<0.5	<0.5	<0.6	<0.5	<0.5	
	3/11/99	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1	
	6/9/99	<50	<0.5	<0.5	<0.6	<0.5	<0.5	<0.5	
	8/30/99	<50	<0.5	<0.5	<0.6	<0.5	<0.5	<0.6	
	12/8/99	<60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	6/20/00	<50	<0.6	<0.5	<0.5	<0.5	<0.5	<0.5	
	8/16/00	<30	<0.5	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	12/15/00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	3/5/01	<50	<0.5	<0.5	<0.6	<0.5	NA	<0.6	
	5/24/01	<60	<0.5	<0.5	<0.5	<0.5	NA	<0.5	
	8/17/01	<50	<0.5	<0.5	<0.5	<0.5	NA	0.0	
	11/28/01	<50	<0.6	<0.5	<0.5	<0.5	NA	1.0	
2/21/02	<50	<0.5	<0.5	<0.5	<0.5	NA	0.8		
MW-4	8/24/94	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	
	5/23/95	<40	<0.3	<0.3	<0.3	<0.6	NA	NA	
	6/4/96	<60	<0.5	<0.5	<0.5	<0.5	<0.5	NA	
	9/12/96	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA	
	12/19/96	<20	<0.6	<0.5	<0.5	<1.0	<0.5	<3.0	

Well ID	Date	Flow	Pressure	Temperature	Gas	Oil	Water	Other
	6/15/98	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/11/99	58,000	820	4,100	510	3,100	<0.5	<0.5
	6/9/99	100,000	2,000	6,000	1,000	6,400	<1,000	98,000
	8/31/99	46,000	1,400	5,000	750	4,100	<50	21,000
	2/20/00	72,000	1,700	11,000	2,000	14,300	<500	330,000
	6/20/00	14,000	160	1,200	500	2,700	<20	3,300
	8/17/00	110,000	1,500	13,000	3,800	16,000	NA	6,000
	12/15/00	67,000	800	9,800	2,400	16,000	NA	13,000
	3/6/01	12,000	72	670	130	1,800	NA	5,800
	6/5/01	<50,000	1,700	2,200	1,000	4,000	NA	370,000
	8/17/01	0,400	130	520	490	1,700	NA	8,300
	11/28/01	6,600	18	230	190	1,100	NA	1,400
	2/21/02	8,500	38	470	360	1,200	NA	3,000
MW-11	8/24/94	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	5/23/95	500	<0.3	<0.3	<0.3	<0.6	NA	NA
	6/4/96	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	9/12/96	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	12/19/96	<20	<0.5	<0.5	<0.5	<1.0	<0.5	<3.0
	4/14/97	<20	<0.5	<0.5	<0.5	<1.0	<0.6	<3.0
	6/13/97	<20	<0.5	<0.5	<0.5	<1.0	<0.5	<3.0
	9/23/97	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/17/97	<60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/17/98	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/15/98	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/98	3,100	<0.5	20	18	77	<0.5	1
	12/16/98	<50	1	<0.5	<0.5	<0.5	<0.5	<0.5
	3/11/99	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/8/99	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8/30/99	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/9/99	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/30/00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/20/00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6
	8/16/00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/15/00	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.6
	3/6/01	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	6/24/01	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	8/17/01	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	11/28/01	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	2/21/02	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
MW-12	8/24/94	FP	FP	FP	FP	FP	NA	NA
	6/23/95	39,000	5,000	1,800	720	1,200	NA	NA
	6/4/96	5,000	1,700	570	230	340	<10	NA
	9/12/96	13,000	5,900	780	710	570	<50	NA
	12/20/96	4,500	1,100	300	78	152	<0.5	380
	4/15/97	5,300	790	280	110	166	<0.5	320
	6/13/97	783	100	6	<0.5	6.2	<5.0	410
	9/24/97	4,600	530	310	130	310	<5.0	360
	12/17/97	2,300	1,200	22	<5.0	65	<5.0	360
	3/17/98	7,300	1,700	1,300	360	900	<10	620
	6/15/98	7,300	620	520	140	340	<5.0	470
	9/15/98	1,200	110	60	<2.0	<2.0	<2.0	130
	12/16/98	21,000	3,500	2,300	910	2,400	<50	620
	3/12/99	5,900	390	480	91	280	<5.0	2,800
	6/9/99	16,000	4,400	1,200	1,000	1,700	<20	1,900
	8/31/99	8,800	1,200	540	280	508	<50	4,100
	12/8/99	31,000	1,000	5,300	780	3,500	<30	5,800
	3/30/00	64,000	3,600	24,000	2,300	23,000	<100	1,400
	6/26/00	63,000	3,600	6,900	2,400	12,000	<100	4,800
	8/17/00	66,000	7,400	16,000	2,800	12,000	NA	1,800
	3/6/01	80,000	3,200	7,800	1,400	8,100	NA	3,500

Table 2. Hydrocarbon Concentrations in Groundwater 2011 Gas Tables (Well Temp. 50°C, 100°C, 150°C) All depths at 20°C (0.5 to 1.27 m)								
Well	Date Analyzed	TPH(g)	Benzene	Toluene	Ethylbenzene	Xylenes	EDCs	FP(g)
	6/5/01	58,000	3,700	7,800	1,900	10,000	NA	7,200
	8/17/01	61,000	730	3,300	1,800	11,000	NA	7,700
	11/28/01	62,000	1,900	13,000	3,300	19,000	NA	10,000
	2/21/02	150,000	1,400	5,200	2,300	12,000	NA	6,600
MW-13	8/24/84	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	5/23/86	<40	<0.3	<0.3	<0.3	<0.6	NA	NA
	6/4/88	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	9/12/88	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	12/19/88	<20	<0.5	<0.5	<0.5	<1.0	<0.5	<3.0
	4/14/87	<20	<0.5	<0.5	<0.5	<1.0	<0.5	<3.0
	6/13/87	<20	<0.5	<0.5	<0.5	<1.0	<0.5	<3.0
	9/23/87	<50	<0.5	1	1	<0.5	<0.5	<0.5
	12/17/87	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/17/88	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/15/88	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	9/16/88	760	<0.5	2	7	72	<0.5	<0.5
	12/16/88	<50	<0.5	1	1	<0.5	<0.5	<0.5
	3/11/89	<50	<0.5	<0.5	1	<0.5	<0.5	<0.5
	6/3/89	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8/30/89	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/8/89	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8/16/00	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	12/15/00	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	3/5/01	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	5/24/01	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	8/17/01	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	11/28/01	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5
	2/21/02	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5

Note:

TPH(g): Total Petroleum Hydrocarbons characterized as gasoline.
 <50: Less than the detection limit of 50 µg/L.
 NA: Not Analyzed
 FP: Measurable amount of free product in monitoring well.

▪ ATTACHMENT 2

Revised Paleontological Resources Assessment
Cogstone Response to Comments

HIGHWAY 101 IMPROVEMENT PROJECT, TEMPLETON, CA

PALEONTOLOGICAL RESOURCES ASSESSMENT

Sherrí Gust, Qualified Paleontologist

Introduction

The California Department of Transportation proposes improvements to Highway 101 in Templeton, San Luis Obispo County, California in the vicinity of Las Tablas Rd. (refer to Figures 1 and 2 in the PEAR - Exhibit F in the Draft PSR). Rex Saint'Onge of Deep Time surveyed the area on April 20, 2001. Geological maps were consulted to determine the geological formations present in the area. Geological and paleontological sources were consulted for information on potential of project formations to yield fossils.

Results

Highway 101 at Las Tablas Rd. is situated mostly on rocks of the Paso Robles Formation (Jenkins 1992). At the easternmost extreme of the project area, there is a small possibility that Quaternary Terrace deposits might be encountered. The field survey reported the Monterey Formation and the Vaqueros Formation in addition to these. The Monterey Formation is mapped north, west and south of the project area but not directly within its boundaries. The Vaqueros Formation is mapped as small outcrops both north and south of the project area. It is possible that both formations do occur within the project area, but it is considered unlikely that professional geologists mapping the area would have missed either.

Two unidentifiable fragments of fossil bone were recovered during the field survey. Both were recovered west of Duncan Rd. and north of Las Tablas Rd. in the vacant field. The location of the recovered fragments was mapped onto a sketch map only and thus the exact coordinates are not known. Both are most likely from the Paso Robles Formation and are indicative of the formation's potential to yield fossils. However, unidentifiable fragments do not meet the significance criteria used for fossils under CEQA or section 106 and the fragments may be discarded.

Stratigraphy and Paleontology of Project Geological Formations

Quaternary Terrace Deposits

Terrace deposits are the result of local uplift that increases the elevation of these coastal deposits. Multiple terraces (also called benches) occur with multiple uplift events. As the area is uplifted, streams seek a new base level attempting to enter the ocean and incise

the older deposits. Quaternary nonmarine terrace deposits (deposited 1.8 million to 10,000 years before present) are formed of terrestrial alluvial deposits that have been uplifted and incised in this manner. Locally these deposits may overlie thin marine terrace deposits (Jefferson, et. al., 1992).

Terrace deposits contain significant, non-renewable, paleontological resources and are considered to have high paleontological significance. Within San Luis Obispo County, Natural History Museum of Los Angeles County Localities 5800-5802, and 6165, have yielded Ice Age mammals including ground sloth (*Glossotherium harlani*), bison (*Bison antiquus*), and horse (*Equus* sp. cf. *E. occidentalis*), while other localities have yielded camel (*Camelops hesternus*), and mammoth (*Mammuthus*) (Jefferson, et. al., 1992; Gust 2002).

Plio-Pleistocene Paso Robles Formation

The Paso Robles Formation occurs throughout the Santa Maria Basin, the Cuyama area, and into the Santa Ynez Mountains. This marine to nonmarine alluvium (deposited 5.3 million to 10,000 years before present) consists of light gray to brown clay-limestone, silt, sand, gravel, and conglomerate with numerous clasts derived from the Monterey Formation. Coarser sediments are derived primarily from stream channels, while finer grained material exists as flood plain deposits. Terrestrial clay and limestone rich deposits are relatively rare in the section, but where they occur, they contain the remains of freshwater mollusks. Overall, these sediments are poorly consolidated and poorly stratified, but some crossbedding may be observed in the field (Behl and Ramirez, 2000).

In San Luis Obispo County, this formation has produced the remains of terrestrial mollusks, crustaceans, three-spine stickleback (*Gasterosteus*), giant tortoise (*Geochelone*), rodent (Rodentia), elephant (Gompothoridae and *Mammut*), horse (Equiidae), long-horned bison (*Bison latifrons*), and yesterday's camel (*Camelops hesternus*) (Addicott & Galehouse 1973, Gust 2002). These sediments contain significant, non-renewable, paleontological resources and are considered to have high paleontological significance.

Conclusions and Recommendations

The project formations have a high potential to contain significant, non-renewable, paleontological resources. Given this fact, it is recommended that a qualified, properly equipped, professional paleontologist be on call during all earth moving activity on the project. If the grading will be of short duration, it is generally more cost-efficient to have the paleontologist actively monitor grading to recover any significant fossils encountered. This allows work to proceed with minimal delay.

References Cited

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Wayne Mills
Environmental Engineering
Cal Trans
San Luis Obispo

Dear Mr. Mills:

Enclosed please find a revision of the paleontological assessment for the Improvements to Highway 101 near Templeton. I hope you will find it meets your needs.

I would like to use this letter to specifically address the comments you made on the field survey report. The sketch map is not very accurate in regard to landmarks, in addition to lacking scale, making it virtually impossible obtain precise locations. However unidentifiable fragments are not usually collected at all, just noted. Since no significant fossils were observed, it was not necessary to create localities and properly record them.

The material collected notation on the survey report states that the bone fragments age 10-12 million years old and are late Oligocene to early & middle Miocene. The field surveyor made assumptions about the age of the fragments based on the sediments around them. The Monterey Formation is mid-to-late Miocene in age and the Vaqueros Formation is early-to-mid Miocene. The use of late Oligocene is an error.

However, the Paso Robles Formation is comprised, in large part, of decomposed Monterey Formation rocks. Therefore the color and structure can be very misleading in the field, especially where there are no large exposures to reveal stratigraphy.

Please don't hesitate to contact me if I can be of further assistance.

Sincerely yours,

Sherri Gust
Qualified Paleontologist

EXHIBIT E – PDS Traffic Scoping Checklist



PDS Traffic Forecasting, Analysis and Operations Scoping Checklist

Project Information

District 5 County Slo Route 101 Kilometer Post (Post Mile) 81.6-83.2 (51.0-52.0)EA 05-0G510K

Description (include how project was identified: system planning, safety investigation, highway and freeway surveillance, etc.)

