

Memorandum

To: Melvin L. Hodges-Chief
Office of Project Studies

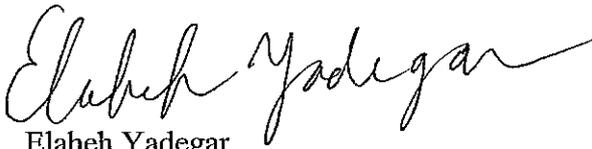
Date: March 26, 2003

File: 07-LA-60/605 HB-5
SR60/I605
HOV DIRECT CONNECTOR
SR-60 KP 17.9/21.2
(PM 11.1/PM 13.2)
I-605 KP R27.2/R31.0
(PM R16.9/PM R19.3)
07186-23560K

From: Elaheh Yadegar
Department of Transportation
Division of Planning
Office of Project Studies

Subject: Approved Project Initiation Document (PID)

Enclosed for your file are the original and one copy of the approved Project Studies Report - Project Development Support (PSR-PDS) dated March 26, 2003 for the above referenced project.



Elaheh Yadegar
Senior Transportation Engineer
Office of Project Studies

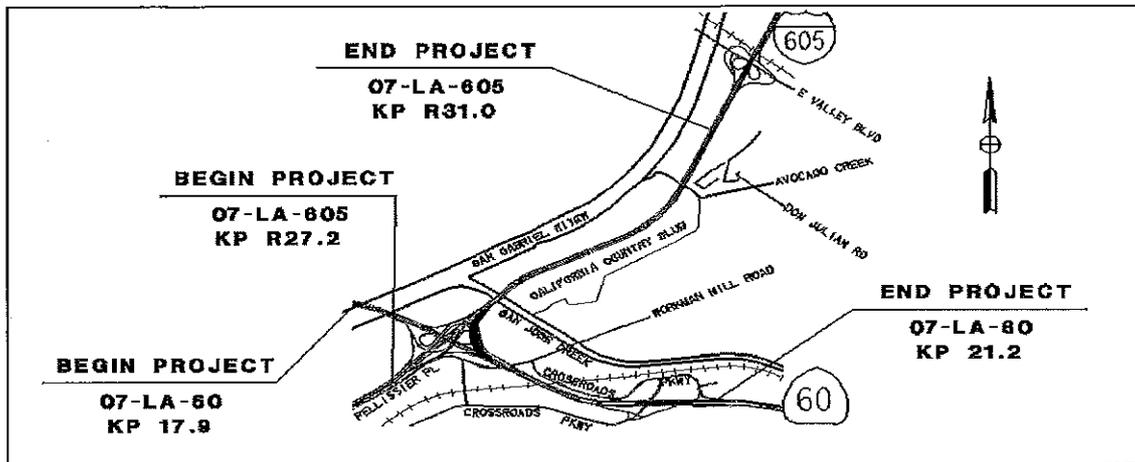
Attachment(s): Project Study Report (Project Development Support)

c: Project Studies Files



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 components. The remaining support and capital components of the project are preliminary estimates and are not suitable for programming purposes. Either a Supplement Project Study Report or a Project Report will serve as the programming document for the remaining support and capital components of the project.



On Route State Route SR-60/Interstate I-605 Interchange
From SR-60 KP 17.9/I-605 KP R27.2
To SR-60 KP 21.2/I-605 KP R31.0

APPROVAL RECOMMENDED BY:

Maen Shaar
MAEN SHAAR, PROJECT MANAGER

CONCURRED BY:

W. H. Reagan
WILLIAM H. REAGAN, DESIGN DIVISION CHIEF

APPROVED BY:

Douglas R. Failing
DOUGLAS R. FAILING, DISTRICT DIRECTOR

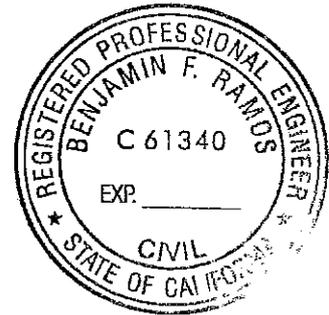
3-19-03

DATE

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


REGISTERED CIVIL ENGINEER

2 - 20 - 2003
DATE



PROJECT STUDY REPORT (Project Development Support)

1. INTRODUCTION

Caltrans proposes to improve the effectiveness of this District's High Occupancy Vehicle (HOV) System for commuters from the eastern part of Los Angeles County to Downtown Los Angeles by continuing the proposed HOV lanes on State Route SR-60 to the existing HOV lanes on Interstate I-10 via Interstate I-605. This will be accomplished by constructing two HOV Direct connector projects at the SR-60/I-605 interchange (Southern Phase) and the I-10/I-605 interchange (Northern Phase). (See Attachment R)

This Project Study Report – Project Development Support (PSR-PDS) addresses the southern phase by proposing to construct an elevated HOV direct connector within the freeway median area to provide direct connections for HOV traffic from westbound SR-60 to northbound I-605 and from southbound I-605 to eastbound SR-60. This HOV connector will improve the effectiveness of the HOV System for HOV commuters. The viable alternatives considered in this report include no build, minimum build, minimum standard build and full standard build. The estimated construction cost for these proposals ranges from \$130 million to \$280 million in 2002 dollars including the right of way cost. An estimated support cost of \$8.16 million (in 2002 dollars) to complete the Project Approval and the Environmental Document (PA/ED) is anticipated for this southern phase of the project. It is anticipated that funding for this southern phase of the project will be obtained from both the State Transportation Improvement Program-Interregional Transportation Improvement Program (STIP-ITIP), as provided by Caltrans, and from the State Transportation Improvement Program-Regional Transportation Improvement Program (STIP-RTIP) through Metropolitan Transportation Authority's (MTA) call for projects.

2. BACKGROUND

SR-60 known as the Pomona Freeway, is a major urban freeway which serves as a primary commuter corridor that links the Los Angeles Central Business District (LACBD) and communities located in the San Gabriel Valley, Pomona Valley, Riverside, and San Bernardino Counties. Addition of HOV lanes on SR-60 east of I-605 to SR-57 is currently in the Plans, Specifications and Estimates (PS&E) phase with EA 129401. Proposed lane and shoulder configurations (EA 129401) in each direction are 0.7 m inside shoulder, one 3.3 m HOV lane, four 3.3 mixed flow lanes, 3.6 m mixed flow lane, and 2.4 m outside shoulder. Located at Colima Rd. and Albatross Rd., approximately 10 km east of this project limits, is

the Puente Hills Mall Park and Ride facility. There are five structures (San Gabriel River Bridge, River Access Road Undercrossing, Workman Mill Road Undercrossing, Union Pacific Railroad Overhead, Crossroad Parkway Overcrossing) on SR-60 within this project limits.

I-605 traverses an urbanized area, which includes 14 cities in Los Angeles and Orange Counties: Whittier, City of Industry, and Baldwin Park are within this project limits. I-605 functions as a major collector distributor route feeding routes 91, 405, 10, 60, 210, and 105. There are existing HOV lanes on I-605 from SR-91 to I-10. Existing lane and shoulder configurations in each direction are 0.6 m inside shoulder, one 3.3 m HOV lane, four 3.3 m mixed flow lanes, and 3.0 m outside shoulder. There are two structures (San Jose Creek Bridge and SR-60/I-605 Separation) within this project limits.

HOV lanes are currently being constructed on the I-10 from east of I-605 to Baldwin Avenue in the City of El-Monte, EA 1069U4. These HOV lanes will join to the existing HOV lanes located between the City of El Monte and Downtown Los Angeles.

3. NEED AND PURPOSE

A. Purpose

To improve the effectiveness of the District's HOV System for HOV commuters from the eastern part of the Los Angeles County to downtown Los Angeles, the proposed HOV lanes on SR-60 east of I-605 (EA 129401) need to be connected to the existing HOV lanes on I-605 and proposed HOV lanes on I-10 west of I-605 (construction stage EA 1069U4). To accomplish this, HOV direct connectors need to be constructed at the SR-60/I-605 (Southern Phase) Interchange and the I-10/I-605 Interchange (Northern Phase).

This southern phase of the project proposes to add an elevated HOV direct connector within the freeway median area to provide direct connections for HOV traffic from westbound SR-60 to northbound I-605 and from southbound I-605 to eastbound SR-60.

In coordination with this project phase, another project phase (northern phase EA 23570K) is proposing an elevated HOV direct connector to connect the HOV traffic from northbound I-605 to westbound I-10 and eastbound I-10 to southbound I-605.

These two projects phases will provide system continuity for HOV commuters from the eastern part of the Los Angeles County area to downtown Los Angeles.

Direct HOV connectors for the SR-60/I-605 and I-10/I-605 interchanges are consistent with the MTA HOV Guiding Principles, which states that HOV Gap Closures and Freeway-to-Freeway HOV Connectors are areas where future capital investments in the HOV system plan are needed. This proposed project phase is also consistent with the following Caltrans goals:

- Reliability-Reduce traveler delays due to roadwork and incidents
- Productivity-Improve the efficiency of the transportation system.

B. Need

An HOV direct connector for the SR-60/I-605 interchange would provide efficient HOV movement. Without an HOV direct connector, HOV users traveling on the existing HOV lanes on I-605 to and from HOV lanes on SR-60 (EA 129401) will have to exit the HOV lane, merge back into the mixed-flow lanes before entering the connector ramps, and then merge into the HOV lane. This movement will interfere with vehicles traveling on mainlines, significantly deteriorate the effectiveness on the HOV network and reduce the safety and operation of the existing freeways.

C. Existing and Forecasted Traffic Conditions

1. Existing Condition

The existing Average Annual Daily Traffic (AADT) for each segment within the limits of this southern phase of the project is 259,000 (SR-60) and 217,000 (I-605). See Attachment H for current peak traffic volumes for mainline and ramps within the SR-60/I-605 interchange.

2. Forecasted Condition

A significant growth in carpools/vanpools occurred on freeways that providing HOV lanes, when compared with the number of carpools/vanpools remaining relatively constant or decreasing for freeways without HOV lanes. The projected HOV volumes (Year 2035) are estimated to compare with the current volumes to ensure proposed HOV direct connector can accommodate future HOV demand without exceeding design capacity, specified in Highway Capacity Manual (HCM). Attachment H shows projected volumes in each direction of the HOV direct connector will not exceed the HOV design capacity of 2000 vplph. HOV volumes on I-605 (both directions) and eastbound SR-60 will exceed the current HOV peak hour lane capacity. This requires that an additional HOV lane be added on I-605 in both directions, between the I-10/I-605 and SR-60/I-605 interchanges, and eastbound SR-60, east of the SR-60/I-605 interchange, to meet the future demand. Note: The Draft Transportation Concept Report (TCR) for SR-60 recommends 1 HOV lane in each direction and the Draft TCR for I-605 recommends 2 HOV lanes in each direction within the southern phase of this project limits.

Table 1 below shows Level Of Service (LOS) Criteria for SR-60/I-605 (southern phase), within the project limits and the proposed HOV direct connector.

Table 1

LOS	Volume / Capacity (V/C) Ratio	I-10 (EB/WB) Average Speed (MPH)	I-605 (NB/SB) Average Speed (MPH)	Hours of Congestion
A	< 0.35	55 +	55 +	Free flow – excellent Operation
B	0.36 - 0.53	55	55	Stable flow – Very good operation
C	0.54 - 0.76	50-54	50-54	Stable flow – good operation
D	0.77 - 0.92	40-49	40-49	Toward unstable flow – Fair operation
E	0.93 - 1.00	30-39	30-39	Unstable flow – Poor operation
F-0	1.01 – 1.25	< 30	< 30	Forced flow-Queues form 15 min – 1 hour congestion
F-1	1.26 – 1.35			1 hour to 2 hours congestion
F-2	1.36 – 1.45			2 hours to 3 hours congestion
F-3	> 1.46			3 or more hours congestion

Tables 2, 3, and 4 below show the existing and projected 2035 LOS for SR-60 and I-605 within the southern phase of this project limits and the proposed HOV direct connector based on the criteria shown on Table 1. See Attachment H for current and projected 2035 peak hour traffic volumes for mainline and ramps within the SR-60/I-605 interchange.

Table 2: SR-60 Operations

Peak Period	Direction	Year 2002	Year 2035			
		Existing*	Alternative 1 No Build	Alternative 2 Minimum Build HOV Direct Connector	Alternative 3 Minimum Standard Build HOV Direct Connector	Alternative 4 Full Standard Build HOV Direct Connector
A.M. Peak Hour	WB	LOS E	LOS F-0	LOS F-0	LOS F-0	LOS D
	WB HOV*	LOS D	LOS E	LOS E	LOS E	LOS E
	WB Through the Interchange	LOS F-1	LOS F-2	LOS F-2 LOS F-0**	LOS F-2 LOS F-0**	LOS F-0 LOS D**
P.M. Peak Hour	EB	LOS E	LOS F-0	LOS F-0	LOS F-0	LOS F-0
	EB HOV*	LOS E	LOS F-0	LOS F-0	LOS F-0	LOS F-0

*The assumption is that EA 129400 is the existing condition for this project.

**With Optional Improvements

The LOS for SR-60 (mainline and HOV lane) during AM/PM peak hour is listed in above Table 2. Alternatives 2 and 3 are expected to maintain a no build LOS of F-0 for both directions on the mainline. Alternative 4 is expected to improve the westbound mainline LOS from a no build LOS F-0 to LOS D. Optional improvements for each build alternative are expected to improve westbound mainline LOS through the interchange due to the increase in capacity from an additional mixed flow lane. All build alternatives are expected to maintain a no build westbound HOV LOS E and a no build eastbound HOV LOS F-0.

Table 3: I-605 Operations

Peak Period	Direction	Year 2002	Year 2035			
		Existing	Alternative 1 No Build	Alternative 2 Minimum Build HOV Direct Connector	Alternative 3 Minimum Standard Build HOV Direct Connector	Alternative 4 Full Standard Build HOV Direct Connector
A.M. Peak Hour	SB	LOS E	LOS F-1	LOS F-0	LOS F-0	LOS F-0
	SB HOV	LOS B	LOS F-0	LOS F-0	LOS B	LOS C
P.M. Peak Hour	NB	LOS D	LOS F-0	LOS F-0	LOS F-0	LOS F-0
	NB HOV	LOS C	LOS F-0	LOS F-0	LOS B	LOS C

The LOS for I-605 (mainline and HOV lane) during AM/PM peak hour is listed in above Table 3. All build alternatives are expected to improve the southbound mainline LOS from a no build LOS F-1 to LOS F-0. All build alternatives for the northbound mainline are expected to maintain a no build LOS of F-0. Alternative 3, which proposes an additional HOV lane in each direction, is expected to maintain or improve the existing HOV LOS B and LOS C to LOS B in both directions. Alternative 4, which also proposes an additional HOV lane in each direction, is expected to result in a LOS C in both directions. Alternative 2 maintains the existing 1 HOV lane in each direction, which will result in HOV demand exceeding the designed capacity and an expected downgrade in LOS to F-0.

Table 4: Proposed HOV Direct Connector Operations

Peak Period	Direction	Year 2002	Year 2035			
		Existing	Alternative 1 No Build	Alternative 2 Minimum Build HOV Direct Connector	Alternative 3 Minimum Standard Build HOV Direct Connector	Alternative 4 Full Standard Build HOV Direct Connector
A.M. Peak Hour	SB I-605 to EB SR-60	N/A	N/A	LOS A	LOS A	LOS A
P.M. Peak Hour	SB I-605 to EB SR-60	N/A	N/A	LOS B	LOS B	LOS A

N/A - Not Applicable

accidents occurring on I-605 (624 accidents occurred on I-605 only and 116 accidents occurred on ramps at I-605) within the project phase limits. The accidents on I-605 included 3 fatalities, 213 injuries and 524 property damage only. From the total of 740 accidents, 376 (50.8 %) were rear end, 163 (22.0%) were sideswipe, 159 (21.1%) were hit object and 42 (6.1%) were miscellaneous. Majority of the accidents occurring on the mainline were rear-end and sideswipe collisions, which are indicative of stop and go traffic due to congestion along I-605.

High Accident Concentration Locations study (Caltrans Table C's) are generated when the number and significance is met for different time periods. A study was generated for the period between 10/1/98 and 9/30/01 on SR-60. From this study, westbound KP 18.0 to westbound off ramp to Peck Road, eastbound KP 18.5 to eastbound off ramp to I-605, and westbound KP 20.4 to KP 20.8 were marked for a required investigation. From Traffic Investigation report A014-111A dated February 4, 2002 for westbound KP 18.0 to off ramp to Peck Road, no action was recommended due to the widening of Peck Road off ramp, project EA 07-40100. Traffic Investigation report A014-112A dated June 19, 2002 for eastbound KP 18.5 to eastbound off ramp to I-605 concluded there was no unusual roadway condition and no accident was related to roadway deficiency. Therefore no action was recommended. From Traffic Investigation report A984-286W dated 12/28/98 for westbound KP 20.3 to KP 20.7, speeding on wet pavement and other driver's errors were the cause for a majority of all accidents. Furthermore, field review showed no apparent roadway deficiencies and no action was recommended.

Caltrans Table C study was generated for a period between 10/1/98 and 9/30/01 on I-605. From this study southbound KP R27.7 to KP R28.0, southbound KP R28.2 to KP R28.5, and northbound KP R28.2 to KP R28.5 were marked for investigation. From Traffic Investigation report A972-218A dated 10/5/99 for southbound KP R28.2 to KP R28.5, accidents were congestion related. There was no unusual roadway condition and no accident was related to roadway deficiency. Furthermore, no action was recommended at the time. From Traffic Investigation report A964-211A dated 10/9/96 for northbound KP R28.2 to R28.5, primary collision factors were 56% speeding, 13% improper turn, 9% Driving Under the Influence, and 22% other violations. At the time of the investigation, there was no median shoulder due to on-going construction of the HOV lane, the roadway was in satisfactory condition, and no action was recommended.

All build alternatives propose an elevated HOV direct connector within the freeway median area to provide HOV system continuity. Optional improvements will add a mixed flow lane on westbound SR-60 through the SR-60/I-605 interchange and also will modify the southbound I-605 to eastbound SR-605 loop connector by providing an additional truck lane (see Alternatives, Section 4). These improvements and the construction of the HOV direct connector would reduce the number of congestion and weaving related accidents.

4. **ALTERNATIVES**

There are four alternatives proposed for this southern phase of the project, including the “no build” alternative and three “build” alternatives.

With limited land availability and the existing geology, alternatives have been studied to minimize right of way as well as environmental impacts. Due to site constraints, the proposed alignment will require acquisition of right of way, construction of new bridges, widening of existing bridges, slope mitigation, retaining walls and/or soundwalls.

A. Alternative 1: No Build

The “No Build” Alternative will maintain the current configuration of the existing highway. HOV users traveling on the existing HOV lanes on I-605 to and from HOV lanes on SR-60 (EA 129401) will have to exit the HOV lane, merge back into the mixed-flow lanes, and then merge into the HOV lane. This merging will have a negative effect on the operations of both freeways. This Alternative also results in a discontinuous HOV system for HOV commuters traveling from the eastern part of the Los Angeles Metropolitan area to downtown Los Angeles.

B. Alternative 2: Minimum Build HOV Direct Connector

Alternative 2 proposes to construct a two-lane elevated HOV direct connector within the freeway median area to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605. SR-60 and I-605 will be widened within the limits of this project phase to accommodate the HOV connector in the median area. The proposed lane width and shoulder width configurations on I-605 will remain as existing. The proposed lane width and shoulder width on SR-60 will be the same as project EA 129401. Several structures will be widened/replaced and several connectors will be modified. See Attachment B for Typical Cross Sections and Attachment C for Layouts. The estimated construction cost for this alternative ranges from \$130 million to \$160 million including right of way cost.

Optional Improvements:

Southbound I-605 to eastbound SR-60 loop connector has been identified as a freeway to freeway connector that is of concern to traffic and traffic flow (See Attachment H). This option proposes to modify the southbound I-605 to eastbound SR-60 loop connector by adding an additional 4.9 m wide truck lane, widening the existing 2.4 m outside shoulder to standard 3.0 m, and providing standard merge distance to eastbound SR-60. Also to relieve congestion on westbound SR-60, an additional mixed flow lane is proposed through the SR-60/I-605 interchange per Caltrans Traffic Investigations recommendation. These improvements will result in interchange reconfiguration and additional structure widening/replacement (See Attachment C, Sheets 3 & 4). Detailed studies will need to be

done during PA/ED phase for these optional improvements and for proper interchange reconfiguration. These improvements should reduce congestion and congestion related accidents within the interchange. The estimated construction cost for these optional improvements ranges from \$50 million to \$80 million. These optional improvements can be considered as a separate stand alone project and can go forward on their own schedule.

C. Alternative 3: Minimum Standard Build HOV Direct Connector

This alternative proposes to construct a two-lane elevated HOV direct connector within the freeway median area to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605. SR-60 and I-605 will be widened within the limits of this project phase and proposed lane and shoulder width on SR-60 and I-605 will be improved to standard. This alternative proposes 3.0 m inside shoulder, 3.6 m HOV lanes, 3.6 m mixed flow lanes, and 3.0 m outside shoulder on SR-60 and I-605 in each direction within this project phase limits. One additional 3.6 m wide HOV lanes in each direction on I-605 will continue from the proposed northbound and southbound direct HOV connector landing/taking-off on I-605. This additional HOV lane will join with Alternatives 2 and 4 of the northern phase of the project (EA 23570K) at KP R30.4 to accommodate projected increase in HOV volume. Due to the outside widening for this alternative, the westbound SR-60 to northbound I-605 connector will be modified and a 3.6 m wide passing lane will be provided. Several structures will be widened/replaced and several connectors will be modified in this alternative. See Attachment B for Typical Cross Sections and Attachment C for Layouts. The estimated construction cost for this alternative ranges from \$190 million to \$220 million including right of way cost.

Optional Improvements:

Similar to Alternative 2, an option to this alternative is to modify the southbound I-605 to eastbound SR-60 loop connector by adding an additional 4.9 m wide truck lane, widening the existing 2.4 m outside shoulder to standard 3.0 m, and providing standard merge distance to eastbound SR-60. Also, a mixed flow lane on westbound SR-60 will be added through the SR-60/I-605 interchange. These optional improvements will result in interchange reconfiguration and additional structure widening/replacement (See Attachment C, Sheet 6). The estimated construction cost for these optional improvements ranges from \$40 million to \$70 million. These optional improvements can be considered as a separate stand alone project and can go forward on its schedule.

D. Alternative 4: Full Standard Build HOV Direct Connector

This alternative proposes to construct a four-lane elevated HOV direct connector within the freeway median area. The proposed additional lane on the HOV direct connector is provided in each direction to permit passing maneuvers. A 4.0 m wide inside shoulder on the southbound I-605 to eastbound SR-60 direction of the HOV direct connector is provided for standard horizontal stopping sight distance. The widening of SR-60 and I-605 will be more

than Alternatives 2 and 3 due to an additional column needed to support the four lane elevated HOV direct connector. This additional widening would result in an interchange reconfiguration of all connectors except the northbound I-605 to westbound SR-60 loop connector and southbound I-605 to westbound SR-60 connector. Detailed studies will need to be done during PA/ED phase for this proposal and for proper interchange reconfiguration. Several structures will be widened/replaced in this alternative. See Attachment B for Typical Cross Sections and Attachment C for Layouts. Features proposed in this alternative that are also included in Alternative 3 are:

- Proposed lane and shoulder width on SR-60 and I-605 are to be widened to standard width.
- One additional 3.6 m wide HOV lane in each direction on I-605 continuing from the proposed northbound and southbound direct HOV connector landing/taking-off on I-605 to join to Alternatives 2 and 4 of northern phase of the project (EA 23570K) at KP R30.4 is provided.
- Additional 3.6 m wide passing lane for the westbound SR-60 to northbound I-605 connector is provided.

The estimated construction cost for this alternative ranges from \$250 million to \$280 million including right of way cost.

Optional Improvements:

The optional improvements of this alternative are similar to Alternatives 2 and 3. Since the construction of the HOV direct connector for this alternative results in interchange reconfiguration, the modification of the southbound I-605 to eastbound SR-60 loop connector is already included in this alternative. An additional mixed flow lane on westbound SR-60 through the SR-60/I-605 interchange will result in realignment and modification of the northbound I-605 to westbound SR-60 loop connector and southbound I-605 to westbound SR-60 connector (See Attachment C, Sheet 9). The estimated construction cost for these optional improvements ranges from \$20 million to \$50 million. These optional improvements can be considered as a separate stand alone project and can go forward on its schedule.

E. Other Alternatives Studied but Found Non-Viable

Standard Build HOV Direct Connector over San Jose Creek Water Reclamation Plant (WRP)

This alternative proposes to construct a four-lane elevated HOV direct connector over the San Jose Creek WRP located north of SR-60 and east and west of I-605. Due to substantial impacts on the San Jose Creek WRP, Project Development Team members deemed this alternative non-viable.

5. SYSTEM & REGIONAL PLANNING

A. Transportation Concept Report:

The Draft Transportation Concept Report (TCR) for SR-60 dated April 2002 suggests improvement to achieve or maintain a Main Line Level LOS of F3 and a HOV LOS of D in the year of 2020 during the peak hour. The TCR for SR-60 recommends four mixed flow lanes, one truck lane, and one HOV lane in each direction from I-605 to SR-57. This proposed HOV direct connector is not specifically identified in the Draft TCR for SR-60.

The Draft TCR for I-605 dated 2002 suggests improvement to achieve or maintain a Main-Line LOS of F3 and HOV LOS of C in the year of 2020 during peak hour. The Draft TCR for I-605 recommends five mixed flow lanes and two HOV lanes from SR-60 to I-10.

B. Regional Planning:

This southern phase of the project is consistent with the 2001 Regional Transportation Plan (RTP), which was developed by and subsequently adopted by the Southern California Association of Governments (SCAG) on May 5, 2001 under unconstrained projects. SCAG's RTP received approval by FHWA June 8, 2001 for all non-attainment areas, with the exception of the PM₁₀ areas in the San Bernardino County portion of the Mojave Desert Air Basin (MDAB) and the Coachella Valley portion of the Salton Sea Air Basin (SSAB), which were approved on August 3, 2001. A subsequent amendment to the 2001 RTP was federally approved on May 10, 2002.

This southern phase of the project is listed in the 2001 RTP "Unconstrained" project listing. However for the RTP to be approved by the United States Department of Transportation (DOT), it must meet the fiscal constraint requirement. This proposed project phase is listed in the Los Angeles County Metropolitan Transportation Authority's (LACMTA) 2001 Long Range Transportation Plan (LRTP), Table 3-5 for HOV Connector implementation.

C. Air Quality Conformity:

The Clean Air Act Amendments (CAAA) of 1990 require that transportation plans, programs and projects, which are funded by or approved under Title 23 U.S.C. or Federal Transit Act (FTA), conform with state or federal air quality plans. In order to be found to conform, a project must come from approved transportation plans and programs such as the State Implementation Plan (SIP), RTP and the Regional Transportation Improvement Program (RTIP).

This southern phase of the project is not identified in the existing 2002 RTIP which was prepared by the SCAG. The 2002 RTIP (2002/03 – 2007/08) received U.S. DOT (FHWA/FTA) approval October 4, 2002. Inclusion in the RTIP is essential to federal funding. The project sponsor will need to take steps to get this southern phase of the project

included into the RTP and the RTIP. This southern phase of the project will be on the RTIP list after applying to MTA's 2003 call for projects in March 2003.

Until this project phase is identified in the required regional plans (RTP) and programs (RTIP), it does not conform to the requirements of the federal CAAs of 1990.

6. ENVIRONMENTAL DETERMINATION

A. Environmental Document

A Preliminary Environmental Evaluation Report (PEER) has been prepared for this southern phase of the project (see Attachment G). Since all build alternatives will have potential affect on endangered species, which may constitute a significant impact, the appropriate environmental document anticipated will be an Environmental Impact Report / Environmental Impact Statement (EIR/EIS). The environmental clearance process will require 36 months to complete. It is suggested that one environmental document be done for this southern phase of the project and the HOV direct connector on I-10/I-605 interchange (northern phase, EA 23570K,) to save resources and maintain system consistency in the PA/ED phase (See Attachment Q).

B. Hazardous Waste

A Preliminary Hazardous Waste Assessment has been requested and conducted for this southern phase of the project, and the findings are included in Preliminary Environmental Evaluation Report (PEER, see Attachment G). A Site Investigation (SI) is recommended during the PAED or PS&E stage of the project to identify the intensity of any hazardous substances that may be present. A Hazardous Waste field investigation and review of Environmental Data Resources (EDR) reports (regulatory agency database) was conducted by Caltrans to identify potential concerns due to historical land use. The following potential hazardous waste concerns apply to all build alternatives as follows:

1. Contamination: Aerially Deposited Lead Contaminated Soil, Regional Ground Water Contamination and Railroad Corridor Soil Contamination.
2. Hazardous Materials: Structures, Yellow Pavement Markings (Lead-based and Thermoplastic Paint), Lead Based Paint, and Asbestos Containing Material.

For further detail see the PEER, Attachment G.

C. Air Quality

Projects of this type are not identified in the Environmental Protection Agency (EPA) Transportation Conformity Rule category of exempt projects, Table 2 (40 CFR Parts 51 and 53, Section 51.462).

This southern phase of the project is located in the South Coast Air Basin (SCAB) which is identified as non attainment for both Carbon Monoxide (Co) and Particulate Matter (PM₁₀) at the State and federal levels; therefore, the proposed project is subject to a Carbon Monoxide (CO) hot spot analysis as well as a PM₁₀ qualitative analysis in order to determine localized emissions effects.

D. Landscape

All alternatives will affect the existing landscaping and irrigation system. Depending upon the alternative chosen and the resultant environmental impacts to be mitigated, the additional cost could range from \$0.4 million to \$1 million extra.

To ensure Caltrans works diligently towards environmental enhancement, and causes no adverse environmental impact from its planting practices, Caltrans will use regionally-appropriate native plant materials whenever possible and avoid the use of non-native plant materials near sensitive ecosystems. By careful selection of plant materials and context sensitive design, Caltrans will be consistent to the desires of the US Fish and Wildlife Service and to Executive Order 13112 on Invasive Plant Species.

E. Permits which maybe required

Permits for work over San Jose Creek and San Gabriel River*

Agency	Permit
California Department of Fish and Game	Section 1601, construction activities over stream
Regional Water Quality Control Board	Water Quality Certification or Waiver pursuant to Section 401 of the Clean Water Act
Army Corps of Engineers	Nationwide 33 Permit required for temporary construction access, when construction equipment is place in the channel.
Army Corps of Engineers	Section 404 Permit when placing permanent structures in the Channel's bottom
State Water Resources Control Board	Strom Water Pollution Prevention Plan
Los Angeles County Flood Control District, Public Works	Flood Control Permit

*These permits may take between six to twelve months to obtain.

For the physical aspect of the project a Notification of Construction Application form for construction work through the Regional Water Quality Control Board is required for construction activities exceeding 1 acre after March 1, 2003.

F. Aesthetics

To be consistent with District 7's strategic objective, "to improve roadside aesthetics," 1% of

the project cost will be allocated for beatification and modernization items. Textured walls, railings, and other items may be used. Motorists have a higher expectation of roadside aesthetics in congested urban areas due to lower overall speeds, which allows closer scrutiny of the traveled way.

G. Storm Water

Construction activity near storm drains, specifically San Jose Creek and San Gabriel River, will incorporate the following storm water practices: Treatment, Design Pollution Prevention (DPP), and Construction Site Best Management Practices (BMPs). The incorporation of storm water BMP's in this project will minimize impacts to storm water quality. Temporary controls may be required to address short-term water contamination threat during construction. Drain inlets that are exposed to dust or debris during construction should be protected. Silt fences should also be used as a temporary sediment control measure. A Storm Water Data Sheet has been included as Attachment P.

This southern phase of the project is located within the San Gabriel River Watershed and is listed as being impaired under Section 303 (d) of the Clean Water Act. Waters on this list, like those in the San Gabriel River Watershed do not meet water quality standards. Since this project may discharge water into impaired waterbodies such as San Jose Creek and San Gabriel River, the following information must be provided in the construction and operational phases of the project and disclosed in the environmental document:

- Estimates of concentrations (mg/l or mpn/100 ml as appropriate) and loads (lbs/day) from point and non-point sources for constituents causing impairment to water quality.
- Estimates of the amount of runoff generated by the project during wet and dry weather.
- Which waterways the proposed project will drain into.
- Surface water management for the stormwater, wash water and other wastewater generated during the project.
- Estimates of amounts of increased or decreased percolation due to the project.
- Effects of the project on groundwater conditions (water elevations) during construction (dewatering activities, historic drought conditions, and under 10-year and 50-year flood conditions)

7. RIGHT OF WAY

Significant right of way acquisition and utility relocation will be required on all build alternatives. The associated right of way costs are included in the cost estimate (see Attachment D). A Right of Way PSR-PDS Data Sheet has been included as Attachment F.

8. TRANSPORTATION MANAGEMENT PLAN

A Traffic Management Plan (TMP) will be developed to minimize delay and inconvenience to the traveling public during the construction period. The TMP will include a Public Awareness Campaign, Construction Zone Enhanced Enforcement Program (COZEEP), Freeway Service Patrol (FSP), and Portable Changeable Message Signs (PCMS). A TMP Data Sheet has been included as Attachment M.

9. VALUE ANALYSIS

A formal Value Analysis (VA) Study is mandated by the National Highway System (NHS) Act of 1995 for projects on NHS over \$25,000,000 including Capital Outlay Support. The VA Study will be conducted during PA/ED phase.

10. FUNDING/SCHEDULING

The estimated construction cost for the “build” alternatives ranges from \$130 million to \$280 million including right of way costs and optional improvements. An estimated cost of \$8.16 million for the PA/ED phase is anticipated for this southern phase of the project. This southern phase of the project complies with the newly adopted Change Control Process; thus, only the amount of support dollars to complete the PA/ED phase are being requested to be programmed.

A. Capital Outlay Support Estimate for PA/ED*

Fiscal Year	STIP-RTIP and/or other Funding Sources PY's /\$'s	
	PY's	\$'s (Million)
04/05	25.7	2.57
05/06	25.8	2.58
06/07	25.8	2.58
07/08	4.3	0.43
Total Support Cost	81.6	8.16

*Estimate for planning purposes only. Resources for Plans, Specifications, and Estimate (PS&E), right of way acquisition and construction will not be programmed at this time.

B. Capital Outlay Estimate

Alternatives	Range of HOV Direct Connector Cost (Million)	STIP-RTIP Funds and/or other Funding Sources (Million)
Alternative 2 – Minimum Build HOV Direct Connector	\$130-\$160	\$160
Alternative 3 – Minimum Standard Build HOV Direct Connector	\$190-\$220	\$220
Alternative 4 – Full Standard Build HOV Direct Connector	\$250-\$280	\$280

The level of detail available to develop these capital cost estimates is only accurate to within the above ranges and are useful for long range planning purposes only. The capital 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.

C. Tentative Project Schedule

Milestone	Fiscal Year
Circulate Draft Project Report / Draft ED	May 2007
PA/ED	July 2007
PS&E	April 2011
Ready To List	July 2011
Construction Completion	January 2015

See Attachment N for Project Schedule.

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.

D. Capital Outlay Support Estimate for Optional Improvements at PA/ED Phase – Reference Only

Alternatives Associated with Optional Improvements	Range of Optional Improvements Cost (Million)	PY's	STIP-RTIP Funds and/or other Funding Sources (Million)
Alternative 2 – Minimum Build HOV Direct Connector	\$50-\$80	24	2.4
Alternative 3 – Minimum Standard Build HOV Direct Connector	\$40-\$70	21	2.1
Alternative 4 – Full Standard Build HOV Direct Connector	\$20-\$50	15	1.5

11. PROGRAMMING RECOMMENDATION

This southern phase of the project, in coordination with the proposed elevated HOV direct connector from northbound I-605 to westbound I-10 and eastbound I-10 to southbound I-605 (northern phase, EA 23570K), will provide system continuity for HOV commuters from the eastern part of the Los Angeles Metropolitan area to downtown Los Angeles. It is recommended that Capital Outlay Support (COS) costs be programmed to study all alternatives for the southern phase of this project for PA/ED. Alternatives may be added or revised during the PA/ED phase as more information becomes available. Detailed studies will be done at the PA/ED phase to select the preferred alternative. It is also recommended that one environmental document be done for this project phase and the HOV direct connector project proposed on I-10/I-605 interchange (northern phase, EA 23570K) during the PA/ED phase (See Attachment Q). It is anticipated that funding for this southern phase of the project will be obtained from both the STIP-ITIP, as provided by Caltrans, and from the STIP-RTIP through MTA's call for projects.

12. FEDERAL INVOLVEMENT

I-605 within the limits of this project phase is part of the National Highway System (NHS). This project is eligible for Federal funding and, if funded, the Federal Highway Association (FHWA) involvement will be on a project by project basis per Section 7, Chapter 2 of Project Development Procedures Manual (PDPM).

13. PROJECT REVIEWS

	Date
Local Agency Review	<u>August 6, 2002</u>
Headquarters Project Development Coordinator	<u>December 16, 2002</u>
Quality Review	<u>December 12, 2002</u>

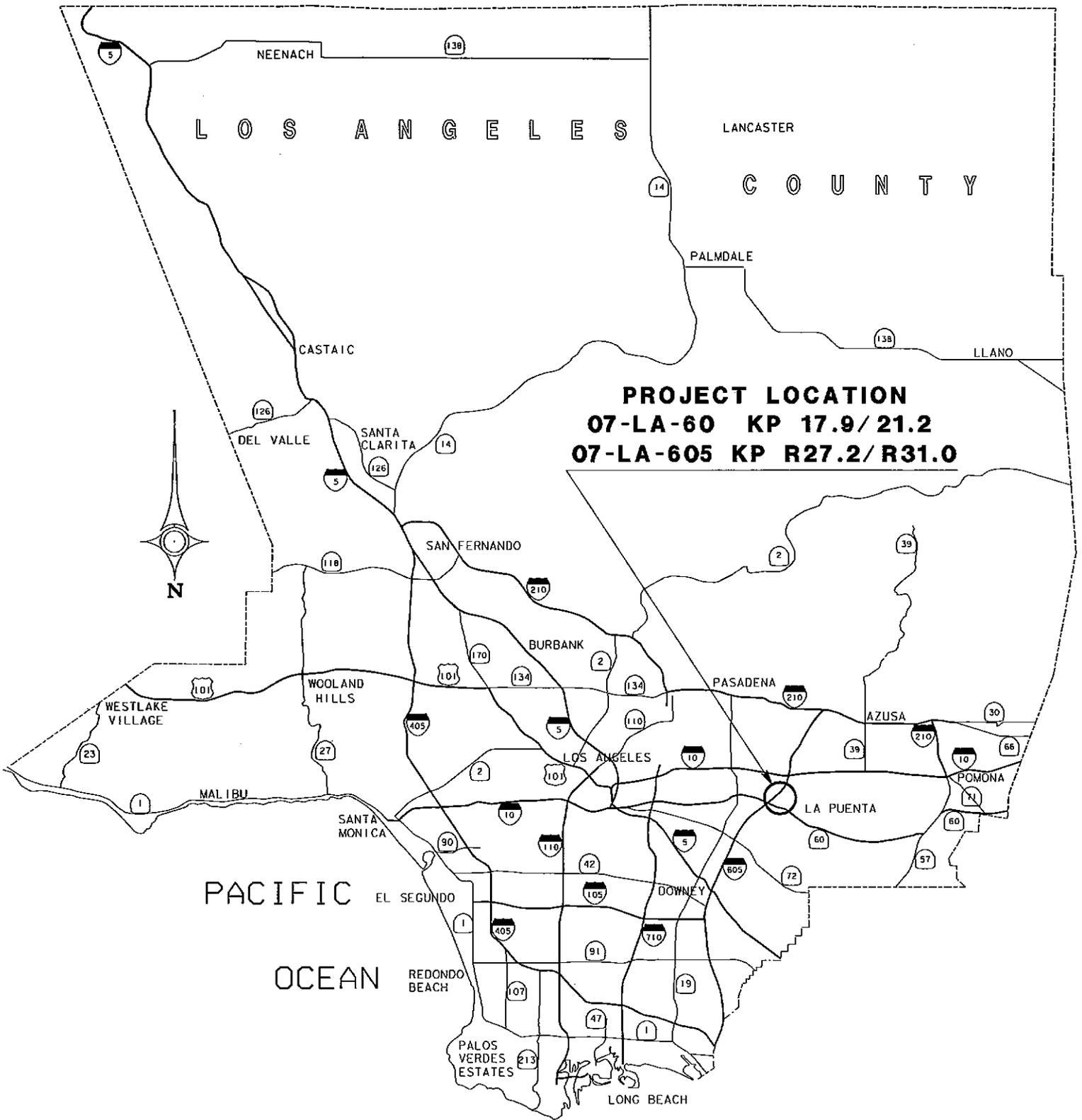
14. DISTRICT CONTACT

The following individuals may be contacted for information or questions regarding this PSR-PDS document:

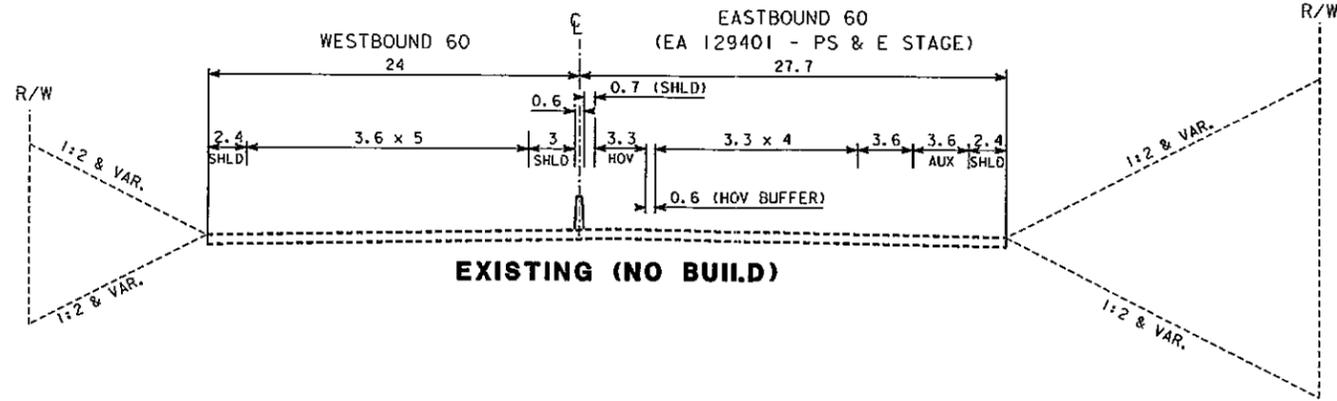
Maen Shaar	Project Manager	(213) 897-8665
Elahesh Yadegar	Senior Transportation Engineer	(213) 897-9635
Benjamin Ramos	Project Engineer	(213) 897-9605
Thao Le	Transportation Engineer	(213) 897-5604

ATTACHMENTS

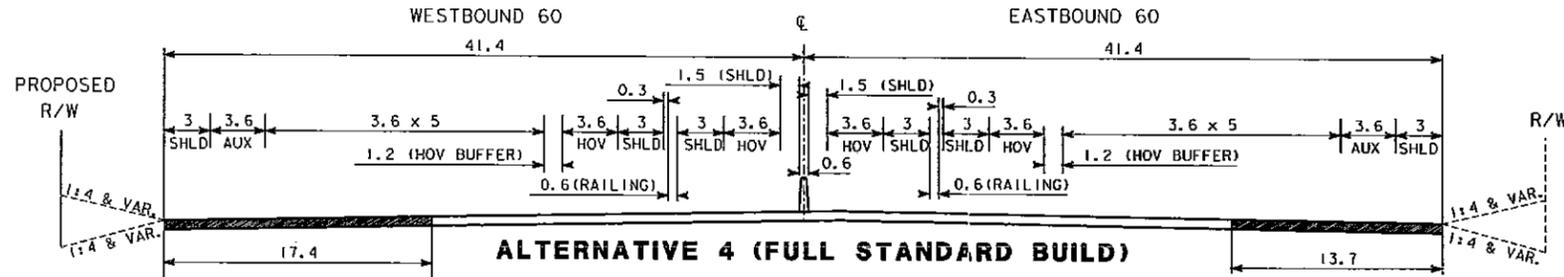
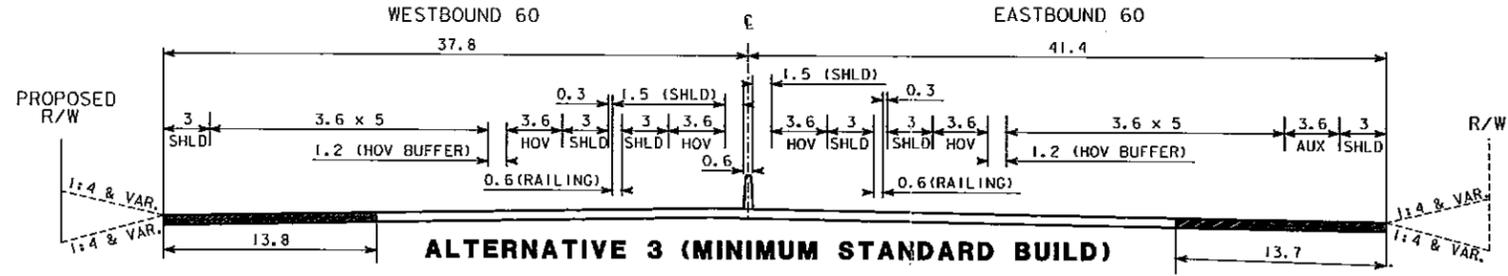
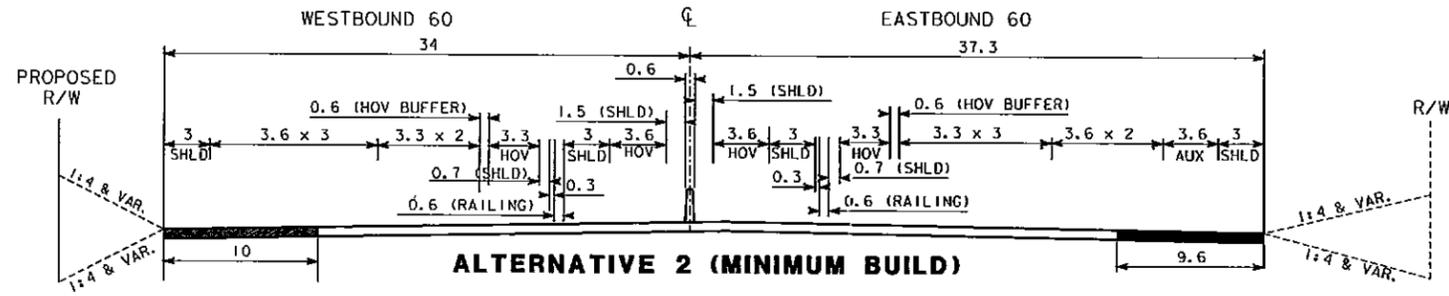
- A. Location Map
- B. Typical Cross Sections
- C. Preliminary Layouts
- D. Project Study Report-Project Development Support Cost Estimate
- E. Project Development Support Design Scoping Checklist
- F. Right of Way Project Study Report-Project Development Support Data Sheet
- G. Preliminary Environmental Evaluation Report (Including Hazardous Waste Screening and Mitigation)
- H. Project Development Support Traffic Forecasting, Analysis and Operations Scoping Checklist-Recommendations from Traffic Branch
- I. Division of Engineering Services Scoping Checklist
- J. Project Study Report Evaluation Checklist
- K. TASAS-Table B and Table C
- L. Intelligent Transportation Systems
- M. Transportation Management Plan
- N. Project Schedule
- O. Recommendation from the Office of Geotechnical Design – South
- P. Storm Water Data Report, NPDES Information Submittal, and Control Checklist of Water Pollution
- Q. Environmental Document Programming Memorandum
- R. Initiation Memorandum



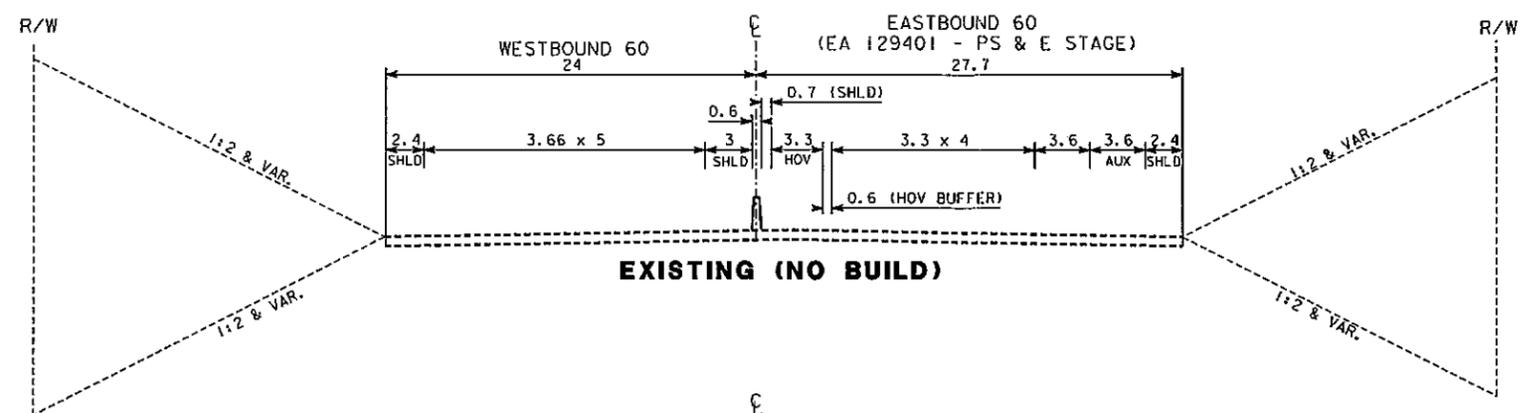
LOCATION MAP
ATTACHMENT A



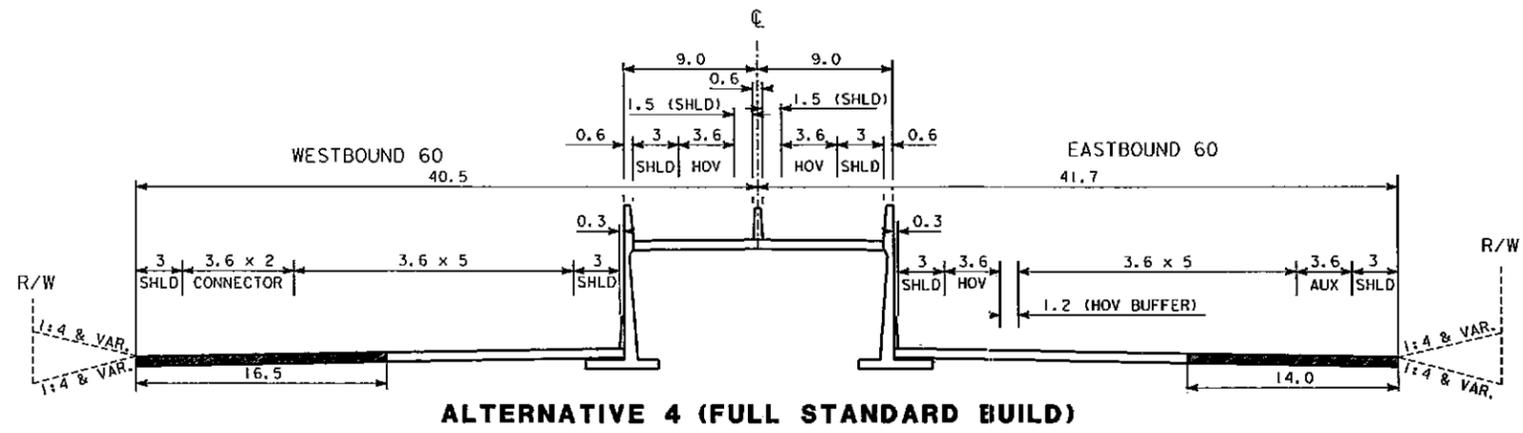
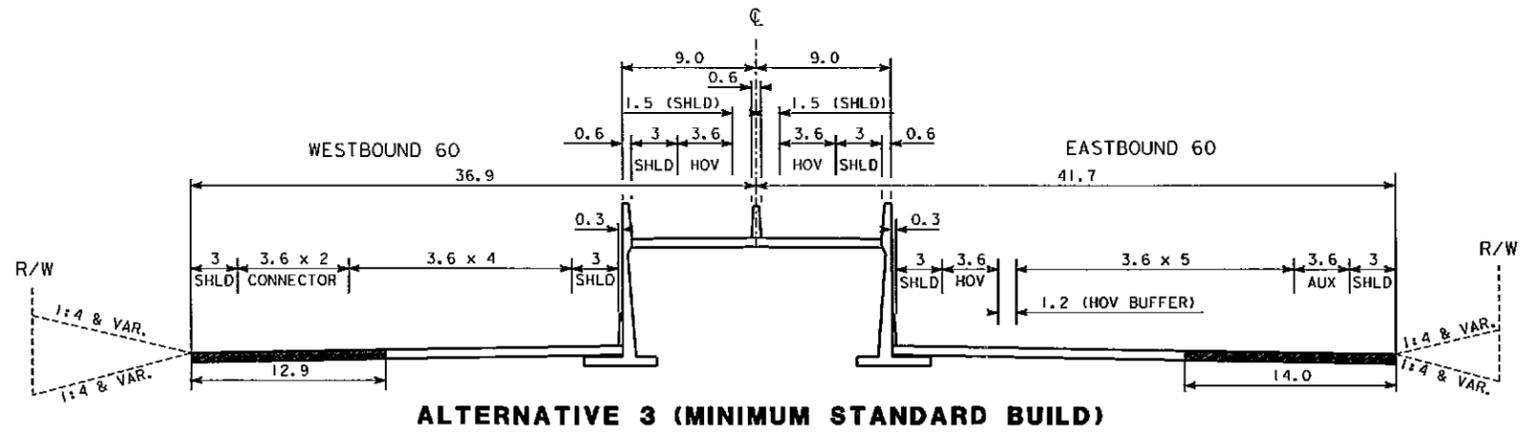
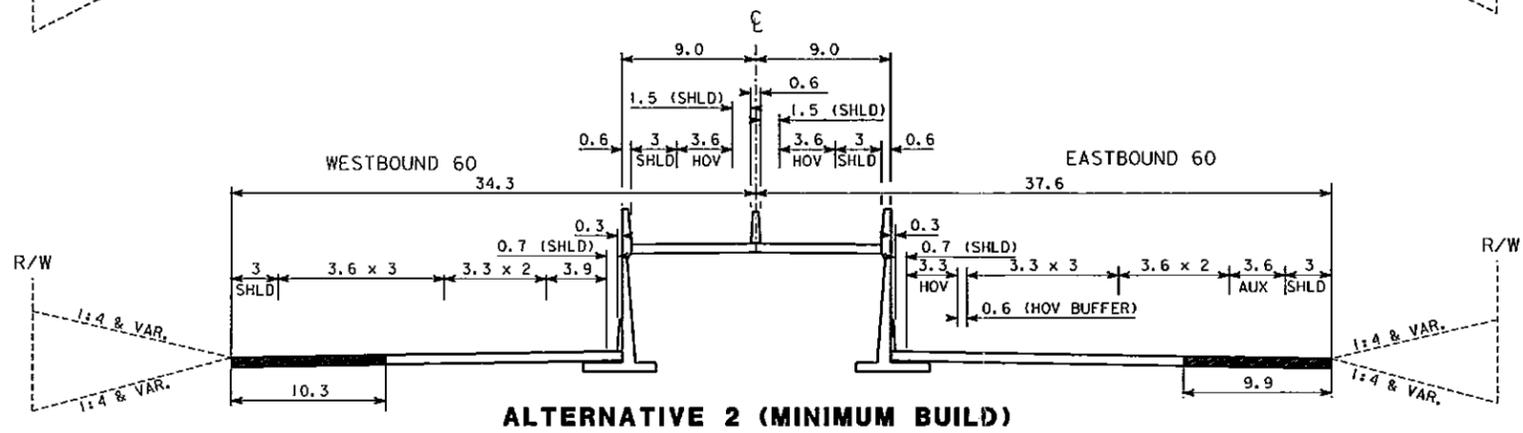
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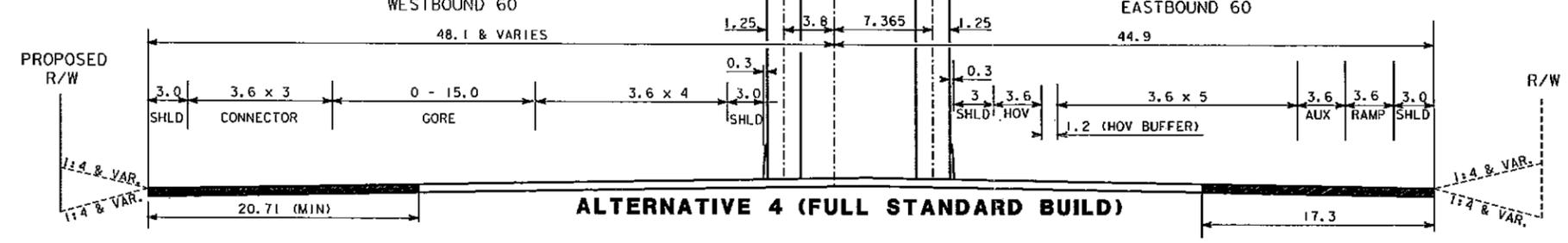
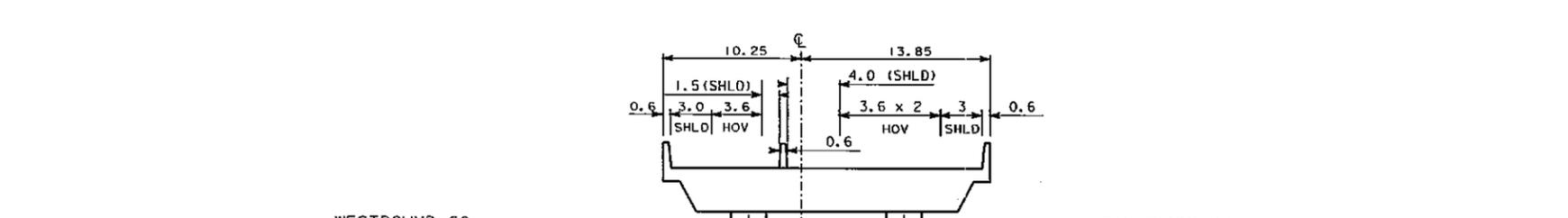
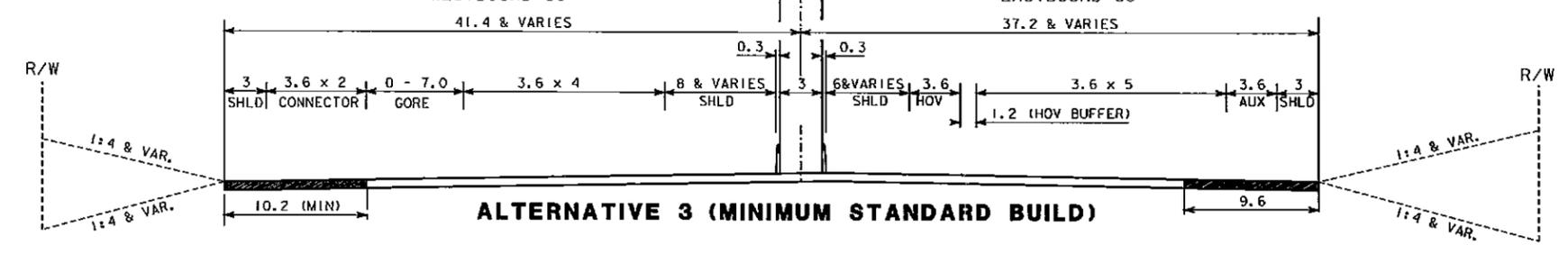
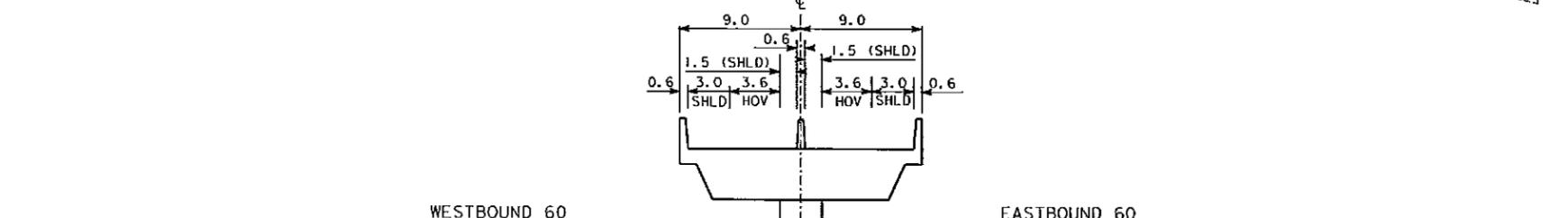
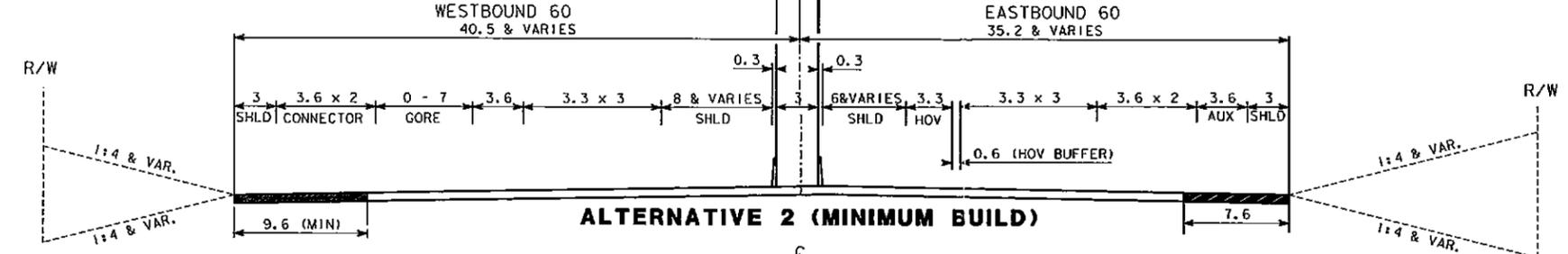
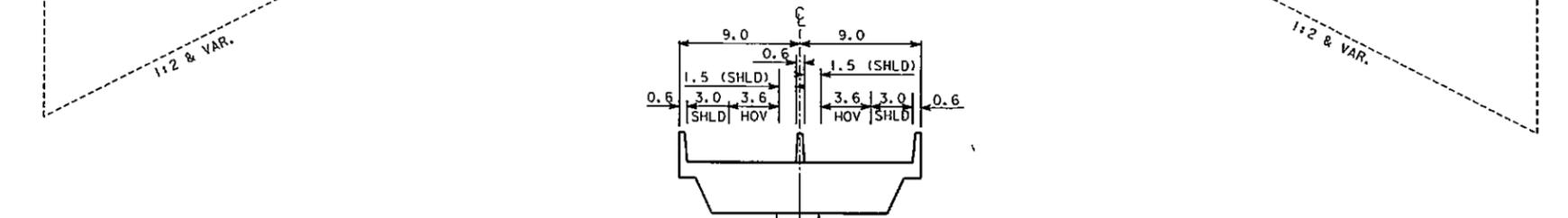
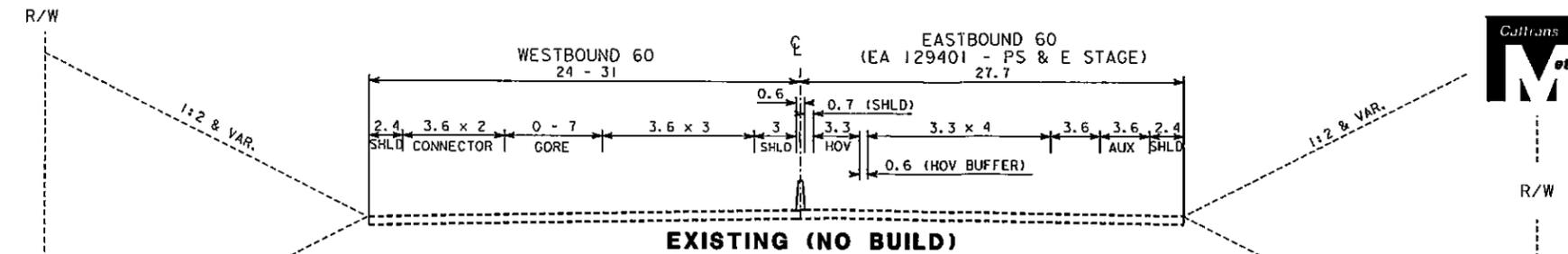


WIDENING AREA



ATTACHMENT B
B - B CROSS SECTION
HOV DIRECT CONNECTOR
TYPICAL SECTION

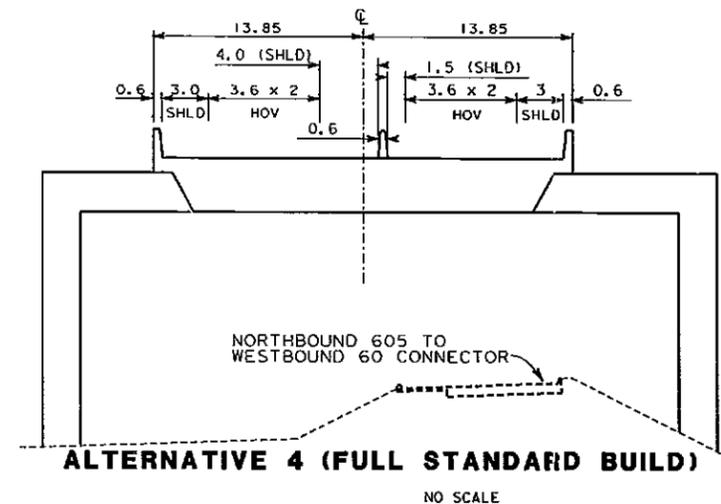
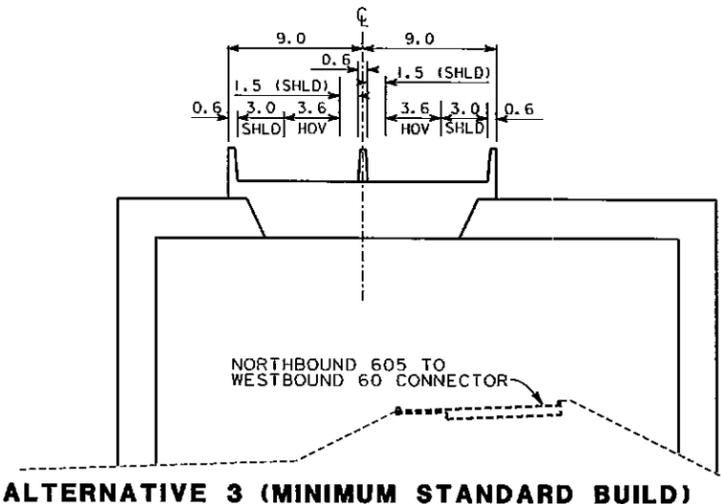
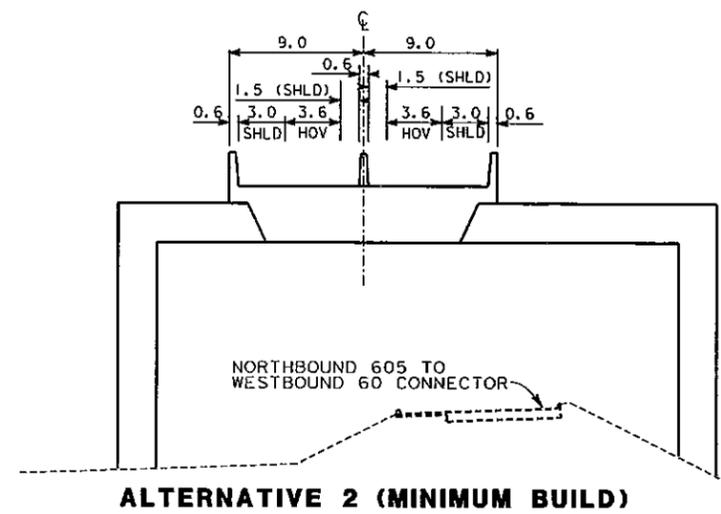
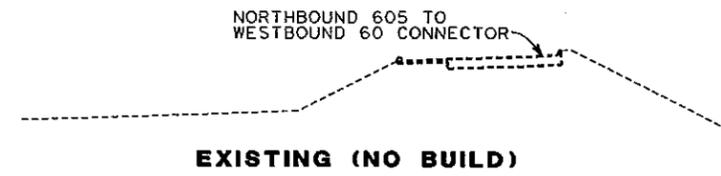
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ATTACHMENT B
C - C CROSS SECTION
HOV DIRECT CONNECTOR
TYPICAL SECTION

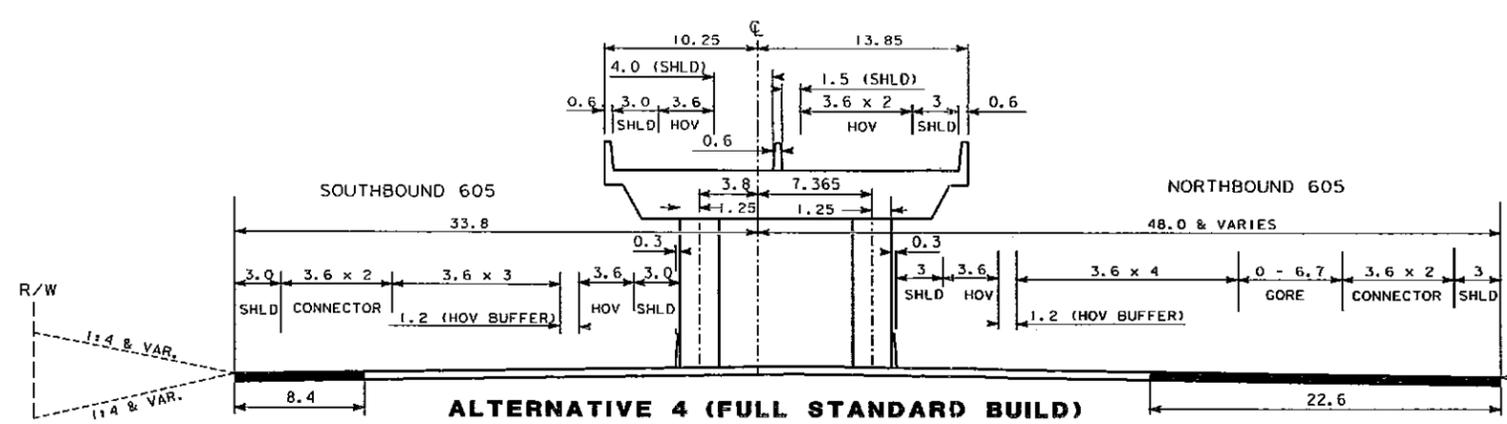
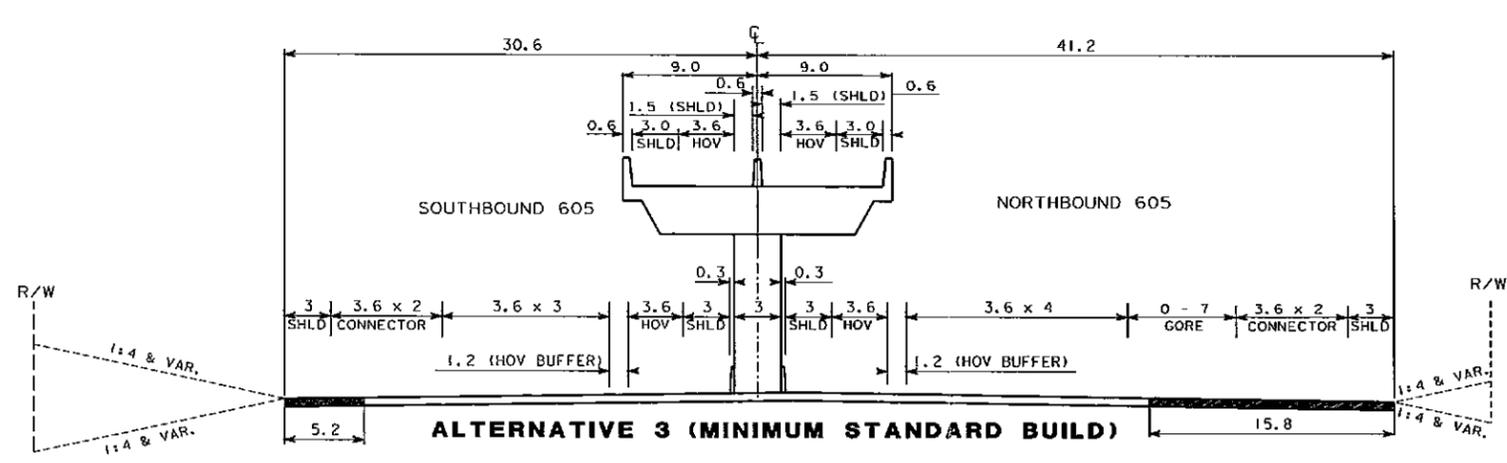
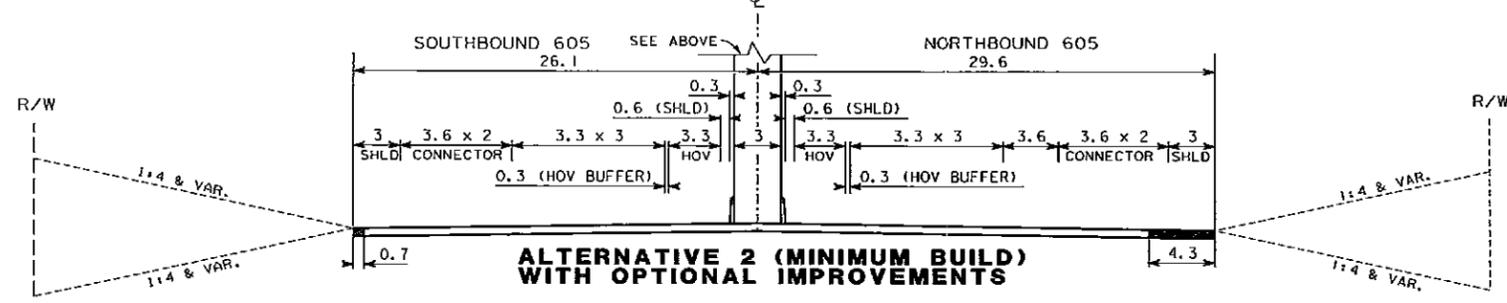
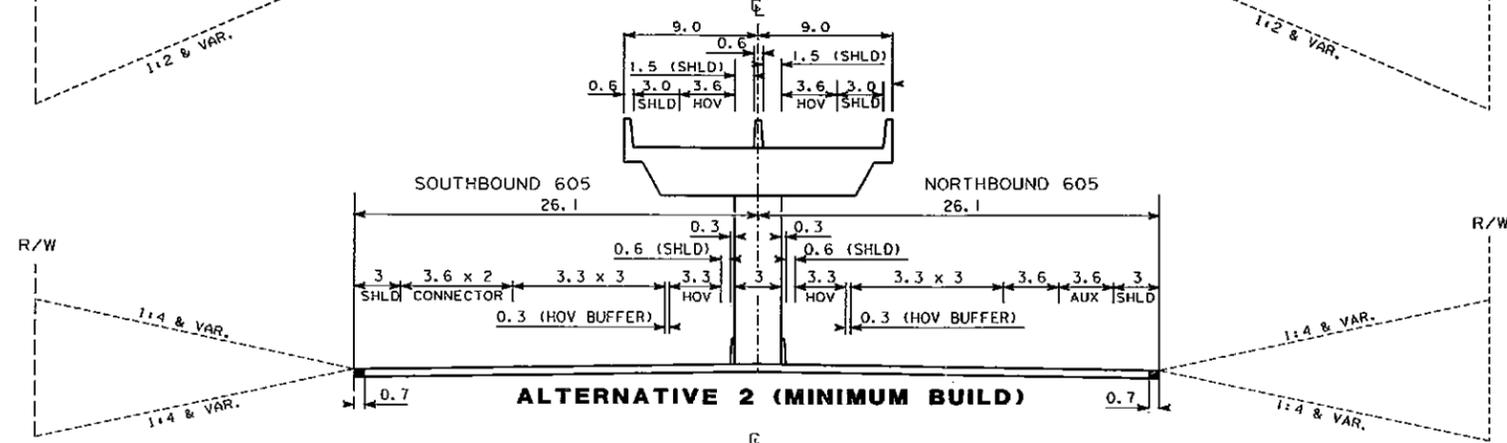
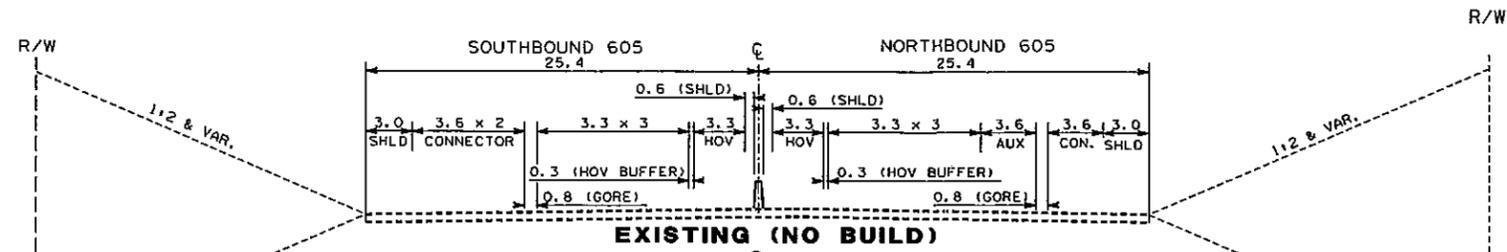
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TYPICAL SECTION