The interchange of U.S. Route 101 and Las Tablas Road is currently configured as a grade-separated diamond interchange with stop controls on the northbound and southbound approaches of the U.S. 101 off-ramps to Las Tablas Road. Las Tablas Road is two lanes wide under U.S. 101 and left turn channelization is not provided on Las Tablas Road at the intersections with the U.S. 101 ramps. The intersections of the northbound and southbound U.S. 101 ramps are approximately 340 feet apart with the Las Tablas Road/Duncan Road intersection located approximately 160 feet west of the intersection with the southbound ramps and the Las Tablas Road/Bennett Way intersection located approximately 333 west of Duncan Road. The intersection spacings along Las Tablas Road do not meet generally accepted intersection spacing criteria. Traffic demand is expected to increase in the future on the Las Tablas Road corridor as the surrounding area continues to develop. The existing diamond interchange will not provide the capacity to serve future traffic demand. A PSR(PDS) has been initiated by the County of San Luis Obispo to identify improvements necessary to serve future traffic diamond at the interchange. The PSR(PDS) evaluates four alternative interchange configurations.

Project Manager Thomas E. Houston

Phone # (805) 549-3016

Consultant Project Engineer Nathan Donnelly

Phone # (916) 858-0642

Traffic Forecasting Functional Manager Sarah Chesebro

Phone # (805) 549-3640

Traffic Operations Functional Manager Paul McClintic

Phone # (805) 549-3472

Traffic Forecasting, Traffic Analysis Scoping

Traffic Operations Scoping

Project Screening

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

2. Project Setting

The U.S. 101/Las Tablas Road interchange is located in Templeton area of San Luis Obispo County, between Paso Robles and Atascadero. The Las Tablas Road corridor serves an east-west circulation function in Templeton and links the downtown areas east of U.S. 101 with residential areas located west of U.S. 101. The Twin Cities

Community Hospital and ancillary medical services are located on Las Tablas Road west of U.S. 101. The interchange is also used to access a California Highway Patrol facility located on Duncan Road north of Las Tablas Road.

Rural or Urban Urban.

Current land uses State Highway, undeveloped

Adjacent land uses Commercial, Residential, Park & Ride Lot; Undeveloped
(industrial, light industry, commercial, agricultural, residential, etc.)

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

Mainline highway U.S. 101 currently operates at LOS B during the peak commute hours in the vicinity of the Las Tablas Road intersection.

Ramp intersections

Las Tablas Road/Southbound U.S.101 Ramps: The approach of the southbound U.S. 101 off-ramp to Las Tablas Road currently operates at LOS C during the AM and PM peak commute hours. Existing peak hour volumes warrants monitoring the intersection for signalization. Most of the vehicles from the southbound off-ramp turn right and these vehicles would not usually require the traffic control provided by signalization.

Las Tablas Road/Northbound U.S.101 Ramps: The approach of the northbound U.S. 101 off-ramp to Las Tablas Road currently operates at LOS D during the AM and LOS C during the PM peak hour. Existing peak hour volumes currently meet Caltrans Peak Hour Signal Warrant criteria for signalization.

Merge / diverge The ramp influence areas on U.S. 101 currently operate at LOS B during the peak commute hours.

Street intersections

Las Tablas Road/Bennett Way: Northbound approach of Bennett Way operates at LOS B during the AM and PM peak commute hours.

Las Tablas Road/Duncan Road: Southbound approach of Duncan Road operates at LOS C during the AM and PM peak commute hours.

Las Tablas Road/Florence Street: Northbound approach of Florence Street operates at LOS B during the AM and PM peak commute hours.

Weaving / merging (spacing)

The Vineyard Drive interchange with U.S. 101 is located approximately 0.81 miles (1.30 km) south of Las Tablas Road and the Main Street interchange with U.S. 101 is located approximately .99 miles (1.59 km) north of Las Tablas Road. The spacing between Las Tablas Road and Vineyard Drive is less than current Caltrans standard for interchange spacing. Because existing ramp volumes are relatively low at the current time, weaving conditions between interchanges are out of the realm of weaving.

Other

Traffic Study and Analysis Anticipated

Traffic Modeling Assumptions

- o Use Local Model Yes.
- o Update Local Model Yes, updated the Templeton travel demand model developed in 1991 for the Templeton Circulation Study.
- o New Model N/A
- o Existing Traffic Counts N/A
- o New Traffic Counts 2001
- o Historical Growth N/A
- o General Plan (GP) Buildout No.
- o Pro-Rate GP Growth Yes.
- o Existing Year (2001) Complete.
- o Design Year (2030) Complete.
- o Interim Year (2020) N/A.

Other

The Templeton travel demand model was updated and was used to generate the traffic forecasts for the PSR-PDS. The travel demand model uses the Tmodel 2 software program to assign trips to the road network. The travel forecasts as well as the operational analyses are described in the report "Las Tablas/U.S. 101 UC Improvements PSR/PDS Traffic Analysis" prepared by Higgins Associates and dated June 26, 2002.

Traffic Analysis

- o Mainline LOS Complete.
- o Merge/Diverge LOS Complete.
- o Ramp Int. LOS Complete.
- o Adjacent IC LOS N/A
- o Ramp Metering (open) N/A
- o Ramp Metering (later) N/A
- o Left/Right Turn Storage Complete.
- o Accident / Safety Analysis Complete.
- o Intersection Queues Complete.
- o Construction Staging Not Complete.
- o Project Staging Required if project is to be phased.

Other

The "Las Tablas/U.S. 101 UC Improvements PSR/PDS Traffic Analysis" prepared by Higgins Associates includes Mainline LOS analysis, Ramp Intersection LOS and Accident Analysis. Queuing analysis based on the results of a Sim Traffic analysis is also documented in the study.

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

Traffic Operations Scoping

Traffic Operational Improvements

Attach the project location map to this checklist to show location of all traffic operations improvements anticipated.

- o Auxiliary Lanes Not required on U.S. 101. Traffic analysis assumes that Theater Drive is extended to the south from Main Street to Duncan Road/Petersen Ranch Road.

o Intersection Improvements

Design Alternative 1: This alternative will widen Las Tablas Road between Bennett Way and Florence Street by adding one through lane and one bike lane to both sides of the road. A dedicated right turn lane will be added to westbound Las Tablas Road between the northbound ramps and Florence Street. Left turn channelization will be provided on Las Tablas Road at the intersections with the northbound and southbound U.S. 101 ramps. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road. The intersections of Las Tablas Road with Bennett Way, Duncan Road, Florence Street and the northbound and southbound US-101 ramps will be adjusted to accommodate the widening of Las Tablas Road. The two existing 3-span, undercrossing bridges on US-101 will be replaced with a single 3-span structure that will accommodate the ultimate widening of US-101 as indicated in Caltrans' US-Concept Report. At the interchange, the traffic lanes, bike lanes, curb, gutter and sidewalk on Las Tablas Road will pass under the center span of the undercrossing structure.

Design Alternative 2: Alternative 2 will widen Las Tablas Road between Bennett Way and Florence Street by adding one through lane and one bike lane to both sides of the road. A dedicated right turn lane will be added to westbound Las Tablas Road between the northbound ramps and Florence Street. Left turn channelization will be provided on the westbound Las Tablas Road approach to the southbound U.S. 101 ramps. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road. The intersections of Las Tablas Road with Bennett Way, Florence Street and the northbound US-101 ramps will be adjusted to accommodate the widening of Las Tablas Road. The Duncan Road intersection with Las Tablas Road will be deleted and Duncan Road will be obliterated between Las Tablas Road and the CHP facility. The southbound US-101 ramps intersection with Las Tablas Road will be relocated and the ramps will be realigned. The two existing 3-span, undercrossing bridges on US-101 will be replaced with a single 2-span structure to accommodate the ultimate width of Las Tablas Road and the ultimate widening of US-101 as indicated in Caltrans' Route Concept Report.

Design Alternative 3: This alternative will widen Las Tablas Road between Bennett Way and the southbound US-101 ramps by adding one through lane and one bike lane to both sides of the road. A dedicated right turn lane will be added to westbound Las Tablas Road between the northbound ramps and Florence Street. Left turn channelization will be provided on Las Tablas Road at the intersections with the northbound and southbound U.S. 101 ramps. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road between Bennett Way and Florence Street. The intersection of Las Tablas Road with Bennett Way will be adjusted to accommodate the widening of Las Tablas Road. The Duncan Road intersection with Las Tablas Road will be deleted and Duncan Road will be obliterated between Las Tablas Road and the CHP facility. The southbound US-101 ramps intersection with Las Tablas Road will be relocated and the ramps will be realigned. The existing undercrossing bridges on US-101 will remain, but the closure

walls at abutments 1 and 4 will be removed. Tieback walls will be installed at each abutment to provide room for curb, gutter, sidewalks and bike lanes beneath spans 1 and 3 of the existing undercrossing structures.

Design Alternative 5: This alternative will widen Las Tablas Road between Bennett Way and Florence Street by adding one through lane and one bike lane to both sides of the road. Left turn channelization will be provided on the westbound Las Tablas Road approach to the southbound U.S. 101 ramps. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road. The intersection of Las Tablas Road with Bennett Way will be adjusted to accommodate the widening of Las Tablas Road. The Duncan Road intersection with Las Tablas Road will be deleted and Duncan Road will be obliterated for approximately 140 m. The Florence Street access from Las Tablas will be closed. All US-101 ramp intersections with Las Tablas Road will be relocated and the ramps will be realigned. The two existing 3-span, undercrossing bridges on US-101 will be replaced with a single 2-span structure to accommodate the ultimate width of Las Tablas Road and the ultimate widening of US-101 as indicated in Caltrans' Route Concept Report.

Design Alternative 7: This alternative will close all of the ramps at Las Tablas Road to eliminate access to the main line from the local street and convert the existing interchange to a simple undercrossing. Curb, gutter, sidewalk and bike lane delineation will be added along Las Tablas Road where needed.

o Truck Climbing Lane N/A.

o New Signals Traffic signals would be required at the intersections of the Las Tablas Road intersections at Bennett Way, Duncan Road (Alternative 1), southbound U.S. 101 ramps, northbound U.S. 101 ramps and Florence Street for all design alternatives except as noted at Duncan Road. Under Design Alternatives 2 and 3, the Las Tablas Road/Duncan Road intersection is eliminated.

o Modify Signals N/A.

o Merging Improvements N/A.

o Weaving Improvements N/A.

o Deceleration / Acceleration Lanes As described for the intersection improvements.

Other

Traffic Management Systems

Attach the project location map to this checklist to show location of all traffic management systems identified.

- o Ramp Meters None
 - o HOV Ramp Bypass None
 - o Mainline HOV Lanes None
 - o Detector Loops As required for signal operation.
 - o Communication Networks (fiber optic, telephone, etc.) Required for signal coordination.
 - o Closed Circuit Television None
 - o Changeable Message Sign None
 - o Highway Advisory Radio None
- Other
-
-

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

Preliminary Traffic Forecasting and Operations Evaluation provided by:

Traffic Forecasting & Operational Analysis J. Daniel Takacs, Higgins Associates
Phone # (408) 848-3122 Date 7/25/02

**EXHIBIT F – Preliminary Estimate of Project
Cost**

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

District-County-Route	<u>05-SLO-101</u>
KP(PM)	<u>82.7 (51.45)</u>
EA	<u>0G510K</u>
Program Code	<u>HE 12</u>

PROJECT DESCRIPTION: Alternative 1 - Modify the existing Interchange at
Las Tablas Road / US-101

Limits: On US-101 at Las Tablas Road

Proposed Improvement (Scope): Replace existing undercrossing structure
and widen Las Tablas Road between
Bennett Way and Florence Street
Add bike lanes, curb, gutter and sidewalk where needed

Alternate: Alternative 1

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$	<u>\$4,058,000</u>
TOTAL STRUCTURE ITEMS	\$	<u>\$3,017,000</u>
SUBTOTAL CONSTRUCTION COSTS	\$	<u>\$7,075,000</u>
TOTAL RIGHT OF WAY ITEMS	\$	<u>\$122,000</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$	<u>\$7,197,000</u>

Reviewed by Project Manager
Dokken Engineering

Matthew N. Lujan
Signature

Approved by Project Engineer
Dokken Engineering

Mark S. O'Connell
Signature

Phone No. (916) 858-0642 Date April 04, 2003

KP(PM) 82.7 (51.45)
 EA 0G510K
 Program Code HE 12

Section 6 Minor Items

Subtotal Sections 1-5 \$2,665,253 x 5% \$133,263

TOTAL MINOR ITEMS \$133,263

Section 7 Roadway Mobilization

Subtotal Sections 1-5 \$2,665,253
 Minor Items \$133,263

Sum \$2,798,516 x 10% \$279,852

TOTAL ROADWAY MOBILIZATION \$279,852

Section 8 Road Additions

Supplemental

Subtotal Sections 1-5 \$2,665,253
 Minor Items \$133,263

Sum \$2,798,516 x 10% \$279,852

TOTAL ROADWAY ADDITIONS \$979,480

TOTAL ROADWAY ITEMS \$4,057,848

(Total of Sections 1-8)

Contingencies *

Subtotal Sections 1-5 \$2,665,253
 Minor Items \$133,263

Sum \$2,798,516 x 25% \$699,629

ESTIMATE PREPARED BY
 DOKKEN ENGINEERING

Janette A. Ruesga PHONE # (916) 858-0642 DATE April 04, 2003
 (Print Name)

District-County-Route 05-SLO-101
 KP(PM) 82.7 (51.45)
 EA 0G510K
 Program Code HE 12

II. STRUCTURES ITEMS

Bridge Name	<u>Las Tablas Rd UC</u>	_____	_____	_____
Structure Type	<u>Concrete Box Girder</u>	_____	_____	_____
Width (out to out) - (m)	<u>35.16</u>	_____	_____	_____
Span Length - (m)	<u>50</u>	_____	_____	_____
Total Area - (m^2)	<u>1,758.0</u>	_____	_____	_____
Footing Type (pile/spread)	<u>Pile</u>	_____	_____	_____
Cost Per m^2 (incl. 10% mobilization and 25% contingency)	<u>\$1,475.00</u>	_____	_____	_____
Total Cost for Structure	<u>\$2,617,000</u>	_____	_____	_____

SUBTOTAL STRUCTURES ITEMS \$2,617,000

Related Costs:	<u>Bridge Removal</u>	<u>\$400,000</u>
	_____	_____
	_____	_____

SUBTOTAL RAILROAD ITEMS \$400,000

TOTAL STRUCTURES ITEMS \$3,017,000

COMMENTS:

ESTIMATE PREPARED BY
 DOKKEN ENGINEERING

Martin Maechler, P. E. PHONE # (916) 858-0642
 (Print Name)

DATE April 04, 2003

District-County-Route 05-SLO-101

KP(PM) 82.7 (51.45)

EA 0G510K

Program Code HE 12

III. RIGHT OF WAY

Acquisition, including excess lands and damages to remainder	<u>\$80,850</u>
Utility Relocation (Project share)	<u>\$31,500</u>
Clearance/Demolition	<u> </u>
RAP	<u> </u>
Title and Escrow Fees	<u>\$9,450</u>

TOTAL RIGHT OF WAY \$121,800

CONSTRUCTION CONTRACT WORK \$15,000

COMMENTS

ESTIMATE PREPARED BY

Tarvin & Associates

Bob Tarvin

(Print Name)

PHONE # (805) 489-0147

DATE

April 04, 2003

(If appropriate, attach additional pages and backup.)

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

District-County-Route	<u>05-SLO-101</u>
KP(PM)	<u>82.7 (51.45)</u>
EA	<u>0G510K</u>
Program Code	<u>HE 12</u>

PROJECT DESCRIPTION: Alternative 2 - Modify the existing Interchange at
Las Tablas Road / US-101

Limits: On US-101 at Las Tablas Road

Proposed Improvement (Scope): Replace existing undercrossing structure, realign SB ramps
and widen Las Tablas Road between
Bennett Way and Florence Street
Add bike lanes, curb, gutter and sidewalk where needed
Delete Duncan Road intersection.

Alternate: Alternative 2

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$	<u>\$6,010,000</u>
TOTAL STRUCTURE ITEMS	\$	<u>\$3,097,000</u>
SUBTOTAL CONSTRUCTION COSTS	\$	<u>\$9,107,000</u>
TOTAL RIGHT OF WAY ITEMS	\$	<u>\$532,000</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$	<u>\$9,639,000</u>

Reviewed by Project Manager
Dokken Engineering

Matthew N. Linn
Signature

Approved by Project Engineer
Dokken Engineering

Nathan S. Orloff
Signature

Phone No. (916) 858-0642 Date April 04, 2003

KP(PM) 82.7 (51.45)
 EA OG510K
 Program Code HE 12

Section 6 Minor Items

Subtotal Sections 1-5 \$3,947,351 x 5% \$197,368

TOTAL MINOR ITEMS \$197,368

Section 7 Roadway Mobilization

Subtotal Sections 1-5 \$3,947,351

Minor Items \$197,368

Sum \$4,144,718 x 10% \$414,472

TOTAL ROADWAY MOBILIZATION \$414,472

Section 8 Road Additions

Supplemental

Subtotal Sections 1-5 \$3,947,351

Minor Items \$197,368

Sum \$4,144,718 x 10% \$414,472

Contingencies *

Subtotal Sections 1-5 \$3,947,351

Minor Items \$197,368

Sum \$4,144,718 x 25% \$1,036,180

TOTAL ROADWAY ADDITIONS \$1,450,651

TOTAL ROADWAY ITEMS \$6,009,842

(Total of Sections 1-8)

ESTIMATE PREPARED BY
 DOKKEN ENGINEERING

Janette A. Ruesga
 (Print Name)

PHONE # (916) 858-0642

DATE April 04, 2003

District-County-Route 05-SLO-101

KP(PM) 82.7 (51.45)

EA 0G510K

Program Code HE 12

III. RIGHT OF WAY

Acquisition, including excess lands and damages to remainder	<u>\$349,650</u>
Utility Relocation (Project share)	<u>\$157,500</u>
Clearance/Demolition	<u>\$10,500</u>
RAP	<u> </u>
Title and Escrow Fees	<u>\$14,175</u>

TOTAL RIGHT OF WAY \$531,825

CONSTRUCTION CONTRACT WORK \$30,000

COMMENTS

ESTIMATE PREPARED BY

Tarvin & Associates Bob Tarvin PHONE # (805) 489-0147 DATE April 04, 2003
(Print Name)

(If appropriate, attach additional pages and backup.)

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

District-County-Route	<u>05-SLO-101</u>
KP(PM)	<u>22.0 (13.7)</u>
EA	<u>0G510K</u>
Program Code	<u>HE 12</u>

PROJECT DESCRIPTION: Alternative 3 - Modify the existing Interchange at
Las Tablas Road / US-101

Limits: On US-101 at Las Tablas Road

Proposed Improvement (Scope): Remove closure walls from end spans of existing undercrossing structure,
place Tie-Back walls at abutments, realign SB ramps, and widen Las Tablas
Road between Bennett Way and Florence Street
Add bike lanes, curb, gutter and sidewalk where needed
Delete Duncan Road intersection.

Alternate: Alternative 3

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$	<u>\$5,602,000</u>
TOTAL STRUCTURE ITEMS	\$	<u>\$790,000</u>
SUBTOTAL CONSTRUCTION COSTS	\$	<u>\$6,392,000</u>
TOTAL RIGHT OF WAY ITEMS	\$	<u>\$423,000</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$	<u>\$6,815,000</u>

Reviewed by Project Manager
Dokken Engineering

Matthew N. Smith
Signature

Approved by Project Engineer
Dokken Engineering

Mark S. O'Connell
Signature

Phone No. (916) 858-0642 Date April 04, 2003

KP(PM)	<u>22.0 (13.7)</u>
EA	<u>0G510K</u>
Program Code	<u>HE 12</u>

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	<u>2</u>	<u>LS</u>	<u>\$405,000.00</u>	<u>\$810,000</u>	
Barriers					
Guardrails	<u>2</u>	<u>LS</u>	<u>\$5,000.00</u>	<u>\$10,000</u>	
Noise Barriers					
Highway Planting	<u>1</u>	<u>LS</u>	<u>\$150,000.00</u>	<u>\$150,000</u>	
Replacement Planting					
Irrigation Modification					
Relocate Private Irrigation Facilities					
Erosion Control	<u>16,500</u>	<u>m^2</u>	<u>\$2.00</u>	<u>\$33,000</u>	
Slope Protection					
Water Pollution Control	<u>1</u>	<u>LS</u>	<u>\$140,000.00</u>	<u>\$140,000</u>	
Hazardous Waste Mitigation Work					
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$250,000.00</u>	<u>\$250,000</u>	
Resident Engineer Office Space	<u>1</u>	<u>LS</u>	<u>\$30,000.00</u>	<u>\$30,000</u>	
Construction Staking	<u>1</u>	<u>LS</u>	<u>\$75,000.00</u>	<u>\$75,000</u>	
Temporary Railing (Type K)	<u>2,500</u>	<u>M</u>	<u>\$60.00</u>	<u>\$150,000</u>	
Crash Cushion Modules	<u>30</u>	<u>EA</u>	<u>\$450.00</u>	<u>\$13,500</u>	
					<u>\$1,661,500</u>

<u>Section 5 Traffic Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Lighting	<u>1</u>	<u>LS</u>	<u>\$250,000.00</u>	<u>\$250,000</u>
Remove Traffic Signals				
Traffic Signals	<u>1</u>	<u>LS</u>	<u>\$420,000.00</u>	<u>\$420,000</u>
Overhead Sign Structures				
Roadside Signs	<u>1</u>	<u>LS</u>	<u>\$15,000.00</u>	<u>\$15,000</u>
Ramp Metering System				
Traffic Control Systems	<u>1</u>	<u>LS</u>	<u>\$100,000.00</u>	<u>\$100,000</u>
Traffic Management Plan				

Subtotal Traffic Items \$785,000

SUBTOTAL SECTIONS 1-5 \$3,679,201

KP(PM) 22.0 (13.7)
 EA 0G510K
 Program Code HE 12

Section 6 Minor Items

Subtotal Sections 1-5 \$3,679,201 x 5% \$183,960

TOTAL MINOR ITEMS \$183,960

Section 7 Roadway Mobilization

Subtotal Sections 1-5 \$3,679,201
 Minor Items \$183,960

Sum \$3,863,161 x 10% \$386,316

TOTAL ROADWAY MOBILIZATION \$386,316

Section 8 Road Additions

Supplemental

Subtotal Sections 1-5 \$3,679,201
 Minor Items \$183,960

Sum \$3,863,161 x 10% \$386,316

Contingencies *

Subtotal Sections 1-5 \$3,679,201
 Minor Items \$183,960

Sum \$3,863,161 x 25% \$965,790

TOTAL ROADWAY ADDITIONS \$1,352,106

TOTAL ROADWAY ITEMS \$5,601,583

(Total of Sections 1-8)

ESTIMATE PREPARED BY
 DOKKEN ENGINEERING

Wendy Tkacheff
 (Print Name)

PHONE # (916) 858-0642

DATE April 04, 2003

District-County-Route 05-SLO-101

KP(PM) 22.0 (13.7)

EA 0G510K

Program Code HE 12

II. STRUCTURES ITEMS

Bridge Name	<u>Las Tablas Rd UC</u>	_____	_____	_____
Structure Type	<u>Tieback Wall</u>	_____	_____	_____
Width (out to out) - (m)	_____	_____	_____	_____
Span Length - (m)	_____	_____	_____	_____
Total Area - (m ²)	<u>385</u>	_____	_____	_____
Footing Type (pile/spread)	_____	_____	_____	_____
Cost Per m ²	_____	_____	_____	_____
(incl. 10% mobilization and 25% contingency)	<u>\$2,000.00</u>	_____	_____	_____
Total Cost for Structure	<u>\$770,000</u>	_____	_____	_____

SUBTOTAL STRUCTURES ITEMS \$770,000

Related Costs:	<u>Closure Wall Removal</u>	_____	<u>\$20,000</u>
	_____	_____	_____
	_____	_____	_____

SUBTOTAL RAIL \$20,000

TOTAL STRUCTURES ITEMS \$790,000

COMMENTS:

Includes cost of replacing barriers on existing structure to remain

ESTIMATE PREPARED BY

DOKKEN ENGRM Martin Maechler, P. E.
(Print Name)

PHONE # ####

DATE June 17, 1999

District-County-Route 05-SLO-101
 KP(PM) 22.0 (13.7)
 EA 0G510K
 Program Code HE 12

III. RIGHT OF WAY

Acquisition, including excess lands and damages to remainder	<u>\$264,600</u>
Utility Relocation (Project share)	<u>\$136,500</u>
Clearance/Demolition	<u>\$10,500</u>
RAP	<u> </u>
Title and Escrow Fees	<u>\$11,025</u>

TOTAL RIGHT OF WAY \$422,625

CONSTRUCTION CONTRACT WORK \$15,000

COMMENTS

ESTIMATE PREPARED BY
 DOKKEN ENGINEERING Bob Tarvin PHONE # (805) 489-0147 DATE April 04, 2003
 (Print Name)

(If appropriate, attach additional pages and backup.)