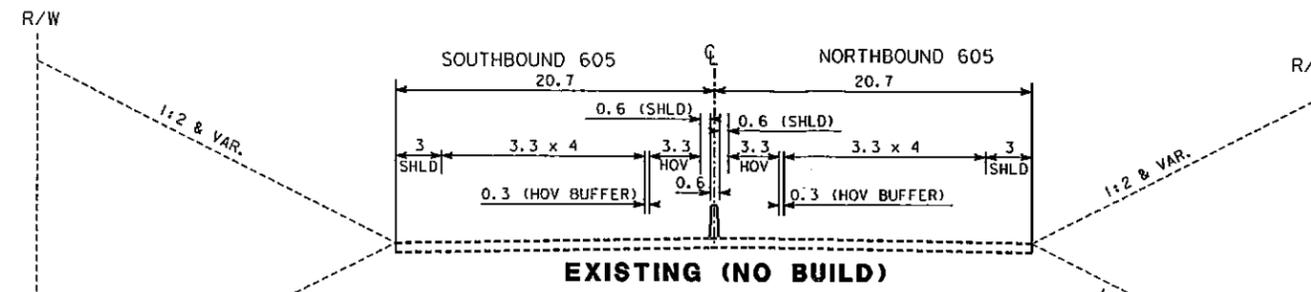


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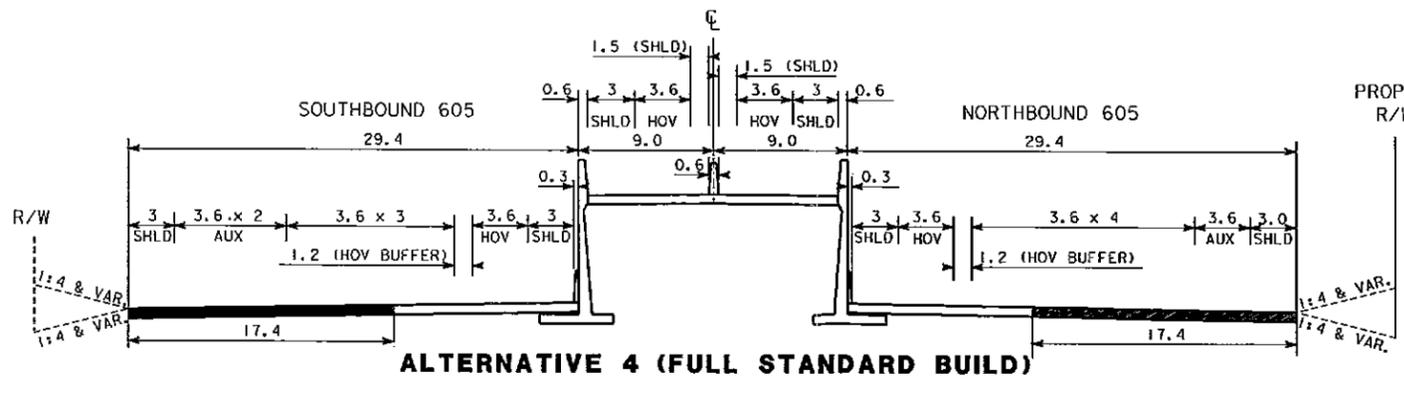
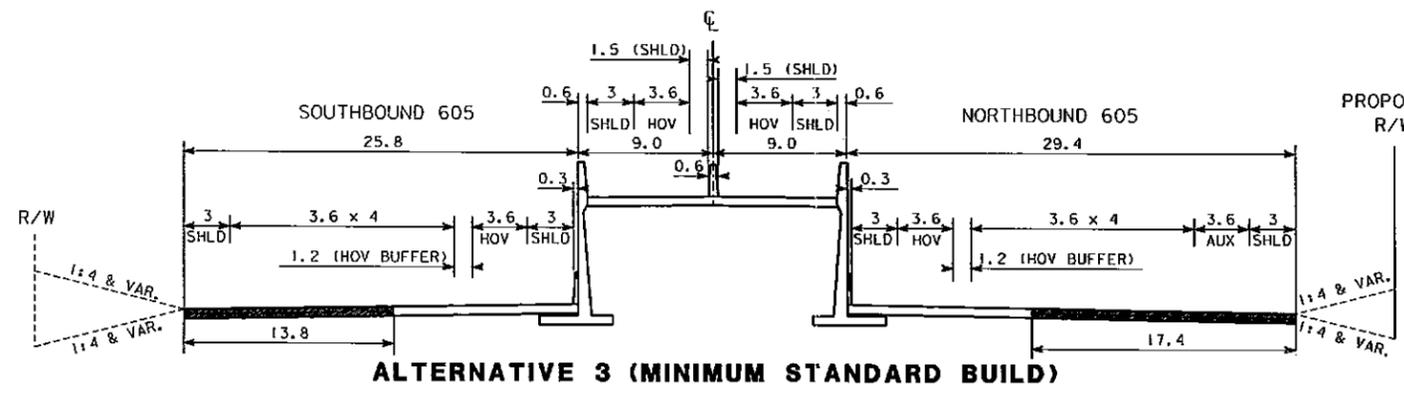
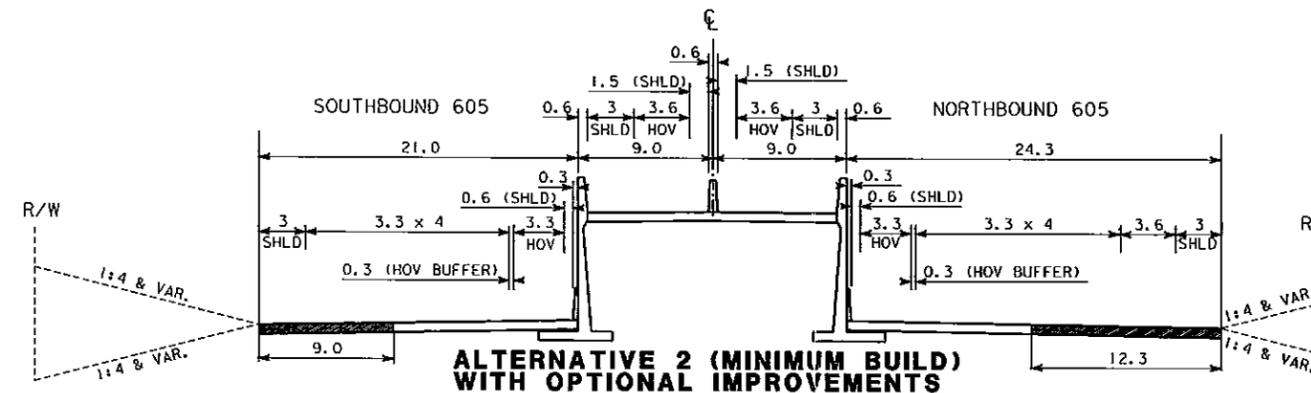
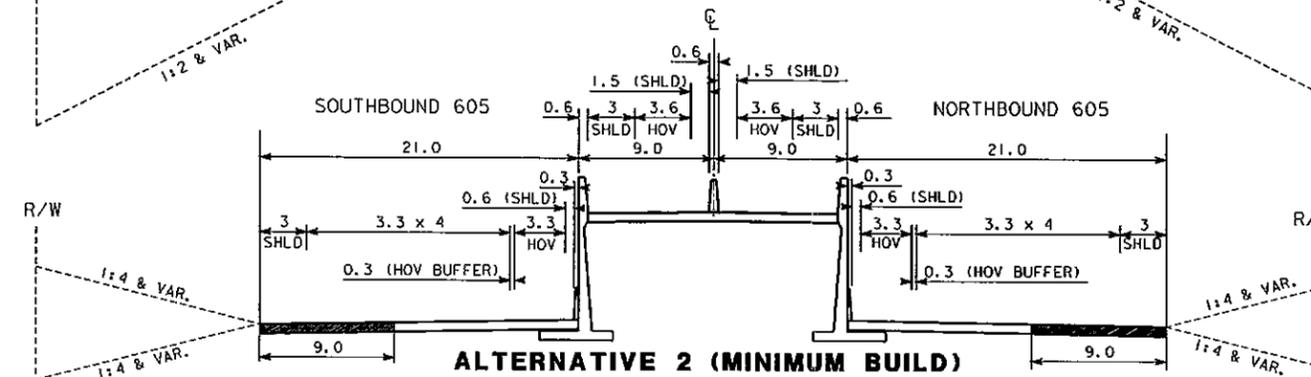
PROPOSED R/W

ATTACHMENT B
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HOV DIRECT CONNECTOR
TYPICAL SECTION

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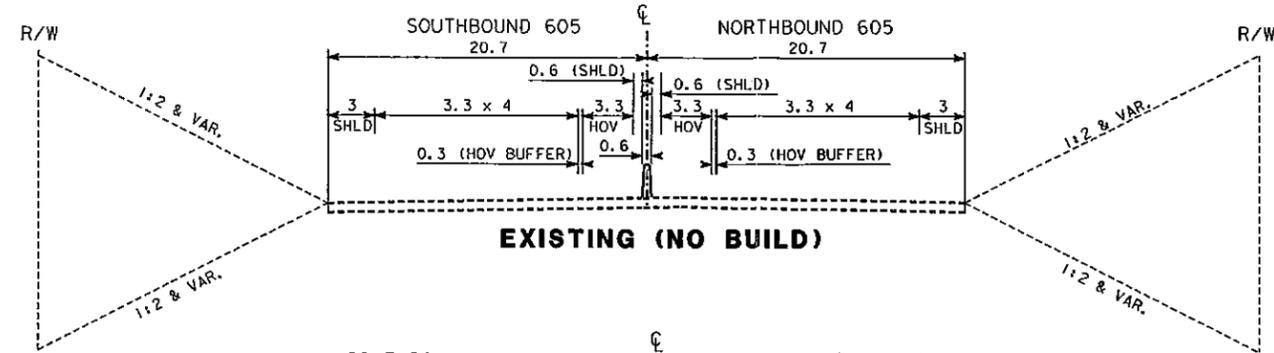


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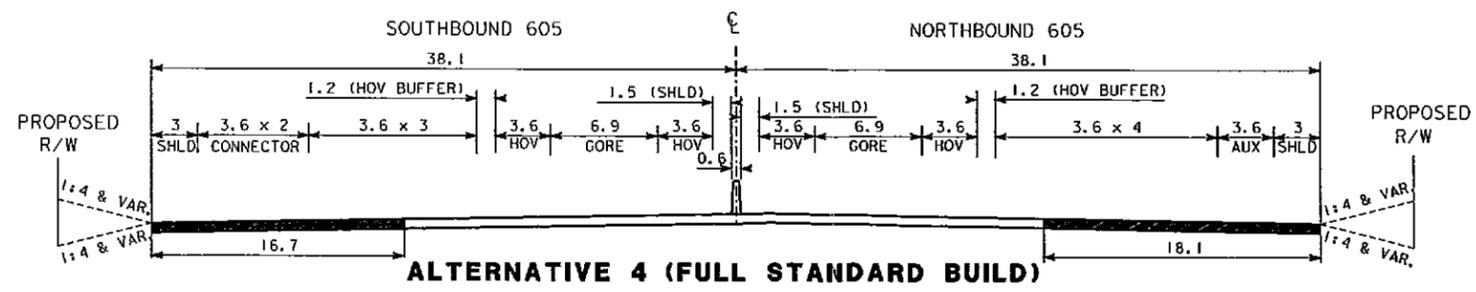
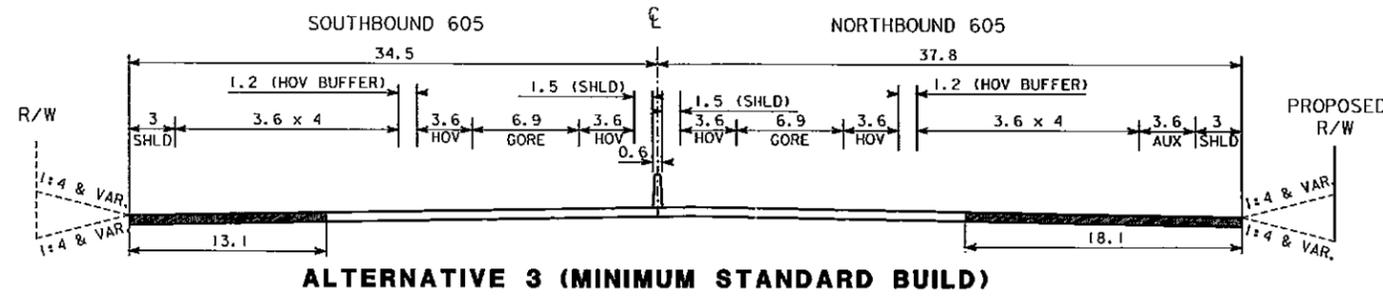
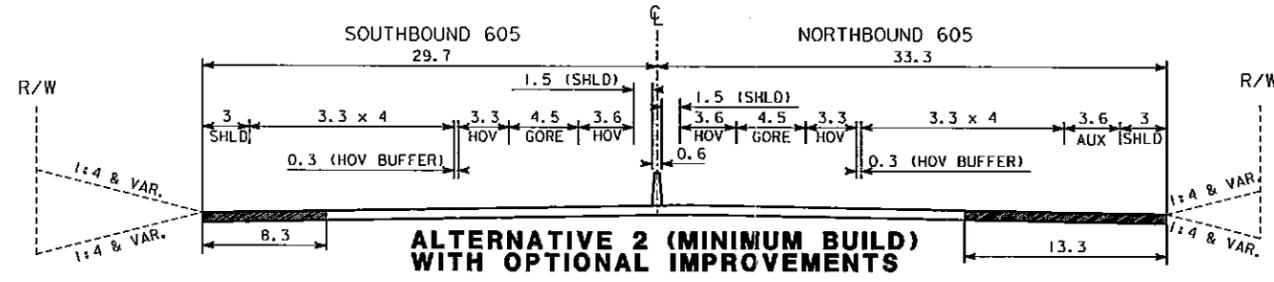
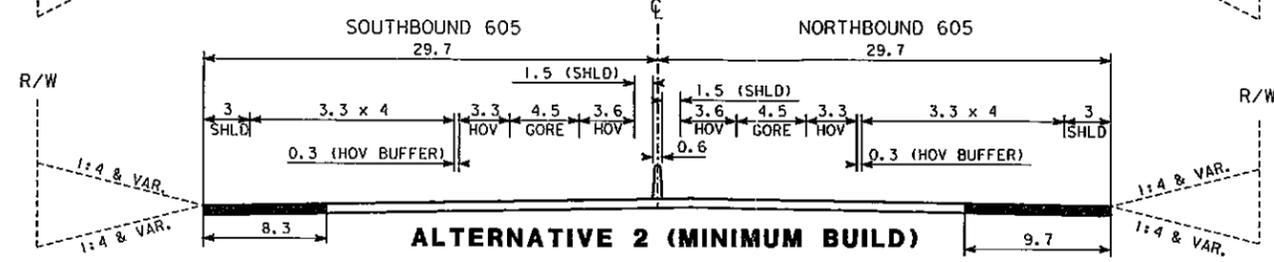


**ATTACHMENT B
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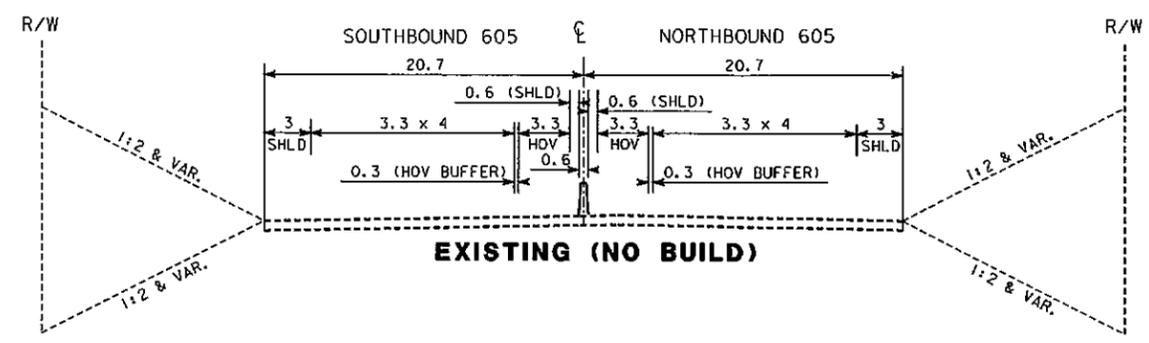


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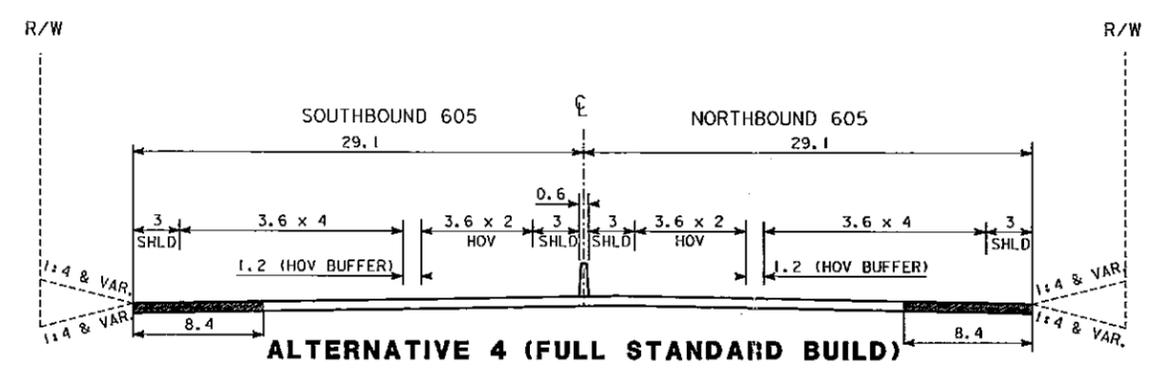
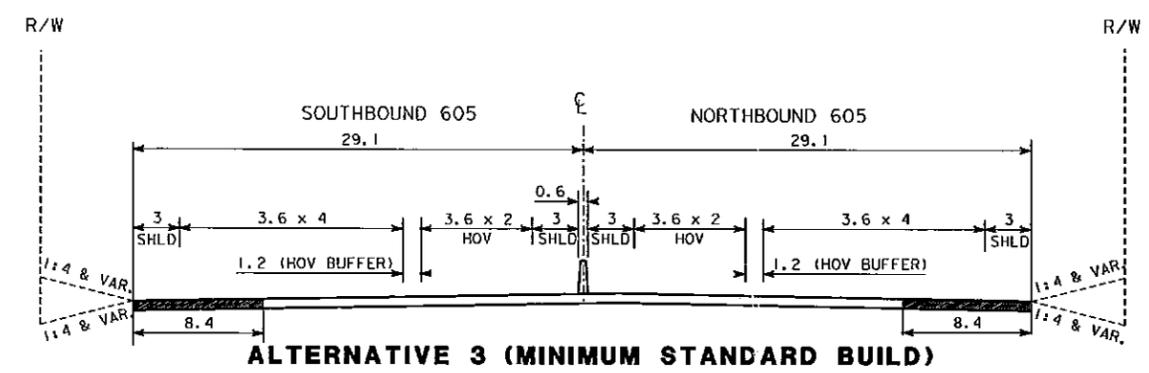


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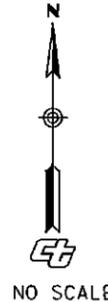
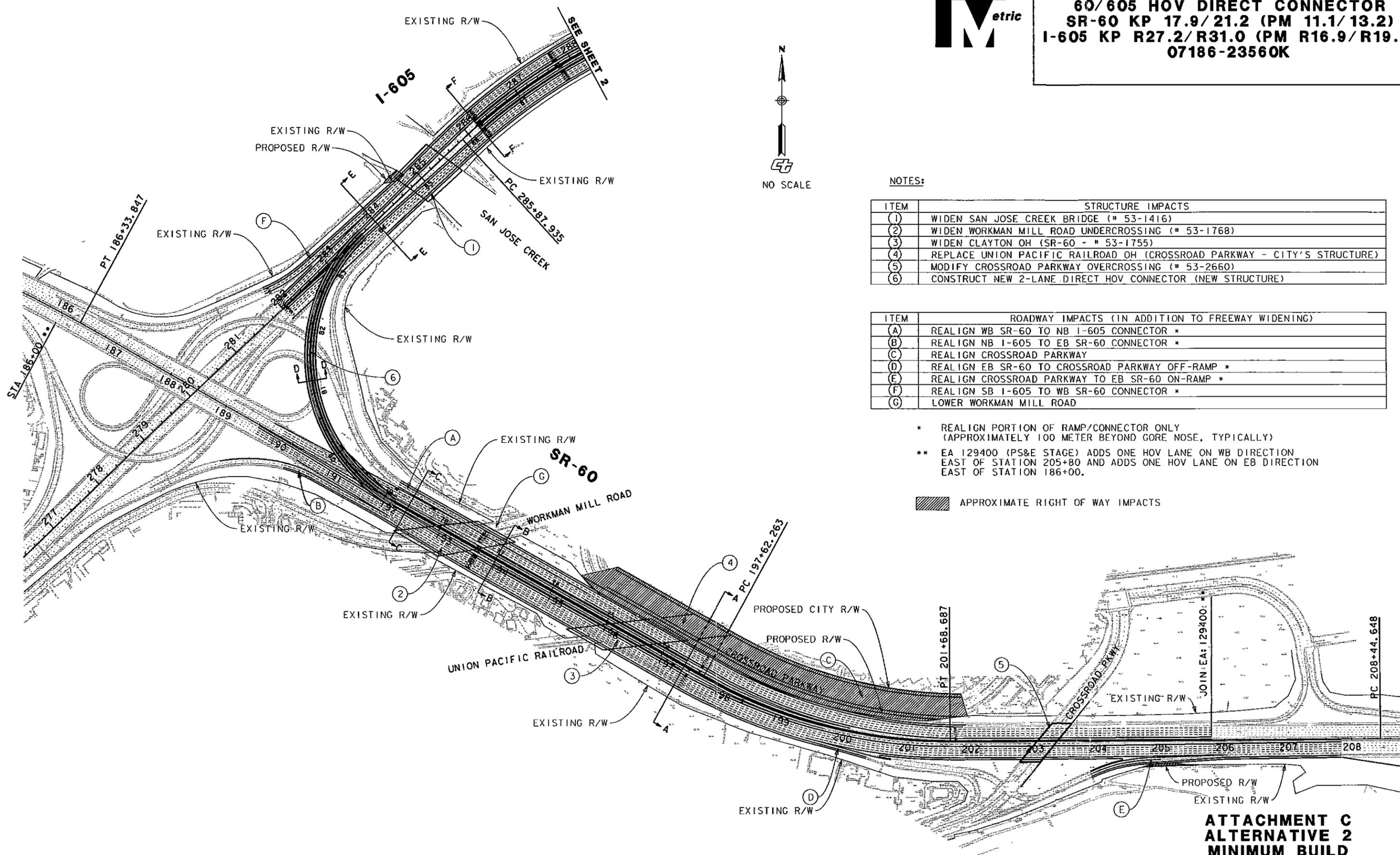


ATTACHMENT B
H - H CROSS SECTION
HOV DIRECT CONNECTOR
TYPICAL SECTION

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 ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN



PRELIMINARY PLAN
 (FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
SR-60 KP 17.9/21.2 (PM 11.1/13.2)
I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
07186-23560K



NOTES:

ITEM	STRUCTURE IMPACTS
(1)	WIDEN SAN JOSE CREEK BRIDGE (# 53-1416)
(2)	WIDEN WORKMAN MILL ROAD UNDERCROSSING (# 53-1768)
(3)	WIDEN CLAYTON OH (SR-60 - # 53-1755)
(4)	REPLACE UNION PACIFIC RAILROAD OH (CROSSROAD PARKWAY - CITY'S STRUCTURE)
(5)	MODIFY CROSSROAD PARKWAY OVERCROSSING (# 53-2660)
(6)	CONSTRUCT NEW 2-LANE DIRECT HOV CONNECTOR (NEW STRUCTURE)

ITEM	ROADWAY IMPACTS (IN ADDITION TO FREEWAY WIDENING)
(A)	REALIGN WB SR-60 TO NB I-605 CONNECTOR *
(B)	REALIGN NB I-605 TO EB SR-60 CONNECTOR *
(C)	REALIGN CROSSROAD PARKWAY
(D)	REALIGN EB SR-60 TO CROSSROAD PARKWAY OFF-RAMP *
(E)	REALIGN CROSSROAD PARKWAY TO EB SR-60 ON-RAMP *
(F)	REALIGN SB I-605 TO WB SR-60 CONNECTOR *
(G)	LOWER WORKMAN MILL ROAD

* REALIGN PORTION OF RAMP/CONNECTOR ONLY (APPROXIMATELY 100 METER BEYOND GORE NOSE, TYPICALLY)
 ** EA 129400 (PS&E STAGE) ADDS ONE HOV LANE ON WB DIRECTION EAST OF STATION 205+80 AND ADDS ONE HOV LANE ON EB DIRECTION EAST OF STATION 186+00.

APPROXIMATE RIGHT OF WAY IMPACTS

ATTACHMENT C
ALTERNATIVE 2
MINIMUM BUILD
HOV DIRECT CONNECTOR
SHEET 1 OF 10

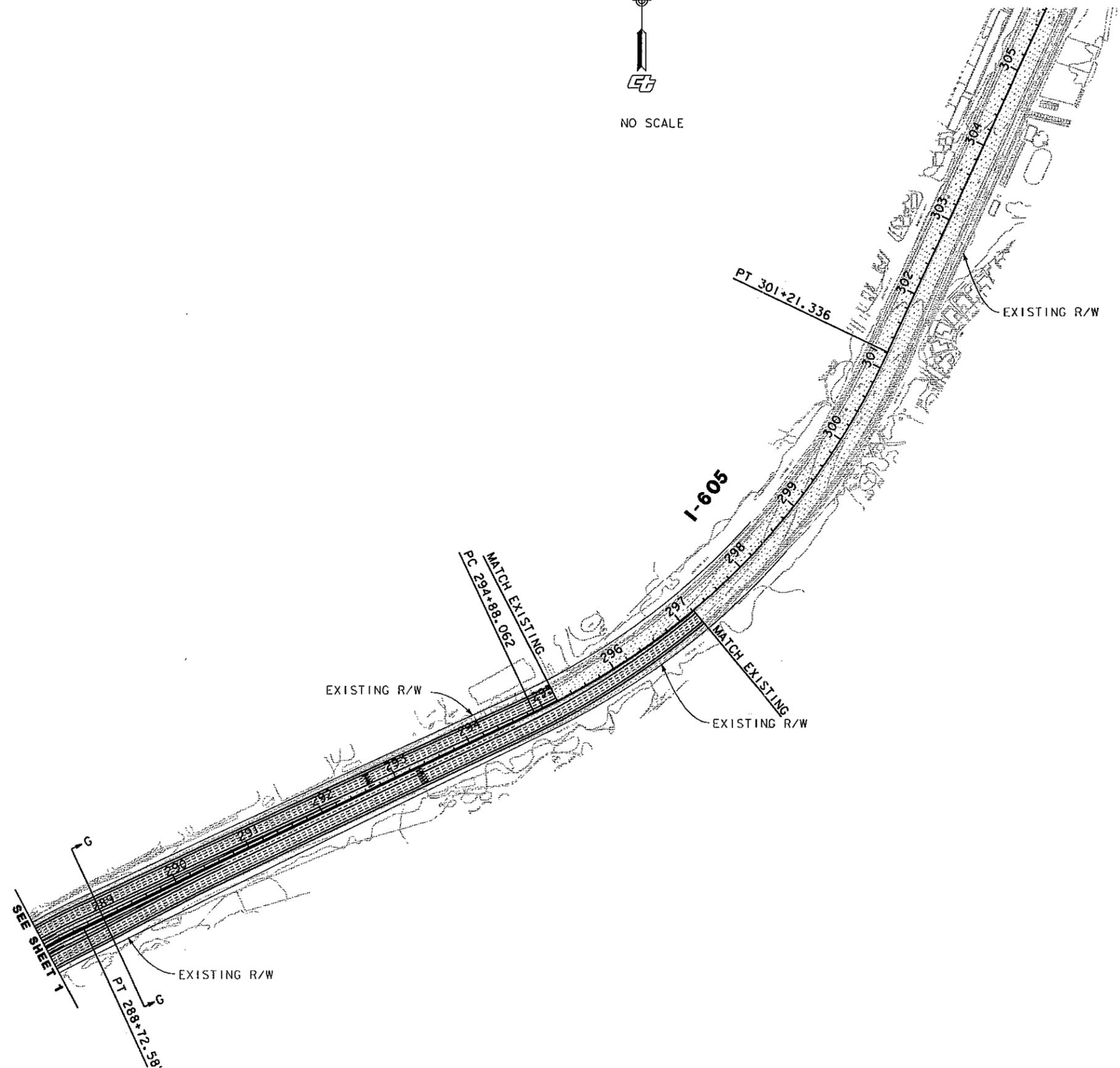
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PRELIMINARY PLAN
 (FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
SR-60 KP 17.9/21.2 (PM 11.1/13.2)
I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
07186-23560K



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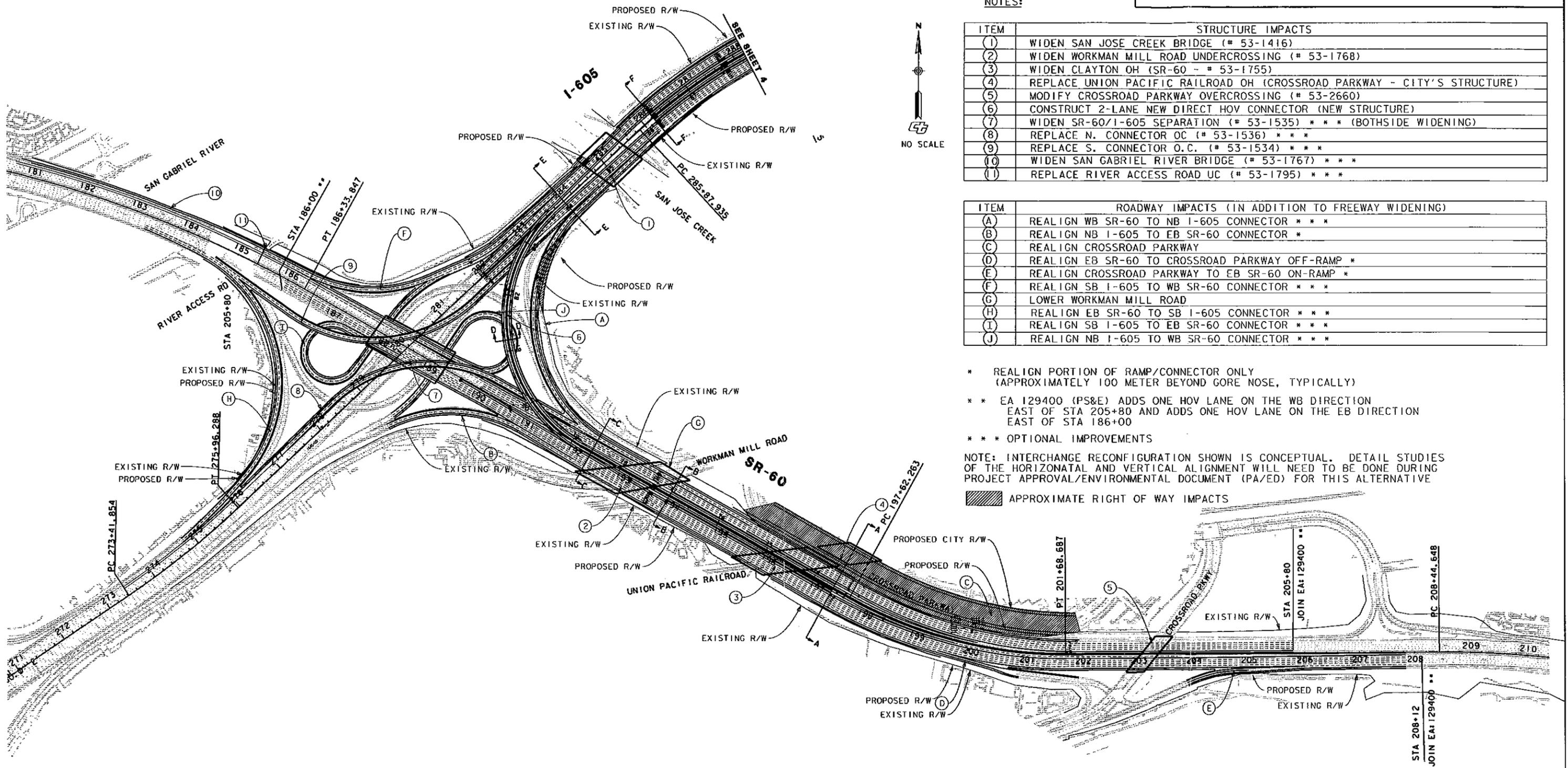
ATTACHMENT C
ALTERNATIVE 2
MINIMUM BUILD
HOV DIRECT CONNECTOR
SHEET 2 OF 10

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PRELIMINARY PLAN
 (FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
SR-60 KP 18.8/21.2 (PM 11.7/13.2)
I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
07186-23560K

NOTES:



ITEM	STRUCTURE IMPACTS
(1)	WIDEN SAN JOSE CREEK BRIDGE (# 53-1416)
(2)	WIDEN WORKMAN MILL ROAD UNDERCROSSING (# 53-1768)
(3)	WIDEN CLAYTON OH (SR-60 - # 53-1755)
(4)	REPLACE UNION PACIFIC RAILROAD OH (CROSSROAD PARKWAY - CITY'S STRUCTURE)
(5)	MODIFY CROSSROAD PARKWAY OVERCROSSING (# 53-2660)
(6)	CONSTRUCT 2-LANE NEW DIRECT HOV CONNECTOR (NEW STRUCTURE)
(7)	WIDEN SR-60/I-605 SEPARATION (# 53-1535) * * * (BOTH SIDE WIDENING)
(8)	REPLACE N. CONNECTOR OC (# 53-1536) * * *
(9)	REPLACE S. CONNECTOR O.C. (# 53-1534) * * *
(10)	WIDEN SAN GABRIEL RIVER BRIDGE (# 53-1767) * * *
(11)	REPLACE RIVER ACCESS ROAD UC (# 53-1795) * * *

ITEM	ROADWAY IMPACTS (IN ADDITION TO FREEWAY WIDENING)
(A)	REALIGN WB SR-60 TO NB I-605 CONNECTOR * * *
(B)	REALIGN NB I-605 TO EB SR-60 CONNECTOR *
(C)	REALIGN CROSSROAD PARKWAY
(D)	REALIGN EB SR-60 TO CROSSROAD PARKWAY OFF-RAMP *
(E)	REALIGN CROSSROAD PARKWAY TO EB SR-60 ON-RAMP *
(F)	REALIGN SB I-605 TO WB SR-60 CONNECTOR * * *
(G)	LOWER WORKMAN MILL ROAD
(H)	REALIGN EB SR-60 TO SB I-605 CONNECTOR * * *
(I)	REALIGN SB I-605 TO EB SR-60 CONNECTOR * * *
(J)	REALIGN NB I-605 TO WB SR-60 CONNECTOR * * *

* REALIGN PORTION OF RAMP/CONNECTOR ONLY (APPROXIMATELY 100 METER BEYOND GORE NOSE, TYPICALLY)

* * EA 129400 (PS&E) ADDS ONE HOV LANE ON THE WB DIRECTION EAST OF STA 205+80 AND ADDS ONE HOV LANE ON THE EB DIRECTION EAST OF STA 186+00

* * * OPTIONAL IMPROVEMENTS

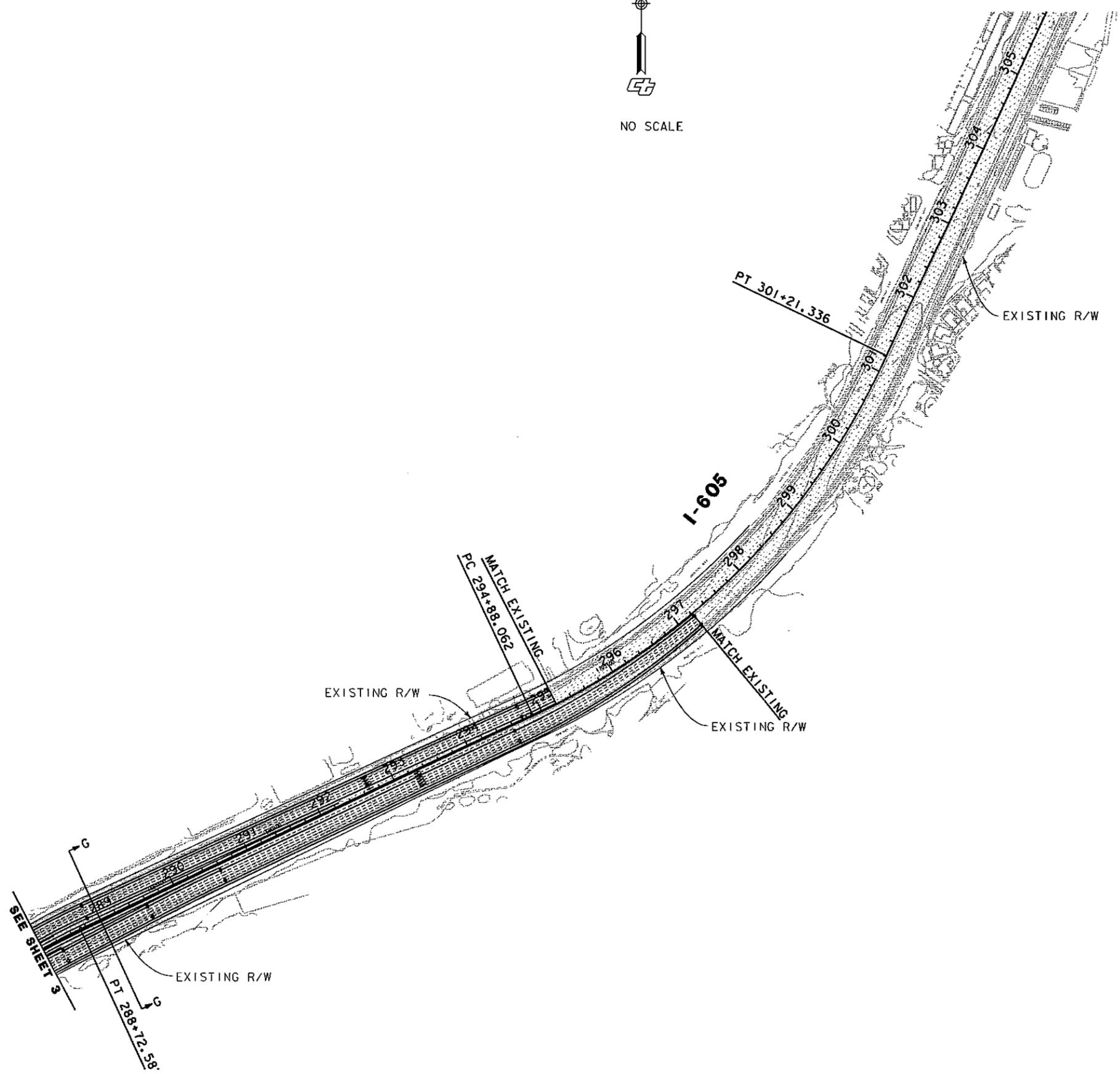
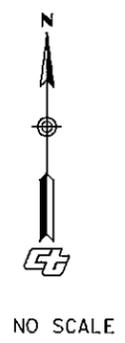
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APPROXIMATE RIGHT OF WAY IMPACTS

ATTACHMENT C
ALTERNATIVE 2
MINIMUM BUILD
HOV DIRECT CONNECTOR
AND OPTIONAL IMPROVEMENTS
SHEET 3 OF 10



PRELIMINARY PLAN
 (FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
 SR-60 KP 17.9/21.2 (PM 11.1/13.2)
 I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
 07186-23560K

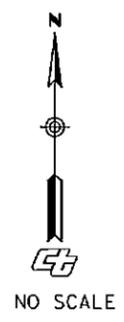
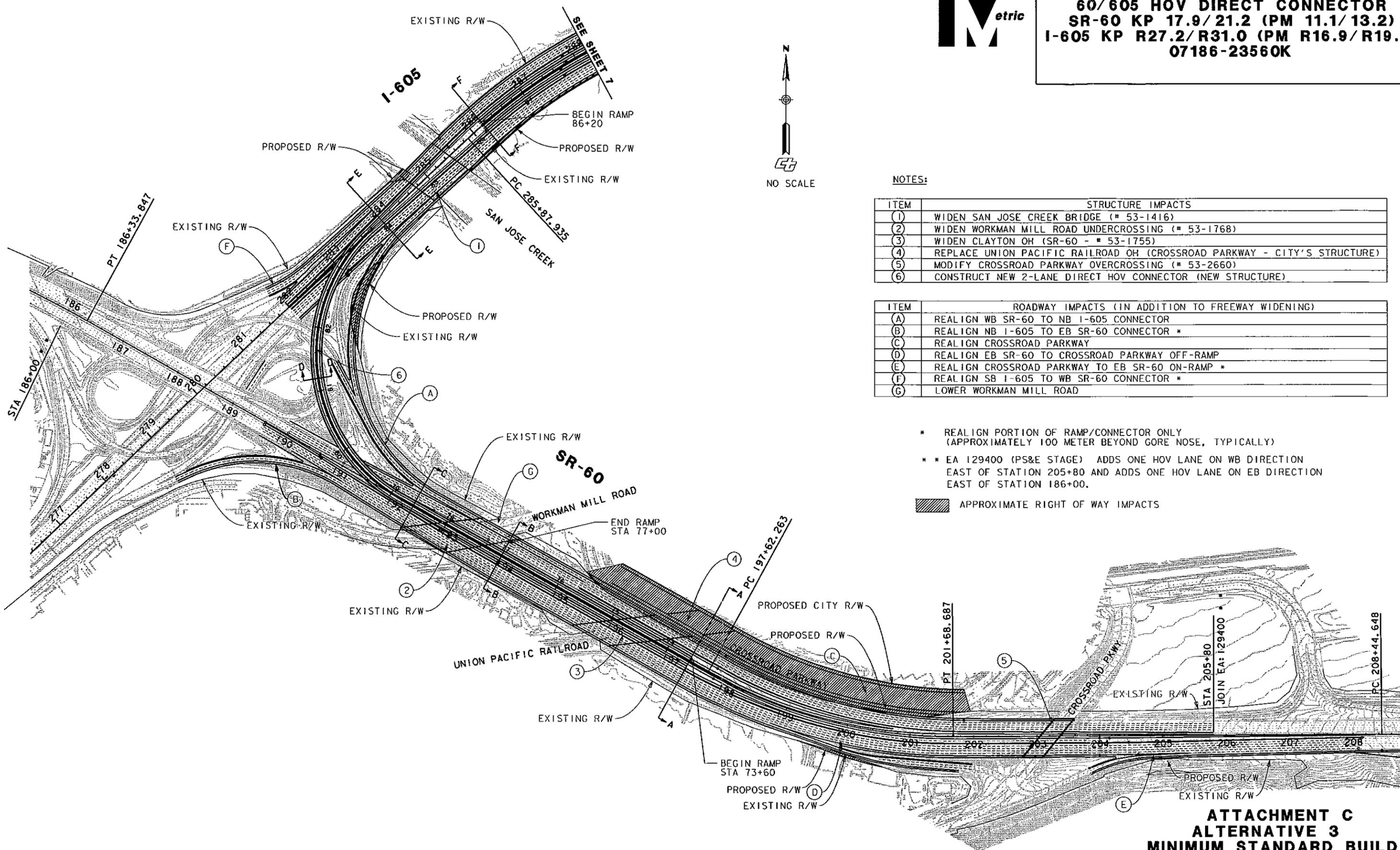


ATTACHMENT C
ALTERNATIVE 2
MINIMUM BUILD
HOV DIRECT CONNECTOR
AND OPTIONAL IMPROVEMENTS
SHEET 4 OF 10

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PRELIMINARY PLAN
 (FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
SR-60 KP 17.9/21.2 (PM 11.1/13.2)
I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
07186-23560K



NOTES:

ITEM	STRUCTURE IMPACTS
(1)	WIDEN SAN JOSE CREEK BRIDGE (# 53-1416)
(2)	WIDEN WORKMAN MILL ROAD UNDERCROSSING (# 53-1768)
(3)	WIDEN CLAYTON OH (SR-60 - # 53-1755)
(4)	REPLACE UNION PACIFIC RAILROAD OH (CROSSROAD PARKWAY - CITY'S STRUCTURE)
(5)	MODIFY CROSSROAD PARKWAY OVERCROSSING (# 53-2660)
(6)	CONSTRUCT NEW 2-LANE DIRECT HOV CONNECTOR (NEW STRUCTURE)

ITEM	ROADWAY IMPACTS (IN ADDITION TO FREEWAY WIDENING)
(A)	REALIGN WB SR-60 TO NB I-605 CONNECTOR
(B)	REALIGN NB I-605 TO EB SR-60 CONNECTOR *
(C)	REALIGN CROSSROAD PARKWAY
(D)	REALIGN EB SR-60 TO CROSSROAD PARKWAY OFF-RAMP
(E)	REALIGN CROSSROAD PARKWAY TO EB SR-60 ON-RAMP *
(F)	REALIGN SB I-605 TO WB SR-60 CONNECTOR *
(G)	LOWER WORKMAN MILL ROAD

* REALIGN PORTION OF RAMP/CONNECTOR ONLY (APPROXIMATELY 100 METER BEYOND GORE NOSE, TYPICALLY)
 * * EA 129400 (PS&E STAGE) ADDS ONE HOV LANE ON WB DIRECTION EAST OF STATION 205+80 AND ADDS ONE HOV LANE ON EB DIRECTION EAST OF STATION 186+00.

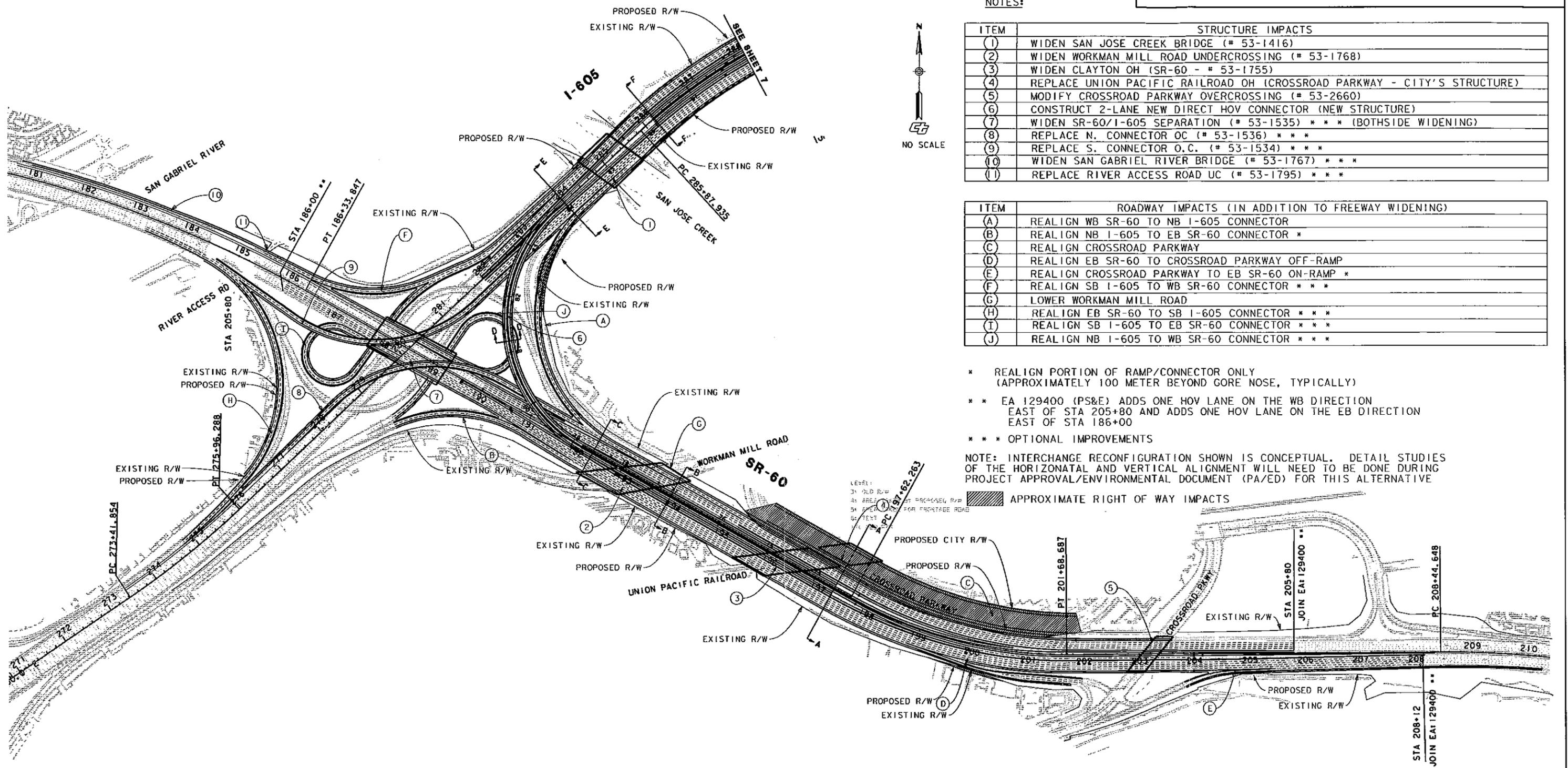
APPROXIMATE RIGHT OF WAY IMPACTS

ATTACHMENT C
ALTERNATIVE 3
MINIMUM STANDARD BUILD
HOV DIRECT CONNECTOR
SHEET 5 OF 10

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PRELIMINARY PLAN
 (FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
SR-60 KP 17.9/21.2 (PM 11.1/13.2)
I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
07186-23560K



NOTES:

ITEM	STRUCTURE IMPACTS
(1)	WIDEN SAN JOSE CREEK BRIDGE (# 53-1416)
(2)	WIDEN WORKMAN MILL ROAD UNDERCROSSING (# 53-1768)
(3)	WIDEN CLAYTON OH (SR-60 - # 53-1755)
(4)	REPLACE UNION PACIFIC RAILROAD OH (CROSSROAD PARKWAY - CITY'S STRUCTURE)
(5)	MODIFY CROSSROAD PARKWAY OVERCROSSING (# 53-2660)
(6)	CONSTRUCT 2-LANE NEW DIRECT HOV CONNECTOR (NEW STRUCTURE)
(7)	WIDEN SR-60/I-605 SEPARATION (# 53-1535) * * * (BOTH SIDE WIDENING)
(8)	REPLACE N. CONNECTOR OC (# 53-1536) * * *
(9)	REPLACE S. CONNECTOR O.C. (# 53-1534) * * *
(10)	WIDEN SAN GABRIEL RIVER BRIDGE (# 53-1767) * * *
(11)	REPLACE RIVER ACCESS ROAD UC (# 53-1795) * * *

ITEM	ROADWAY IMPACTS (IN ADDITION TO FREEWAY WIDENING)
(A)	REALIGN WB SR-60 TO NB I-605 CONNECTOR
(B)	REALIGN NB I-605 TO EB SR-60 CONNECTOR *
(C)	REALIGN CROSSROAD PARKWAY
(D)	REALIGN EB SR-60 TO CROSSROAD PARKWAY OFF-RAMP
(E)	REALIGN CROSSROAD PARKWAY TO EB SR-60 ON-RAMP *
(F)	REALIGN SB I-605 TO WB SR-60 CONNECTOR * * *
(G)	LOWER WORKMAN MILL ROAD
(H)	REALIGN EB SR-60 TO SB I-605 CONNECTOR * * *
(I)	REALIGN SB I-605 TO EB SR-60 CONNECTOR * * *
(J)	REALIGN NB I-605 TO WB SR-60 CONNECTOR * * *

* REALIGN PORTION OF RAMP/CONNECTOR ONLY (APPROXIMATELY 100 METER BEYOND GORE NOSE, TYPICALLY)

* * EA 129400 (PS&E) ADDS ONE HOV LANE ON THE WB DIRECTION EAST OF STA 205+80 AND ADDS ONE HOV LANE ON THE EB DIRECTION EAST OF STA 186+00

* * * OPTIONAL IMPROVEMENTS

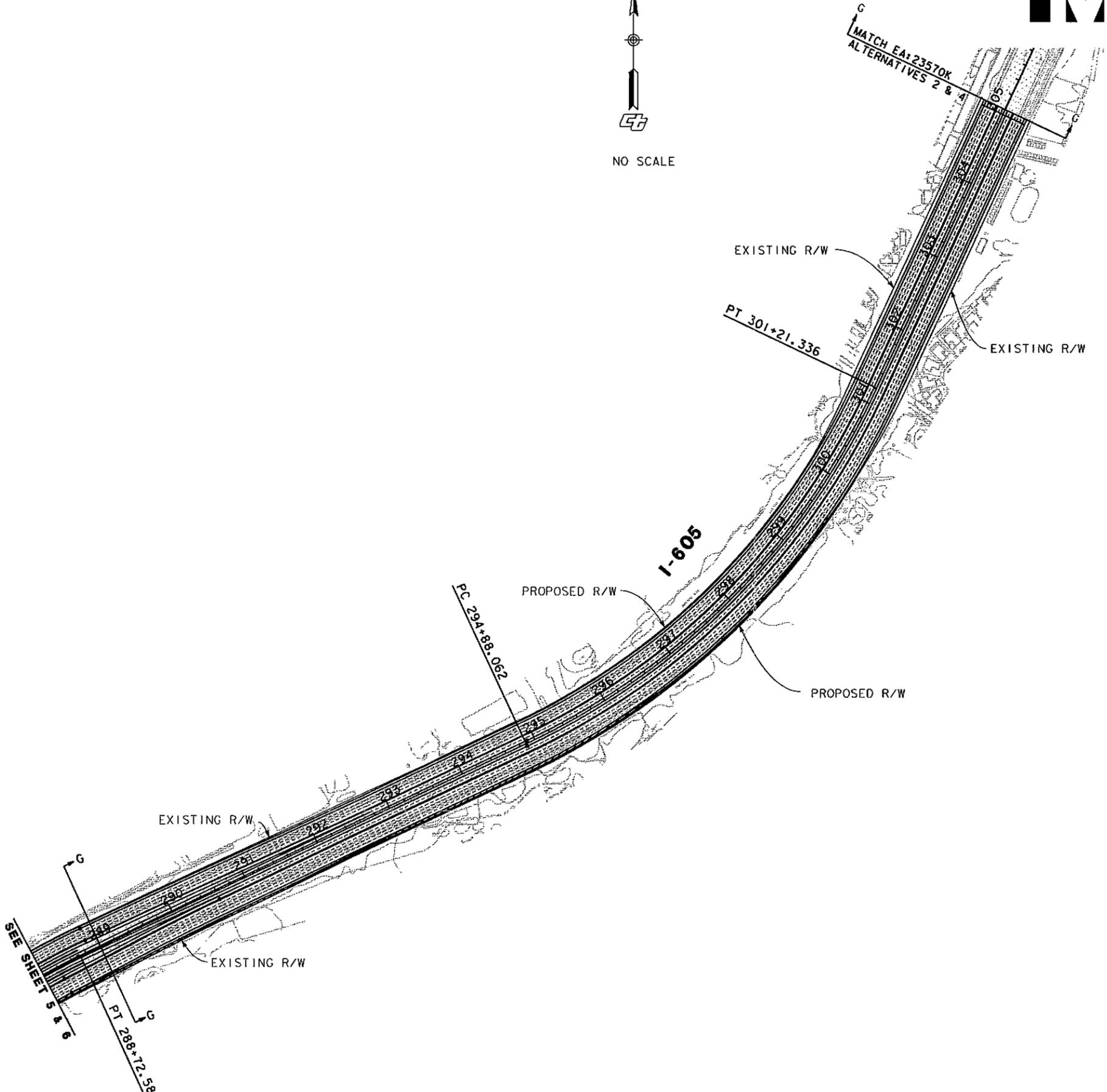
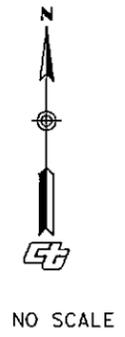
NOTE: INTERCHANGE RECONFIGURATION SHOWN IS CONCEPTUAL. DETAIL STUDIES OF THE HORIZONTAL AND VERTICAL ALIGNMENT WILL NEED TO BE DONE DURING PROJECT APPROVAL/ENVIRONMENTAL DOCUMENT (PA/ED) FOR THIS ALTERNATIVE

APPROXIMATE RIGHT OF WAY IMPACTS

ATTACHMENT C
ALTERNATIVE 3
MINIMUM STANDARD BUILD
HOV DIRECT CONNECTOR
AND OPTIONAL IMPROVEMENTS
SHEET 6 OF 10



PRELIMINARY PLAN
 (FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
 SR-60 KP 17.9/21.2 (PM 11.1/13.2)
 I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
 07186-23560K



APPROXIMATE RIGHT OF WAY IMPACTS

ATTACHMENT C
ALTERNATIVE 3
MINIMUM STANDARD BUILD
HOV DIRECT CONNECTOR
SHEET 7 OF 10

DATE PLOTTED 23 03 JAN 2003
 TIME PLOTTED 2 13:52:32
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 DGN FILE = 3 11 125560k104.dgn



PRELIMINARY PLAN
 (FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
SR-60 KP 17.9/21.2 (PM 11.1/13.2)
I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
07186-23560K

NOTES:

ITEM	STRUCTURE IMPACTS
①	WIDEN SAN JOSE CREEK BRIDGE (# 53-1416)
②	WIDEN WORKMAN MILL ROAD UNDERCROSSING (# 53-1768)
③	WIDEN CLAYTON OH (SR-60 - # 53-1755)
④	REPLACE UNION PACIFIC RAILROAD OH (CROSSROAD PARKWAY - CITY'S STRUCTURE)
⑤	MODIFY CROSSROAD PARKWAY OVERCROSSING (# 53-2660)
⑥	CONSTRUCT 4-LANE NEW DIRECT HOV CONNECTOR (NEW STRUCTURE)
⑦	WIDEN SR-60/I-605 SEPARATION (# 53-1535) (SOUTHSIDE WIDENING)
⑧	REPLACE N. CONNECTOR OC (# 53-1536)
⑨	REPLACE S. CONNECTOR O.C. (# 53-1534)

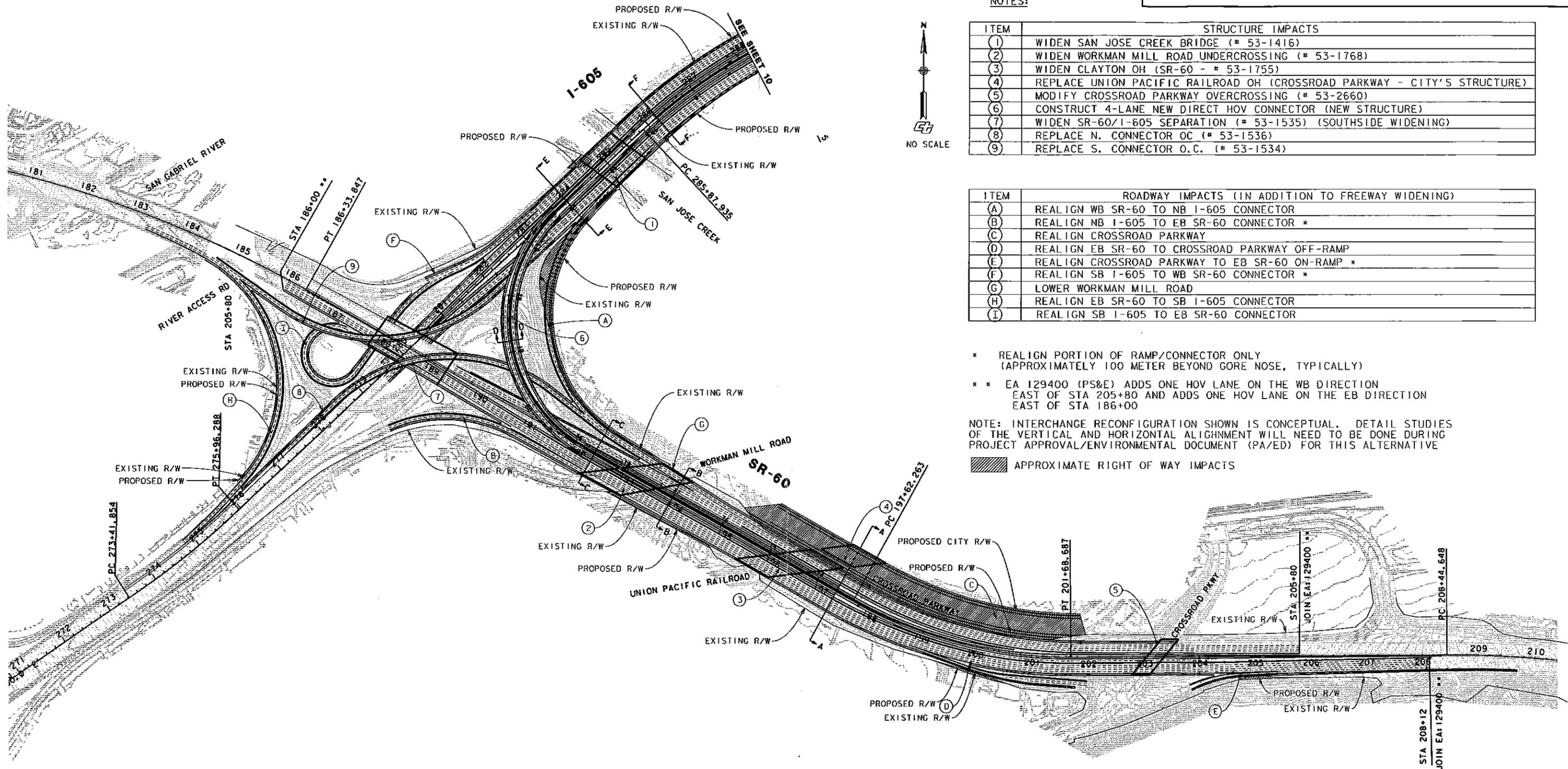
ITEM	ROADWAY IMPACTS (IN ADDITION TO FREEWAY WIDENING)
A	REALIGN WB SR-60 TO NB I-605 CONNECTOR
B	REALIGN NB I-605 TO EB SR-60 CONNECTOR *
C	REALIGN CROSSROAD PARKWAY
D	REALIGN EB SR-60 TO CROSSROAD PARKWAY OFF-RAMP
E	REALIGN CROSSROAD PARKWAY TO EB SR-60 ON-RAMP *
F	REALIGN SB I-605 TO WB SR-60 CONNECTOR *
G	LOWER WORKMAN MILL ROAD
H	REALIGN EB SR-60 TO SB I-605 CONNECTOR
I	REALIGN SB I-605 TO EB SR-60 CONNECTOR

* REALIGN PORTION OF RAMP/CONNECTOR ONLY (APPROXIMATELY 100 METER BEYOND GORE NOSE, TYPICALLY)

** EA 129400 (PS&E) ADDS ONE HOV LANE ON THE WB DIRECTION EAST OF STA 205+80 AND ADDS ONE HOV LANE ON THE EB DIRECTION EAST OF STA 186+00

NOTE: INTERCHANGE RECONFIGURATION SHOWN IS CONCEPTUAL. DETAIL STUDIES OF THE VERTICAL AND HORIZONTAL ALIGNMENT WILL NEED TO BE DONE DURING PROJECT APPROVAL/ENVIRONMENTAL DOCUMENT (PA/ED) FOR THIS ALTERNATIVE

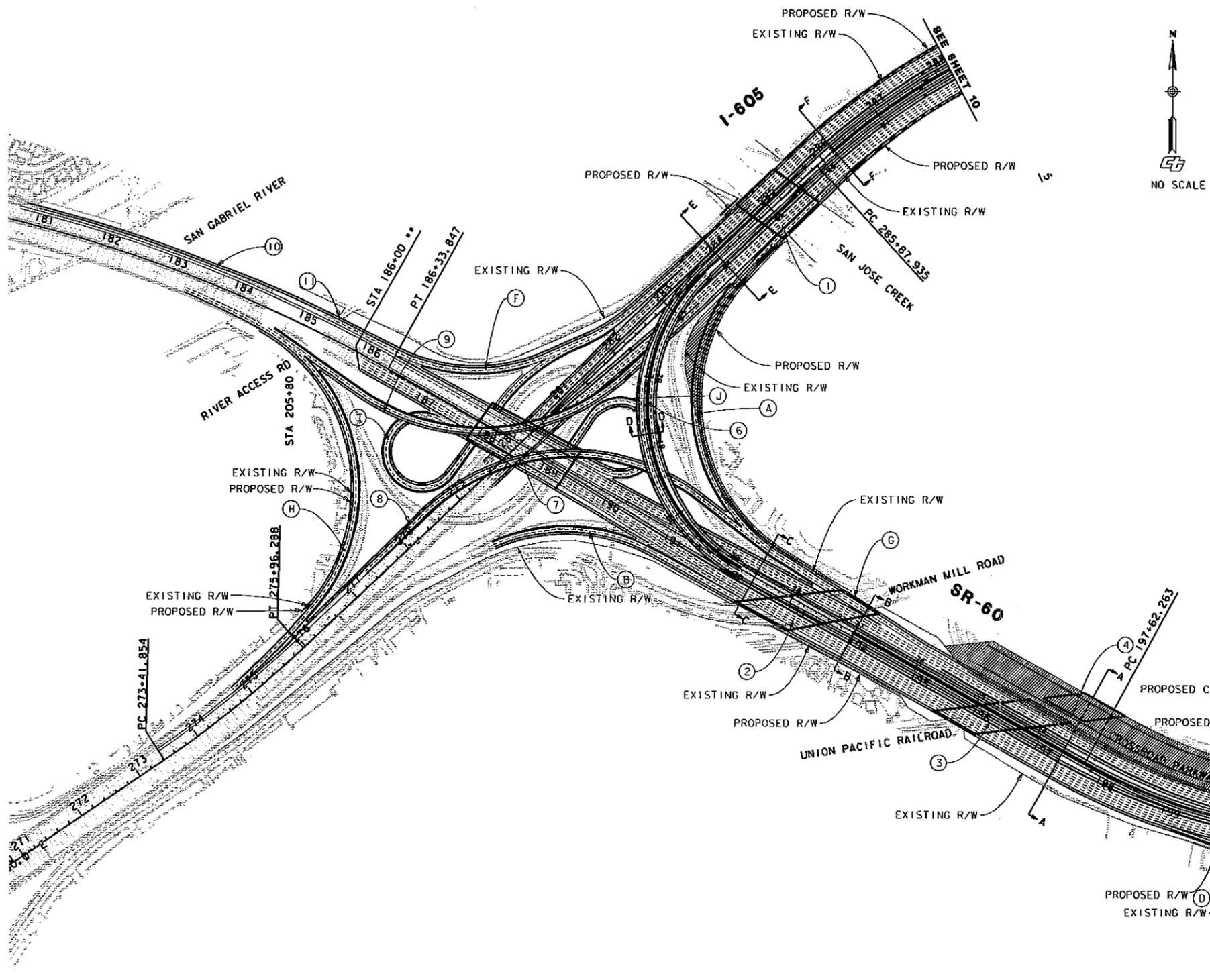
APPROXIMATE RIGHT OF WAY IMPACTS



ATTACHMENT C
ALTERNATIVE 4
FULL STANDARD BUILD
HOV DIRECT CONNECTOR



PRELIMINARY PLAN
 (FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
SR-60 KP 17.9/21.2 (PM 11.1/13.2)
I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
07186-23560K



NOTES:

ITEM	STRUCTURE IMPACTS
(1)	WIDEN SAN JOSE CREEK BRIDGE (# 53-1416)
(2)	WIDEN WORKMAN MILL ROAD UNDERCROSSING (# 53-1768)
(3)	WIDEN CLAYTON OH (SR-60 - # 53-1755)
(4)	REPLACE UNION PACIFIC RAILROAD OH (CROSSROAD PARKWAY - CITY'S STRUCTURE)
(5)	MODIFY CROSSROAD PARKWAY OVERCROSSING (# 53-2660)
(6)	CONSTRUCT 4-LANE NEW DIRECT HOV CONNECTOR (NEW STRUCTURE)
(7)	WIDEN SR-60/I-605 SEPARATION (# 53-1535) * * * (NORTHSIDE WIDENING)
(8)	REPLACE N. CONNECTOR OC (# 53-1536)
(9)	REPLACE S. CONNECTOR O.C. (# 53-1534)
(10)	WIDEN SAN GABRIEL RIVER BRIDGE (# 53-1767) * * *
(11)	REPLACE RIVER ACCESS ROAD UC (# 53-1795) * * *

ITEM	ROADWAY IMPACTS (IN ADDITION TO FREEWAY WIDENING)
(A)	REALIGN AND MODIFY WB SR-60 TO NB I-605 CONNECTOR
(B)	REALIGN NB I-605 TO EB SR-60 CONNECTOR *
(C)	REALIGN CROSSROAD PARKWAY
(D)	REALIGN EB SR-60 TO CROSSROAD PARKWAY OFF-RAMP
(E)	REALIGN CROSSROAD PARKWAY TO EB SR-60 ON-RAMP *
(F)	REALIGN SB I-605 TO WB SR-60 CONNECTOR * * *
(G)	LOWER WORKMAN MILL ROAD
(H)	REALIGN EB SR-60 TO SB I-605 CONNECTOR
(I)	REALIGN SB I-605 TO EB SR-60 CONNECTOR
(J)	REALIGN NB I-605 TO WB SR-60 CONNECTOR * * *

- * REALIGN PORTION OF RAMP/CONNECTOR ONLY (APPROXIMATELY 100 METER BEYOND GORE NOSE, TYPICALLY)
- * * EA 129400 (PS&E) ADDS ONE HOV LANE ON THE WB DIRECTION EAST OF STA 205+80 AND ADDS ONE HOV LANE ON THE EB DIRECTION EAST OF STA 186+00
- * * * OPTIONAL IMPROVEMENTS

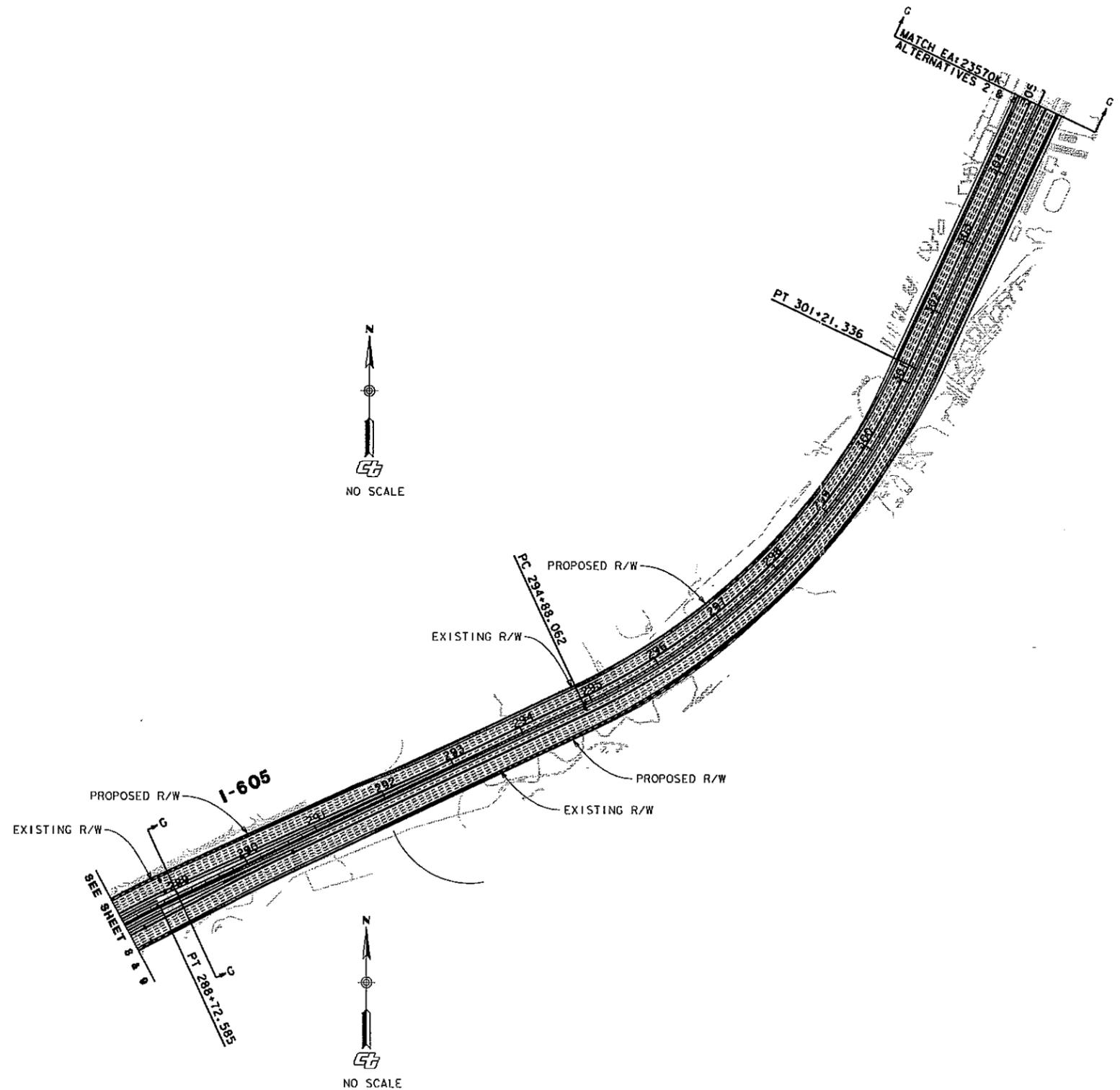
NOTE: INTERCHANGE RECONFIGURATION SHOWN IS CONCEPTUAL. DETAIL STUDIES OF THE HORIZONTAL AND VERTICAL ALIGNMENT WILL NEED TO BE DONE DURING PROJECT APPROVAL/ENVIRONMENTAL DOCUMENT (PA/ED) FOR THIS ALTERNATIVE

APPROXIMATE RIGHT OF WAY IMPACTS

ATTACHMENT C
ALTERNATIVE 4
FULL STANDARD BUILD
HOV DIRECT CONNECTOR
AND OPTIONAL IMPROVEMENTS
SHEET 9 OF 10



PRELIMINARY PLAN
(FOR PROJECT INITIATION DOCUMENT ONLY)
60/605 HOV DIRECT CONNECTOR
SR-60 KP 17.9/21.2 (PM 11.1/13.2)
I-605 KP R27.2/R31.0 (PM R16.9/R19.3)
07186-23560K



 APPROXIMATE RIGHT OF WAY IMPACTS

ATTACHMENT C
ALTERNATIVE 4
FULL STANDARD BUILD
HOV DIRECT CONNECTOR

I. ROADWAY ITEMS

	<u>Average Cost per Lane KM</u>	<u>Number of KMs</u>	<u>Total cost</u>
Total Cost of Lane KMs	<u>\$11,071,400</u>	<u>4.2</u>	<u>\$92,999,760</u>
			USE <u>\$93,000,000</u>

The Average Cost per Lane KM was computed by dividing the Total Roadway Cost by the Number of KMs, then divided again by the number of lanes proposed. The Total Roadway Cost includes the following items: Earthwork, Pavement Structural Section, Specialty Items (including Landscaping Beautification, Fiber Optic Communication System, Traffic Management Plan-TMP, and Temporary Best Management Practice-BMP), Minor Items, Roadway Mobilization, and Roadway Additions. Retaining walls and sound walls are proposed at ultimate locations. Contingency of 35 percent was factored in the subtotal cost to obtain the final Total Roadway Cost.