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

District-County-Route	05-SLO-101
KP(PM)	22.0 (13.7)
EA	0G510K
Program Code	HE 12

PROJECT DESCRIPTION: Alternative 5 - Modify the existing Interchange at
Las Tablas Road / US-101

Limits: On US-101 at Las Tablas Road

Proposed Improvement (Scope): Full standard alternative
Widen Las Tablas Road between Bennet Way and Florence,
replace existing undercrossing structure, realign all ramps,
add bike lanes, curb, gutter and sidewalk where needed, and close
Duncan Road and Florence Street intersections.

Alternate: Alternative 5

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$	\$7,704,000
TOTAL STRUCTURE ITEMS	\$	\$3,097,000
SUBTOTAL CONSTRUCTION COSTS	\$	\$10,801,000
TOTAL RIGHT OF WAY ITEMS	\$	\$5,516,000
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$	\$16,317,000

Reviewed by Project Manager
Dokken Engineering

Matthew N. Smith
Signature

Approved by Project Engineer
Dokken Engineering

Mark S. Conroy
Signature

Phone No. (916) 858-0642

Date February 17, 2004

KP(PM)	<u>22.0 (13.7)</u>
EA	<u>OG510K</u>
Program Code	<u>HE 12</u>

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	<u>1</u>	<u>LS</u>	<u>\$220,000.00</u>	<u>\$220,000</u>	
Barriers					
Guardrails	<u>2</u>	<u>LS</u>	<u>\$5,000.00</u>	<u>\$10,000</u>	
Noise Barriers					
Highway Planting	<u>1</u>	<u>LS</u>	<u>\$150,000.00</u>	<u>\$150,000</u>	
Replacement Planting					
Irrigation Modification					
Relocate Private Irrigation					
Facilities					
Erosion Control	<u>23,000</u>	<u>m^2</u>	<u>\$2.00</u>	<u>\$46,000</u>	
Slope Protection					
Water Pollution Control	<u>1</u>	<u>LS</u>	<u>\$140,000.00</u>	<u>\$140,000</u>	
Hazardous Waste Mitigation Work					
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$250,000.00</u>	<u>\$250,000</u>	
Resident Engineer Office Space	<u>1</u>	<u>LS</u>	<u>\$30,000.00</u>	<u>\$30,000</u>	
Construction Staking	<u>1</u>	<u>LS</u>	<u>\$75,000.00</u>	<u>\$75,000</u>	
Temporary Railing (Type K)	<u>570</u>	<u>M</u>	<u>\$60.00</u>	<u>\$34,200</u>	
Crash Cushion Modules	<u>22</u>	<u>EA</u>	<u>\$450.00</u>	<u>\$9,900</u>	
					<u>\$965,100</u>

<u>Section 5 Traffic Items</u>					
Lighting	<u>1</u>	<u>LS</u>	<u>\$250,000.00</u>	<u>\$250,000</u>	
Remove Traffic Signals					
Traffic Signals	<u>1</u>	<u>LS</u>	<u>\$420,000.00</u>	<u>\$420,000</u>	
Overhead Sign Structures					
Roadside Signs	<u>1</u>	<u>LS</u>	<u>\$15,000.00</u>	<u>\$15,000</u>	
Ramp Metering System					
Traffic Control Systems	<u>1</u>	<u>LS</u>	<u>\$100,000.00</u>	<u>\$100,000</u>	
Traffic Management Plan					

Subtotal Traffic Items \$785,000

SUBTOTAL SECTIONS 1-5 \$5,060,118

KP(PM) 22.0 (13.7)
 EA 0G510K
 Program Code HE 12

Section 6 Minor Items

Subtotal Sections 1-5 \$5,060,118 x 5% \$253,006

TOTAL MINOR ITEMS \$253,006

Section 7 Roadway Mobilization

Subtotal Sections 1-5 \$5,060,118

Minor Items \$253,006

Sum \$5,313,124 x 10% \$531,312

TOTAL ROADWAY MOBILIZATION \$531,312

Section 8 Road Additions

Supplemental

Subtotal Sections 1-5 \$5,060,118

Minor Items \$253,006

Sum \$5,313,124 x 10% \$531,312

Contingencies *

Subtotal Sections 1-5 \$5,060,118

Minor Items \$253,006

Sum \$5,313,124 x 25% \$1,328,281

TOTAL ROADWAY ADDITIONS \$1,859,593

TOTAL ROADWAY ITEMS \$7,704,030

(Total of Sections 1-8)

ESTIMATE PREPARED BY
 DOKKEN ENGINEERING

Nathan Donnelly, P.E. PHONE # (916) 858-0642 DATE February 17, 2004
 (Print Name)

District-County-Route 05-SLO-101

KP(PM) 22.0 (13.7)

EA 0G510K

Program Code HE 12

II. STRUCTURES ITEMS

Bridge Name	<u>Las Tablas Rd UC</u>	_____	_____	_____
Structure Type	<u>Concrete Box Girder</u>	_____	_____	_____
Width (out to out) - (m)	<u>35.160</u>	_____	_____	_____
Span Length - (m)	<u>52.000</u>	_____	_____	_____
Total Area - (m ²)	<u>1,828.320</u>	_____	_____	_____
Footing Type (pile/spread)	<u>Pile</u>	_____	_____	_____
Cost Per m ² (incl. 10% mobilization and 25% contingency)	<u>\$1,475.00</u>	_____	_____	_____
Total Cost for Structure	<u>\$2,697,000</u>	_____	_____	_____

SUBTOTAL STRUCTURES ITEMS \$2,697,000

Related Costs: Bridge Removal \$400,000

SUBTOTAL RELATED COSTS \$400,000

TOTAL STRUCTURES ITEMS \$3,097,000

COMMENTS:

ESTIMATE PREPARED BY
DOKKEN ENGRM Martin Maechler, P. E.
(Print Name)

PHONE # (916) 858-0642 DATE February 17, 2004

District-County-Route 05-SLO-101
 KP(PM) 22.0 (13.7)
 EA 0G510K
 Program Code HE 12

III. RIGHT OF WAY

Acquisition, including excess lands and damages to remainder	<u>\$4,699,800</u>
Utility Relocation (Project share)	<u>\$157,500</u>
Clearance/Demolition	<u>\$64,050</u>
RAP	<u>\$567,000</u>
Title and Escrow Fees	<u>\$27,270</u>

TOTAL RIGHT OF WAY \$5,515,620

CONSTRUCTION CONTRACT WORK \$15,000

COMMENTS

ESTIMATE PREPARED BY
 DOKKEN ENGINEERING Nathan Donnelly PHONE # (916) 858-0642 DATE February 17, 2004
 (Print Name)

(If appropriate, attach additional pages and backup.)

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

District-County-Route	<u>05-SLO-101</u>
KP(PM)	<u>22.0 (13.7)</u>
EA	<u>0G510K</u>
Program Code	<u>HE 12</u>

PROJECT DESCRIPTION: Alternative 7 - Close the existing Interchange at
Las Tablas Road / US-101

Limits: On US-101 at Las Tablas Road

Proposed Improvement (Scope): Close and obliterate NB and SB ramps
Add bike lanes, curb, gutter and sidewalk where needed

Alternate: Alternative 7

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$	<u>\$373,000</u>
TOTAL STRUCTURE ITEMS	\$	<u>\$0</u>
SUBTOTAL CONSTRUCTION COSTS	\$	<u>\$373,000</u>
TOTAL RIGHT OF WAY ITEMS	\$	<u>\$0</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$	<u>\$373,000</u>

Reviewed by Project Manager
Dokken Engineering

Matthew N. Lewis
Signature

Approved by Project Engineer
Dokken Engineering

Mark S. Orndorff
Signature

Phone No. (916) 858-0642 Date April 04, 2003

KP(PM)	<u>22.0 (13.7)</u>
EA	<u>0G510K</u>
Program Code	<u>HE 12</u>

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls				\$0	
Barriers					
Guardrails				\$0	
Noise Barriers					
Highway Planting				\$0	
Replacement Planting					
Irrigation Modification					
Relocate Private Irrigation					
Facilities					
Erosion Control	1	LS	\$3,000.00	\$3,000	
Slope Protection					
Water Pollution Control	1	LS	\$5,000.00	\$5,000	
Hazardous Waste Mitigation Work	1	LS	\$5,000.00	\$5,000	
Environmental Mitigation				\$0	
Resident Engineer Office Space				\$0	
Construction Staking				\$0	
Temporary Railing (Type K)	96	M	\$60.00	\$5,760	
Crash Cushion Modules				\$0	
					<u>\$18,760</u>

<u>Section 5 Traffic Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Lighting				
Remove Electrolier	4	EA	\$2,000.00	\$8,000
Traffic Signals				\$0
Overhead Sign Structures(Replace Panel)	1	EA	\$3,000.00	\$3,000
Remove Roadside Signs	1	LS	\$5,000.00	\$5,000
Ramp Metering System				
Traffic Control Systems	1	LS	\$3,000.00	\$3,000
Traffic Management Plan				

Subtotal Traffic Items \$19,000

SUBTOTAL SECTIONS 1-5 \$245,230

KP(PM) 22.0 (13.7)
 EA 0G510K
 Program Code HE 12

Section 6 Minor Items

Subtotal Sections 1-5 \$245,230 x 5% \$12,262

TOTAL MINOR ITEMS \$12,262

Section 7 Roadway Mobilization

Subtotal Sections 1-5 \$245,230

Minor Items \$12,262

Sum \$257,492 x 10% \$25,749

TOTAL ROADWAY MOBILIZATION \$25,749

Section 8 Road Additions

Supplemental

Subtotal Sections 1-5 \$245,230

Minor Items \$12,262

Sum \$257,492 x 10% \$25,749

Contingencies *

Subtotal Sections 1-5 \$245,230

Minor Items \$12,262

Sum \$257,492 x 25% \$64,373

TOTAL ROADWAY ADDITIONS \$90,122

TOTAL ROADWAY ITEMS \$373,363

(Total of Sections 1-8)

ESTIMATE PREPARED BY
 DOKKEN ENGINEERING

Janette Ruesga
 (Print Name)

PHONE # (916) 858-0642

DATE April 04, 2003

District-County-Route 05-SLO-101

KP(PM) 22.0 (13.7)

EA 0G510K

Program Code HE 12

II. STRUCTURES ITEMS

Bridge Name _____
Structure Type _____

Width (out to out) - (m) _____
Span Length - (m) _____
Total Area - (m²) _____

Footing Type (pile/spread) _____
Cost Per m² _____
(incl. 10% mobilization and
25% contingency) _____
Total Cost for Structure _____

SUBTOTAL STRUCTURES ITEMS \$0

Related Costs: _____

SUBTOTAL RAIL \$0

TOTAL STRUCTURES ITEMS \$0

COMMENTS:

Includes cost of replacing barriers on existing structure to remain

ESTIMATE PREPARED BY
DOKKEN ENGRNG _____
(Print Name)

PHONE # _____ DATE _____

District-County-Route 05-SLO-101

KP(PM) 22.0 (13.7)

EA 0G510K

Program Code HE 12

III. RIGHT OF WAY

Acquisition, including excess lands and damages to remainder _____
Utility Relocation (Project share) _____
Clearance/Demolition _____
RAP _____
Title and Escrow Fees _____

TOTAL RIGHT OF WAY \$0

CONSTRUCTION CONTRACT WORK _____

COMMENTS

ESTIMATE PREPARED BY
DOKKEN ENGINEERING _____ PHONE # _____ DATE _____
(Print Name)

(If appropriate, attach additional pages and backup.)