II. STRUCTURES ITEMS

Bridge Name	<u>Structure (1)</u> <u>San Jose Creek</u> <u>Diversion Bridge</u> <u>(#53-1416)</u>	<u>Structure (2)</u> <u>Workman Mill</u> <u>Road UC</u> <u>(#53-1768)</u>	<u>Structure (3)</u> <u>Clayton OH</u> <u>(#53-1755)</u>
Total Cost for Structure	<u>\$1,773,538</u>	<u>\$1,458,400</u>	<u>\$2,036,700</u>
Bridge Name	<u>Structure (4)</u> <u>City OH</u>	<u>Structure (5)</u> <u>Crossroad</u> <u>Parkway OC</u> <u>(#53-2660)</u>	<u>Structure (6)</u> <u>New structure</u> <u>Direct HOV</u> <u>connector</u>
Total Cost for Structure	<u>\$2,010,000</u>	<u>\$801,400</u>	<u>\$22,246,900</u>
	TOTAL STRUCTURES ITEMS		<u>\$30,326,938</u>
	(Sum of Total Cost for Structures)		
		USE	<u>\$30,400,000</u>

The preliminary cost is based on the estimates obtained from the Headquarters' Structure unit. This cost to include the 10% mobilization and 20% contingency.

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$3,380,000</u>	<u>\$3,380,000</u>
			USE	<u>\$3,380,000</u>

The preliminary cost is based on the estimates obtained from the Environmental Planning Unit and Hazardous Waste Unit. This cost to include environmental mitigation and related costs such as biological and hazardous waste material mitigation (including aerial deposited lead (ADL) contaminated soil, lead-based and thermosplastic paint, abestos containing material (ACM).

IV. RIGHT OF WAY ITEMS

	CURRENT VALUE	ESCALATED VALUE
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$243,805	\$365,276
B. Utility Relocation	\$648,500	\$978,513
TOTAL RIGHT OF WAY ITEMS	\$895,329	\$1,348,000
	USE	<u>\$1,348,000</u>

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

The preliminary cost is based on the estimates obtained from the Utilities unit. This cost to include right-of-way related costs such as acquisition, and utility relocation.

I. ROADWAY ITEMS

	<u>Average Cost per Lane KM</u>	<u>Number of KMs</u>	<u>Total cost</u>
Total Cost of Lane KMs	<u>\$2,523,800</u>	<u>4.2</u>	<u>\$21,199,920</u>
			USE <u>\$21,200,000</u>

The Average Cost per Lane KM was computed by dividing the Total Roadway Cost by the Number of KMs, then divided again by the number of lanes proposed. The Total Roadway Cost are the additional costs for the optional improvements.

II. STRUCTURES ITEMS

	<u>Structure (7)</u>	<u>Structure (8)</u>	<u>Structure (9)</u>
Bridge Name	<u>60/605 SEP</u> <u>(#53-1535)</u>	<u>N. CONN</u> <u>(#53-1536)</u>	<u>S. CONN</u> <u>(#53-1534)</u>
Total Cost for Structure	<u>\$2,722,600</u>	<u>\$8,596,400</u>	<u>\$8,868,300</u>

	<u>Structure (10)</u>	<u>Structure (11)</u>
Bridge Name	<u>San Gabriel</u> <u>(#53-1767)</u>	<u>River Access Rd</u> <u>(#53-1795)</u>
Total Cost for Structure	<u>\$1,271,200</u>	<u>\$804,200</u>

TOTAL STRUCTURES ITEMS \$22,262,700
 (Sum of Total Cost for Structures)

USE \$22,300,000

The preliminary cost is based on the estimates obtained from the Headquarters' Structure unit. This cost to include the 10% mobilization and 20% contingency.

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$916,000</u>	<u>\$916,000</u>
			USE	<u>\$916,000</u>

The preliminary cost is based on the estimates obtained from the Environmental Planning Unit and Hazardous Waste Unit. This cost to include environmental mitigation and related costs such as biological and hazardous waste material mitigation (including aerial deposited lead (ADL) contaminated soil, lead-based and thermoplastic paint, abestos containing material (ACM).

IV. RIGHT OF WAY ITEMS

	CURRENT VALUE	ESCALATED VALUE
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill		
B. Utility Relocation		

TOTAL RIGHT OF WAY ITEMS

USE

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

The preliminary cost is based on the estimates obtained from the Utilities unit. This cost to include right-of-way related costs such as acquisition, and utility relocation.



Project Study Report – Project Development Support Cost Estimate

District-County-Route 07-LA-60
07-LA-605
 KP(PM) 17.9/21.2(11.1/13.2)
R27.2/R31.0(R16.9/R19.3)
 EA 23560K
 Program Code HE13

PROJECT DESCRIPTION:

Limits State Route 60 and Route 605 in Los Angeles county

Proposed Improvement (Scope) Construct a 60/605 2-Lane HOV Direct Connector

Alternative **No. 3 Minimum Standard**

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ <u>139,400,000</u>
TOTAL STRUCTURE ITEMS	\$ <u>32,900,000</u>
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$ <u>4,726,000</u>
 SUBTOTAL CONSTRUCTION COSTS	 \$ <u>177,026,000</u>
 TOTAL RIGHT OF WAY ITEMS	 \$ <u>5,100,000</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ <u>182,126,000</u>
 USE \$	 <u>190,000,000 – 220,000,000</u>

I. ROADWAY ITEMS

	<u>Average Cost per Lane KM</u>	<u>Number of KMs</u>	<u>Total cost</u>
Total Cost of Lane KMs	<u>\$16,595,200</u>	<u>4.2</u>	<u>\$139,399,680</u>
		USE	<u>\$139,400,000</u>

The Average Cost per Lane KM was computed by dividing the Total Roadway Cost by the Number of KMs, then divided again by the number of lanes proposed. The Total Roadway Cost includes the following items: Earthwork, Pavement Structural Section, Specialty Items (including Landscaping Beautification, Fiber Optic Communication System, Traffic Management Plan-TMP, and Temporary Best Management Practice-BMP), Minor Items, Roadway Mobilization, and Roadway Additions. Retaining walls and sound walls are proposed at ultimate locations. Contingency of 35 percent was factored in the subtotal cost to obtain the final Total Roadway Cost.

II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)
Bridge Name	<u>San Jose Creek Bridge</u>	<u>Workman Mill Road</u>	<u>Clayton OH</u>
	<u>(#53-1416)</u>	<u>UC (#53-1768)</u>	<u>(#53-1755)</u>
Total Cost for Structure	<u>\$3,347,300</u>	<u>\$1,923,800</u>	<u>\$2,699,400</u>
	Structure (4)	Structure (5)	Structure (6)
Bridge Name	<u>City OH</u>	<u>Crossroad Parkway</u>	<u>New structure</u>
		<u>OC (#53-2660)</u>	<u>Direct HOV</u>
Total Cost for Structure	<u>\$2,010,000</u>	<u>\$1,753,100</u>	<u>\$21,116,700</u>

TOTAL STRUCTURES ITEMS \$32,850,300
 (Sum of Total Cost for Structures)

USE \$32,900,000

The preliminary cost is based on the estimates obtained from the Headquarters' Structure unit. This cost to include the 10% mobilization and 20% contingency.

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$4,726,000</u>	<u>\$4,726,000</u>
			USE	<u>\$4,726,000</u>

The preliminary cost is based on the estimates obtained from the Environmental Planning Unit and Hazardous Waste Unit. This cost to include environmental mitigation and related costs such as biological and hazardous waste material mitigation (including aerial deposited lead (ADL) contaminated soil, lead-based and thermoplastic paint, abestos containing material (ACM).

IV. RIGHT OF WAY ITEMS

	CURRENT VALUE	ESCALATED VALUE
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$2,492,865	\$3,734,882
B. Utility Relocation	\$884,500	\$1,334,611
TOTAL RIGHT OF WAY ITEMS	\$3,396,083	\$5,097,537
	USE	<u>\$5,100,000</u>

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

The preliminary cost is based on the estimates obtained from the Utilities unit. This cost to include right-of-way related costs such as acquisition, and utility relocation.

I. ROADWAY ITEMS

	<u>Average Cost per Lane KM</u>	<u>Number of KMs</u>	<u>Total cost</u>
Total Cost of Lane KMs	<u>\$2,023,800</u>	<u>4.2</u>	<u>\$16,999,920</u>
		USE	<u>\$17,000,000</u>

The Average Cost per Lane KM was computed by dividing the Total Roadway Cost by the Number of KMs, then divided again by the number of lanes proposed. The Total Roadway Cost are the additional costs for the optional improvements.

II. STRUCTURES ITEMS

	Structure (7)	Structure (8)	Structure (9)
Bridge Name	<u>60/605 SEP</u>	<u>N. CONN</u>	<u>S. CONN</u>
	<u>(#53-1535)</u>	<u>(#53-1536)</u>	<u>(#53-1534)</u>
Total Cost for Structure	<u>\$2,722,600</u>	<u>\$8,596,400</u>	<u>\$8,868,300</u>
	Structure (10)	Structure (11)	
Bridge Name	<u>San Gabriel</u>	<u>River Access Rd</u>	
	<u>(#53-1767)</u>	<u>(#53-1795)</u>	
Total Cost for Structure	<u>\$1,271,200</u>	<u>\$804,200</u>	

TOTAL STRUCTURES ITEMS \$22,262,700
 (Sum of Total Cost for Structures)

USE \$22,300,000

The preliminary cost is based on the estimates obtained from the Headquarters' Structure unit. This cost to include the 10% mobilization and 20% contingency.

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$771,000</u>	<u>\$771,000</u>
			USE	<u>\$771,000</u>

The preliminary cost is based on the estimates obtained from the Environmental Planning Unit and Hazardous Waste Unit. This cost to include environmental mitigation and related costs such as biological and hazardous waste material mitigation (including aerial deposited lead (ADL) contaminated soil, lead-based and thermoplastic paint, abestos containing material (ACM).

IV. RIGHT OF WAY ITEMS

	CURRENT VALUE	ESCALATED VALUE
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill		
B. Utility Relocation		

TOTAL RIGHT OF WAY ITEMS

USE

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

The preliminary cost is based on the estimates obtained from the Utilities unit. This cost to include right-of-way related costs such as acquisition, and utility relocation.



Project Study Report – Project Development Support Cost Estimate

District-County-Route 07-LA-60
07-LA-605
 KP(PM) 17.9/21.2(11.1/13.2)
R27.2/R31.0(R16.9/R19.3)
 EA 23560K
 Program Code HE13

PROJECT DESCRIPTION:

Limits State Route 60 and Route 605 in Los Angeles county

Proposed Improvement (Scope) Construct a 60/605 4-Lane HOV Direct Connector

Alternative **No. 4-Full Standard**

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ <u>165,100,000</u>
TOTAL STRUCTURE ITEMS	\$ <u>60,300,000</u>
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$ <u>7,114,000</u>
 SUBTOTAL CONSTRUCTION COSTS	 \$ <u>232,514,000</u>
 TOTAL RIGHT OF WAY ITEMS	 \$ <u>11,558,000</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ <u>244,072,000</u>
 USE \$	 <u>250,000,000 - 280,000,000</u>

I. ROADWAY ITEMS

	<u>Average Cost per Lane KM</u>	<u>Number of KMs</u>	<u>Total cost</u>
Total Cost of Lane KMs	<u>\$19,654,700</u>	<u>4.2</u>	<u>\$165,099,480</u>
		USE	<u>\$165,100,000</u>

The Average Cost per Lane KM was computed by dividing the Total Roadway Cost by the Number of KMs, then divided again by the number of lanes proposed. The Total Roadway Cost includes the following items: Earthwork, Pavement Structural Section, Specialty Items (including Landscaping Beautification, Fiber Optic Communication System, Traffic Management Plan-TMP, and Temporary Best Management Practice-BMP), Minor Items, Roadway Mobilization, and Roadway Additions. Retaining walls and sound walls are proposed at ultimate locations. Contingency of 35 percent was factored in the subtotal cost to obtain the final Total Roadway Cost.

II. STRUCTURES ITEMS

Bridge Name	<u>Structure (1)</u> <u>San Jose Creek Bridge</u> <u>(#53-1416)</u>	<u>Structure (2)</u> <u>Workman Mill Road</u> <u>UC (#53-1768)</u>	<u>Structure (3)</u> <u>Clayton OH</u> <u>(#53-1755)</u>
Total Cost for Structure	<u>\$4,110,200</u>	<u>\$2,387,700</u>	<u>\$2,831,700</u>
Bridge Name	<u>Structure (4)</u> <u>City OH</u>	<u>Structure (5)</u> <u>Crossroad Parkway</u> <u>OC (#53-2660)</u>	<u>Structure (6)</u> <u>New structure</u> <u>Direct HOV</u> <u>connector</u>
Total Cost for Structure	<u>\$2,010,000</u>	<u>\$2,161,500</u>	<u>\$27,927,000</u>
Bridge Name	<u>Structure (7)</u> <u>60/605 SEP</u> <u>(#53-1535)</u>	<u>Structure (8)</u> <u>N. CONN</u> <u>(#53-1536)</u> <u>New Connector</u>	<u>Structure (9)</u> <u>S.CONN</u> <u>(#53-1534)</u> <u>New Connector</u>
Total Cost for Structure	<u>\$1,361,300</u>	<u>\$8,596,400</u>	<u>\$8,868,300</u>

TOTAL STRUCTURES ITEMS \$60,254,100
 (Sum of Total Cost for Structures)

USE **\$60,300,000**

The preliminary cost is based on the estimates obtained from the Headquarters' Structure unit. This cost to include the 10% mobilization and 20% contingency.

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$7,114,000</u>	<u>\$7,114,000</u>
			USE	<u>\$7,114,000</u>

The preliminary cost is based on the estimates obtained from the Environmental Planning Unit and Hazardous Waste Unit. This cost to include environmental mitigation and related costs such as biological and hazardous waste material mitigation (including aerial deposited lead (ADL) contaminated soil, lead-based and thermoplastic paint, abestos containing material (ACM).

IV. RIGHT OF WAY ITEMS

	<u>CURRENT VALUE</u>	<u>ESCALATED VALUE</u>
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$5,737,845	\$8,495,222
B. Utility Relocation	\$2,013,000	\$3,008,707
TOTAL RIGHT OF WAY ITEMS	\$7,787,017	\$11,557,484
	USE	<u>\$11,558,000</u>

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

The preliminary cost is based on the estimates obtained from the Utilities unit. This cost to include right-of-way related costs such as acquisition, and utility relocation.



Project Study Report – Project Development Support Cost Estimate

District-County-Route 07-LA-60
07-LA-605
 KP(PM) 17.9/21.2(11.1/13.2)
R27.2/R31.0(R16.9/R19.3)
 EA 23560K
 Program Code HE13

PROJECT DESCRIPTION:

Limits State Route 60 and Route 605 in Los Angeles county

Proposed Improvement (Scope) Construct a 60/605 4-Lane HOV Direct Connector

Alternative **No. 4-Optional Improvements**

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ <u>8,000,000</u>
TOTAL STRUCTURE ITEMS	\$ <u>3,500,000</u>
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$ <u>580,000</u>
 SUBTOTAL CONSTRUCTION COSTS	 \$ <u>12,080,000</u>
 TOTAL RIGHT OF WAY ITEMS	 \$ <u>0</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ <u>12,080,000</u>
 USE \$	 <u>20,000,000 - 50,000,000</u>

I. ROADWAY ITEMS

	<u>Average Cost per Lane KM</u>	<u>Number of KMs</u>	<u>Total cost</u>
Total Cost of Lane KMs	<u>\$952,300</u>	<u>4.2</u>	<u>\$7,999,320</u>
		USE	<u>\$8,000,000</u>

The Average Cost per Lane KM was computed by dividing the Total Roadway Cost by the Number of KMs, then divided again by the number of lanes proposed. The Total Roadway Cost are the additional costs for the optional improvements.

II. STRUCTURES ITEMS

	<u>Structure (7)</u>	<u>Structure (10)</u>	<u>Structure (11)</u>
Bridge Name	<u>60/605 SEP</u> <u>(#53-1535)</u>	<u>San Gabriel</u> <u>(#53-1767)</u>	<u>River Access Rd</u> <u>(#53-1795)</u>
Total Cost for Structure	<u>\$1,361,300</u>	<u>\$1,271,200</u>	<u>\$804,200</u>

Bridge Name
 Total Cost for Structure

Bridge Name
 Total Cost for Structure

TOTAL STRUCTURES ITEMS \$3,436,700
 (Sum of Total Cost for Structures)

USE \$3,500,000

The preliminary cost is based on the estimates obtained from the Headquarters' Structure unit. This cost to include the 10% mobilization and 20% contingency.

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$580,000</u>	<u>\$580,000</u>
			USE	<u>\$580,000</u>

The preliminary cost is based on the estimates obtained from the Environmental Planning Unit and Hazardous Waste Unit. This cost to include environmental mitigation and related costs such as biological and hazardous waste material mitigation (including aerial deposited lead (ADL) contaminated soil, lead-based and thermoplastic paint, abestos containing material (ACM).

IV. RIGHT OF WAY ITEMS

	CURRENT VALUE	ESCALATED VALUE
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill		
B. Utility Relocation		

TOTAL RIGHT OF WAY ITEMS

USE

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

The preliminary cost is based on the estimates obtained from the Utilities unit. This cost to include right-of-way related costs such as acquisition, and utility relocation.



PDS Design Scoping Checklist

Project Information

District 07 County LA Route 605 Kilometer Post (Post Mile) 17.9/20.9
(11.1/13.0)
R27.2/R30.1
(R16.9/R18.7) EA 23560K

Description

This southern phase of the project proposes to construct a four-lane elevated High Occupancy Vehicle (HOV) direct connector within the freeway median areas to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605. The project for the HOV lanes on SR-60 from I-605 to SR-57 is currently in the Plans, Specifications and Estimates (PS&E) phase with EA 129400.

In coordination with this project phase, another project, currently in the planning stage (northern phase, EA 23570K), is proposing to construct a four-lane elevated HOV direct connector to connect HOV traffic from northbound I-605 to westbound I-10 and eastbound I-10 to southbound I-605.

These two projects phases will provide system continuity for HOV commuters from the eastern part of the Los Angeles Metropolitan area to downtown Los Angeles.

Alternative 1: No Build

Alternative 2: Construct Minimum Build HOV Connector

Alternative 3: Construct Minimum Standard Build HOV Direct Connector

Alternative 4: Construct Full Standard Build HOV Direct Connector

Combining these project phases (EA 23560K & 23570K) will maintain system consistency for the HOV network within the limits of the combined project. The project management is committed to combining the two project phases so that sufficiently programmed resources can be allocated to complete the environmental document and project approval for the combined project (See Attachment R)

Project Manager Maen Shaar Phone Number (213) 897-8665

Project Engineer Ben Ramos Phone Number (213) 897-9605

Design Functional Manager Elaheh Yadegar Phone Number (213) 897-9635

Project Development Coordinator Jim Deluca Phone Number (916) 653-4067

Project Screening

1. Project Description as Noted in Regional Transportation Plan: N/A
2. Project Setting: In Los Angeles County on Route 60 From 60/605 Interchange to Crossroad Parkway and on Route 605 from 60/605 Interchange to 700 meters south of Valley Blvd.
- Rural or Urban Urban
- Current land uses Land within Caltrans Right of Way
- Adjacent land uses Commercial, Residential
(industrial, light industry, commercial, agricultural, residential, etc.)
- Existing landscaping/planting On both sides of freeways (SR-60 and I-605) and in the area of the SR-60/I-605 Interchange
3. Route Adoption: Date: SR60 04/20/1955 , I605 05/25/1961
- Type of Facility (Freeway, Controlled Access Highway, or Conventional Highway)
Freeway
- Freeway Agreement: Date: SR60 03/26/1968, I605 04/06/1960

Description of the Transportation Problem

HOV ingress/egress between I-605 and SR-60, which will cause safety and operational problems on the mainlines.

Proposed Scope of Work (South Phase)

This Project South Phase:

This project South Phase proposes to construct an elevated High Occupancy Vehicle (HOV) direct connector within the freeway median area to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605. The project for the HOV lanes on SR-60 from I-605 to SR-57 is currently in the Plans, Specifications and Estimates (PS&E) phase with EA 129400.

Optional Improvements:

Option to each alternative: This project phase also proposes to modify the southbound I-605 to eastbound SR-60 loop connector and add a mixed flow lane on westbound SR-60 through the SR-60/I-605 interchange per Caltrans Traffic Investigation Unit recommendation (See PSR-PDS alternatives). All optional improvements are according to standard design for the development of this PSR-PDS. Detailed studies should be done during PA/ED when further information is available.

Design Criteria

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

Hov

Freeway Expressway Conventional Highway Urban Street Other (specify) Connector

Design Speed for highway facilities within the project limit Freeway-130 km/h,Ramp-80 km/h(Full Standard)

Design Period: Construction year is? 2014 Design year is? 2035

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

Mainline F3 Ramp F3 Local Street _____ Weaving Sections _____

Design Vehicle Selection? STAA (Freeway & Ramps) California Bus (HOV Direct Connector)

Proposed Roadbed and Structure Widths

Forecasted Average Daily Traffic Volumes See Attachment H

Percent Truck Volume SR-60 8.49%, I-605 11.0%, & HOV Direct Connector 0%

Alternative 2:

Note: Outside Lanes are 3.6 m

	Roadbed Width			Structure Width		
	Existing	Proposed	Standard	Existing	Proposed	Standard
SR-60						
Between A-A & B-B	EB/WB	EB/WB	EB/WB	EB/WB	EB/WB	EB/WB
Lane Widths	<u>3.3/3.6</u>	<u>3.3/3.3</u>	<u>3.6/3.6</u>	<u>3.3/3.6</u>	<u>3.3/3.3</u>	<u>3.6/3.6</u>
Inside Shoulder	<u>0.7/3.0</u>	<u>0.7/0.7</u>	<u>3.0/3.0</u>	<u>0.7/3.0</u>	<u>0.7/0.7</u>	<u>3.0/3.0</u>
Outside Shoulder	<u>2.4/2.4</u>	<u>3.0/3.0</u>	<u>3.0/3.0</u>	<u>2.4/2.4</u>	<u>3.0/3.0</u>	<u>3.0/3.0</u>
Median Width	<u>4.3</u>	<u>N/A**</u>	<u>10.8</u>	<u>4.3</u>	<u>N/A**</u>	<u>10.8</u>
HOV Buffer	<u>0.6/N/A</u>	<u>0.6/0.6</u>	<u>1.2*/1.2*</u>	<u>0.6/N/A</u>	<u>0.6/0.6</u>	<u>1.2*/1.2*</u>
Bicycle Lane	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
SR - 605						
Between E-E & F-F						
Lane Widths	<u>3.3</u>	<u>3.3</u>	<u>3.6</u>	<u>3.3</u>	<u>3.3</u>	<u>3.6</u>
Inside Shoulder	<u>0.6</u>	<u>0.6-1.5</u>	<u>3.0</u>	<u>0.6</u>	<u>0.6-1.5</u>	<u>3.0</u>
Outside Shoulder	<u>3.0</u>	<u>3.0</u>	<u>3.0</u>	<u>0.6-1.1</u>	<u>3.0</u>	<u>3.0</u>
Median Width	<u>1.8</u>	<u>N/A**</u>	<u>10.8</u>	<u>1.8</u>	<u>N/A**</u>	<u>10.8</u>
HOV buffer	<u>0.3</u>	<u>0.3</u>	<u>1.2*</u>	<u>0.3</u>	<u>0.3</u>	<u>1.2*</u>
Bicycle Lane	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
HOV Direct Connector						
Lane Width				<u>N/A</u>	<u>3.6</u>	<u>3.6</u>
Inside Shoulder				<u>N/A</u>	<u>1.5***</u>	<u>1.5</u>
Outside Shoulder				<u>N/A</u>	<u>3.0***</u>	<u>3.0</u>
Median Width				<u>N/A</u>	<u>3.6*</u>	<u>3.6*</u>
Passing Lane				<u>N/A</u>	<u>0.0</u>	<u>3.6</u>

* Per Caltrans HOV Guidelines

** HOV direct connector ramping up/down in the median area

*** Nonstandard Sight Distance

Alternative 3:

Roadbed Width
Existing / Proposed / Standard

Structure Width
Existing / Proposed / Standard

SR - 60

Between A-A & B-B	EB/WB	EB/WB	EB/WB	EB/WB	EB/WB	EB/WB
Lane Widths	3.3/3.6	3.6/3.6	3.6/3.6	3.3/3.6	3.6/3.6	3.6/3.6
Inside Shoulder	0.7/3.0	3.0/3.0	3.0/3.0	0.7/3.0	3.0/3.0	3.0/3.0
Outside Shoulder	2.4/2.4	3.0/3.0	3.0/3.0	2.4/2.4	3.0/3.0	3.0/3.0
Median Width	4.3	N/A**	10.8	4.3	N/A**	10.8
HOV Buffer	0.6/N/A	1.2*/1.2*	1.2*/1.2*	0.6/N/A	1.2*/1.2*	1.2*/1.2*
Bicycle Lane	N/A	N/A	N/A	N/A	N/A	N/A

SR - 605

Between E-E & F-F

Lane Widths	3.3	3.6	3.6	3.3	3.6	3.6
Inside Shoulder	0.6	1.5-3.0	3.0	0.6	1.5-3.0	3.0
Outside Shoulder	3.0	3.0	3.0	0.6-1.1	3.0	3.0
Median Width	1.8	N/A**	10.8	1.8	N/A**	10.8
HOV buffer	0.3	1.2*	1.2*	0.3	1.2*	1.2*
Bicycle Lane	N/A	N/A	N/A	N/A	N/A	N/A

HOV Direct Connector

Lane Width				N/A	3.6	3.6
Inside Shoulder				N/A	1.5***	1.5
Outside Shoulder				N/A	3.0***	3.0
Median Width				N/A	3.6*	3.6*
Passing Lane				N/A	0.0	3.6

* Per Caltrans HOV Guidelines

** HOV direct connector ramping up/down in the median area

*** Nonstandard Sight Distance

Alternative 4:

Roadbed Width
Existing / Proposed / Standard

Structure Width
Existing / Proposed / Standard

SR - 60

Between A-A & B-B	EB/WB	EB/WB	EB/WB	EB/WB	EB/WB	EB/WB
Lane Widths	3.3/3.6	3.6/3.6	3.6/3.6	3.3/3.6	3.6/3.6	3.6/3.6
Inside Shoulder	0.7/3.0	3.0/3.0	3.0/3.0	0.7/3.0	3.0/3.0	3.0/3.0
Outside Shoulder	2.4/2.4	3.0/3.0	3.0/3.0	2.4/2.4	3.0/3.0	3.0/3.0
Median Width	4.3	N/A**	10.8	4.3	N/A**	10.8
HOV Buffer	0.6/N/A	1.2*/1.2*	1.2*/1.2*	0.6/N/A	1.2*/1.2*	1.2*/1.2*
Bicycle Lane	N/A	N/A	N/A	N/A	N/A	N/A

Ramp / Street Intersection Improvements

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

Operational Improvements

Truck Climbing Lane

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

Auxiliary Lanes

- When 600 M Between Successive On-Ramps.
- Two Lane Exit Ramps Have 400 M Auxiliary Lane.
- Weaving < 500 M between Off-Ramp and On-Ramp.
- Other Additional passing lane on WB SR-60 to NB I-605 connector *
- Additional truck lane on SB I-605 to EB SR-60 loop connector *
- Additional mixed flow lane on westbound SR-60 through SR-60/I-605 interchange *
- * See PSR-PDS Alternatives

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 Temporary construction easement and additional right-of-way will be required.

Roadway Design Scoping (South Phase)

Highway Planting

- Replacement
- Median
- Mitigation

Roadside Management

- Slope paving
- Gore paving
- Roadside paving

Safety

- Off-Freeway Access
- Maintenance Vehicle Pull-Out

Stormwater

- Erosion control
- Drainage
- Slope design

Structures

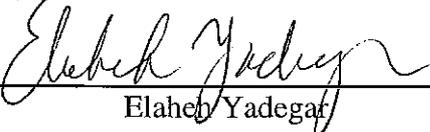
- New Bridge
- Bridge Rehab
- Retaining Wall
- Other Replace/Widen / Modify Existing Structures
- On STRAIN list for _____

Additional Studies

Preliminary Evaluation provided by:

Project Engineer _____ **Date** 2-11-03

 Ben Ramos

Design Manager _____ **Date** 12/16/2002

 Elaheb Yadegari

Design Concept approved by:

Project Development Coordinator _____ **Date** 12/16/02

 Jim Deluca

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

Review by:

Project Manager _____ **Date** 3-5-03

 Maen Shaar

TO Elaheh Yadegar
 ATTN Chan Kuoch
 PHONE 213-897-9605
 SENIOR RW P&M Jorge Cabrera
 ROUTE 60/605
 PM_KM 18.8/20.9
 EA 23560K
 ALT 2

R/W DATA SHEET

WBS
 REVISED
 UPDATED
 DATE 6/12/2002
 PROJ_DESC Construct elevated 60/605 HOV Direct Connector.

ID NO
290

This cost estimate is pursuant to the following statements which are based on information provided by Elaheh Yadegar.

This cost estimate is valid for the above scoping report only. This is an estimate only and not an appraisal. It may be based on worse case scenarios. The estimate is subject to change and revision.

The mapping did not provide sufficient nor adequate detail to determine the limits of the Right of Way required and effects on the improvements.

The transportation facilities have not been sufficiently designed for our estimator to determine the damages to any of the remainder parcels affected by the project.

Residential displacement is not involved .

Utility facilities or Utility Right of Way are affected.

Railroad facilities or R.R. Right of Way are affected.

Right of Way work will be performed by Caltrans staff.

It is not known at this time if major items of Construction Contract Work is anticipated.

It is not known at this time whether there are any material borrow and/or disposal sites are required.

It is not known at this time whether there are potential relinquishments and/or abandonments.

Hazardous waste parcels are not evident

Time constraints precluded a detailed cost estimate.

The time schedule provided by the requesting party allowed for a field inspection.

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/ w acq.(incl.contingency G.w-condem.-adm.s'tl.)Permits	\$243,805	\$365,276
Clearance	NONE	NONE
RAP (cont rate.)	NONE	NONE
Escrow costs (cont rate.)	\$3,024	\$4,530
Utility relocation costs	\$648,500	\$978,513
Total estimated cost	\$895,329	\$1,348,319

ESCALATION RATE RW .07
 ESCALATION RATE Utilities .08
 CERT.DATE 6/1/08
 Date of this Data Sheet 9/10/02
 YEARS TO CERT DATE 5.98

		<u>DATE</u>
Right of Way Estimate prepared by	<u>VICTOR LEE</u>	<u>9/10/02</u>
Railroad Estimate prepared by	<u>Ken Moore</u>	<u>6/18/02</u>
Utilities Estimate prepared by	<u>Butch Mateo</u>	<u>7/29/02</u>
SR. R/W Agent	<u>Jorge Cabrera</u>	
Project Manager	<u><i>Maen Shaw</i></u>	<u>3-5-03</u>

I have personally reviewed this R/W Data Sheet and all supporting information I certify that the probable highest and best use estimated values and assumptions are reasonable and proper subject to the limiting conditions set forth and I find this Data Sheet complete and current.

This Data Sheet is not to be signed by Chief unless accompanied by final scoping report(PR,PSR,PSSR) for review and/or signature.

CHIEF	<u><i>J. Cabrera</i></u>	<u>3/3/03</u>
-------	--------------------------	---------------

TO Elaheh Yadegar
 ATTN Chan Kuoch
 PHONE 213-897-9605
 SENIOR R/W P&M Jorge Cabrera
 ROUTE 60/605
 PM_KM 18.8/20.9
 EA 23560K
 ALT 3

R/W DATA SHEET

WBS
 REVISED
 UPDATED
 DATE 6/12/2002
 PROJ_DESC Construct elevated 60/605 HOV Direct Connector

ID NO
289

This cost estimate is pursuant to the following statements which are based on information provided by Elaheh Yadegar.

This cost estimate is valid for the above scoping report only. This is an estimate only and not an appraisal. It may be based on worse case scenarios. The estimate is subject to change and revision.

The mapping did not provide sufficient nor adequate detail to determine the limits of the Right of Way required and effects on the improvements.

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Residential displacement is not involved .

Utility facilities or Utility Right of Way are affected.

Railroad facilities or R.R. Right of Way are affected.

Right of Way work will be performed by Caltrans staff.

It is not known at this time if major items of Construction Contract Work is anticipated.

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It is not known at this time whether there are potential relinquishments and/or abandonments.

Hazardous waste parcels are not evident

Time constraints precluded a detailed cost estimate.

The time schedule provided by the requesting party allowed for a field inspection.

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/w acq.(incl.contingency G.w-condem.-adm.s'tl.)Permits	\$2,492,865	\$3,734,882
Clearance	NONE	NONE
RAP (cont rate.)	NONE	NONE
Escrow costs (cont rate.)	\$18,718	\$28,044
Utility relocation costs	\$884,500	\$1,334,611
Total estimated cost	\$3,396,083	\$5,097,537

ESCALATION RATE RW .07
 ESCALATION RATE Utilities .08
 CERT.DATE 6/1/08
 Date of this Data Sheet 9/10/02
 YEARS TO CERT DATE 5.98

		<u>DATE</u>
Right of Way Estimate prepared by	<u>VICTOR LEE</u>	<u>9/10/02</u>
Railroad Estimate prepared by	<u>Ken Moore</u>	<u>6/19/02</u>
Utilities Estimate prepared by	<u>Butch Mateo</u>	<u>7/29/02</u>
SR. RW Agent	<u>Jorge Cabrera</u>	<u> </u>
Project Manager	<u><i>Man Shaw</i></u>	<u>3-5-03</u>

I have personally reviewed this R/W Data Sheet and all supporting information I certify that the probable highest and best use estimated values and assumptions are reasonable and proper subject to the limiting conditions set forth and I find this Data Sheet complete and current.

This Data Sheet is not to be signed by Chief unless accompanied by final scoping report(PR,PSR,PSSR) for review and/or signature.

CHIEF	<u><i>Jabon</i></u>	<u>03/03/03</u>
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TO Elaheh Yadegar
 ATTN Benjamin Ramos
 PHONE 213-897-9605
 SENIOR RW P&M Jorge Cabrera
 ROUTE 60/605
 PM_KM 60 PM 11.7/13 (KP 18.8/20.9) 605 PM R17.4/R18.7 (KP R28/R30.1)
 EA 23560K
 ALT 4

R/W DATA SHEET

WBS
 REVISED
 UPDATED
 DATE 8/15/2002
 PROJ_DESC Construct elevated 60/605 HOV Direct Connector

ID NO
 377

This cost estimate is pursuant to the following statements which are based on information provided by Elaheh Yadegar.

This cost estimate is valid for the above scoping report only. This is an estimate only and not an appraisal. It may be based on worse case scenarios. The estimate is subject to change and revision.

The mapping did not provide sufficient nor adequate detail to determine the limits of the Right of Way required and effects on the improvements.

The transportation facilities have not been sufficiently designed for our estimator to determine the damages to any of the remainder parcels affected by the project.

Residential displacement is not involved .

Utility facilities or Utility Right of Way are affected.

Railroad facilities or R.R. Right of Way are affected.

Right of Way work will not be performed by Caltrans staff.

It is not known at this time if major items of Construction Contract Work is anticipated.

It is not known at this time whether there are any material borrow and/or disposal sites are required.

It is not known at this time whether there are potential relinquishments and/or abandonments.

Hazardous waste parcels are not evident

Time constraints precluded a detailed cost estimate.

The time schedule provided by the requesting party allowed for a field inspection.

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/ w acq.(incl.contingency G.w-condem.-adm.s' tl.)Permits	\$5,737,845	\$8,495,222
Clearance	NONE	NONE
RAP (cont rate.)	NONE	NONE
Escrow costs (cont rate.)	\$36,172	\$53,555
Utility relocation costs	\$2,013,000	\$3,008,707
Total estimated cost	\$7,787,017	\$11,557,484

Corrected per request of Ben Ramos in PSR Section.

ESCALATION RATE RW .07
 ESCALATION RATE Utilities .08
 CERT.DATE 6/1/08
 Date of this Data Sheet 10/31/02
 YEARS TO CERT DATE 5.80

PARCEL DUAL TYPES APPR.

A	3	
B	9	3
C		
D		
F		
W		

PARCEL COUNT

RIGHTS NEEDED

FEE	12
EASE	
TCE	

TAKES

FULL	
PART	12
TOTAL	12

DISPLACEMENT OF UNITS

SFR	
MULTI	
BUS	

PARCELS WITH RAP

0

POTENTIAL CLEARANCE PARCELS

--

POTENTIAL CONDEMNATION PARCELS

3

POTENTIAL EXCESS PARCELS

not known at this time.

ESTIMATE OF PY'S

APPRAISALS

	PY	HOURS
A	.0753	13.2
B	.3969	702.9
C		
D		
F		
W		

ACQUISITIONS

	PY	HOURS
A	.1197	13.2
B	.4743	702.9
C		
D		
F		

UTILITIES

	PY	HOURS
PY U4 1	.1536	271.8
PY U4 2		
PY U4 3		
PY U4 4		
PY U5 7		
PY U5 8		
PY U5 9	.1911	338.1

RAILROAD

	PY	HOURS
C & M		
SC		
LIC/RE		

CONDEMNATION

PY	HOURS
.2016	356.7

CLEARANCE

PY	HOURS

RELOCATION

PY	HOURS

PERMITS

PY	HOURS
.02208	39.12

UTILITY INFORMATION

Are Utilities affected: Yes

	Quantities	Estimated Costs
Edison steel tower	\$2	\$1,000,000
Edison OH lines 6	\$600	\$0
MCIWorldCom Fiber Optic	\$600	\$60,000
Witel Fiber Optic	\$600	\$60,000
4" M So. Cal Gas	\$1,500	\$90,000
17-3/4" So. San Gabriel Valley Water	\$1,500	\$255,000
6" Conduit Verizon	\$300	\$30,000
Bur Cable Verizon	\$1,500	\$75,000
1" G.I.P. Verizon	\$300	\$30,000
17" So. San Gabriel Valley Water	\$500	\$68,000
6-4" MCD Verizon	\$500	\$300,000
6" M So. Cal Gas	\$500	\$45,000

Are utility easements required Yes No. of easements _____ Are Utility agreements required Yes

TOTAL CURRENT COST \$2,013,000

CONST. COMPLETION DATE 12-1-2007

UTILITY ESCALATION RATE 8%

ESCALATED VALUE TO UTILITY CONSTRUCTION COMPLETION DATE \$3,008,707

RR INFORMATION

Are RR affected YES

Describe affected RR Possible Railroad IMPACT

WHEN BRANCH LINES OR SPURS ARE AFFECTED ,WOULD ACQUISITION AND OR PAYMENT OF DAMAGES TO BUSINESSES AND OR INDUSTRIES SERVED BY THE RAILROAD FACILITY BE MORE COST EFFECTIVE THAN SERVICE CONTRACTS ,OR GRADE SEPARATIONS REQUIRING CONSTRUCTION AND MAINTENANCE AGREEMENTS INVOLVED?

Explain Branch lines

DISCUSS TYPES OF AGREEMENTS AND RIGHTS REQUIRED FROM THE RAILROADS. ARE GRADE XING REQUIRING SERVICE CONTRACTS ,OR GRADE SEPARATIONS REQUIRING CONSTRUCTION AND MAINTENANCE AGREEMENTS INVOLVED.

ESTIMATED COST TO THE STATE FOR ALL R.R. INVOLVEMENTS. _____

		<u>DATE</u>
Right of Way Estimate prepared by	<u>VICTOR LEE</u>	<u>9/12/02</u>
Railroad Estimate prepared by	<u>Ken Moore</u>	<u>9/9/02</u>
Utilities Estimate prepared by	<u>Butch Mateo</u>	<u>9/12/02</u>
SR. RW Agent	<u>Jorge Cabrera</u>	<u> </u>
Project Manager	<u><i>Maen Shuen</i></u>	<u>3-5-03</u>

I have personally reviewed this R/W Data Sheet and all supporting information I certify that the probable highest and best use estimated values and assumptions are reasonable and proper subject to the limiting conditions set forth and I find this Data Sheet complete and current.

This Data Sheet is not to be signed by Chief unless accompanied by final scoping report(PR,PSR,PSSR) for review and/or signature.

CHIEF *J. Cabrera* 03/03/03

Memorandum

To: **ELAHEH YADEGAR,**
Senior Transportation Engineer
Office of Project Studies

Date: **August 26, 2002**

File No.: 07-LA-60/605
PEER for SR-60/I-
605Connectors

EA: 07-23560K

From: **GARY IVERSON**
DEPARTMENT OF TRANSPORTATION
District 7, Office Chief, Central Area Projects
Division of Environmental Planning

Subject: PEER Report

Attached is the Preliminary Environmental Evaluation Report (PEER) for the proposed project. The physical and biological sections, Environmental Checklist Discussion (Questions 10, 20, 23, 30 and 54) emphasizes the importance of minimizing construction impacts towards San Jose Creek and the nearby San Gabriel River. This is important because San Jose Creek is located within the project's proximity. There are water quality issues (permits) and sensitive species located within the project limits. The Division of Environmental Planning staff encourages the use of "context sensitive design" and early consultation/coordination with the appropriate resource agencies (Army Corps of Engineers, Los Angeles County Flood Control District, Regional Water Quality Control Board), to avoid and resolve potential water quality and or biological issues.

Even with conducting early consultation with the appropriate resource agencies, the Division of Environmental Planning anticipates the appropriate environmental document to be an Environmental Impact Report/Environmental Impact Statement (EIR/EIS*). This is primarily due to the potential affect of the project on endangered species, which may constitute a significant impact. However, if Endangered Species Act Section 7 Consultation with the US Fish and Wildlife Service determines the proposed project has no potential to affect endangered species with mitigation, then the appropriate environmental document may be an IS/EA (approximately 24 months to complete).

If you have any questions regarding this review, please contact Robert Wang at (213) 897-5912.



Gary Iverson, Office Chief-Central Area Projects
Division of Environmental Planning
Caltrans, District 7 (1-9B)

*Typical Preparation time for an EIR/EIS is 36 months.

Preliminary Environmental Evaluation Report

for a Proposed Project to

Provide a dedicated High Occupancy Vehicle Lane Connector
from Westbound State Route 60 to Northbound Interstate Route
605

In the City of Industry and unincorporated portion of Los Angeles
County

07-LA-60
EA 23560K



Caltrans
District VII

Division of Environmental Planning



August 2002

Environmental Scoping Checklist

Project Information

District 07 County LA Route 60/605 Kilometer Post (Post Mile) R 18.8/28.0 EA 23560K

Project Manager	<u>Maen Shaar</u>	Phone #	<u>213-897-8665</u>
Project Engineer	<u>Elaheh Yadegar</u>	Phone #	<u>213-897-9635</u>
Transportation Engineer	<u>Ben Ramos</u>		<u>213-897-9605</u>
Environmental Planner	<u>Gary Iverson/Robert Wang</u>	Phone #	<u>213-897-3818/213-897-5912</u>

Project Description:

The proposed project provides an exclusive High Occupancy Vehicle (HOV) connector for vehicles to transition from westbound State Route 60 (SR-60) to northbound Interstate Route 605 (I-605).

There are four alternatives considered for this project. The alternatives are:

- **Alternative 1 “No Build”**
This alternative maintains the current configuration of the existing highway. There will be no direct connection between the existing HOV lanes on westbound SR-60 towards existing northbound I-605 HOV lanes. A consequence of the HOV gap is that cars have to exit the HOV lanes and enter mixed flow traffic to transition to the northbound I-605 HOV lanes.
- **Alternative 2 “Standard Build HOV Direct Connector”**
A standard 2-lane elevated HOV direct connector is proposed within the freeway median area. The HOV connector structure will provide direct linkage between the westbound SR-60 HOV lanes to the existing northbound I-605 HOV lanes. HOV traffic should transition smoothly between both facilities eliminating traffic conflicts with mixed flow vehicles, as a result of vehicles leaving the SR-60 HOV lanes to transition to the northbound I-605 HOV lanes. Proposed for this alternative is additional right of way, San Jose Creek Bridge widening, retaining walls, slope mitigation, and soundwalls.
- **Alternative 3 “Minimum Build HOV Direct Connector**
As proposed, this alternative seeks to construct a 2-lane elevated HOV structure. This alternative, however, will maintain existing shoulder and lane widths.
- **Alternative 4 “ Full Standard Build HOV Direct Connector over San Jose Creek and San Gabriel River”**
Recommended by Headquarters Structure Design and District 7 Office of Traffic Investigations. This alternative will construct a new 4 lane direct HOV connector, involves interchange reconfiguration, specifically connector improvements to westbound SR-60 to northbound I-605 and to southbound I-605 to eastbound SR-60. Right of way takes to SR-60 and I-605 will be more than Alternative 3

Description of work:

Access roads are required. Cast in Drilled Holes (CIDH) for the HOV aerial connector.

There will be grading and grubbing of the area between the northeast portion of State Route 60 and Interstate Route 605 Interchange and northbound Interstate Route 605, the eastern side. The placement of columns for the HOV connector will require the removal of vegetation. Falsework, and forms will be required and may span Interstate Route 605 and the existing 60 / 605 connector which is at freeway level. Pile driving will be needed for the footing area over San Jose Creek. Temporary railings will also be used around the project site.

Bridge widening over San Jose Creek will involve pile driving. It is also anticipated that pier walls will have to extend along with the bridge widening. Approximate pier walls widths will be approximate to the existing width of San Jose Creek bridge pier walls.

Bridge work over San Jose Creek and San Gabriel Rivers will need to have measures such as netting, plastic sheeting, or blankets or similar practices to minimize construction debris and dust from entering the channel. Provisions will also need to include work schedules outside the rainy season to minimize soil erosion. Work will also be scheduled to minimize impacts to nesting birds.

Environmental Checklist and Analysis

The attached environmental checklist was used to focus on the environmental impacts most likely to occur with the project implementation. A "No" answer in the first checklist column documents a no effect determination. A "Yes" answer on the checklist documents the potential for effect. An asterisk is shown on the checklist where a narrative discussion is provided to further clarify the determination made.

ENVIRONMENTAL SIGNIFICANCE CHECKLIST

		YES OR NO BEFORE MITIGATION	IF YES, IS IT SIGNIFI- CANT AFTER MITIGATION
PHYSICAL - Will the proposal (either directly or indirectly):			
1.	Appreciable changes the topography or ground surface relief features?	No	-
2.	Destroy, cover, or modify any unique geologic or physical features?	No	
3.	Result in the loss of availability of a known mineral resource or locally important mineral resource recovery site, that would be of value to the region and the residents of the state?	No	
4.	Result in unstable earth surfaces or increase the exposure of people or property to geologic or seismic hazards?	No*	
5.	Result in or be affected by soil erosion or siltation (whether by water or wind)?	YES	*
6.	Result in the increased use of fuel or energy in large amounts or in a wasteful manner?	No	
7.	Result in an increase in the rate of use of any natural resource?	No	
8.	Result in the substantial depletion of any nonrenewable resource?	No	
9.	Violate any published federal, state or local standards pertaining to hazardous waste, solid waste or litter controls?	No*	
10.	Modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	YES	*
11.	Encroach upon a floodplain or result in or be affected by floodwaters or tidal waves?	No	
12.	Adversely affect the quantity or quality of surface water, groundwater, or public water supply?	No	
13.	Result in the use of water in large amount or in a wasteful manner?	No	
14.	Affect wetlands or riparian vegetation?	No*	
15.	Violate or be inconsistent with federal, state or local water quality standards?	No	
16.	Result in changes in air movement, moisture or temperature, or any climatic conditions?	No	
17.	Result in an increase in air pollutant emissions, adverse effects on or deterioration of ambient air quality?	No*	
18.	Result in the creation of objectionable odors?	No	
19.	Violate or be inconsistent with any federal, state or local air standards or control plans?	No	
20.	Result in an increase in noise levels or vibration for adjoining areas?	YES	*
21.	Result in any federal, state or local noise criteria being equaled or exceeded?	No	
22.	Produce new light, glare or shadows?	No	

ENVIRONMENTAL SIGNIFICANCE CHECKLIST			
		YES OR NO BEFORE MITIGATION	IF YES, IS IT SIGNIFICANT AFTER MITIGATION
BIOLOGICAL - Will the proposal (either directly or indirectly):			
23.	Change in the diversity of species or number of any species of plants (including trees, shrubs, grass, microflora and aquatic plants)?	YES	**
24.	Reduction in the numbers of or encroachment upon the critical habitat of any unique, threatened or endangered species of plants?	No	
25.	Introduction of new species of plants into an area, or result in a barrier to the normal replenishment of existing species?	No	
26.	Reduction in acreage of any agricultural crop or commercial timber stand, or affect prime, unique or other farmland of state or local importance?	No	
27.	Removal or deterioration of existing fish or wildlife habitat?	No	
28.	Change in the diversity of species or number of species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects or microfauna)?	No	
29.	Reduction in the numbers of or encroachment upon the critical habitat of any unique, threatened or endangered species of animals?	No	
30.	Conflict with any applicable habitat conservation plan, natural community conservation plan or other approved local, regional or state habitat plan?	YES	*
31.	Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	No	
SOCIAL AND ECONOMIC - Will the proposal (either directly or indirectly):			
32.	Cause disruption of orderly planned development?	No	
33.	Be inconsistent with any elements of adopted community plans, policies or goals, or the California Urban Strategy?	No	
34.	Be inconsistent with a Coastal Zone Management Plan?	No	
35.	Affect the location, distribution, density, or growth rate of the human population of an area?	No	
36.	Affect lifestyles, or neighborhood character or stability?	No	
37.	Affect minority, elderly, handicapped, transit-dependent, or other specific interest groups?	No	
38.	Divide or disrupt an established community?	No	
39.	Affect existing housing, require the acquisition of residential improvements or the displacement of people or create a demand for additional housing?	No	
40.	Affect employment, industry or commerce, or require the displacement of businesses or farms?	No	
41.	Affect property values or the local tax base?	No	
42.	Affect any community facilities (including medical, educational, scientific, recreational, or religious institutions, ceremonial sites or sacred shrines)?	No	
43.	Affect public utilities, or police, fire, emergency or other public services?	No*	
44.	Have substantial impact on existing transportation systems or alter present patterns or circulation or movement of people and or goods?	No*	

ENVIRONMENTAL SIGNIFICANCE CHECKLIST

		YES OR NO BEFORE MITIGATION	IF YES, IS IT SIGNIFICANT AFTER MITIGATION
45.	Generate additional traffic?	No	
46.	Affect or be affected by existing parking facilities or result in demand for new parking?	No	
47.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	No	
48.	Involve a substantial risk of an explosion or the release of hazardous substances in the event of an accident or otherwise affect overall public safety?	No	
49.	Result in alterations to waterborne, rail or air traffic?	No	
50.	Support large commercial or residential development?	No	
51.	Affect a significant archaeological or historic site, structure, object, or building?	No*	
52.	Affect wild or scenic rivers or natural landmarks?	No	
53.	Affect any scenic resources or result in the obstruction of any scenic vista or view open to the public, or creation of an aesthetically offensive site open to public view?	No	
54.	Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.)?	No*	
55.	Result in the use of any publicly owned land from a park, recreation area, or wildlife and wildfowl refuge?	No	
MANDATORY FINDINGS OF SIGNIFICANCE			
56.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major period of California history or prehistory?	No	
57.	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	No	
58.	Does the project have environmental effects, which are individually limited, but cumulatively considerable? Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with other projects, the effects of other current projects, and the effects of probable future projects. It includes the effects of other projects, which interact with this project and, together, are considerable.	No	
59.	Does this project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	No	

Initiation of Environmental Process

Caltrans will act as the State lead agency for NEPA and CEQA compliance of this project. To initiate the environmental compliance process, please submit a written request to the Office of Environmental Planning. The request should include:

- A project Development contact person and phone number.
- A project description addressing all aspects of the project (including such things as turnouts, haul roads, temporary access routes, and borrow/disposal sites).
- A mosaic or topographic base map that has delineated on it the existing development in relation to the proposed alternative, existing and maximum anticipated right-of-way lines, and the location of proposed construction and limits of grading/vegetation removal (100' or 50' scale mapping preferred).
- A clear project location map and vicinity map which shows all alternative alignments.
- Profiles, typical sections, and, if available, cross sections at critical locations.
- Mapping that clearly delineates any temporary construction routes.
- Proposed mitigation measures that are part of the project (including landscaping revegetation, construction, etc.).

If all of the above information is not available when studies are requested, a meeting should be arranged between Project Development and Environmental Planning to determine when the information will be available, and which parts of the environmental study can begin with the partial information. Failure to provide this information may result in a delaying of the environmental document, and may significantly delay project delivery.

SUMMARY

Careful design work, construction staging, and the way in which the work will occur will determine the appropriate environmental document. If the work is carefully planned out to avoid any adverse impacts to existing traffic, endangered/sensitive species, and water quality impacts to San Jose Creek and San Gabriel River during and after construction, the appropriate environmental document may still be an Environmental Impact Report/Environmental Impact Statement because of the potential to affect endangered species (EIR/EIS- approximately 36 months to complete). The Traffic Management Plan (TMP) should provide sufficient notice to motorists of HOV Connector and bridge construction and duration. A Public Awareness Campaign should also be provided to inform motorists of construction and possible alternate route and detours.

It is strongly advised that Project Management/Project Design work closely with the Division of Environmental Planning, at the earliest opportunity, to plan a project that will avoid the detrimental impacts to the environment which could add unnecessary time, person years, and financial resources to the project. In short, a context sensitive project should be selected to minimize environmental effects to the surrounding area.

Environmental Checklist Discussion

- A. (Question 4) Result in unstable earth surfaces or increase the exposure of people or property to geologic or seismic hazards?

All structures constructed as part of the project will be built using the latest standards designed to address seismic safety issues. In addition, soil samples will be obtained to determine soil conditions prior to design and construction of the HOV connector.

- B. (Question 9) Violate any published Federal, State, or local standards pertaining to hazardous waste. Additionally, a Site Assessment might be required to identify the presence/absence and intensity of hazardous substances that may be present.

During the preparation of the environmental document a Field Review and an Initial Site Assessment will need to be prepared to identify any potential for hazardous waste. Additionally, a Site Assessment might be required to identify the presence/absence and intensity of hazardous substances that may be present.

Due to the location of this project, it is anticipated that aerially deposited lead has the potential to be present in the project study area. If the above listed studies find that aerially deposited lead is present (or any other hazardous substance), mitigation measures as well as special provisions will need to be formulated to address the situation.

- C. (Question 10 and 14) All Caltrans' Best Management Practices (BMP's) pertaining to water quality will be followed to minimize any potential water quality impacts. This will insure that no impact to the natural community will occur. However, it is anticipated that permits related to water quality would be required for work within the project limits. These permits need to be obtained prior to start of construction. The permit process may take six (6) to twelve (12) months. Coordination with the appropriate agency is necessary. Permits would need to be obtained from the Army Corp of Engineers for work within San Jose Creek and San Gabriel River and a Flood Control Permit is also anticipated from the Los Angeles Flood Control District.
- D. (Question 17) Result in an increase in air pollution emissions, adverse effects on or deterioration of ambient air quality?

Please ensure that the project is listed in the STIP and SCAG's (Southern California Association of Governments) Regional Transportation Plan (RTIP) for air quality conformity (District 7 Air Quality Coordinator, Leann Williams, 626-338-5334. Any air quality issues should only take place during the construction of the project. As such, these impacts are temporary in nature and measures will be taken to insure they are not significant. This may include weather monitoring to minimize construction activities that generate dust during windy periods.

E. (Question 20) Result in an increase in noise levels or vibration for adjoining areas?

Any noise levels or vibration issues should only take place during the construction of the project. As such these impacts are temporary in nature and measures will be taken to insure they are not significant. When work occurs at San Jose Creek Bridge special precautions should be taken to schedule construction outside of bird nesting season. San Jose Creek is a biologically sensitive area.

F. (Question 23) Change in the diversity of species or number of any species of (trees, shrubs, grass, microflora, and aquatic plants)?

The project may involve the removal of some vegetation within the right of way. Replacement landscaping should be considered to minimize soil erosion and to minimize any visual impacts. The Division of Environmental Planning recommends a re-vegetation plan which includes at least 10 percent native plants. Landscaping of disturbed areas is also important to maintain a pleasant vista for the freeway motoring public because this is a heavily congested and traveled area.

G. (Question 30) Conflict with any applicable habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat plan?

The proposed HOV project is located adjacent to the San Jose Creek Habitat Restoration Project. Bridge widening over San Jose Creek will require consultation and coordination with the appropriate habitat restoration organizations. Proper consultation and coordination with the habitat restoration organizations and Caltrans will prevent project conflicts between both groups. The organizations responsible for the restoration are: North East Trees, CALPIRG Charitable Trust, and the Sierra Club. The proposed San Jose Creek restoration project involves the planting of native trees and shrubs, weed abatement, and erosion control. Contact information for North East Trees (Project Coordinator) is Eileen Takata at 323-441-8634 (570 West Avenue 26, Suite 200, L.A., CA 90065). Work impacting the San Jose Creek habitat restoration project shall be avoided.

H. (Question 43, 44 and 59) Have substantial impact on existing transportation systems or alter present patterns of circulation or movement of people and/or goods?

If the westbound SR-60 to northbound I-605 connector remain open during construction and work is planned out to avoid any adverse traffic impacts to the surrounding communities, then the appropriate environmental document required should be an Environmental Impact Report/Environmental Impact Statement (EIR/EIS, approximately 36 months to complete). A detailed traffic control plan should also be developed during the PS&E stage of the project to ensure consideration is given to the safety and convenience of motorists and construction workers who must pass through the construction zone.

- I. (Question 51) Affect a significant archaeological or historic site, structure, object, or building?

At this time no cultural resources seem to be present in the project study area. However during the preparation of the environmental document an Archaeological Survey Report may have to be completed. These reports may be combined in to a Cultural Resource Study Report. Any of these reports may contain mitigation measures that will have to be included in the final project design, and have to be included as part of the PS&E.

- J. (Question 54) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.)?

Dust control measures will be employed to ensure no significant impacts from dust during construction occurs, measures will be taken to make certain no siltation enters any waterway, and construction will be staged to insure that no significant impact occurs to traffic flow in the area. Any impact from the construction of this project will not be significant.

Anticipated Environmental Approval

CEQA

- Categorical/Statutory Exemption
 Negative Declaration
 X Environmental Impact Report

NEPA

- Categorical Exclusion
 Finding of No Significant Impact
 X Environmental Impact Statement

Why?

The Division of Environmental Planning anticipates the appropriate environmental document to be an EIR/EIS because of the potential to affect endangered species which may constitute a significant impacts. However, if Section 7 Consultation under the Endangered Species Act with the US Fish and Wildlife Service determines the proposed project has no potential to affect endangered species with mitigation, then the appropriate environmental document may be an Initial Study/Environmental Assessment (Approximately 19 months to complete).

Typical Preparation time for an EIR/EIS is 36 months. (Caltrans Environmental Handbook)

*Preliminary Natural Environmental Study Report, dated July 15, 2002

Project Screening

Attach the project location map to this checklist to show location of all known and/or potential hazardous waste, cultural (not archaeological) and biological sites identified. (Include any work with drainage and/or waterways).

- | | | | | | |
|------------------------------------|---|--------------------------------|------------|---|------------|
| 1. Project Features: New R/W? | YES | Excavation? | YES | Railroad Involvement? | YES |
| Structure demolition/modification? | YES, San Jose Creek Bridge | Subsurface utility relocation? | | Possible fiber optics, irrigation pipes, and possible underground sewage treatment plant pipes | |
| 2. Project Setting | <u>City of Industry, Los Angeles County and unincorporated part of Los Angeles County.</u> | | | | |
| Rural or Urban | <u>Urban Los Angeles County with a mixture of residential units located northeast of the project site with pockets of commercial development located to the south, east and west along Workman Mill Road and Crossroads Parkway. A Union Pacific and Metrolink Railroad Right of Way is also present southeast of the project site.</u> | | | | |
| Current land uses | <u>Public Utility (Sewage Treatment plant), Commercial, Industrial, Residential, Highway. See attached land use map</u> | | | | |
| Adjacent land uses | <u>Public Utility (Sewage Treatment Plant) with commercial pockets (adjacent to SR-60 east of I-605) and public roadway</u> | | | | |
| Existing landscaping/planting | <u>Landscaping typical of highway planting of the 1950's. Plants are at end of life cycle. Myoporum found at I-605 north (adjacent to California Country Club Golf Course) of SR-60.</u> | | | | |

Cultural Resources Screening

1. Check federal, state, and local environmental records and databases as necessary, to see if any known cultural resource site(s) is in or near the project area? Checked database and the UCLA Regional Archaeological Information Center.

If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project. (DO NOT show location of archaeological sites on the map). **No known sites were identified.** Work scope does not involve excavation.

2. Conduct Field Inspection. Date Will be conducted at the PSR stage

3. Other comments and/or observations:

If during project construction cultural materials appear, work will stop in the immediate area. The District 7 Archaeologist will be notified upon such discovery and appropriate measures will be performed to mitigate the impacts to the resource. Work only may resume with approval from the Caltrans Archaeologist.

An Area of Potential Effects Map (APE Map) should be defined early on. Uninvestigated areas within the area of potential effects should be surveyed by a qualified archaeologist prior to project approval. Once surveyed, results should be documented in an Archaeological Survey Report (ASR).

Hazardous Waste Screening

Is the project on the HW Study Minimal-Risk List (HWT)? No.

1. Check federal, State and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project.

2. Conduct Field Inspection. Date 07/17/02 Use the attached map to locate potential or known HW sites.

STORAGE STRUCTURES / PIPELINES:

Underground tanks	<u>Not Present</u>	Surface tanks	<u>Not Present</u>
Sumps	<u>Not Present</u>	Ponds	<u>Not Present</u>
Drums	<u>Not Present</u>	Basins	<u>Not Present</u>
Transformers	<u>Not Present</u>	Landfill	<u>Not Present</u>
Other	<u></u>		

CONTAMINATION: (spills, leaks, illegal dumping, etc.)

Surface staining	<u></u>	Oil Sheen	<u></u>
Odors	<u></u>	Vegetation damage	<u></u>
Aerial Lead	<u>Potential on soil adjacent to shoulders</u>	Other	<u></u>

HAZARDOUS MATERIALS: (asbestos, lead, etc.)

Structures	<u>Bridge expansions joint, gaskets</u>	Spray-on fireproofing	<u></u>
Pipe wrap/Asbestos Cement Pipe	<u>Potential</u>	Friable tile	<u>Possible</u>
Yellow thermoplastic paint	<u>Present</u>	Serpentine	<u>Not Present</u>
Lead Paint	<u>Potential</u>	Other	<u></u>

3. Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. If necessary attach a map to show the location of potential hazardous waste sites.

4. Other comments and/or observations:

Standard special provisions are required to cover asbestos handling issues for this project. For the removal and management of Asbestos Containing Material (ACM) that may be found in the bridge structure, the work shall be performed by a contractor who is registered pursuant to Section 6501.5 of the Labor Code and certified pursuant to Section 7058.6 of the Business and Professions Code. Asbestos removal shall conform to Cal OSHA requirements in Title 8 Sections 1529 and 341. Packaging, storage, transporting, and disposing of ACM shall conform to Title 22 , Division 4, Chapter 30

Determination: Does the project have potential hazardous waste involvement? **YES**. If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Preliminary Site Investigation? **YES**. If "YES", then give an estimate of additional time require:

A Site Investigation (SI) can be done early in the PS&E phase to determine the level of asbestos contamination. This study will commence upon receipt of a request from your office and may take up to 90 days to obtain final results. The SI report will require special provisions for the handling and disposal of asbestos. Furthermore, an Asbestos Demolition /Renovation Notification Form must be filed per NESHAP, 40 CFR Part 61, Subpart M. This form may be obtained from and submitted to the regional United States Environmental Protection Agency office and the South Coast Air Quality Management District. The proposed project shall also be guided by asbestos handling protocols defined in NESHAP, 40 CFR Part 61 and adopted by the South Coast Air Quality Management District under Regulation X Subpart M, amended May 11, 2001. This rule states that when project activities involve the handling, removal, and disposal of asbestos applicable state and local agencies shall be notified.

Potential hazardous waste concerns apply to all build alternatives as follows:

Aerially Deposited Lead (ADL) Contaminated Soil:

ADL is the primary hazardous waste concern on the project. Soil that is located in the existing unpaved areas of the project site is suspected of containing high level of ADL. The degree of lead content will determine whether excavated soil should be re-used on the project (invoking DTSC Variance), re-used as non-hazardous soils, or disposed of as hazardous waste to a class I facility. The degree of lead content will also help determine the health risk assessment of the field staffs during construction and proper contractor qualifications for handling ADL contaminated soil. For estimating purposes the average cost for disposal to a class I facility is \$250 to \$350 per m³.

Existing Yellow Pavement Markings (Lead-based and Thermoplastic Paint)

The existing yellow traffic striping is suspected of containing lead-based material. Yellow paint striping applied prior to 1996 has a high lead content and should be treated as hazardous waste. Yellow thermoplastic striping should be treated as hazardous waste due to its high chromium content, regardless of the year of installation. If lead and/or chromium are present in the material, it needs to be properly removed and disposed of at a Class I facility. For estimating purposes, the average remediation cost (remove and disposal) ranges between \$5 and \$7 per lineal meter.

Regional Groundwater Contamination

It is likely that deep foundations will be employed for new bridges and bridge widening and possibly some of the retaining walls on the project. This may require dewatering during excavation. It is possible that groundwater contamination exists in these areas, and it may be necessary to dispose of the removed ground water as hazardous material depending on the type and degree of contamination.

Other potential Contamination

The union pacific railroad under-crossing at I-60 raises concern as railroad corridors are, by our experience, are prone to soil contamination. It appears that there will be significant excavation work within or directly adjacent to the subject under-crossing.

In order to determine the true extent of potential contamination it is recommended to initiate a Site Investigation (SI) during the PAED or PS&E stage of the project. The site investigation shall include provisions for analysis of all the above concerns. Once the site investigation is completed appropriate final recommendations can be made. The estimated support resource needed to perform the site investigation is approximately 0.5 PY.

It is our recommendation that the appropriate site investigation request shall be submitted to our office as soon as a preferred alternative is identified.

Designated areas of the San Gabriel Valley are also on the National Priority List (NPL) due to Volatile Organic Compound (VOC) Groundwater contamination. There are also other "areas of concern" where VOC contamination exists for which the EDR report does not specify whether soil or groundwater is the affected matrix. A portion of the EDR report is attached which includes a map and detailed explanation of the NPL site history. Fortunately, the "areas of concern" and the NPL site **are not** within the project limits, but the regional nature of the problem warrants mention.

Biological Resources Screening

1. Check federal, State and local environmental records as necessary, to see if any known sensitive biological habitat or wetlands site is in or near the project area. If a known site is identified, its location will be shown on an attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project.
2. Conduct Field Inspection. Date **Will be conducted at the PSR Stage** Use the attached map to locate potential or known endanger species, natural resource or wetland sites.
3. Other comments and/or observations:

San Jose Diversion Channel may function as a wildlife corridor. A wildlife movement evaluation needs to be conducted. Sensitive species and habitats occur adjacent to the project site. See the attached Preliminary Natural Environmental Study Report, dated, July 15, 2002.

Environmental Technical Reports or Studies Required Anticipated

	Study/ Report	Document Text Only	Not Anticipated
Community Impact Study	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Farmland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Visual Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Water Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Floodplain Evaluation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Noise Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Air Quality Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Traffic Management Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cultural

ASR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HSR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
HASR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
HPSR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Section 106/SHPO	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Section 4(f) Evaluation *	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*Section 4-F not anticipated if the equestrian trail parallel and located north to San Jose Creek remains open and accessible at all times to the general public during and after project construction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Study/ Report	Document Text Only	Not Anticipated
Hazardous Waste			
ISA (Additional)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PSA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Biological

Endangered Species (Federal)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Endangered Species (State)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Biological Opinion/USFWA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
401 Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
404 Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
1601 Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
NPDES Coordination	<input type="checkbox"/>	<input type="checkbox"/>	
Natural Environment Study Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Biological Assessment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
NEPA 404 Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional Studies Required:

General Plant Surveys*

Wildlife Movement Evaluation (From San Jose Creek Diversion Channel to San Gabriel River)*

Species List Requested (Obtained from U.S. Fish and Wildlife Service)

* Specific Surveys may take at least 16 months to complete. Surveys will have to cover all seasons (Winter, Spring, Summer, and Fall)

Anticipated Project Mitigation

Discuss any known likely mitigation requirements and coordination based on similar projects and experience with resource agencies within the project vicinity.

*Preliminary Natural Environmental Study Report, dated July 15, 2002

All BMPs shall be adhered to for water quality as stipulated in Caltrans Stormwater Quality Practice Guidelines 9CT SW-RT-99-079), dated December 1999. Caltrans Division of Environmental Planning emphasizes the importance of utilizing Design Pollution Prevention and treatment Best Management Practices (BMPS's) to reduce urban runoff pollutants. Permanent stormwater BMP's such as drain inlet inserts (Treatment BMP's) should be considered and installed where feasible at drain inlets as part of the project. Drain inlets that are exposed to dust or debris during construction should likewise be covered. Soil disturbed or exposed as a result of construction should be revegetated or mulched to prevent soil erosion, especially on sloped areas adjacent and near channels.

Estimate of Project Mitigation Costs Are:

See attached tables 1, 2, and 3 for mitigation costs.

Special Considerations

For Pollution Prevention:

Use products that are Environmental Protection Agency (EPA) approved. Include provisions for the contractor that will allow for the use of construction equipment that operates on alternative clean fuel. Phasing of construction activities and scheduling construction to avoid high ozone days. Monitoring meteorological reports to determine weather conditions that could intensify ozone levels and particulate matter (PM-10).

PM-10:

To minimize PM-10, construction should be scheduled to avoid high wind conditions which could generate particulate matter (dust) that would impair drivers vision within the vicinity of the Interstate Route 605 and State Route 60 Junction.

Impacts to Section 303d listed waters:

San Jose Creek and San Gabriel River are listed as Section 303d water of concern. This is attributed to high pollutant levels that are present.

Section 303(d) of the Clean Water Act of 1972 states that states, territories and authorized tribes are required to develop a list of water quality limited segments. Waters on this list do not meet current water quality standards. Certain pollutants that are problematic are identified on this list. This may still occur even after the installation of minimum levels of pollution control technology. The act requires the local water quality jurisdiction to establish action plans and ranking s for water on these lists. The action plans are called the Total Maximum Daily Loads (TMDL). Special protocols and BMP's should be utilized when working within these waters of concern.

There is the potential to affect sensitive biological resources located within the project area*. Drainage areas may also be impacted. Potentially affected channels are San Jose Creek and San Gabriel River. Both these channels are soft bottom and are listed as Federal Section 303d listed water of concern. A Section 303d listed water does not meet current water quality guidelines. Also a Species List is required from the US Fish and Wildlife Service due to the potential to affect sensitive species located within the project vicinity.

*Preliminary Natural Environmental Study Report, dated July 15, 2002

Notification Prior to Construction:

As always please ensure that the Division of Environmental Planning is notified prior to construction in a pre-construction/survey meeting with our environmental planning staff (environmental planners and biologists). This will ensure that specifications are met and that all necessary measures are incorporated into the project and any outstanding issues are resolved.

Disclaimer

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

Hazardous Waste Scoping by	Jeff Chess/Steve Chan	Date	September 11, 2002
Biological Scoping by	Paul Caron Site visit by: Adelina Munoz, Kristi Daniel, and Paul Yamasaki	Date	July 15, 2002
Cultural Scoping By	Gary Iverson/Alex Kirkish	Date	August 2002
Environmental Generalist Scoping by	Robert Wang	Date	May 15, 2002

Table 3: Biological Mitigation Cost Estimate Sheet

Flour(s) 60 60S County Los Angeles

Project Description Alternative Number 3
 Date Preparer Nov. 3, 2002 Adelina Munoz

HOV Connector between Route 60 and 60S over San Jose Creek
 Replace and widen San Jose Creek 12 and 17 meters on both sides (north and southbound)

RESOURCE (unit) - suggested cost	Cost/Unit	Units	Optimistic Costs	Most likely Costs	Units	Pessimistic Costs
COASTAL SAGE SCRUB (acre) - \$ 30,000	30,000	0.06	\$1,800	\$18,000	1	\$30,000
SWALLOW EXCLUSION (area) - \$ 30,000	30,000	0.77	\$23,100	\$23,100	0.77	\$23,100
RIPARIAN WOODLAND (acre) - \$ 50,000	50,000	0.02	\$1,000	\$23,500	0.93	\$46,500
WESTERN POND TURTLE EXCLUSION	30,000	1.3	\$39,000	\$39,000	1.3	\$39,000
CATTAIL/MULE FAT SCRUB (acre) - \$ 50,000	50,000	0.06	\$3,000	\$52,000	1.04	\$52,000
NESTING BIRDS	30,000	1	\$30,000	\$30,000	1	\$30,000
BAT EXCLUSION (area) - \$ 50,000	50,000	0.46	\$23,000	23000	0.46	\$23,000
			\$0	\$0		\$0
			\$0	\$0		\$0
Redo Probability %	25	2.678	\$30,225	\$52,150	5.5	\$60,900
Land Acquisition (acres)	0	2.678	\$0	\$0	5.5	\$0
Easement Acquisition (acres)			\$0	\$0		\$0
Land Management Endowment	4,000	1	\$4,000	\$4,000	1	\$4,000
Capital Cost Subtotals			\$155,125	\$264,750		\$308,500
SUPPORT COSTS						
Construction Monitoring (hours)	50	80	\$4,000	\$6,500	200	\$10,000
Biological Monitoring (hours)	75	120	\$9,000	\$15,000	250	\$18,750
CDFG 1601 Permit Fee	1,800					
RWGCB 401 Permit Fee	1,000					
Support Cost Subtotals			\$13,000	\$21,500		\$28,750
Total Capital + Support			\$188,125	\$286,250		\$337,250
Contingency %			\$33,625	\$57,250		\$87,450
Total + Contingency			\$201,750	\$343,500		\$404,700

Estimated Mitigation Cost
\$330,075

Box indicates user-defined field. Estimated Mitigation Cost = (Optimistic Costs+4*Most-likely Costs+Pessimistic)/6.