**EXHIBIT G – Right-of-Way Data Sheets &
Utility Information Sheets**

Las Tablas Road Improvements

RIGHT OF WAY DATA SHEET

TO: Dokken Engineering

ATTN.: Ali Hemmati

Date: January 15, 2002, Rev. Feb. 7, 2002
 Dist. 05 SLO 101 - 51.45
 KP: NA
 EA: NA
 Project Description: Las Tablas Road
 Improvements

SUBJECT: Right of Way Data - Alternate No. 1 - Revised

1. Right of Way Cost Estimate:

	Current Value (Future use)	Escalation Rate	Escalated Value
A. Acquisition, including Excess Lands, Damages and Goodwill	\$77,000	5%	\$80,850
B. Utility Relocation (State Share)	\$30,000	5%	\$31,500
C. Relocation Assistance	\$ 0	-%	\$ 0
D. Clearance / Demolition	\$ 0	-%	\$ 0
E. Title and Escrow Fees	\$9,000	5%	\$9,450
F. Total Current Value	\$116,000		
G. Total Escalated Value			\$121,800
H. Construction Contract Work	\$15,000		

2. Anticipated Date of Right of Way Certification: June 2004

3. Parcel Data:

<u>Type</u>	<u>Dual /Appr</u>	<u>Utilities</u>	<u>RR Involvements</u>
X	None	U4-1 2	None X
A 4		-2	C&M Agrmt
B		-3 3	Svc. Contract
C 2		-4	Lic/RE/Clause
D		U5-7	
E XXXX		-8	<u>Misc. R/W Work</u>
F XXXX		-9 5	RAP Displ NA
			Clear/Demo NA
			Const Permits NA
			Condemnation NA
Total 6			

Areas: Right of Way 0.1638 Acres No. Excess Parcels 0 Excess NA

Enter PMCS Screens NA by NA

Enter AGRE Screens NA (Railroad data only) by NA

UTILITY INFORMATION SHEET

1. Name of utility companies involved in project:

Pacific Gas & Electric - E
Southern California Gas – Distribution & Transmission
Pacific Bell
Templeton Water district
Charter Communications
Templeton Community Service District

2. Types of facilities and agreements required:

- 1) Pacific Bell – Relocate line on Joint Pole
- 2) Templeton Community Service District – Notice to adjust water valve covers and monitoring well cover
- 3) Southern California Gas – Pothole depth of four-inch M.P. Gas Line on south side of Las Tablas Road.
- 4) Pacific Gas & Electric – Relocate joint pole and guy-pole
- 5) Charter Communications – Relocate line on joint pole

3. Additional information concerning utility involvement on the project:

Eight to 12 months lead time will be required to relocate utilities that are determined to be in conflict.

4. PMCS Input Information: N/A

Total estimated agency cost obligations for utility relocation on this project: \$30,000

Prepared by: R. H. Tarvin, Right of Way Agent

Las Tablas Road Improvements

RIGHT OF WAY DATA SHEET

TO: Dokken Engineering

Date: January 15, 2002, Rev. Feb. 7, 2002

Dist. 05 SLO 101 – 51.45

ATTN.: Ali Hemmati

KP: NA

EA: NA

Project Description: Las Tablas Road Improvements

SUBJECT: Right of Way Data - Alternate No. 2 - Revised

1. Right of Way Cost Estimate:

	Current Value (Future use)	Escalation Rate	Escalated Value
A. Acquisition, including Excess Lands, Damages and Goodwill	\$333,000	5%	\$349,650
B. Utility Relocation (State Share)	\$150,000	5%	\$157,500
C. Relocation Assistance	\$ 0	-%	\$ 0
D. Clearance / Demolition	\$10,000	5%	\$10,500
E. Title and Escrow Fees	\$13,500	5%	\$14,175
F. Total Current Value	\$506,500		
G. Total Escalated Value			\$531,825
H. Construction Contract Work	\$30,000		

2. Anticipated Date of Right of Way Certification: June 2004

3. Parcel Data:

<u>Type</u>	<u>Dual /Appr</u>	<u>Utilities</u>	<u>RR Involvements</u>
X	None	U4-1 2	None X
A 3		-2	C&M Agrmt
B 7		-3 3	Svc. Contract
C 1		-4	Lic/RE/Clause
D		U5-7	
E XXXX		-8	<u>Misc. R/W Work</u>
F XXXX		-9 5	RAP Displ NA
Total 11			Clear/Demo 1
			Const Permits NA
			Condemnation NA

Areas: Right of Way 1.6513 Acres

No. Excess Parcels 0

Excess NA

Enter PMCS Screens NA

by NA

Enter AGRE Screens NA (Railroad data only)

by NA

Las Tablas Road Improvements

4. Are there any items of construction contract work? Yes. Conform driveways and reconstruct two new commercial driveways.
5. Provide a general description of the right of way and excess lands required (zoning, use major improvements, critical or sensitive parcels, etc.) Part takes for commercial, office and residential properties. No sensitive parcels or excess parcels.
6. Is there an effect on assessed valuation? No
7. Are utility facilities or rights of way affected? (If yes, attach Utility Information Sheet Exhibit 01-01-05). Yes
8. Are railroad facilities or rights of way affected? (If yes, attach Railroad Information Sheet Exhibit 01-01-06). No
9. Were any previously unidentified sites with hazardous waste and/or material found? (If yes, attach memorandum per Procedural handbook Volume I, Section 101.011) No
10. Are RAP displacements required? No. (If yes, provide the following information)
No. of single family No. of business/nonprofit
No. of multi-family No. of farms
Based on Draft/final Relocation Impact Statement/Study dated NA - it is anticipated that sufficient replacement housing (will) be available without Last Resort Housing.
11. Are there material borrow and /or disposal sites required? (If yes, explain) No
12. Are there potential relinquishments and/or abandonments? (If yes, explain) No
13. Are there any existing and or potential Airspace sites? (If yes, explain) No
14. Indicate the anticipated Right of Way schedule and lead time requirements. Eighteen months to two years right of way lead time will be required for this project.
15. Is it anticipated that all Right of Work will be performed by CALTRANS staff? It is anticipated that Caltrans will only provide oversight assistance in respect to this project.

I personally prepared this Right of Way Data Sheet and supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the accuracy of the data provided, normal limiting conditions and that this Data Sheet is complete and current. The above data has been prepared for the sole purpose of making a comparative market analysis and should not be considered to be an appraisal. In making any decision that relies upon the above data, it should be remembered that the guidelines for development of an appraisal or analysis as contained in the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation have not been followed.


By: R. H. Tarvin SR/WA, IFAS Date: January 15, 2002, Rev, Feb 7, 2002
Right of Way Agent and Certified General Real Estate Appraiser

Las Tablas Road Improvements

Alternate No. 2

UTILITY INFORMATION SHEET

1. Name of utility companies involved in project:

Pacific Gas & Electric - E
Southern California Gas – Distribution & Transmission
Pacific Bell
Charter Communications
Templeton Community Service District

2. Types of facilities and agreements required:

- 1) Pacific Bell – Adjust manhole vault cover. Relocate underground fiber optics lines and switch station structure.
- 2) Templeton Community Service District – Notice to adjust water valve covers.
- 3) Southern California Gas – Pothole depth of four-inch M.P. Gas Line.
- 4) Pacific Gas & Electric – Relocate 4 joint pole and 3 guy-poles.
- 5) Charter Communications – Relocate line on joint pole.

3. Additional information concerning utility involvement on the project:

Eighteen months to two year lead time for relocation of affected utilities. – Note: fiber optic lines can be very expensive to relocate depending on where and how far they must go to splice to existing lines.

4. PMCS Input Information: N/A

Total estimated agency cost obligations for utility relocation on this project: \$150,000

Prepared by: R. H. Tarvin, Right of Way Agent

Las Tablas Road Improvements

RIGHT OF WAY DATA SHEET

TO: Dokken Engineering

Date: January 15, 2002, Rev. Feb. 7, 2002

Dist. 05 SLO 101 - 51.45

ATTN.: Ali Hemmati

KP: NA

EA: NA

Project Description: Las Tablas Road Improvements

SUBJECT: Right of Way Data - Alternate No. 3 - Revised

1. Right of Way Cost Estimate:

	Current Value (Future use)	Escalation Rate	Escalated Value
A. Acquisition, including Excess Lands, Damages and Goodwill	\$252,000	5%	\$264,600
B. Utility Relocation (State Share)	\$130,000	5%	\$136,500
C. Relocation Assistance	\$ 0	-%	\$ 0
D. Clearance / Demolition	\$10,000	5%	\$10,500
E. Title and Escrow Fees	\$10,500	5%	\$11,025
F. Total Current Value	\$402,500		
G. Total Escalated Value			\$422,625
H. Construction Contract Work	\$15,000		

2. Anticipated Date of Right of Way Certification: June 2004

3. Parcel Data:

Type	Dual / Appr	Utilities	RR Involvements
X	None	U4-1 2	None X
A 2		-2	C&M Agrmt
B		-3 3	Svc. Contract
C 4		-4	Lic/RE/Clause
D 1		U5-7	
E XXXX		-8	<u>Misc. R/W Work</u>
F XXXX		-9 5	RAP Displ NA
Total 7			Clear/Demo 1 Const Permits NA Condemnation NA

Areas: Right of Way 1.5674 Acres

No. Excess Parcels 0

Excess NA

Enter PMCS Screens NA

by NA

Enter AGRE Screens NA (Railroad data only)

by NA

Las Tablas Road Improvements

4. Are there any items of construction contract work? Yes. Conform driveways and other approaches.
5. Provide a general description of the right of way and excess lands required (zoning, use major improvements, critical or sensitive parcels, etc.) Part takes – commercial. No sensitive parcels or excess parcels.
6. Is there an effect on assessed valuation? No
7. Are utility facilities or rights of way affected? (If yes, attach Utility Information Sheet Exhibit 01-01-05). Yes
8. Are railroad facilities or rights of way affected? (If yes, attach Railroad Information Sheet Exhibit 01-01-06). No
9. Were any previously unidentified sites with hazardous waste and/or material found? (If yes, attach memorandum per Procedural handbook Volume 1, Section 101.011) No
10. Are RAP displacements required? No. (If yes, provide the following information)
No. of single family No. of business/nonprofit
No. of multi-family No. of farms
Based on Draft/final Relocation Impact Statement/Study dated NA - it is anticipated that sufficient replacement housing (will) be available without Last Resort Housing.
11. Are there material borrow and /or disposal sites required? (If yes, explain) No
12. Are there potential relinquishments and/or abandonments? (If yes, explain) No
13. Are there any existing and or potential Airspace sites? (If yes, explain) No
14. Indicate the anticipated Right of Way schedule and lead time requirements. Eighteen months to two years right of way lead time will be required for this project.
15. Is it anticipated that all Right of Work will be performed by CALTRANS staff? It is anticipated that Caltrans will only provide oversight assistance in respect to this project.

I personally prepared this Right of Way Data Sheet and supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the accuracy of the data provided, normal limiting conditions and that this Data Sheet is complete and current. The above data has been prepared for the sole purpose of making a comparative market analysis and should not be considered to be an appraisal. In making any decision that relies upon the above data, it should be remembered that the guidelines for development of an appraisal or analysis as contained in the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation have not been followed.

By: 
R. H. Tarvin SR/WA, IFAS
Right of Way Agent and Certified General Real Estate Appraiser

Date: January 15, 2002, Rev. Feb. 7, 2002

UTILITY INFORMATION SHEET

1. Name of utility companies involved in project:

Pacific Gas & Electric - E
Southern California Gas – Distribution & Transmission
Pacific Bell
Charter Communications
Templeton Community Service District

2. Types of facilities and agreements required:

- 1) Pacific Bell – Adjust manhole vault cover. Relocate underground fiber optics lines and switch station structure.
- 2) Templeton Community Service District – Notice to adjust water valve covers.
- 3) Southern California Gas – Pothole depth of four-inch M.P. Gas Line.
- 4) Pacific Gas & Electric – Relocate 5 joint pole and 2 guy-poles.
- 5) Charter Communications – Relocate line on joint pole.

3. Additional information concerning utility involvement on the project:

Eighteen months to two year lead time for relocation of affected utilities. – Note: fiber optic lines can be very expensive to relocate depending on where and how far they must go to splice to existing lines.