Table 4A: Biological Mitigation Cost Estimate Sheet

Route(s)

County

Date
Preparer

Project Description
Alternative Number

Notes

RESOURCE (unit) - suggested cost	Cost/Unit	Units	Optimistic Costs	Most likely Costs	Units	Passimistic Costs
CAPITAL COSTS						
COASTAL SAGE SCRUB (acre) - \$ 30,000	30,000	0	\$0	\$0	0	\$0
SWALLOW EXCLUSION (area) - \$ 30,000	30,000	0.77	\$23,100	\$23,100	0.77	\$23,100
RIPARIAN SCRUB (acre) - \$ 50,000	50,000	2.56	\$128,000	\$194,500	5.12	\$258,000
WESTERN POND TURTLE EXCLUSION	50,000	1	\$0	\$0		\$0
CATTAIL/MULE FAT SCRUB (ac/ft) - \$ 50,000	50,000	0.39	\$30,000	\$30,000	1	\$30,000
BAT EXCLUSION (area) - \$ 50,000	50,000	6.8	\$340,000	\$390,000	1.7	\$85,000
NESTING BIRDS - \$ 20,000	20,000	1	\$20,000	\$20,000	6.8	\$340,000
			\$0	\$0	1	\$20,000
			\$140,150	\$161,650		\$188,525
Redo Probability %	25	2.56	\$0	\$0	3.89	\$0
Land Acquisition (acres)	0	1	\$0	\$0	1	\$0
Easement Acquisition (acres)	4,000		\$4,000	\$4,000		\$4,000
Land Management Endowment						
Capital Cost Subtotals			\$704,750	\$912,250		\$946,625
SUPPORTING COSTS						
Construction Monitoring (hours)	60	60	\$4,000	\$5,500	130	\$10,000
Biological Monitoring (hours)	75	120	\$9,000	\$15,000	200	\$18,750
COFG 1601 Permit Fee	1,800					
RWCCB 401 Permit Fee	1,000					
Support Cost Subtotals			\$13,000	\$21,500		\$28,750
Total Capital + Support			\$717,750	\$933,750		\$975,375
Contingency %			\$143,550	\$166,750		\$196,075
Total + Contingency			\$861,300	\$1,000,500		\$1,170,450

Estimated Mitigation Cost
\$1,005,625

Box indicates user-defined field. Estimated Mitigation Cost = (Optimistic Costs + 4 * Most-Rely Costs + Passimistic) / 6.

Table 4B: Biological Mitigation Cost Estimate Sheet

Route(s) 60 605

County

Nov. 12, 2008
Adelina Ritzke

Date
Preparer

Project Description
Full Standard Build HOV Direct Connector between Route 60 and 605 over San Jose Creek Channel
Alternative Number
Notes
Widen Westbound Route 60 at San Gabriel River and Widen Eastbound 60 at San Jose Creek

RESOURCE (unit) - suggested cost	Cost/Unit	Units	Optimistic Costs	Units	Most likely Costs	Units	Pessimistic Costs
COASTAL SAGE SCRUB (acre) - \$ 30,000	30,000	0.005	\$150	0.12	\$3,600	0.24	\$7,200
SWALLOW EXCLUSION (acre) - \$ 30,000	30,000	3.8	\$204,000	3.8	\$204,000	4.8	\$288,000
RIPIARIAN SCRUB (acre) - \$ 30,000	20,000	4.17	\$208,500	8.34	\$417,000	12.51	\$622,500
WESTERN POND TURTLE EXCLUSION	20,000		\$0		\$0		\$0
CATTAIL/MULE FAT SCRUB (acre) - \$ 50,000	60,000	0.383	\$18,900	0.773	\$38,900	1.181	\$59,050
BAT EXCLUSION (area) - \$ 50,000	50,000	1	\$50,000	1	\$50,000	1	\$50,000
NESTING BIRDS - \$ 20,000	20,000	1	\$20,000	1	\$20,000	1	\$20,000
Riparian Probability %	25		\$125,000	4.58	\$185,375	13.911	\$241,188
Land Acquisition (acres)	0		\$0		\$0		\$0
Easement Acquisition (acres)			\$0		\$0		\$0
Land Management Endowment	4,000	1	\$4,000	1	\$4,000	1	\$4,000
Capital Cost Subtotals			\$671,925		\$620,875		\$1,209,378
Construction Monitoring (hours)	50	80	\$4,000	130	\$6,500	200	\$10,000
Biological Monitoring (hours)	75	120	\$9,000	200	\$15,000	250	\$18,750
CDFG 1601 Permit Fee	1,800						
RWCCB 401 Permit Fee	1,000						
Support Cost Subtotals			\$13,000		\$21,500		\$28,750
Total Capital + Support Contingency %			\$644,625		\$942,375		\$1,236,628
Total + Contingency	20		\$128,925		\$188,475		\$247,738
			\$773,550		\$1,130,850		\$1,486,428

Estimated Mitigation Cost
\$1,130,563

Table 4: Biological Mitigation Cost Estimate Sheet

Route(s) **60** **605** County **Los Angeles**

Date **Nov. 12, 2002**
Preparer **Adellina Munoz**

Project Description **Full Standard Build HQV Direct Connector between Route 60 and 605 over San Jose Creek Channel, San Jose Creek and San Gabriel River**
Alternative Number **4**
Notes **Widen Westbound Route 60 at San Gabriel River and Widen Eastbound 60 at San Jose Creek and Widen Northbound Route 605 at San Jose Creek (San Jose Channel)**

RESOURCE (unit) - suggested cost	Cost/Unit	Optimistic		Most likely		Pessimistic	
		Units	Costs	Units	Costs	Units	Costs
CAPITAL COSTS							
COASTAL SAGE SCRUB (acre) - \$ 30,000	30,000	0.005	\$150	0.12	\$3,600	0.24	\$7,200
SWALLOW EXCLUSION (acre) - \$ 30,000	30,000	7.57	\$227,100	7.57	\$227,100	7.57	\$227,100
RIPARIAN SCRUB (acre) - \$ 50,000	50,000	6.75	\$337,500	12.23	\$611,500	17.63	\$881,500
			\$0		\$0		\$0
			\$0		\$0		\$0
WESTERN POND TURTLE EXCLUSION-	30,000	1	\$30,000	1	\$30,000	1	\$30,000
CATTAIL/MULE FAT SCRUB (acre) - \$ 50,000	50,000	0.788	\$39,400	1.55	\$77,500	2.861	\$143,050
BAT EXCLUSION (area) - \$ 50,000	50,000	1	\$50,000	1	\$50,000	1	\$50,000
NESTING BIRDS - \$ 20,000	20,000	1	\$20,000	1	\$20,000	1	\$20,000
			\$0		\$0		\$0
			\$176,038		\$254,925		\$339,713
Redo Probability %	25	7.12	\$0	13.128	\$0	19.031	\$0
Land Acquisition (acres)	0		\$0		\$0		\$0
Easement Acquisition (acres)			\$0		\$0		\$0
Land Management Endowment	4,000	1	\$4,000	1	\$4,000	1	\$4,000
Capital Cost Subtotals			\$984,188		\$1,278,625		\$1,702,563
SUPPORT COSTS							
Construction Monitoring (hours)	50	80	\$4,000	130	\$6,500	200	\$10,000
Biological Monitoring (hours)	75	120	\$9,000	200	\$15,000	250	\$18,750
CDFG 1601 Permit Fee	1,800						
RWQCB 401 Permit Fee	1,000						
Support Cost Subtotals			\$13,000		\$21,500		\$28,750
Total Capital + Support			\$997,188		\$1,300,125		\$1,731,313
Contingency %	20		\$179,438		\$260,025		\$346,263
Total + Contingency			\$1,076,625		\$1,560,150		\$2,077,575

Estimated Mitigation Cost
\$1,565,800



PDS Traffic Forecasting, Analysis and Operations Scoping Checklist

Project Information

District 07 County LA Route 60 Kilometer Post 17.9/21.2 (11.1/13.2)
605 (Post Mile) R27.2/R31.0 (R16.9/R19.3) EA 23560K

Description

This southern phase of the project proposes to construct a four-lane elevated High Occupancy Vehicle (HOV) direct connector within the freeway median areas to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605. The project for the HOV lanes on SR-60 from I-605 to SR-57 is currently in the Plans, Specifications and Estimates (PS&E) phase with EA 129400.

In coordination with this project phase, another project phase, currently in the planning stage (northern phase, EA 23570K), is proposing to construct a four-lane elevated HOV direct connector to connect HOV traffic from northbound I-605 to westbound I-10 and eastbound I-10 to southbound I-605.

These two projects phases will provide system continuity for HOV commuters from the eastern part of the Los Angeles Metropolitan area to downtown Los Angeles.

Alternative 1: No Build

Alternative 2: Construct Minimum Build HOV Connector

Alternative 3: Construct Minimum Standard Build HOV Direct Connector

Alternative 4: Construct Full Standard Build HOV Direct Connector

Combining both project phases (EA 23560K & 23570K) will maintain system consistency for the HOV network within the limits of the combined project. The project management is committed to combining the two project phases so that sufficiently programmed resources can be allocated to complete the environmental document and project approval for the combined project (See Attachment R)

Project Manager	<u>Maen Shaar</u>	Phone Number	<u>(21) 897-8665</u>
Project Engineer	<u>Benjamin Ramos</u>	Phone Number	<u>(213) 897-9605</u>
Traffic Forecasting Functional Manager	<u>Chao Wei</u>	Phone Number	<u>(213) 897-1814</u>
Traffic Investigations Functional Manager	<u>Bob Masuda</u>	Phone Number	<u>(213) 897-0350</u>

Project Screening

1. Project Features:

New R/W? Yes Excavation or Fill? Both

2. Project Setting:

In Los Angeles County on Route 60 From 60/605 Interchange To Crossroad Parkway and on Route 605 From 60/605 Interchange To 700 meters south of Valley Blvd.

Rural or Urban Urban

Current land uses Land within Caltrans Right of Way

Adjacent land uses Commercial, Residential

(industrial, light industry, commercial, agricultural, residential, etc.)

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

Mainline highway

Provide an additional mixed flow through lane for westbound SR-60 from the connector to I-605 to the merge of the northbound SR-605 connector. The northbound I-605 connector should be re-striped to merge with the No. 4 lane. This improvement will reduce the congestion and congestion related accidents that occur at this capacity reduction. Provide an additional truck lane on the southbound I-605 to eastbound SR-60 loop connector. This improvement will reduce congestion and congestion related accidents that occur north of this connector. (See optional improvements to all build alternatives)

Ramp intersection

Provide phone lines for adjacent off ramps signals. Additional traffic signal modification.

Merge / diverge

The diverging SR-60/I-605 interchange connector ramps at the second gore do not have sufficient or are at an adverse super-elevation.

Street intersection

Weaving / merging (spacing)

Other

Install an overhead sign bridge for westbound SR-60, east of the Workman Mill Road undercrossing with G24 and G85 signs indication the destination for each of the lanes. This will improve the freeway operation by informing moterist which lanes to use for the various destinations in advance of the interchange. Install an overhead sign bridge for southbound I-605, north of the San Jose Creek bridge with G24 and G85 signs indicating the destination for each of the lanes. This will improve the freeway operation by informing motorist which lanes to use for the various destinations in advance of the SR-60/I-605 interchange.

Traffic Study and Analysis Anticipated

Traffic Modeling Assumptions

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Use Local/LARTS Model | <input type="checkbox"/> Update New Model | <input type="checkbox"/> New Model |
| <input checked="" type="checkbox"/> Existing Traffic Counts | <input checked="" type="checkbox"/> New Traffic Counts | <input type="checkbox"/> Historical Growth |
| <input type="checkbox"/> General Plan (GP) Buildout | <input type="checkbox"/> Pro-Rate GP Growth | |
| <input checked="" type="checkbox"/> Existing Year -(2002) | <input checked="" type="checkbox"/> Design Year -(2035) | <input type="checkbox"/> Interim Year () |
- Other

Traffic Analysis

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Mainline LOS | <input checked="" type="checkbox"/> Merge/Diverge LOS | <input type="checkbox"/> Ramp Int. LOS |
| <input type="checkbox"/> Adjacent IC LOS | <input type="checkbox"/> Ramp Metering (open) | <input type="checkbox"/> Ramp Metering (later) |
| <input type="checkbox"/> Left/Right Turn Storage | <input checked="" type="checkbox"/> Accident Analysis | <input type="checkbox"/> Intersection Queues |
| <input checked="" type="checkbox"/> Construction Staging | <input checked="" type="checkbox"/> Project Staging | <input type="checkbox"/> Interim Year |
- Other Overhead Guide Signing

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

Traffic Operation Scoping

Traffic Operational Improvements

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

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Auxiliary Lanes | <input type="checkbox"/> Intersection Improvements | <input type="checkbox"/> Truck Climbing Lane |
| <input type="checkbox"/> New Signals | <input checked="" type="checkbox"/> Modify Signals | <input checked="" type="checkbox"/> Merging Improvements |
| <input checked="" type="checkbox"/> Weaving Improvements | <input checked="" type="checkbox"/> Deceleration/Acceleration Lanes | |
- Other Overhead Guide Signing

Traffic Management Systems

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

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Ramp & Connector Meters | <input type="checkbox"/> HOV Ramp Bypass | <input type="checkbox"/> Mainline HOV Lanes |
| <input checked="" type="checkbox"/> Detector Loops | <input checked="" type="checkbox"/> Communication Networks (fiber optic, telephone, etc.) | |
| <input checked="" type="checkbox"/> Closed Circuit Television | <input type="checkbox"/> Changeable Message Sign | <input type="checkbox"/> Highway Advisory Radio |
- Other

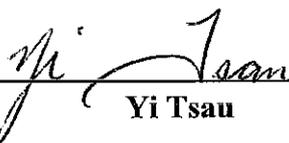
Discuss strategies (technical analysis, public outreach, etc.) to secure local agency and public support to implement HOV lanes and ramp metering:

Preliminary Traffic Forecasting Evaluation provided by:

Traffic Forecasting  **Date** 1-21-03
Chao Wei

Preliminary Traffic Operations Evaluation provided by:

Traffic Operation Engineer  **Date** 12-31-02
for Lily Kam

Traffic Electrical Engineer  **Date** 1-3-03
Yi Tsau

ITS Development Engineer  **Date** 12-30-02
Jacquelin Tan

LOS Estimates for SR-60/I-605 Interchange

AM Peak Hour

Mainline LOS

Location	Current Year Volume	No HOV				1 HOV			2 HOV					
		Volume	D/C	LOS	Demand	Volume	D/C	LOS	Volume	D/C	LOS			
Pomona Freeway SR-60	MF	W/B East of I-605	9,750	1.00	E	11,010	1.13	F-0	10,580	1.09	F-0	8,440	0.87	D
		E/B East of I-605	6,100	0.63	C	15,970	1.64	F-3	11,720	1.20	F-0	9,810	1.01	F-0
	HOV	W/B East of I-605	1,500	0.77	D	1,890	0.97	E	1,860	0.95	E	1,950	1.00	E
		E/B East of I-605	1,950	1.00	E	1,280	0.66	C	1,330	0.68	C	1,400	0.72	C
	W/B thru the Interchange	7,880	1.01	F-0	8,360	1.07	F-0	8,120	1.04	F-0	6,100	0.78	D	
	E/B thru the Interchange	8,047	0.83	D	14,500	1.49	F-3	9,790	1.00	E	7,941	0.81	D	
W/B West of I-605	9,010	0.92	D	9,930	1.02	F-0	10,080	1.03	F-0	10,580	1.09	F-0		
	E/B West of I-605	4,260	0.44	B	8,390	0.86	D	8,230	0.84	D	8,640	0.89	D	
San Gabriel River Freeway I-605	MF	N/B South of SR-60	5,240	0.67	C	6,850	0.88	D	6,290	0.81	D	6,600	0.85	D
		S/B South of SR-60	7,450	0.96	E	9,920	1.27	F-1	9,550	1.22	F-0	9,960	1.28	F-1
	HOV	N/B South of SR-60	532	0.27	A	1,180	0.61	C	1,280	0.66	C	1,340	0.69	C
		S/B South of SR-60	1,010	0.52	B	2,280	1.17	F-0	2,400	1.23	F-0	2,520	1.29	F-1
	N/B thru the Interchange	5,300	0.68	C	3,180	0.41	B	2,680	0.34	A	3,040	0.39	B	
	S/B thru the Interchange	7,500	0.96	E	8,160	1.05	F-0	7,730	0.99	E	8,006	1.03	F-0	
MF	N/B between SR-60 and I-10	5,510	0.71	C	6,880	0.88	D	6,350	0.81	D	6,670	0.86	D	
	S/B between SR-60 and I-10	7,710	0.99	E	9,820	1.26	F-1	9,180	1.18	F-0	9,640	1.24	F-0	
HOV	N/B between SR-60 and I-10	390	0.10	A	1,060	0.27	A	1,060	0.27	A	1,110	0.28	A	
	S/B between SR-60 and I-10	1,010	0.26	A	2,080	0.53	B	2,080	0.53	B	2,180	0.56	C	

To deal with the LOS effects of increasing the number of lanes on the Westbound SR-60 through the interchange, change the value of number of lanes. The D/C and corresponding LOS will change.

Mixed Flow Ramp LOS

From	To	Current Year				No HOV				1 HOV			2 HOV				
		Volume	Lanes	V/C	LOS	Demand	Lanes	D/C	LOS	Demand	Lanes	D/C	LOS	Demand	Lanes	D/C	LOS
Northbound I-605	Eastbound SR-60	2,280	2	0.76	C	3,140	2	1.05	F-0	3,150	2	1.05	F-0	3,160	2	1.05	F-0
Northbound I-605	Westbound SR-60	1,280	2	0.43	B	1,710	2	0.57	C	1,740	2	0.58	C	1,740	2	0.58	C
Southbound I-605	Eastbound SR-60	1,020	1	0.68	C	1,340	1	0.89	D	860	1	0.57	C	790	1	0.53	B
Southbound I-605	Westbound SR-60	2,120	2	0.71	C	2,700	2	0.90	D	2,850	2	0.95	E	2,860	2	0.95	E
Eastbound SR-60	Northbound I-605	1,140	2	0.38	B	1,490	2	0.50	B	1,560	2	0.52	B	1,560	2	0.52	B
Eastbound SR-60	Southbound I-605	830	1	0.62	C	1,260	1	0.84	D	1,280	1	0.85	D	1,280	1	0.85	D
Westbound SR-60	Northbound I-605	1,140	1	0.76	C	1,510	1	1.01	F-0	1,270	1	0.85	D	1,230	1	0.82	D
Westbound SR-60	Southbound I-605	2,230	2	0.74	C	3,030	2	1.01	F-0	3,050	2	1.02	F-0	3,060	2	1.02	F-0

HOV Ramps LOS

From	To	Current Year				No HOV				1 HOV			2 HOV Lanes				
		Volume	Lanes	V/C	LOS	Demand	Lanes	D/C	LOS	Demand	Lanes	D/C	LOS	Demand	Lanes	D/C	LOS
Southbound I-605	Eastbound SR-60	#N/A	1	#N/A	#N/A	#N/A	0	#N/A	#N/A	510	1	0.34	A	824	2	0.27	A
Westbound SR-60	Northbound I-605	#N/A	1	#N/A	#N/A	#N/A	0	#N/A	#N/A	420	1	0.28	A	429	2	0.14	A

Travel Demand Modeling offers limited information on Level of Service for Interchange Improvements. The Model only provides estimates of LOS gains from changes in capacity. It does not take into consideration improved geometrics or changes in weaving behavior. As these sorts of improvements represent a lot of the improvements generated by this project, the Travel Demand LOS improvements represent a midpoint for your evaluation, not the end.

LOS Estimates for SR-60/I-605 Interchange

PM Peak Hour

Mainline LOS

Location	Current Year Flow Volume	Current Year			No HOV			1 HOV			2 HOV			Number of Lanes	
		Demand Volume	D/C	LOS	Demand Volume	D/C	LOS	Demand Volume	D/C	LOS	Demand Volume	D/C	LOS		
Pomona Freeway SR-60	MF	WB East of I-605	6,860	0.70	C	11,010	1.13	F-0	10,580	1.09	F-0	10,580	1.09	F-0	5
		E/B East of I-605	9,250	0.95	E	11,980	1.23	F-0	10,851	1.11	F-0	11,720	1.20	F-0	5
	HOV	WB East of I-605	1,372	0.70	C	1,800	0.92	D	1,830	0.94	E	1,840	0.94	E	1
		E/B East of I-605	1,850	0.95	E	2,060	1.06	F-0	2,050	1.05	F-0	2,040	1.05	F-0	1
	WB thru the Interchange	6,400	1.09	F-0	9,100	1.56	F-3	7,410	1.27	F-1	7,990	1.37	F-2	3	
	E/B thru the Interchange	8,500	0.87	D	10,740	1.10	F-0	7,806	0.80	D	8,720	0.89	D	5	
	WB West of I-605	6,020	0.62	C	9,880	1.01	F-0	9,950	1.02	F-0	9,760	1.00	E	5	
	E/B West of I-605	8,150	0.84	D	10,730	1.10	F-0	10,850	1.11	F-0	10,910	1.12	F-0	5	
San Gabriel River Freeway I-605	MF	N/B South of SR-60	7,110	0.91	D	9,650	1.24	F-0	9,110	1.17	F-0	9,050	1.16	F-0	4
		S/B South of SR-60	5,910	0.76	C	7,850	1.01	F-0	7,160	0.92	D	7,170	0.92	D	4
	HOV	N/B South of SR-60	895	0.46	B	1,460	0.75	C	2,360	1.21	F-0	2,450	1.26	F-1	1
		S/B South of SR-60	1,293	0.66	C	950	0.49	B	1,890	0.97	E	1,910	0.98	E	1
	N/B thru the Interchange	7,120	0.91	D	6,300	0.81	D	4,210	0.54	C	6,660	0.85	D	4	
	S/B thru the Interchange	6,000	0.77	D	5,420	0.69	C	5,290	0.68	C	5,246	0.67	C	4	
	MF	N/B between SR-60 and I-10	7,130	0.91	D	9,500	1.22	F-0	8,940	1.15	F-0	8,900	1.14	F-0	4
		S/B between SR-60 and I-10	6,190	0.79	D	7,670	0.98	E	7,220	0.93	E	7,160	0.92	D	4
	HOV	N/B between SR-60 and I-10	1,173	0.30	A	2,080	0.53	B	2,080	0.53	B	2,590	0.66	C	2
		S/B between SR-60 and I-10	513	0.13	A	1,630	0.42	B	1,630	0.42	B	1,820	0.47	B	2

Mixed Flow Ramp LOS

From	To	Current Year				No HOV				1 HOV				2 HOV			
		Volume	Lanes	V/C	LOS	Demand	Lanes	D/C	LOS	Demand	Lanes	D/C	LOS	Demand	Lanes	D/C	LOS
Northbound I-605	Eastbound SR-60	2,430	2	0.77	D	3,350	2	1.06	F-0	3,350	2	1.06	F-0	3,380	2	1.07	F-0
Northbound I-605	Westbound SR-60	1,090	2	0.35	A	1,460	2	0.46	B	1,490	2	0.47	B	1,480	2	0.47	B
Southbound I-605	Eastbound SR-60	1,180	1	0.75	C	1,550	1	0.99	E	1,110	1	0.71	C	1,080	1	0.67	C
Southbound I-605	Westbound SR-60	1,440	2	0.46	B	1,830	2	0.58	C	1,930	2	0.61	C	1,930	2	0.61	C
Eastbound SR-60	Northbound I-605	2,100	2	0.67	C	2,730	2	0.87	D	2,870	2	0.91	D	2,870	2	0.91	D
Eastbound SR-60	Southbound I-605	1,200	1	0.76	C	1,620	1	1.03	F-0	1,640	1	1.04	F-0	1,640	1	1.04	F-0
Westbound SR-60	Northbound I-605	1,340	1	0.85	D	1,770	1	1.13	F-0	1,240	1	0.79	D	1,170	1	0.74	C
Westbound SR-60	Southbound I-605	2,370	2	0.75	C	3,230	2	1.03	F-0	3,260	2	1.03	F-0	3,260	2	1.03	F-0

HOV Ramps LOS

From	To	Current Year				No HOV				1 HOV				2 HOV			
		Volume	Lanes	V/C	LOS	Demand	Lanes	D/C	LOS	Demand	Lanes	D/C	LOS	Demand	Lanes	D/C	LOS
Southbound I-605	Eastbound SR-60	#N/A	0	#N/A	#N/A	#N/A	0	#N/A	#N/A	720	1	0.48	B	844	2	0.28	A
Westbound SR-60	Northbound I-605	#N/A	0	#N/A	#N/A	#N/A	0	#N/A	#N/A	585	1	0.39	B	530	2	0.18	A

Travel Demand Modeling offers limited information on Level of Service for Interchange Improvements. The Model **only** provides estimates of LOS gains from changes in capacity. It **does not take into consideration** improved geometrics or changes in weaving behavior. As these sort of improvements represent a lot of the improvements generated by this project, the Travel Demand LOS improvements represent a midpoint for your evaluation, not the end.

To: TI seniors, Bob Masuda/D07/Caltrans/CAGov@DOT
cc: Jerry Champa/HQ/Caltrans/CAGov@DOT

Subject: Scoping Documents

Luu. . . let's discuss to see what we need to do.

----- Forwarded by Steve Leung/D07/Caltrans/CAGov on 11/27/2001 07:08 PM -----

Doug Failing


▲ 11/27/2001 03:50 PM

To: Rose Casey/D07/Caltrans/CAGov
cc: Melvin Hodges/D07/Caltrans/CAGov@DOT, frank.quon@dot.ca.gov@DOT, Steve
Leung/D07/Caltrans/CAGov@DOT, Bob Sassaman/D07/Caltrans/CAGov
Subject: Scoping Documents

Rose, I had asked traffic to prepare a list of freeway to freeway connector locations that are a concern to traffic and traffic flow.

Traffic has provided me with that list. All of the locations indicate corrective action being taken, or no action being appropriate except for three locations. These three locations may need to be redesigned and reconstructed.

I would like your staff to prepare Scoping Documents for possible corrective action at the following three locations:

The south bound Route 605 to east bound Route 60 connector.

The west bound Route 10 to south bound Route 5 connector.

The east bound Route 10 to northbound Route 605 connector.

Please work with the traffic program advisors on the appropriate schedule for these scoping documents.



Division of Engineering Services Scoping Checklist

Project Information

District 07 County LA Route 60/605

Kilometer Post (Post Mile) I-605, R27.2/R30.1
(PM R16.9/R18.7)

EA 23560K

Description:

The Project Study Report (Project Development Support) – PSR(PDS) is being prepared for the above referenced project. This project, the southern segment of the overall interchange modification project, proposes to add an elevated High Occupancy Vehicle (HOV) direct connector within the freeway median areas to provide direct connections for HOV traffic from westbound SR-60 to northbound I-605 and from southbound I-605 to eastbound SR-60. The overall project will interconnect proposed HOV lanes on SR-60 east of I-605 with existing HOV lanes on I-605 and proposed HOV lanes on I-10 west of I-605. The project for constructing HOV lanes on SR-60 from I-605 to SR-57 (EA 129401) is currently in the Plans, Specifications and Estimate (PS&E) phase. The project for constructing bi-directional HOV lanes on I-10 between Baldwin Avenue and I-605 (EA 1069U4) is currently under construction and scheduled to be completed by October 2004.

The northern project segment (EA 23570K, currently in the planning stage) will provide a direct connection for HOV lanes from northbound I-605 to westbound I-10 and from eastbound I-10 to southbound I-605. When combined, these two project segments (EA 23560K & EA 23570K) will provide system continuity for HOV commuters from the eastern part of the Los Angeles Metropolitan area to downtown Los Angeles. The project management is committed to combining the two project segments so that sufficient resources can be programmed to complete the Environmental Document and receive approval for the overall project (see Attachment Q).

The alternatives proposed are:

Alternative 1: No Build

Alternative 2: Minimum Build HOV Direct Connector

Alternative 3: Minimum Standard Build HOV Direct Connector

Alternative 4: Full Standard Build HOV Direct Connector

Project Manager Maen Shaar

Phone # (213) 897-8665

District Project Engineer Ben Ramos

Phone # (213) 897-9605

DES Project Coordination Engineer John A. Scott

Phone # (916) 227-8813

Alternative 2: Minimum Build HOV Direct Connector

Proposed Work (Select number(s) that best match scope of work that applies to overall project):

- | | |
|---|--|
| (1) Construct New Expressway/Freeway on new align. | (11) Median Barrier Retrofit |
| <input checked="" type="checkbox"/> (2) Construct Interchange | <input checked="" type="checkbox"/> (12) Bridge Widening |
| <input checked="" type="checkbox"/> (3) Modify Interchange | <input checked="" type="checkbox"/> (13) Bridge Replacement (new alignment? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No) |
| (4) Construct Passing Lane | (14) Landslide/Slipout |
| <input checked="" type="checkbox"/> (5) Curve Correction | (15) Rockfall Project |
| <input checked="" type="checkbox"/> (6) Widen Highway | (16) Building Project |
| (7) Left-turn Pocket | (17) Other Roadway Realignment |
| <input checked="" type="checkbox"/> (8) Modify Slope | <input checked="" type="checkbox"/> (18) Construct Soundwall/Retaining Wall |
| (9) Stabilize Subgrade | <input checked="" type="checkbox"/> (19) Bridge Seismic Retrofit |
| (10) Stabilize Roadway | <input checked="" type="checkbox"/> (20) Realign Connector |

Alternative # 2

Project Cost (Range) \$1000

Roadway \$ 93,000 to 114,200
 Structure** \$ 30,400 to 51,500
 Total \$ 123,400 to 165,700

Tentative Schedule

PR or PA/ED* July 2007
 DPS&E December 2009
 RTL July 2010
 Construction Complete September 2014

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

**Structure Cost was provided by DES Technical Liaison Engineer.

Proposed Scope of DES Design Work

Discuss and identify assumptions made and also identify risks and/or unknowns associated with those assumptions. Include anticipated lead times for development of Draft General Plan, Geotechnical Studies, and Hydraulic studies. For the purposes of this study, it is to construct a two-lane elevated HOV direct connector within the freeway median area to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605.

Structure Design Services (Check all that are anticipated):

- Design by: Office of Structure Design Structure Maintenance Design
 Office of Structure Contract Management (Consultant Design)
 Office of Special Funded Projects (Consultant Design Oversight: State or Local Agency)

Bridge Design:

- New Bridge: How many? 1
 List name and Br. Numbers (if existing)
 1. 2-Lane HOV Direct Connector
- Bridge Replacement: How many? 1
 List name and Br. Numbers (if existing)
 1. Union Pacific Railroad OH (Crossroad Parkway City's structure)
- Bridge Widening: How many? 4
 List name and Br. Numbers (if existing):
 1. Crossroad Parkway OC BR. No 53-2660
 2. San Jose Creek No. 53-1416
 3. Workman Mill Road UC No. 53-1768
 4. Clayton OH No. 53-1755
- Br. Rail upgrade: How many? _____
 List name and Br. Numbers (if existing) _____

Structure Design Services (Cont'd)

Other DES Functional units required for Structure Work (excluding Bridge Design)

- X Structure Hydraulics (San Jose Creek Br No. 53-1416)
- X Geotechnical Services (Structure Foundations)

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

- X Soundwall(s): How many? 2 Estimated Max. Ht 4.3m Estimated Total Length (m) 469
- X Retaining walls(s): How many? 9 Estimated Max. Ht 6.0m Estimated Total Length (m) 3042
- MSE walls(s): How many? _____ Estimated, Max. Ht: _____ Total Length (m) _____

Technical Specialist Design

Anticipated insertable plan sheet(s) check below:

- X Culvert(s): How many? 2 X Barrier(s): How many? Type 25/27 -- 3542m
Type 60A -- 2535m, Type 732 -- 974m
- X Sign and Overhead Structure(s) 7

Other Design: Explain None identified at the time of this report.

Transportation Architecture Design Services (Check all that are anticipated):

- Design New Building(s): Explain _____
- Remodel Existing Buildings(s): Explain _____
- X Bridge Aesthetics Evaluation: Explain New bridges may need to be aesthetically enhanced.
- Build scale model Other Aesthetics work: Explain _____

Electrical, Mechanical, Water & Wastewater Design Services

- Pumping Plants: Explain _____
- Movable bridge, drawbridge: Explain _____
- X Lighting, control systems for facilities: Explain: New lighting system for HOV Direct Connector
- Sanitary Systems: Explain _____

DES Geotechnical Services

Has Geotechnical Design Liaison or other geotechnical staff been contacted:

X Yes No If yes, who? Yung Chung, PE (916) 227-5398

Type of Terrain: X Flat Rolling Mountainous

Cuts: Est. Max Height (m): 1.5m Est. Volume (m³) 61,583 X New X Widen

Fills: Est. Max Height (m): 1.5m Est. Volume (m³): 114,368 X New X Widen

Retaining Walls, How many? 9 Est. Max. Height 6.0m Est. length 3042m Cut Fill

X Overhead Sign Foundations, How many? 7

Changeable Message Sign Foundations, How many? _____

X Soundwalls, How many? 2 Est. Avg. Height 4.3 m Standard Plan Non-Standard Plan

X Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.)

Ground water and liquefaction might be potential issues.

Existing Maintenance Problems, Explain: None identified at the time of this report.

DES Materials Engineering & Testing Services

- Deflection Studies: No. Of Locations 5 Number of lane/miles to be tested 2
Type of pavement (Ave. grades, Ave. superelevation) _____
- Consultation and inspection Signal & Lighting Products
- Changeable Message Signs, Closed Circuit TV X Loop detectors
- X Concrete Bridge Steel Bridge
- X Corrosion Tests (Soil X, Concrete X) Cathodic Protection System
- Special Products, Explain: _____

Railroad Agreements

Railroad Involvement: No Yes, Explain: Union Pacific Railroad OH is to be replaced.

Note: This function to be initiated by DES but the majority of the work and the completion of the task will be by District 07 Railroad staff.

DES Engineering Technology

Aerial Photography Raster Imaging Est. Total Length 11000 m Est. Ave. Width 5500 m

Mapping: Est. Total Length (km) 11 Est. Average Width (m) 5.5 Scale: 1:3000

Photogrammetric DTM Modeling (non-district): Est. Total Length (km) _____ Est. Total Ave. Width (m) _____

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

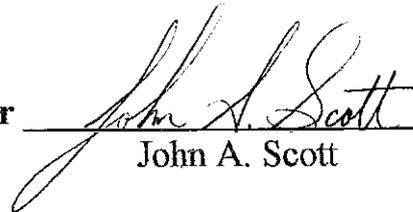
Additional Studies, Investigations or Research from DES

Additional studies which may need to be conducted are contaminated soils investigation, endangered species review, historical building determination, and any potential railroad easements, both construction and permanent.

<u>Division of Engineering Services</u>	<u>PY's</u> Alternative 2
Resources for WBS Activity 100	1.69
Resources for WBS Activity 150	0.76
Resources for WBS Activity 160	1.24
Resources for WBS Activity 165	0.00
Resources for WBS Activity 175	0.20
Resources for WBS Activity 180	0.01
TOTAL	3.90
COST ESTIMATE	\$390,000

Preliminary Evaluation provided by:

DES Project Coordination Engineer


John A. Scott

Date 2/28/03

Reviewed by:

Project Manager


Maen Shaar

Date 3/3/03



Division of Engineering Services Scoping Checklist

Project Information

District 07 County LA Route 60/605

Kilometer Post (Post Mile) I-605, R27.2/R30.1
(PM R16.9/R18.7)

EA 23560K

Description:

The Project Study Report (Project Development Support) – PSR(PDS) is being prepared for the above referenced project. This project, the southern segment of the overall interchange modification project, proposes to add an elevated High Occupancy Vehicle (HOV) direct connector within the freeway median areas to provide direct connections for HOV traffic from westbound SR-60 to northbound I-605 and from southbound I-605 to eastbound SR-60. The overall project will interconnect proposed HOV lanes on SR-60 east of I-605 with existing HOV lanes on I-605 and proposed HOV lanes on I-10 west of I-605. The project for constructing HOV lanes on SR-60 from I-605 to SR-57 (EA 129401) is currently in the Plans, Specifications and Estimate (PS&E) phase. The project for constructing bi-directional HOV lanes on I-10 between Baldwin Avenue and I-605 (EA 1069U4) is currently under construction and scheduled to be completed by October 2004.

The northern project segment (EA 23570K, currently in the planning stage) will provide a direct connection for HOV lanes from northbound I-605 to westbound I-10 and from eastbound I-10 to southbound I-605. When combined, these two project segments (EA 23560K & EA 23570K) will provide system continuity for HOV commuters from the eastern part of the Los Angeles Metropolitan area to downtown Los Angeles. The project management is committed to combining the two project segments so that sufficient resources can be programmed to complete the Environmental Document and receive approval for the overall project (see Attachment Q).