4. PMCS Input Information: N/A

Total estimated agency cost obligations for utility relocation on this project: \$130,000

Prepared by: R. H. Tarvin, Right of Way Agent

RIGHT OF WAY DATA SHEET

Date: February 12, 2004
 Dist. 05 – SLO 101 – 51.45
 KP 22.0 (13.7)
 EA. 0G510K
 Project Desc. :Las Tablas Road/US 101
 Interchange Improvements

SUBJECT: Right of Way Data - Alternative 5

1. Right of Way Cost Estimate:

	Current Value (Future use)	Escalation Rate	Escalated Value
A. Acquisition, including Excess Lands, Damages and Goodwill	\$4,476,000	5%	\$4,699,800
B. Utility Relocation (Agency Share)	\$150,000	5%	\$157,500
C. Relocation Assistance	\$540,000	5%	\$567,000
D. Clearance / Demolition	\$61,000	5%	\$64,050
E. Title and Escrow Fees	\$26,400	5%	\$27,270
F. Total Current Value	\$5,253,400		
G. Total Escalated Value			\$5,515,620
H. Construction Contract Work	\$15,000		

2. Anticipated Date of Right of Way Certification: 2006

3. Parcel Data:

<u>Type</u> NA	<u>Dual /Appr</u>	<u>Utilities</u> NA	<u>RR Involvements</u>
X		U4-12	None X
A 4		-2	C&M Agrmt
B 26		-3 3	Svc Contract
C 1		-4	Lic/RE/Clause
D		U5-7	
E XXXX		-8	<u>Misc. R/W Work</u>
F XXXX		-9 5	RAP Displ 9
			Clear/Demo 9
			Const Permits 0
			Condemnation 5

Areas: Right of Way 8.310 Acres

No. Excess Parcels 3 Excess 1.447 Ac

Enter PMCS Screens NA by NA

Enter AGRE Screens NA (Railroad data only) by NA

4. **Are there any items of construction contract work?** Yes. Conform driveways, access roads and reconstruction of one new commercial driveway:
5. **Provide a general description of the right of way and excess lands required (zoning, use major improvements, critical or sensitive parcels, etc.)** Partial and full takes for commercial, office and residential properties. Relocation of Park and Ride lot and CHP facilities. No sensitive parcels are involved, but excess parcels will be created.
6. **Is there an effect on assessed valuation?** No.
7. **Are utility facilities or rights of way affected? (If yes, attach Utility Information Sheet Exhibit 01-01-05).** Yes
8. **Are Railroad facilities or rights of way affected? (If yes, attach Railroad Information Sheet Exhibit 01-01-06)** No Railroad facilities are involved in this project.
9. **Were any previously unidentified sites with hazardous waste and/or material found? (If yes, attach memorandum per Procedural handbook Volume 1, Section 101.011)** No hazardous waste or similar materials were discovered.
10. **Are RAP displacements required? (If yes, provide the following information)** Yes

No. of single family	9	No. of business/nonprofit	0
No. of multi-family	0	No. of farms	0

Based on Draft/final Relocation Impact Statement/Study dated - None - Sufficient replacement housing is available without Last Resort Housing.
11. **Are there material borrow and /or disposal sites required? (If yes, explain)** No
12. **Are there potential relinquishments and/or abandonments? (If yes, explain)** No
13. **Are there any existing and or potential Airspace sites? (If yes, explain)** No
14. **Indicate the anticipated Right of Way schedule and lead time requirements.** Two years right of way lead time will be required for this project.
15. **Is it anticipated that all Right of Work will be performed by CALTRANS staff?** It is anticipated that CALTRANS staff will provide only project oversight and assistance.

I personally prepared this Right of Way Data Sheet and supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the accuracy of the data provided, normal limiting conditions and that this Data Sheet is complete and current.

The above data has been prepared for the sole purpose of making a comparative market analysis and should not be considered to be an appraisal. In making any decision that relies upon the above data, it should be remembered that the guidelines for development of an appraisal or analysis as contained in the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation have not been followed.



By: Nathan Donnelly, PE

Date: February 12, 2004

UTILITY INFORMATION SHEET

1. Name of utility companies involved in project:

PG&E - Electrical
Pacific Bell (SBC) – Communications
Southern California Gas Company
City of Arroyo Grande

2. Types of facilities and agreements required:

- 1) PG&E – Adjust manhole vault cover. Relocate underground fiber optics lines and switch station structure.
- 2) Templeton Community Service District – Notice to adjust water valve covers.
- 3) Southern California Gas – Pothole depth of four inch M.P. Gas Line.
- 4) Pacific Gas & Electric – Relocate 4 joint pole and 3 guy- poles.
- 5) Charter Communications – Relocate line on joint pole.

3. Additional information concerning utility involvement on the project:

Eighteen months to two year lead time for relocation of affected utilities. – Note: fiber optic lines can be very expensive to relocate depending on where and how far they must to to splice to existing lines.

4. PMCS Input Information; Not Applicable

Total estimated agency cost obligations for utility relocation on this project: \$150,000

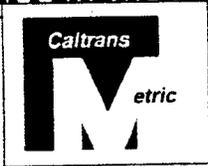
Prepared by: Nathan Donnelly, PE



**EXHIBIT H – Storm Water Data Report
Approval Sheet**

APPENDIX E

Storm Water Data Report



05-SLO-101
 KP 81.6-83.2 (PM 51.0-52.0)
 Interchange Modification
 EA: 0G510K
 RU: _____
 Program Identification: _____
 Phases: PID
 PA/ED
 PS&E

Regional Water Quality Control Board(s): Central Coast Region 3

Project Manager: Tom Houston

Is the Project exempt from incorporating Treatment BMPs? Yes No N/A
 If yes, attach the Exemption Documentation Form

Estimated Construction Start Date: July 2008

Notification of Construction (NOC) Date to be Submitted: _____

Notification of ADL reuse (if yes, provide date) Yes Date _____ No N/A

Separate Dewatering Permit (if yes, permit no.) Yes Permit # _____ No N/A

I have reviewed the storm water quality design issues contained in the Storm Water Data Report and Attachments attached hereto, and find the data to be complete, current, and accurate:

This Storm Water Data Report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based. PE stamp required at PS&E.



Janette A. Ruesga 12 May 03
 Registered Project Engineer Date

Jennifer O'Neal 13 May 03
 Design District/Regional Storm Water Coordinator or Designer Date
 Marc Boswell/Jennifer O'Neal

Dennis Reeves 13 May 03
 Designated Landscape Representative Date
 Dennis Reeves/Laurie Cummings

Jon Wood 16 May 03
 Designated Maintenance Representative Date
 Jon Wood

APPROVAL RECOMMENDED: Tom Houston 20 May 03
 Project Manager Date
 Tom Houston

EXHIBIT I - PDS Design Scoping Checklist



PDS Design Scoping Checklist

Project Information

District 05 County SLO Route 101 Kilometer Post (Post Mile) 81.6-83.2 (PM 51-52) EA 0G510K

Description:

The Las Tablas Road Interchange Improvement Project proposes interchange improvements on Route 101 at Las Tablas Road and along Las Tablas Road between Bennett Way and Florence Street in San Luis Obispo County. The study area consists of Route 101 between the Vineyard Drive Overcrossing and the Main Street Overcrossing, which are the interchanges immediately north and south of the Las Tablas Road / Route 101 interchange.

Caltrans Project Manager Tom Houston Phone # (805) 549-3016

Consultant Project Manager /Engineer Matthew Griggs Phone # (916) 858-0642

Caltrans Design Oversight Manager Dave Fapp Phone # (805) 549-3249

Project Development Coordinator Ken Cozad Phone # (916) 653-0971

Project Screening

1. Project Description as Noted in Regional Transportation Plan: _____
2. Project Setting The Community of Templeton, in San Luis Obispo County
 Rural or Urban Suburban
 Current land uses light industry, commercial, agricultural, and residential
 Adjacent land uses light industry, commercial, agricultural, and residential
 Existing landscaping/planting _____
3. Route Adoption: Date 1933 Type of Facility (Freeway, Controlled Access Highway, or Conventional Highway) Freeway
 Freeway Agreement: Date 1954

Description of the Transportation Problem

The need for the project is to address the congestion and related degradation of the Level of Service (LOS) that is projected for the year 2030, at the Las Tablas Road / Route 101 interchange and the adjacent intersections within the study area. Further, there is a need ensure safety for bicyclists and pedestrians, and safe and efficient access for emergency response vehicles. The purpose of this project is to maximize the efficiency of Las Tablas Road and the Las Tablas Road / Route 101 interchange to preempt any degradation of traffic operations. The project is to be designed such that it will not preclude the planned ultimate widening of Route 101 or future interchange improvements.

Proposed Scope of Work

The proposed project is an interchange improvement project on US-101 at the Las Tablas Road / US-101 interchange, including improvements to Las Tablas Road between Bennett Way and Florence Street. There are four alternatives for improvements, as follows:

Alternative 1 will widen Las Tablas Road between Bennett Way and Florence Street to provide five 3.6-m traffic lanes and two 1.5-m bike lanes. In addition, a dedicated right turn lane would also be provided in the WB direction beginning at the NB ramp intersection and terminating 40 meters west of Florence Street. The center lane would be used as a median or a left turn lane as needed. Between the NB ramps and the Florence Street intersection, the EB through lane adjacent to the bike lane would become a dedicated right turn lane and terminate at Florence Street. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road.

The intersections of Las Tablas Road with Bennett Way, Florence Street and the NB and SB US-101 ramps will be adjusted to accommodate the widening of Las Tablas Road. Duncan Road will be widened at the intersection to accommodate a dedicated right turn lane. Traffic signals will be added to all five intersections. The signals at Duncan Road and the SB US-101 ramps will be interconnected to function as a single intersection.

All four US-101 ramps will be resurfaced. To accommodate future traffic demands, the NB and SB off-ramps will be widened to two lanes. A retaining wall will be needed along the widening of the NB off-ramp to avoid any impacts to the residential area adjacent to the State right-of-way.

The two existing 2-lane, 3-span, undercrossing bridges on US-101 will be replaced with a single, 6-lane, 3-span structure to accommodate the ultimate widening of US-101 as indicated in Caltrans' Transportation Concept Report. At the interchange, the traffic lanes, bike lanes, curb, gutter and sidewalk on Las Tablas Road will pass under the center span of the undercrossing structure.

This alternative will require exceptions to Mandatory Design Standards for the following conditions:

- Non-standard interchange spacing, Highway Design Manual, Topic 501.3 (HDM 501.3)
- Non-standard superelevation rates at ramp termini (HDM 202.2)
- Non-standard intersection spacing (HDM 504.3)
- Non-standard design speed on local facility (HDM 101.2)
- Non-standard shoulder width on a freeway (HDM 302.1)

This alternative will require exceptions to Advisory Design Standards for the following conditions:

- Non-standard design speeds at ramp termini (HDM 504.3(1)(a))
- Non-standard side slope (HDM 304.1)
- Non-standard design speed at freeway exits (HDM 504.2(4)(a))
- Non-standard design speed at freeway entrances (HDM 504.2(4)(b))
- Non-standard stopping sight distance at freeway exits (HDM 504.2(5)(a))
- Non-standard angle of intersection (HDM 403.3)
- Non-standard median width for freeways in suburban areas (HDM 305.1(1)(b))

Alternative 2 will widen Las Tablas Road between Bennett Way and Florence Street to provide five 3.6-m traffic lanes and two 1.5-m bike lanes. In addition, a dedicated right turn lane would also be provided in the WB direction beginning at the NB ramp intersection and terminating 40 meters west of Florence Street. The center lane would be used as a median or a left turn lane as needed. Between the NB ramps and the Florence Street intersection, the EB through lane adjacent to the bike lane would become a dedicated right turn lane and terminate at Florence Street. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas

Road.

The intersections of Las Tablas Road with Bennett Way, Florence Street and the NB US-101 ramps will be adjusted to accommodate the widening of Las Tablas Road. The Duncan Road intersection with Las Tablas Road will be deleted and Duncan Road will be obliterated between Las Tablas Road and the CHP facility. The SB US-101 ramps intersection with Las Tablas Road will be relocated to a position 125-m east of Bennett Way. Traffic signals will be added to the four intersections remaining in the project area.

The NB US-101 on-ramp will be resurfaced. To accommodate future traffic demands, the NB off-ramp will be widened to two lanes. A retaining wall will be needed along the widening of the NB off-ramp to avoid any impacts to the residential area adjacent to the State right-of-way. The existing, single lane SB US-101 ramps will be replaced with 2-lane ramps that align with the relocated intersection. A retaining wall will be needed along a portion of the SB off-ramp to minimize any impacts to the CHP facility.

The two existing 3-span, undercrossing bridges on US-101 will be replaced with a single, 6-lane, 2-span structure to accommodate the ultimate width of Las Tablas Road and the ultimate widening of US-101 as indicated in Caltrans' Route Concept Report.

This alternative will require exceptions to Mandatory Design Standards for the following conditions:

- Non-standard intersection spacing (HDM 504.3)
- Non-standard interchange spacing, Highway Design Manual, Topic 501.3 (HDM 501.3)
- Non-standard superelevation rates at ramp termini (HDM 202.2)
- Non-standard design speed on local facility (HDM 101.2)
- Non-standard shoulder width on a freeway (HDM 302.1)

This alternative will require exceptions to Advisory Design Standards for the following conditions:

- Non-standard design speeds an ramp termini (HDM 504.3(1)(a))
- Non-standard side slope (HDM 304.1)
- Non-standard design speed at freeway exits (HDM 504.2(4)(a))
- Non-standard design speed at freeway entrances (HDM 504.2(4)(b))
- Non-standard stopping sight distance at freeway exits (HDM 504.2(5)(a))
- Non-standard angle of intersection (HDM 403.3)
- Non-standard median width for freeways in suburban areas (HDM 305.1(1)(b))

To implement **Alternative 3**, the Duncan Road intersection with Las Tablas Road will be deleted and Duncan Road will be obliterated between Las Tablas Road and the CHP facility. The SB US-101 ramps intersection with Las Tablas Road will be relocated to a position 125-m east of Bennett Way.

Las Tablas Road will be widened between Bennett Way and the relocated SB US-101 ramps intersection to provide one 3.6-m median/left turn lane, four 3.6-m through lanes and two 1.5-m bike lanes. As it passes under the center spans of the existing undercrossing structures, Las Tablas Road will be re-configured to provide one 3.6-m left turn lane, two 3.6-m through lanes and two 1.07-m shoulders. Between the NB US-101 ramps intersection and Florence Street, Las Tablas Road will be widened to provide one 3.6-m median/left turn lane, two 3.6-m through lanes and two 1.5-m bike lanes. A dedicated right turn lane would also be provided in the WB direction beginning at the NB ramp intersection and terminating 40 meters west of Florence Street.

The intersection of Las Tablas Road with Bennett Way will be adjusted to accommodate the widening of Las Tablas Road. Traffic signals will be added to the four intersections remaining in the project area.

The NB US-101 on-ramp will be resurfaced. To accommodate future traffic demands, the NB off-ramp will be widened to two lanes. A retaining wall will be needed along the widening of the NB off-ramp to avoid any impacts to the residential area adjacent to the State right-of-way. The existing, single lane SB US-101 ramps will be replaced with 2-lane ramps that align with the relocated intersection. A retaining wall will be needed along a portion of the SB off-ramp to minimize any impacts to the CHP facility.

The existing undercrossing bridges on US-101 will remain, but the closure walls at abutments 1 and 4 will be removed. Tieback walls will be installed at each abutment to provide room for curb, gutter, sidewalks and bike lanes beneath spans 1 and 3 of the existing undercrossing structures. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road between Bennett Way and Florence Street.

This alternative will require exceptions to Mandatory Design Standards for the following conditions:

- Non-standard interchange spacing, Highway Design Manual, Topic 501.3 (HDM 501.3)
- Non-standard intersection spacing (HDM 504.3)
- Non-standard superelevation rates at ramp termini (HDM 202.2)
- Non-standard design speed on local facility (HDM 101.2)
- Non-standard shoulders on local facility (HDM 308.1)

This alternative will require exceptions to Advisory Design Standards for the following conditions:

- Non-standard design speeds an ramp termini (HDM 504.3(1)(a))
- Non-standard side slope (HDM 304.1)
- Non-standard design speed at freeway exits (HDM 504.2(4)(a))
- Non-standard design speed at freeway entrances (HDM 504.2(4)(b))
- Non-standard stopping sight distance at freeway exits (HDM 504.2(5)(a))
- Non-standard angle of intersection (HDM 403.3)

The proposed project will also include construction of a barrier at the top of the proposed retaining walls and along the base of the retaining walls, as well as reconstruction of metal beam guardrail where needed throughout the project area. Crash cushions will be installed to protect the ends of the existing bridge piers on Alternative 3.

Alternative 5 is a full standard alternative with respect to Caltrans design standards. This alternative proposes to widen Las Tablas Road between Bennett Way and Florence Street to provide five 3.6-m traffic lanes and two 1.5-m bike lanes. The vertical alignment will also be adjusted to provide stopping sight distance for the desired design speed of Las Tablas Road. Curb, gutter and sidewalks will also be added as needed along both sides of Las Tablas Road.

Both existing 2-lane, 3-span undercrossing structures are to be replaced with a single, 6-lane, 2-span structure to accommodate the ultimate width of Las Tablas Road and the ultimate widening of US-101 as indicated in Caltrans' Route Concept Report.

The intersection of Duncan Road and Las Tablas Road will be deleted and Duncan Road will be obliterated for approximately 140 m past the intersection. Bennet Way will be realigned approximately 100 m east and extended through Las Tablas Road to intersect Peterson Ranch Road at Frontier Way. Duncan Road would be realigned to intersect the Bennett Way Extension. The Florence St access to Las Tablas Road will be closed.

The existing diagonal ramps will be replaced with diagonal ramps to achieve standard design speeds, sight distance and superelevation transitions. The NB off-ramp and SB on and off-ramps have two 3.6 m lanes to accommodate future traffic.

Additional effects fo this alternative include the following:

1. Closing the north end of William Street and the west end of Cayucos Avenue.

2. The Park and Ride lot at the corner of Bennet Way and Las Tablas Road will be relocated.
3. The ramp configuration in the NW quadrant will cause the Pacific Bell installation and the CHP facilities to also be relocated.
4. Access for the driveway on the northeast quadrant that connects to Las Tablas Road will be deleted with a new access point connecting to Hawley Street constructed.

The only design exception this alternative cannot address is the exception to Mandatory Design Standards for the following condition:

- Non-standard interchange spacing (HDM 501.3)

Alternative 7 will close all of the ramps at Las Tablas Road to eliminate access to the main line from the local street and convert the existing interchange to a simple undercrossing. Curb, gutter, sidewalk and bike lane delineation will be added along Las Tablas Road where needed.

Local road improvements would need to be in place before this alternative could be implemented. Bennett Way would be extended south from Temple Hills Road to Turkey Ranch Place, and north of Las Tablas Road to intersect Peterson Ranch Road at Frontier Way. Abramson Road would be extended east to intersect North Main Street.

The benefits of this alternative include elimination of traffic congestion on Las Tablas Road, the sub-standard interchange spacing between Vineyard Drive OC and Las Tablas Road, and the sub-standard intersection spacing west of the under crossing. Additional safety for bicyclists and pedestrians will be achieved within the project area through the elimination of intersections and reduction in traffic volumes.

ALTERNATIVE 1

Design Criteria

Type of facility to be considered? (more than one may apply)

Freeway Expressway Conventional Highway Urban Street

Other (specify) _____

Design Speed for highway facilities within the project limit? 130 km/hr

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

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

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

Design Vehicle Selection?

STAA X California _____ Bus _____

Proposed Roadbed and Structure Widths

Forecasted Average Daily Traffic Volumes 64,200

Percent Truck Volume 8.30 %

	Roadbed Width			Structure Width		
	Existing	Proposed	Standard	Existing	Proposed	Standard
State highway						
Lane Widths	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>
Left Shoulder	<u>1.2</u>	<u>1.2</u>	<u>1.5</u>	<u>1.2</u>	<u>1.6</u>	<u>1.5</u>
Right Shoulder	<u>2.4</u>	<u>2.4</u>	<u>3.0</u>	<u>2.4</u>	<u>2.4</u>	<u>3.0</u>
Median Width	<u>---</u>	<u>---</u>	<u>---</u>	<u>14.6</u>	<u>14.6</u>	<u>18.6</u>
Bicycle Lane	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Local Street						
Lane Widths	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>---</u>	<u>---</u>	<u>---</u>
Left Shoulder	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Right Shoulder	<u>1.2</u>	<u>1.5</u>	<u>1.2</u>	<u>---</u>	<u>---</u>	<u>---</u>
Median Width	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Bicycle Lane	<u>1.5</u>	<u>1.5</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>

Median Barrier Existing Thrie Beam
Proposed (Concrete Barrier / Thrie Beam / Other) No Change

Roadway Design Scoping

Mainline Operations

Mainline Highway Widening

Existing pavement to be rehabilitated with Asphalt Concrete / Rubberized AC / PCC.

Widen existing _____ lane facility to _____ lanes. R/W acquisition for _____ lanes.

Local street structures to span _____ lanes of highway (for future requirements).

Upgrade existing facility to:

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

Ramp / Street Intersection Improvements

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

Operational Improvements**Truck Climbing Lane**

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

Auxiliary Lanes

- When 600 M Between Successive On-Ramps.
- Two Lane Exit Ramps Have 400 M Auxiliary Lane.
- Weaving < 500 M between Off-Ramp and On-Ramp.
- Other _____

Right of Way Access Control

- Existing access control extends at least 15 m beyond end of curb return, radius or taper.
- New construction access control extends at least 30 m (urban areas) or 100 m (rural areas) beyond end of curb returns, radius or taper.
- Other _____

Highway Planting

- | | | |
|--------------------------------------|---------------------------------|-------------------------------------|
| <input type="checkbox"/> Replacement | <input type="checkbox"/> Median | <input type="checkbox"/> Mitigation |
|--------------------------------------|---------------------------------|-------------------------------------|

Safety

- | | |
|---|---|
| <input type="checkbox"/> Off-Freeway Access | <input type="checkbox"/> Maintenance Vehicle Pull-Out |
|---|---|

Roadside Management

- | | | |
|---------------------------------------|---|--|
| <input type="checkbox"/> Slope paving | <input checked="" type="checkbox"/> Gore paving | <input type="checkbox"/> Roadside paving |
|---------------------------------------|---|--|

Stormwater

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Erosion control | <input checked="" type="checkbox"/> Drainage | <input checked="" type="checkbox"/> Slope design |
|---|--|--|

Structures

- | | | |
|---|---------------------------------------|--|
| <input type="checkbox"/> New Bridge | <input type="checkbox"/> Bridge Rehab | <input checked="" type="checkbox"/> Retaining Wall |
| <input checked="" type="checkbox"/> Other <u>Bridge Replacement</u> <input type="checkbox"/> On STRAIN list for _____ | | |

ALTERNATIVE 2

Design Criteria

Type of facility to be considered? (more than one may apply)

Freeway Expressway Conventional Highway Urban Street

Other (specify) _____

Design Speed for highway facilities within the project limit? 130 km/hr

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

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

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

Design Vehicle Selection?

STAA X California _____ Bus _____

Proposed Roadbed and Structure Widths

Forecasted Average Daily Traffic Volumes 63,800

Percent Truck Volume 8.30 %

	Roadbed Width			Structure Width		
	Existing	Proposed	Standard	Existing	Proposed	Standard
State highway						
Lane Widths	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>
Left Shoulder	<u>1.2</u>	<u>1.2</u>	<u>1.5</u>	<u>1.2</u>	<u>1.6</u>	<u>1.5</u>
Right Shoulder	<u>2.4</u>	<u>2.4</u>	<u>3.0</u>	<u>2.4</u>	<u>2.4</u>	<u>3.0</u>
Median Width	<u>---</u>	<u>---</u>	<u>---</u>	<u>14.6</u>	<u>14.6</u>	<u>18.6</u>
Bicycle Lane	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Local Street						
Lane Widths	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>---</u>	<u>---</u>	<u>---</u>
Left Shoulder	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Right Shoulder	<u>1.2</u>	<u>1.5</u>	<u>1.2</u>	<u>---</u>	<u>---</u>	<u>---</u>
Median Width	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Bicycle Lane	<u>1.5</u>	<u>1.5</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>

Median Barrier Existing Thrie Beam
Proposed (Concrete Barrier / Thrie Beam / Other) No Change

Roadway Design Scoping

Mainline Operations

Mainline Highway Widening

Existing pavement to be rehabilitated with Asphalt Concrete / Rubberized AC / PCC.

Widen existing _____ lane facility to _____ lanes. R/W acquisition for _____ lanes.

Local street structures to span _____ lanes of highway (for future requirements).

Upgrade existing facility to:

Expressway Standards Freeway Standards

- Controlled Access Highway
- Traversable Highway
- Improve Vertical Clearance
- Adequate Falsework Clearance

Ramp / Street Intersection Improvements

- New Signals
- Right Turn Lanes
- Merging Lanes
- Left Turn Lanes
- Interchange Spacing
- Intersection Spacing
- Single Lane Ramps Exceeding 300 M Widened To Two Lanes
- Other _____
- Modify Signals
- Widening For Localized Through Lanes
- Deceleration / Acceleration Lanes
- > 300 VPH Left Turn (Requires Double Left Turn)
- Ramps Intersect Local Street < 4 % Grade
- Exit Ramps > 1,500 VPH Designed As Two Lane Exit

Operational Improvements

Truck Climbing Lane

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

Auxiliary Lanes

- When 600 M Between Successive On-Ramps.
- Two Lane Exit Ramps Have 400 M Auxiliary Lane.
- Weaving < 500 M between Off-Ramp and On-Ramp.
- Other _____

Right of Way Access Control

- Existing access control extends at least 15 m beyond end of curb return, radius or taper.
- New construction access control extends at least 30 m (urban areas) or 100 m (rural areas) beyond end of curb returns, radius or taper.
- Other _____

Highway Planting

- Replacement
- Median
- Mitigation

Safety

- Off-Freeway Access
- Maintenance Vehicle Pull-Out

Roadside Management

- Slope paving
- Gore paving
- Roadside paving

Stormwater

- Erosion control
- Drainage
- Slope design

Structures

- New Bridge
- Bridge Rehab
- Retaining Wall
- Other Bridge Replacement
- On STRAIN list for _____

ALTERNATIVE 3

Design Criteria

Type of facility to be considered? (more than one may apply)

Freeway Expressway Conventional Highway Urban Street

Other (specify) _____

Design Speed for highway facilities within the project limit? 130 km/hr

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

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

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

Design Vehicle Selection?

STAA X California _____ Bus _____

Proposed Roadbed and Structure Widths

Forecasted Average Daily Traffic Volumes 70,800

Percent Truck Volume 8.30 %

	Roadbed Width			Structure Width		
	Existing	Proposed	Standard	Existing	Proposed	Standard
State highway						
Lane Widths	---	---	---	---	---	---
Left Shoulder	---	---	---	---	---	---
Right Shoulder	---	---	---	---	---	---
Median Width	---	---	---	---	---	---
Bicycle Lane	---	---	---	---	---	---
Local Street						
Lane Widths	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	---	---	---
Left Shoulder	---	---	---	---	---	---
Right Shoulder	<u>1.2</u>	<u>1.0 - 1.5</u>	<u>1.2</u>	---	---	---
Median Width	---	---	---	---	---	---
Bicycle Lane	<u>1.5</u>	<u>1.5</u>	---	---	---	---

Median Barrier Existing Thrie Beam
Proposed (Concrete Barrier / Thrie Beam / Other) No Change

Roadway Design Scoping

Mainline Operations

Mainline Highway Widening

Existing pavement to be rehabilitated with Asphalt Concrete / Rubberized AC / PCC.

Widen existing _____ lane facility to _____ lanes. R/W acquisition for _____ lanes.

Local street structures to span _____ lanes of highway (for future requirements).

Upgrade existing facility to:

Expressway Standards Freeway Standards

- Controlled Access Highway
- Traversable Highway
- Improve Vertical Clearance
- Adequate Falsework Clearance

Ramp / Street Intersection Improvements

- New Signals
- Modify Signals
- Right Turn Lanes
- Widening For Localized Through Lanes
- Merging Lanes
- Deceleration / Acceleration Lanes
- Left Turn Lanes
- > 300 VPH Left Turn (Requires Double Left Turn)
- Interchange Spacing
- Ramps Intersect Local Street < 4 % Grade
- Intersection Spacing
- Exit Ramps > 1,500 VPH Designed As Two Lane Exit
- Single Lane Ramps Exceeding 300 M Widened To Two Lanes
- Other _____

Operational Improvements

Truck Climbing Lane

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

Auxiliary Lanes

- When 600 M Between Successive On-Ramps.
- Two Lane Exit Ramps Have 400 M Auxiliary Lane.
- Weaving < 500 M between Off-Ramp and On-Ramp.
- Other _____

Right of Way Access Control

- Existing access control extends at least 15 m beyond end of curb return, radius or taper.
- New construction access control extends at least 30 m (urban areas) or 100 m (rural areas) beyond end of curb returns, radius or taper.
- Other _____

Highway Planting

- Replacement
- Median
- Mitigation

Safety

- Off-Freeway Access
- Maintenance Vehicle Pull-Out

Roadside Management

- Slope paving
- Gore paving
- Roadside paving

Stormwater

- Erosion control
- Drainage
- Slope design

Structures

- New Bridge
- Bridge Rehab
- Retaining Wall
- Other Tie Back Walls
- On STRAIN list for _____

ALTERNATIVE 5

Design Criteria

Type of facility to be considered? (more than one may apply)

Freeway Expressway Conventional Highway Urban Street

Other (specify) _____

Design Speed for highway facilities within the project limit? 130 km/hr

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

Design Capacity: Level of Service to be maintained over the design period is?
Mainline D Ramp D Local Street C Weaving Sections N/A

Design Vehicle Selection?

STAA X California _____ Bus _____

Proposed Roadbed and Structure Widths

Forecasted Average Daily Traffic Volumes 63,800

Percent Truck Volume 8.30 %

	Roadbed Width			Structure Width		
	Existing	Proposed	Standard	Existing	Proposed	Standard
State highway						
Lane Widths	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>
Left Shoulder	<u>1.2</u>	<u>1.2</u>	<u>1.5</u>	<u>1.2</u>	<u>1.6</u>	<u>1.5</u>
Right Shoulder	<u>2.4</u>	<u>2.4</u>	<u>3.0</u>	<u>2.4</u>	<u>2.4</u>	<u>3.0</u>
Median Width	<u>---</u>	<u>---</u>	<u>---</u>	<u>14.6</u>	<u>14.6</u>	<u>18.6</u>
Bicycle Lane	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Local Street						
Lane Widths	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>	<u>---</u>	<u>---</u>	<u>---</u>
Left Shoulder	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Right Shoulder	<u>1.2</u>	<u>1.5</u>	<u>1.2</u>	<u>---</u>	<u>---</u>	<u>---</u>
Median Width	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Bicycle Lane	<u>1.5</u>	<u>1.5</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>

Median Barrier Existing Thrie Beam
Proposed (Concrete Barrier / Thrie Beam / Other) No Change

Roadway Design Scoping

Mainline Operations

Mainline Highway Widening

Existing pavement to be rehabilitated with Asphalt Concrete / Rubberized AC / PCC.

Widen existing _____ lane facility to _____ lanes. R/W acquisition for _____ lanes.

Local street structures to span _____ lanes of highway (for future requirements).

Upgrade existing facility to:

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

Ramp / Street Intersection Improvements

- New Signals
- Right Turn Lanes
- Merging Lanes
- Left Turn Lanes
- Interchange Spacing
- Intersection Spacing
- Single Lane Ramps Exceeding 300 M Widened To Two Lanes
- Other _____
- Modify Signals
- Widening For Localized Through Lanes
- Deceleration / Acceleration Lanes
- > 300 VPH Left Turn (Requires Double Left Turn)
- Ramps Intersect Local Street < 4 % Grade
- Exit Ramps > 1,500 VPH Designed As Two Lane Exit

Operational Improvements

Truck Climbing Lane

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

Auxiliary Lanes

- When 600 M Between Successive On-Ramps.
- Two Lane Exit Ramps Have 400 M Auxiliary Lane.
- Weaving < 500 M between Off-Ramp and On-Ramp.
- Other _____

Right of Way Access Control

- Existing access control extends at least 15 m beyond end of curb return, radius or taper.
- New construction access control extends at least 30 m (urban areas) or 100 m (rural areas) beyond end of curb returns, radius or taper.
- Other _____

Highway Planting

- Replacement
- Median
- Mitigation

Safety

- Off-Freeway Access
- Maintenance Vehicle Pull-Out

Roadside Management

- Slope paving
- Gore paving
- Roadside paving

Stormwater

- Erosion control
- Drainage
- Slope design

Structures

- New Bridge
- Bridge Rehab
- Retaining Wall
- Other Bridge Replacement
- On STRAIN list for _____

ALTERNATIVE 7

Design Criteria

Type of facility to be considered? (more than one may apply)

Freeway Expressway Conventional Highway Urban Street

Other (specify) _____

Design Speed for highway facilities within the project limit? 130 km/hr

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

Design Capacity: Level of Service to be maintained over the design period is?
Mainline D Ramp D Local Street C Weaving Sections N/A

Design Vehicle Selection?

STAA X California _____ Bus _____

Proposed Roadbed and Structure Widths

Forecasted Average Daily Traffic Volumes 70,800

Percent Truck Volume 8.30 %

	Roadbed Width			Structure Width		
	Existing	Proposed	Standard	Existing	Proposed	Standard
State highway						
Lane Widths	---	---	---	---	---	---
Left Shoulder	---	---	---	---	---	---
Right Shoulder	---	---	---	---	---	---
Median Width	---	---	---	---	---	---
Bicycle Lane	---	---	---	---	---	---
Local Street						
Lane Widths	3.6	3.3 - 3.6	3.6	---	---	---
Left Shoulder	---	---	---	---	---	---
Right Shoulder	1.2	1.0 - 1.5	1.2	---	---	---
Median Width	---	---	---	---	---	---
Bicycle Lane	1.5	1.5	---	---	---	---

Median Barrier Existing Thrie Beam
Proposed (Concrete Barrier / Thrie Beam / Other) No Change

Roadway Design Scoping

Mainline Operations

Mainline Highway Widening

Existing pavement to be rehabilitated with Asphalt Concrete / Rubberized AC / PCC.

Widen existing _____ lane facility to _____ lanes. R/W acquisition for _____ lanes.

Local street structures to span _____ lanes of highway (for future requirements).

Upgrade existing facility to:

- Expressway Standards Freeway Standards
 Controlled Access Highway Traversable Highway

- Improve Vertical Clearance
- Adequate Falsework Clearance

Ramp / Street Intersection Improvements

- New Signals
- Right Turn Lanes
- Merging Lanes
- Left Turn Lanes
- Interchange Spacing
- Intersection Spacing
- Single Lane Ramps Exceeding 300 M Widened To Two Lanes
- Other _____
- Modify Signals
- Widening For Localized Through Lanes
- Deceleration / Acceleration Lanes
- > 300 VPH Left Turn (Requires Double Left Turn)
- Ramps Intersect Local Street < 4 % Grade
- Exit Ramps > 1,500 VPH Designed As Two Lane Exit

Operational Improvements

Truck Climbing Lane

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

Auxiliary Lanes

- When 600 M Between Successive On-Ramps.
- Two Lane Exit Ramps Have 400 M Auxiliary Lane.
- Weaving < 500 M between Off-Ramp and On-Ramp.
- Other _____

Right of Way Access Control

- Existing access control extends at least 15 m beyond end of curb return, radius or taper.
- New construction access control extends at least 30 m (urban areas) or 100 m (rural areas) beyond end of curb returns, radius or taper.
- Other _____

Highway Planting

- Replacement
- Median
- Mitigation

Safety

- Off-Freeway Access
- Maintenance Vehicle Pull-Out

Roadside Management

- Slope paving
- Gore paving
- Roadside paving

Stormwater

- Erosion control
- Drainage
- Slope design

Structures

- New Bridge
- Bridge Rehab
- Retaining Wall
- Other Tie Back Walls
- On STRAIN list for _____

Additional Studies

Preliminary Evaluation provided by:

Project Engineer Matthew N. Griggs Date 2/18/04
Matthew Griggs

Design Oversight Manager David J. Fapp Date 2-24-04
David Fapp

Design Concept approved by:

Not Required - full standard alt included
Project Development Coordinator _____ Date _____
Ken Cozad

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

Reviewed by:

Caltrans Project Manager Thomas E. Houston Date 2-24-04
Thomas E. Houston

**EXHIBIT J - Traffic Management Plan Data
Sheet/Checklist**

EXHIBIT K - Distribution List

DISTRICT 5 DISTRIBUTION FOR VARIOUS REPORTS

PSR's & PSSR's

Project Reports

Project Report - Minor B

Division of Design (2)
Transp Prog. (2) - J Nicholas
FHWA - Hiep Buu
Hdq Maint - Rob Marsh (only for HA22, HA 42)
Hdq Maint - Roger Hunter for (HA21)
Hdq Traffic - Raul Sanchez (for HB4N and HB4C)
Hdq Traffic Op - Roy Peterson (For HB1)
Project Manager
Design Engineer (3) - Original + 2 cc's
Resident Engineer (held by Design Engineer)
Dist Maint - M Giuliano
Dist Traffic - N Sams
D-10 Traffic - Hassan Marei
Traffic Ops - Paul McClintic
Materials Lab - D Dhillon
RW - J Maddux
Planning - Sarah Chesebro
PPM - T Rix
Surveys - Bob Davies
Records Resource Center - V Pozuelo
ESC/OPPM - Tigi Thomas *
HQ Environmental - Henry Bass

Division of Design (2)
FHWA - Hiep Buu
Project Manager
Design Engineer (3) - Original + 2 cc's
Materials Lab: D Dhillon
Res. Engineer - (held by Design Engineer)
Dist Maint - M Giuliano
Dist Traffic - N Sams
R/W - J Maddux
Planning - S Chesebro
PPM - T Rix
ESC/OPPM - Tigi Thomas *
Records Resource Center - V Pozuelo
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Dist Maint - M Giuliano
Dist Traffic - N Samms
R/W - J Maddux
PM - T Rix
Records Resource Center - V Pozuelo
Surveys - Bob Davies
HQ Environmental - Henry Bass

Distribution:

* Projects involving Structures

FHWA - Federal Resources Office, 1120 N Street, Room 3500, Sacramento, CA 95814

Please notify Kim Walterscheid, District 6, Design I, at CALNET 8-425-3841 for changes in the distribution list

Revised:
2/24/2004