The alternatives proposed are:

- Alternative 1: No Build
- Alternative 2: Minimum Build HOV Direct Connector
- Alternative 3: Minimum Standard Build HOV Direct Connector
- Alternative 4: Full Standard Build HOV Direct Connector

Project Manager Maen Shaar Phone # (213) 897-8665
 District Project Engineer Ben Ramos Phone # (213) 897-9605
 DES Project Coordination Engineer John A. Scott Phone # (916) 227-8813

Alternative 2: Minimum Build HOV Direct Connector (with optional improvements)**Proposed Work** (Select number(s) that best match scope of work that applies to overall project):

- | | |
|--|--|
| (1) Construct New Expressway/Freeway on new align. | (11) Median Barrier Retrofit |
| X (2) Construct Interchange | X (12) Bridge Widening |
| X (3) Modify Interchange | X (13) Bridge Replacement (new alignment? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No) |
| (4) Construct Passing Lane | (14) Landslide/Slipout |
| X (5) Curve Correction | (15) Rockfall Project |
| X (6) Widen Highway | (16) Building Project |
| (7) Left-turn Pocket | (17) Other Roadway Realignment |
| X (8) Modify Slope | X (18) Construct Soundwall/Retaining Wall |
| (9) Stabilize Subgrade | X (19) Bridge Seismic Retrofit |
| (10) Stabilize Roadway | X (20) Realign Connector |

Alternative # 2 **Project Cost (Range) X \$1000**

Roadway \$ 93,000 to 114,200
 Structure** \$ 30,400 to 51,500
 Total \$ 123,400 to 165,700

Tentative Schedule

PR or PA/ED* July 2007
 DPS&E December 2009
 RTL July 2010

Construction Complete September 2014

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

**Structure Cost was provided by DES Technical Liaison Engineer.

Proposed Scope of DES Design Work

Discuss and identify assumptions made and also identify risks and/or unknowns associated with those assumptions. Include anticipated lead times for development of Draft General Plan, Geotechnical Studies, and Hydraulic studies. For the purposes of this study, it is to construct a two-lane elevated HOV direct connector within the freeway median areas to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605. Traffic operational improvements of an additional westbound SR-60 mixed-flow lane through the interchange and an additional truck lane on the southbound to eastbound loop connector to reduce congestion and congestion related accidents.

Structure Design Services (Check all that are anticipated):

Design by: Office of Structure Design Structure Maintenance Design
 Office of Structure Contract Management (Consultant Design)
 Office of Special Funded Projects (Consultant Design Oversight: State or Local Agency)

Bridge Design:X New Bridge: How many? 3

List name and Br. Numbers (if existing)

1. 2-Lane HOV Direct Connector
2. North Connector OC No. 53-1536
3. South Connector OC No. 53-1534

X Bridge Replacement: How many? 2

List name and Br. Numbers (if existing)

1. Union Pacific Railroad OH (Crossroad Parkway City's structure)
2. River Access Road UC No. 53-1795

Bridge Widening: How many? 6

List name and Br. Numbers (if existing):

- | | |
|---|---|
| 1. Crossroad Parkway OC Br No. 53-2660 | 4. Clayton OH Br. No. 53-1755 |
| 2. San Jose Creek Br. No. 53-1416 | 5. SR 60/I-605 Separation Br. No. 53-1535 |
| 3. Workman Mill Road UC Br. No. 53-1768 | 6. San Gabriel River Br. No. 53-1767 |

Structure Design Services (Cont'd)

- Br. Rail upgrade: How many? _____
List name and Br. Numbers (if existing) _____

Other DES Functional units required for Structure Work (excluding Bridge Design)

- Structure Hydraulics (San Jose Creek Br No. 53-1416, San Gabriel River Br. No. 53-1767)
 Geotechnical Services (Structure Foundations)

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

- Soundwall(s): How many? 3 Estimated Max. Ht 4.3m Estimated Total Length (m) 922
 Retaining walls(s): How many? 11 Estimated Max. Ht 6.0m Estimated Total Length (m) 3723
 MSE walls(s): How many? _____ Estimated. Max. Ht: _____ Total Length (m) _____

Technical Specialist Design

Anticipated insertable plan sheet(s) check below:

- Culvert(s): How many? 2 Barrier(s): How many? Type 25/27 – 3542m
 Sign and Overhead Structure(s) 7 Type 60A – 2535m, Type 732 – 3366m

Other Design: Explain None identified at the time of this report.

Transportation Architecture Design Services (Check all that are anticipated):

- Design New Building(s): Explain _____
 Remodel Existing Buildings(s): Explain _____
 Bridge Aesthetics Evaluation: Explain New bridges may need to be aesthetically enhanced.
 Build scale model Other Aesthetics work: Explain _____

Electrical, Mechanical, Water & Wastewater Design Services

- Pumping Plants: Explain _____
 Movable bridge, drawbridge: Explain _____
 Lighting, control systems for facilities: Explain: New lighting system for HOV Direct Connector
 Sanitary Systems: Explain _____

DES Geotechnical Services

Has Geotechnical Design Liaison or other geotechnical staff been contacted:

- Yes No If yes, who? Yung Chung, PE (916) 227-5398

Type of Terrain: Flat Rolling Mountainous

Cuts: Est. Max Height (m): 1.5m Est. Volume (m³) 61,583 New Widen

Fills: Est. Max Height (m): 1.5m Est. Volume (m³): 142,960 New Widen

Retaining Walls, How many? 11 Est. Max. Height 6.0m Est. length 3723 m Cut Fill

Overhead Sign Foundations, How many? 7

Changeable Message Sign Foundations, How many? _____

Soundwalls, How many? 3 Est. Avg. Height 4.3 m Standard Plan Non-Standard Plan

Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.)

Ground water and liquefaction might be potential issues.

Existing Maintenance Problems, Explain None identified at the time of this report.

DES Materials Engineering & Testing Services

- Deflection Studies: No. Of Locations 5 Number of lane/miles to be tested 2
Type of pavement (Ave. grades, Ave. superelevation) _____
 Consultation and inspection Signal & Lighting Products
 Changeable Message Signs, Closed Circuit TV Loop detectors
 Concrete Bridge Steel Bridge
 Corrosion Tests (Soil X, Concrete X) Cathodic Protection System
 Special Products, Explain: _____

Railroad Agreements

Railroad Involvement: No Yes, Explain: Union Pacific Railroad OH is to be replaced

Note: This function to be initiated by DES but the majority of the work and the completion of the task will be by District 07 Railroad staff.

DES Engineering Technology

Aerial Photography Raster Imaging Est. Total Length 11000 m Est. Ave. Width 5500 m

Mapping: Est. Total Length (km) 11 Est. Average Width (m) 5.5 Scale: 1:3000

Photogrammetric DTM Modeling (non-district): Est. Total Length (km) _____ Est. Total Ave. Width (m) _____

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

Additional Studies, Investigations or Research from DES

Additional studies which may need to be conducted are contaminated soils investigation, endangered species review, historical building determination, and any potential railroad easements, both construction and permanent.

<u>Division of Engineering Services</u>	<u>PY's</u>
	Alternative 2 with optional improvements
Resources for WBS Activity 100	2.19
Resources for WBS Activity 150	1.03
Resources for WBS Activity 160	1.60
Resources for WBS Activity 165	0.00
Resources for WBS Activity 175	0.29
Resources for WBS Activity 180	0.01
TOTAL	5.12
COST ESTIMATE	\$ 512,000

Preliminary Evaluation provided by:

DES Project Coordination Engineer John A. Scott Date 2/28/03
John A. Scott

Reviewed by:

Project Manager Maen Shaar Date 3/19/03
Maen Shaar



Division of Engineering Services Scoping Checklist

Project Information

District 07 County LA Route 60/605

Kilometer Post (Post Mile) I-605, R27.2/R30.1
(PM R16.9/R18.7)

EA 23560K

Description:

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The alternatives proposed are:

- Alternative 1: No Build
- Alternative 2: Minimum Build HOV Direct Connector
- Alternative 3: Minimum Standard Build HOV Direct Connector
- Alternative 4: Full Standard Build HOV Direct Connector

Project Manager Maen Shaar

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District Project Engineer Ben Ramos

Phone # (213) 897-9605

DES Project Coordination Engineer John A. Scott

Phone # (916) 227-8813

Alternative 3: Minimum Standard Build HOV Direct Connector

Proposed Work (Select number(s) that best match scope of work that applies to overall project):

- | | |
|--|--|
| (1) Construct New Expressway/Freeway on new align. | (11) Median Barrier Retrofit |
| X (2) Construct Interchange | X (12) Bridge Widening |
| X (3) Modify Interchange | X (13) Bridge Replacement (new alignment? x Yes <input type="checkbox"/> No) |
| (4) Construct Passing Lane | (14) Landslide/Slipout |
| X (5) Curve Correction | (15) Rockfall Project |
| X (6) Widen Highway | (16) Building Project |
| (7) Left-turn Pocket | (17) Other Roadway Realignment |
| X (8) Modify Slope | X (18) Construct Soundwall/Retaining Wall |
| (9) Stabilize Subgrade | X (19) Bridge Seismic Retrofit |
| (10) Stabilize Roadway | X (20) Realign Connector |

Alternative # 3

Project Cost (Range) X \$1000

Roadway \$ 139,000 to 156,400
 Structure** \$ 34,000 to 55,100
 Total \$ 173,000 to 211,500

Tentative Schedule

PR or PA/ED* July 2007
 DPS&E December 2009
 RTL July 2010
 Construction Complete September 2014

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

**Structure Cost was provided by DES Technical Liaison Engineer.

Proposed Scope of DES Design Work

Discuss and identify assumptions made and also identify risks and/or unknowns associated with those assumptions. Include anticipated lead times for development of Draft General Plan, Geotechnical Studies, and Hydraulic studies. For the purposes of this study, it is to construct a two-lane elevated HOV direct connector within the freeway median area to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605.

Structure Design Services (Check all that are anticipated):

- Design by: Office of Structure Design Structure Maintenance Design
 Office of Structure Contract Management (Consultant Design)
 Office of Special Funded Projects (Consultant Design Oversight: State or Local Agency)

Bridge Design:

New Bridge: How many? 1

List name and Br. Numbers (if existing)

- 2-Lane HOV Direct Connector

Bridge Replacement: How many? 1

List name and Br. Numbers (if existing)

- Union Pacific Railroad OH (Crossroad Parkway City's structure)

Bridge Widening: How many? 4

List name and Br. Numbers (if existing):

- Crossroad Parkway OC BR. No 53-2660
- San Jose Creek No. 53-1416
- Workman Mill Road UC No. 53-1768
- Clayton OH No. 53-1755

Br. Rail upgrade: How many? _____

List name and Br. Numbers (if existing) _____

Structure Design Services (Cont'd)

Other DES Functional units required for Structure Work (excluding Bridge Design)

- X Structure Hydraulics (San Jose Creek Br No. 53-1416)
- X Geotechnical Services (Structure Foundations)

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

- X Soundwall(s): How many? 2 Estimated Max. Ht 4.3m Estimated Total Length (m) 469
- X Retaining walls(s): How many? 7 Estimated Max. Ht 6.0m Estimated Total Length (m) 5801
- MSE walls(s): How many? _____ Estimated. Max. Ht: _____ Total Length (m) _____

Technical Specialist Design

Anticipated insertable plan sheet(s) check below:

- X Culvert(s): How many? 2 X Barrier(s): How many? Type 25/27 – 5406m
Type 60A – 3310m, Type 732 – 974m
- X Sign and Overhead Structure(s) 7

Other Design: Explain None identified at the time of this report.

Transportation Architecture Design Services (Check all that are anticipated):

- Design New Building(s): Explain _____
- Remodel Existing Buildings(s): Explain _____
- X Bridge Aesthetics Evaluation: Explain New bridges may need to be aesthetically enhanced.
- Build scale model Other Aesthetics work: Explain _____

Electrical, Mechanical, Water & Wastewater Design Services

- Pumping Plants: Explain _____
- Movable bridge, drawbridge: Explain _____
- X Lighting, control systems for facilities: Explain: New lighting system for HOV Direct Connector
- Sanitary Systems: Explain _____

DES Geotechnical Services

Has Geotechnical Design Liaison or other geotechnical staff been contacted:

- X Yes No If yes, who? Yung Chung, PE (916) 227-5398

Type of Terrain: X Flat Rolling Mountainous

Cuts: Est. Max Height (m): 1.5m Est. Volume (m³) 61,583 X New X Widen

Fills: Est. Max Height (m): 1.5m Est. Volume (m³): 189,617 X New X Widen

Retaining Walls, How many? 7 Est. Max. Height 6.0m Est. length 5801m Cut Fill

X Overhead Sign Foundations, How many? 7

Changeable Message Sign Foundations, How many? _____

X Soundwalls, How many? 2 Est. Avg. Height 4.3 m Standard Plan Non-Standard Plan

X Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.)

Ground water and liquefaction might be potential issues.

Existing Maintenance Problems, Explain: None identified at the time of this report.

DES Materials Engineering & Testing Services

- Deflection Studies: No. Of Locations 5 Number of lane/miles to be tested 2
Type of pavement (Ave. grades, Ave. superelevation) _____
- Consultation and inspection Signal & Lighting Products
- Changeable Message Signs, Closed Circuit TV X Loop detectors
- X Concrete Bridge Steel Bridge
- X Corrosion Tests (Soil X, Concrete X) Cathodic Protection System
- Special Products, Explain: _____

Railroad Agreements

Railroad Involvement: No Yes, Explain: Union Pacific Railroad OH is to be replaced.

Note: This function to be initiated by DES but the majority of the work and the completion of the task will be by District 07 Railroad staff.

DES Engineering Technology

Aerial Photography Raster Imaging Est. Total Length 11000 m Est. Ave. Width 5500 m

Mapping: Est. Total Length (km) 11 Est. Average Width (m) 5.5 Scale: 1:3000

Photogrammetric DTM Modeling (non-district): Est. Total Length (km) _____ Est. Total Ave. Width (m) _____

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

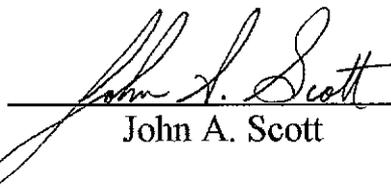
Additional Studies, Investigations or Research from DES

Additional studies which may need to be conducted are contaminated soils investigation, endangered species review, historical building determination, and any potential railroad easements, both construction and permanent.

<u>Division of Engineering Services</u>	<u>PY's</u>
	Alternative 3
Resources for WBS Activity 100	1.76
Resources for WBS Activity 150	0.59
Resources for WBS Activity 160	1.02
Resources for WBS Activity 165	0.00
Resources for WBS Activity 175	0.10
Resources for WBS Activity 180	0.01
TOTAL	3.48
COST ESTIMATE	\$348,000

Preliminary Evaluation provided by:

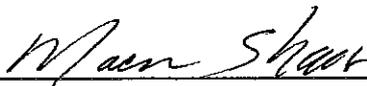
DES Project Coordination Engineer


John A. Scott

Date 2/28/03

Reviewed by:

Project Manager


Maen Shaar

Date 3/3/03



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District Project Engineer Ben Ramos

Phone # (213) 897-9605

DES Project Coordination Engineer John A. Scott

Phone # (916) 227-8813

Alternative 3: Minimum Standard Build HOV Direct Connector (with optional improvements)**Proposed Work** (Select number(s) that best match scope of work that applies to overall project):

- | | |
|--|--|
| (1) Construct New Expressway/Freeway on new align. | (11) Median Barrier Retrofit |
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| X (3) Modify Interchange | X (13) Bridge Replacement (new alignment? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No) |
| (4) Construct Passing Lane | (14) Landslide/Slipout |
| X (5) Curve Correction | (15) Rockfall Project |
| X (6) Widen Highway | (16) Building Project |
| (7) Left-turn Pocket | (17) Other Roadway Realignment |
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Alternative # 3 **Project Cost (Range) X \$1000**

Roadway \$ 139,000 to 156,400
 Structure** \$ 34,000 to 55,100
 Total \$ 173,000 to 211,500

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PR or PA/ED* July 2007
 DPS&E December 2009
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 Construction Complete September 2014

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Proposed Scope of DES Design Work

Discuss and identify assumptions made and also identify risks and/or unknowns associated with those assumptions. Include anticipated lead times for development of Draft General Plan, Geotechnical Studies, and Hydraulic studies. For the purposes of this study, it is to construct a two-lane elevated HOV direct connector within the freeway median areas to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605. Traffic operational improvements of an additional westbound SR-60 mixed-flow lane through the interchange and an additional truck lane on the southbound to eastbound loop connector to reduce congestion and congestion related accidents.

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Design by: Office of Structure Design Structure Maintenance Design
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List name and Br. Numbers (if existing)

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2. North Connector OC No. 53-1536
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List name and Br. Numbers (if existing)

1. Union Pacific Railroad OH (Crossroad Parkway City's structure)
2. River Access Road UC No. 53-1795

Bridge Widening: How many? 6

List name and Br. Numbers (if existing):

- | | |
|---|---|
| 1. Crossroad Parkway OC Br No. 53-2660 | 4. Clayton OH Br. No. 53-1755 |
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| 3. Workman Mill Road UC Br. No. 53-1768 | 6. San Gabriel River Br. No. 53-1767 |

Structure Design Services (Cont'd)

Br. Rail upgrade: How many? _____
List name and Br. Numbers (if existing) _____

Other DES Functional units required for Structure Work (excluding Bridge Design)

Structure Hydraulics (San Jose Creek Br No. 53-1416, San Gabriel River Br. No. 53-1767)
 Geotechnical Services (Structure Foundations)

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

Soundwall(s): How many? 3 Estimated Max. Ht 4.3m Estimated Total Length (m) 922
 Retaining walls(s): How many? 9 Estimated Max. Ht 6.0m Estimated Total Length (m) 6061
 MSE walls(s): How many? _____ Estimated. Max. Ht: _____ Total Length (m) _____

Technical Specialist Design

Anticipated insertable plan sheet(s) check below:

Culvert(s): How many? 2 Barrier(s): How many? Type 25/27 -- 5406m
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Type of Terrain: Flat Rolling Mountainous

Cuts: Est. Max Height (m): 1.5m Est. Volume (m³) 61,583 New Widen

Fills: Est. Max Height (m): 1.5m Est. Volume (m³): 227,540 New Widen

Retaining Walls, How many? 9 Est. Max. Height 6.0m Est. length 6061 m Cut Fill

Overhead Sign Foundations, How many? 7

Changeable Message Sign Foundations, How many? _____

Soundwalls, How many? 3 Est. Avg. Height 4.3 m Standard Plan Non-Standard Plan

Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.)

Ground water and liquefaction might be potential issues.

Existing Maintenance Problems, Explain None identified at the time of this report.

DES Materials Engineering & Testing Services

Deflection Studies: No. Of Locations 5 Number of lane/miles to be tested 2

Type of pavement (Ave. grades, Ave. superelevation) _____

Consultation and inspection Signal & Lighting Products

Changeable Message Signs, Closed Circuit TV Loop detectors

Concrete Bridge Steel Bridge

Corrosion Tests (Soil X, Concrete X) Cathodic Protection System

Special Products, Explain: _____

Railroad Agreements

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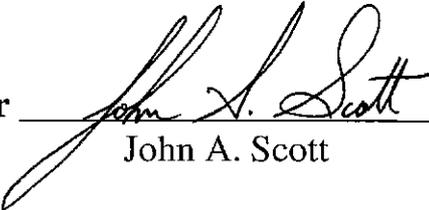
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<u>Division of Engineering Services</u>	<u>PY's</u>
	Alternative 3 with optional improvements
Resources for WBS Activity 100	3.12
Resources for WBS Activity 150	1.16
Resources for WBS Activity 160	1.84
Resources for WBS Activity 165	0.00
Resources for WBS Activity 175	0.43
Resources for WBS Activity 180	0.01
TOTAL	6.56
COST ESTIMATE	\$ 656,000

Preliminary Evaluation provided by:

DES Project Coordination Engineer

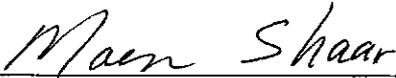


Date 2/28/03

John A. Scott

Reviewed by:

Project Manager



Date 3/19/03

Maen Shaar



Division of Engineering Services Scoping Checklist

Project Information

District 07 County LA Route 60/605

Kilometer Post (Post Mile) I-605, R27.2/R30.1
(PM R16.9/R18.7)

EA 23560K

Description:

The Project Study Report (Project Development Support) – PSR(PDS) is being prepared for the above referenced project. This project, the southern segment of the overall interchange modification project, proposes to add an elevated High Occupancy Vehicle (HOV) direct connector within the freeway median areas to provide direct connections for HOV traffic from westbound SR-60 to northbound I-605 and from southbound I-605 to eastbound SR-60. The overall project will interconnect proposed HOV lanes on SR-60 east of I-605 with existing HOV lanes on I-605 and proposed HOV lanes on I-10 west of I-605. The project for constructing HOV lanes on SR-60 from I-605 to SR-57 (EA 129401) is currently in the Plans, Specifications and Estimate (PS&E) phase. The project for constructing bi-directional HOV lanes on I-10 between Baldwin Avenue and I-605 (EA 1069U4) is currently under construction and scheduled to be completed by October 2004.

The northern project segment (EA 23570K, currently in the planning stage) will provide a direct connection for HOV lanes from northbound I-605 to westbound I-10 and from eastbound I-10 to southbound I-605. When combined, these two project segments (EA 23560K & EA 23570K) will provide system continuity for HOV commuters from the eastern part of the Los Angeles Metropolitan area to downtown Los Angeles. The project management is committed to combining the two project segments so that sufficient resources can be programmed to complete the Environmental Document and receive approval for the overall project (see Attachment Q).

The alternatives proposed are:

- Alternative 1: No Build
- Alternative 2: Minimum Build HOV Direct Connector
- Alternative 3: Minimum Standard Build HOV Direct Connector
- Alternative 4: Full Standard Build HOV Direct Connector

Project Manager Maen Shaar

Phone # (213) 897-8665

District Project Engineer Ben Ramos

Phone # (213) 897-9605

DES Project Coordination Engineer John A. Scott

Phone # (916) 227-8813

Alternative 4: Full Standard Build HOV Direct Connector

Proposed Work (Select number(s) that best match scope of work that applies to overall project):

- | | |
|--|--|
| (1) Construct New Expressway/Freeway on new align. | (11) Median Barrier Retrofit |
| X (2) Construct Interchange | X (12) Bridge Widening |
| X (3) Modify Interchange | X (13) Bridge Replacement (new alignment? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No) |
| (4) Construct Passing Lane | (14) Landslide/Slipout |
| X (5) Curve Correction | (15) Rockfall Project |
| X (6) Widen Highway | (16) Building Project |
| (7) Left-turn Pocket | (17) Other Roadway Realignment |
| X (8) Modify Slope | X (18) Construct Soundwall/Retaining Wall |
| (9) Stabilize Subgrade | X (19) Bridge Seismic Retrofit |
| (10) Stabilize Roadway | X (20) Realign Connector |

Alternative # 4

Project Cost (Range) X \$1000

Roadway \$ 165,100 to 173,100
 Structure** \$ 44,200 to 46,300
 Total \$ 209,300 to 219,400

Tentative Schedule

PR or PA/ED* July 2007
 DPS&E December 2009
 RTL July 2010

Construction Complete September 2014

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

**Structure Cost was provided by DES Technical Liaison Engineer.

Proposed Scope of DES Design Work

Discuss and identify assumptions made and also identify risks and/or unknowns associated with those assumptions. Include anticipated lead times for development of Draft General Plan, Geotechnical Studies, and Hydraulic studies. For the purposes of this study, it is to construct a two-lane elevated HOV direct connector within the freeway median area to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605.

Structure Design Services (Check all that are anticipated):

- Design by: Office of Structure Design Structure Maintenance Design
 Office of Structure Contract Management (Consultant Design)
 Office of Special Funded Projects (Consultant Design Oversight: State or Local Agency)

Bridge Design:

New Bridge: How many? 3

List name and Br. Numbers (if existing)

- 4-Lane HOV Direct Connector
- North Connector OC No. 53-1536
- South Connector OC No. 53-1534

Bridge Replacement: How many? 1

List name and Br. Numbers (if existing)

- Union Pacific Railroad OH (Crossroad Parkway City's structure)

Bridge Widening: How many? 5

List name and Br. Numbers (if existing):

- Crossroad Parkway OC BR. No 53-2660
- San Jose Creek No. 53-1416
- Workman Mill Road UC No. 53-1768
- Clayton OH No. 53-1755
- SR 60/I-605 Separation Br. No. 53-1535

Br. Rail upgrade: How many? _____

Structure Design Services (Cont'd)

Other DES Functional units required for Structure Work (excluding Bridge Design)

X Structure Hydraulics (San Jose Creek Br No. 53-1416)

X Geotechnical Services (Structure Foundations)

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

X Soundwall(s): How many? 3 Estimated Max. Ht 4.3m Estimated Total Length (m) 922

X Retaining walls(s): How many? 7 Estimated Max. Ht 6.0m Estimated Total Length (m) 5801

MSE walls(s): How many? _____ Estimated. Max. Ht: _____ Total Length (m) _____

Technical Specialist Design

Anticipated insertable plan sheet(s) check below:

X Culvert(s): How many? 2

X Barrier(s): How many? Type 25/27 – 5622m

Type 60A – 3548m, Type 732 – 3366m

X Sign and Overhead Structure(s) 7

Other Design: Explain None identified at the time of this report.

Transportation Architecture Design Services (Check all that are anticipated):

Design New Building(s): Explain _____

Remodel Existing Buildings(s): Explain _____

X Bridge Aesthetics Evaluation: Explain New bridges may need to be aesthetically enhanced.

Build scale model Other Aesthetics work: Explain _____

Electrical, Mechanical, Water & Wastewater Design Services

Pumping Plants: Explain _____

Movable bridge, drawbridge: Explain _____

X Lighting, control systems for facilities: Explain: New lighting system for HOV Direct Connector

Sanitary Systems: Explain _____

DES Geotechnical Services

Has Geotechnical Design Liaison or other geotechnical staff been contacted:

X Yes No If yes, who? Yung Chung, PE (916) 227-5398

Type of Terrain: X Flat Rolling Mountainous

Cuts: Est. Max Height (m): 1.5m Est. Volume (m³) 61,583 X New X Widen

Fills: Est. Max Height (m): 1.5m Est. Volume (m³): 259,217 X New X Widen

Retaining Walls, How many? 7 Est. Max. Height 6.0m Est. length 5801m Cut Fill

X Overhead Sign Foundations, How many? 7

Changeable Message Sign Foundations, How many? _____

X Soundwalls, How many? 3 Est. Avg. Height 4.3 m Standard Plan Non-Standard Plan

X Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.)

Ground water and liquefaction might be potential issues.

Existing Maintenance Problems, Explain: None identified at the time of this report.

DES Materials Engineering & Testing Services

Deflection Studies: No. Of Locations 5 Number of lane/miles to be tested 2

Type of pavement (Ave. grades, Ave. superelevation) _____

Consultation and inspection Signal & Lighting Products

Changeable Message Signs, Closed Circuit TV X Loop detectors

X Concrete Bridge Steel Bridge

X Corrosion Tests (Soil X, Concrete X) Cathodic Protection System

Special Products, Explain: _____

Railroad Agreements

Railroad Involvement: No Yes, Explain: Union Pacific Railroad OH is to be replaced.

Note: This function to be initiated by DES but the majority of the work and the completion of the task will be by District 07 Railroad staff.

DES Engineering Technology

Aerial Photography Raster Imaging Est. Total Length 11000 m Est. Ave. Width 5500 m

Mapping: Est. Total Length (km) 11 Est. Average Width (m) 5.5 Scale: 1:3000

Photogrammetric DTM Modeling (non-district): Est. Total Length (km) _____ Est. Total Ave. Width (m) _____

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

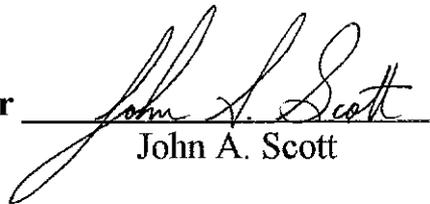
Additional Studies, Investigations or Research from DES

Additional studies which may need to be conducted are contaminated soils investigation, endangered species review, historical building determination, and any potential railroad easements, both construction and permanent.

<u>Division of Engineering Services</u>	<u>PY's</u>
	Alternative 4
Resources for WBS Activity 100	1.98
Resources for WBS Activity 150	0.91
Resources for WBS Activity 160	1.50
Resources for WBS Activity 165	0.00
Resources for WBS Activity 175	0.28
Resources for WBS Activity 180	0.01
TOTAL	4.68
COST ESTIMATE	\$468,000

Preliminary Evaluation provided by:

DES Project Coordination Engineer


John A. Scott

Date 2/28/03

Reviewed by:

Project Manager


Maen Shaar

Date 3/3/03



Division of Engineering Services Scoping Checklist

Project Information

District 07 County LA Route 60/605

Kilometer Post (Post Mile) I-605, R27.2/R30.1
(PM R16.9/R18.7)

EA 23560K

Description:

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The northern project segment (EA 23570K, currently in the planning stage) will provide a direct connection for HOV lanes from northbound I-605 to westbound I-10 and from eastbound I-10 to southbound I-605. When combined, these two project segments (EA 23560K & EA 23570K) will provide system continuity for HOV commuters from the eastern part of the Los Angeles Metropolitan area to downtown Los Angeles. The project management is committed to combining the two project segments so that sufficient resources can be programmed to complete the Environmental Document and receive approval for the overall project (see Attachment Q).

The alternatives proposed are:

Alternative 1: No Build

Alternative 2: Minimum Build HOV Direct Connector

Alternative 3: Minimum Standard Build HOV Direct Connector

Alternative 4: Full Standard Build HOV Direct Connector

Project Manager Maen Shaar

Phone # (213) 897-8665

District Project Engineer Ben Ramos

Phone # (213) 897-9605

DES Project Coordination Engineer John A. Scott

Phone # (916) 227-8813

Alternative 4: Full Standard Build HOV Direct Connector (with optional improvements)**Proposed Work** (Select number(s) that best match scope of work that applies to overall project):

- | | |
|--|--|
| (1) Construct New Expressway/Freeway on new align. | (11) Median Barrier Retrofit |
| X (2) Construct Interchange | X (12) Bridge Widening |
| X (3) Modify Interchange | X (13) Bridge Replacement (new alignment? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No) |
| (4) Construct Passing Lane | (14) Landslide/Slipout |
| X (5) Curve Correction | (15) Rockfall Project |
| X (6) Widen Highway | (16) Building Project |
| (7) Left-turn Pocket | (17) Other Roadway Realignment |
| X (8) Modify Slope | X (18) Construct Soundwall/Retaining Wall |
| (9) Stabilize Subgrade | X (19) Bridge Seismic Retrofit |
| (10) Stabilize Roadway | X (20) Realign Connector |

Alternative # 4**Project Cost (Range) X \$1000**

Roadway \$ 165,100 to 173,100
 Structure** \$ 44,200 to 46,300
 Total \$ 209,300 to 219,400

Tentative Schedule

PR or PA/ED* July 2007
 DPS&E December 2009
 RTL July 2010

Construction Complete September 2014

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

**Structure Cost was provided by DES Technical Liaison Engineer.

Proposed Scope of DES Design Work

Discuss and identify assumptions made and also identify risks and/or unknowns associated with those assumptions. Include anticipated lead times for development of Draft General Plan, Geotechnical Studies, and Hydraulic studies. For the purposes of this study, it is to construct a two-lane elevated HOV direct connector within the freeway median areas to provide direct connections for HOV traffic from southbound I-605 to eastbound SR-60 and westbound SR-60 to northbound I-605. Traffic operational improvements of an additional westbound SR-60 mixed-flow lane through the interchange and an additional truck lane on the southbound to eastbound loop connector to reduce congestion and congestion related accidents.

Structure Design Services (Check all that are anticipated):

Design by: Office of Structure Design Structure Maintenance Design
 Office of Structure Contract Management (Consultant Design)
 Office of Special Funded Projects (Consultant Design Oversight: State or Local Agency)

Bridge Design:**X** New Bridge: How many? 3

List name and Br. Numbers (if existing)

1. 4-Lane HOV Direct Connector
2. North Connector OC No. 53-1536
3. South Connector OC No. 53-1534

X Bridge Replacement: How many? 2

List name and Br. Numbers (if existing)

1. Union Pacific Railroad OH (Crossroad Parkway City's structure)
2. River Access Road UC No. 53-1795

Bridge Widening: How many? 6

List name and Br. Numbers (if existing):

- | | |
|---|---|
| 1. Crossroad Parkway OC Br No. 53-2660 | 4. Clayton OH Br. No. 53-1755 |
| 2. San Jose Creek Br. No. 53-1416 | 5. SR 60/I-605 Separation Br. No. 53-1535 |
| 3. Workman Mill Road UC Br. No. 53-1768 | 6. San Gabriel River Br. No. 53-1767 |

Structure Design Services (Cont'd)

Br. Rail upgrade: How many? _____
List name and Br. Numbers (if existing) _____

Other DES Functional units required for Structure Work (excluding Bridge Design)
 Structure Hydraulics (San Jose Creek Br No. 53-1416, San Gabriel River Br. No. 53-1767)
 Geotechnical Services (Structure Foundations)

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

Soundwall(s): How many? 3 Estimated Max. Ht 4.3m Estimated Total Length (m) 922
 Retaining walls(s): How many? 9 Estimated Max. Ht 6.0m Estimated Total Length (m) 6061
 MSE walls(s): How many? _____ Estimated. Max. Ht: _____ Total Length (m) _____

Technical Specialist Design

Anticipated insertable plan sheet(s) check below:
 Culvert(s): How many? 2 Barrier(s): How many? Type 25/27 - 5622m
 Sign and Overhead Structure(s) 7 Type 60A - 3548m, Type 732 - 3366m

Other Design: Explain None identified at the time of this report.

Transportation Architecture Design Services (Check all that are anticipated):

Design New Building(s): Explain _____
 Remodel Existing Buildings(s): Explain _____
 Bridge Aesthetics Evaluation: Explain New bridges may need to be aesthetically enhanced.
 Build scale model Other Aesthetics work: Explain _____

Electrical, Mechanical, Water & Wastewater Design Services

Pumping Plants: Explain _____
 Movable bridge, drawbridge: Explain _____
 Lighting, control systems for facilities: Explain: New lighting system for HOV Direct Connector
 Sanitary Systems: Explain _____

DES Geotechnical Services

Has Geotechnical Design Liaison or other geotechnical staff been contacted:
 Yes No If yes, who? Yung Chung, PE (916) 227-5398
Type of Terrain: Flat Rolling Mountainous
Cuts: Est. Max Height (m): 1.5m Est. Volume (m³) 61,583 New Widen
Fills: Est. Max Height (m): 1.5m Est. Volume (m³): 285,100 New Widen
Retaining Walls, How many? 9 Est. Max. Height 6.0m Est. length 6061 m Cut Fill
 Overhead Sign Foundations, How many? 7
 Changeable Message Sign Foundations, How many? _____
 Soundwalls, How many? 3 Est. Avg. Height 4.3 m Standard Plan Non-Standard Plan
 Special Studies (slope stability, rockfall, erosion, seepage, ground water, settlement, liquefaction, slipout repair, rock slope, etc.)
Ground water and liquefaction might be potential issues.
 Existing Maintenance Problems, Explain None identified at the time of this report.

DES Materials Engineering & Testing Services

Deflection Studies: No. Of Locations 5 Number of lane/miles to be tested 2
Type of pavement (Ave. grades, Ave. superelevation) _____
 Consultation and inspection Signal & Lighting Products
 Changeable Message Signs, Closed Circuit TV Loop detectors
 Concrete Bridge Steel Bridge
 Corrosion Tests (Soil X, Concrete X) Cathodic Protection System
 Special Products, Explain: _____

Railroad Agreements

Railroad Involvement: No Yes, Explain: Union Pacific Railroad OH is to be replaced.

Note: This function to be initiated by DES but the majority of the work and the completion of the task will be by District 07 Railroad staff.

DES Engineering Technology

Aerial Photography Raster Imaging Est. Total Length 11000 m Est. Ave. Width 5500 m

Mapping: Est. Total Length (km) 11 Est. Average Width (m) 5.5 Scale: 1:3000

Photogrammetric DTM Modeling (non-district): Est. Total Length (km) _____ Est. Total Ave. Width (m) _____

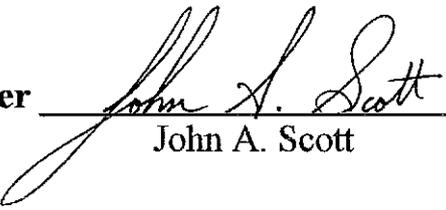
Note: A photogrammetry Service Request-PSR (PDS) must be completed and submitted to DES Photogrammetry by the District Photogrammetry Coordinator.

Additional Studies, Investigations or Research from DES

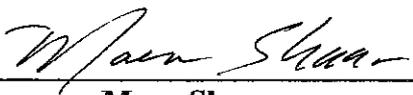
Additional studies which may need to be conducted are contaminated soils investigation, endangered species review, historical building determination, and any potential railroad easements, both construction and permanent.

<u>Division of Engineering Services</u>	<u>PY's</u> Alternative 4 with optional improvements
Resources for WBS Activity 100	2.02
Resources for WBS Activity 150	0.83
Resources for WBS Activity 160	1.34
Resources for WBS Activity 165	0.00
Resources for WBS Activity 175	0.18
Resources for WBS Activity 180	0.01
TOTAL	4.38
COST ESTIMATE	\$ 438,000

Preliminary Evaluation provided by:

DES Project Coordination Engineer  Date 2/28/03
John A. Scott

Reviewed by:

Project Manager  Date 3/3/03
Maen Shaar

PSR Evaluation Checklist

EA 23560K

Date 1/15/03

Concerns of applicable permitting agencies on the need and purpose of the project:
Army Corps of Engineers, Fishing & Game, Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB) and LA County Flood Control District (LACFCD) Permits are required for this project.
Potential impact to scope cost or schedule: Permit issuance by mentioned agencies will impact project schedule.
Recommended actions: Start out all the process as early as possible and work closely with environmental group to avoid/limit the impacts to existing environment due to highway project.
Any exclusion of applicable Traffic Management System (TMS) elements, replacement planting, environmental mitigation, environmental enhancement opportunities, maintenance needs (structural and roadway), and relinquishment requirements:
None
Potential impact to scope cost or schedule:
Recommended actions:
Request for work that is requested by a customer, but is not consistent with the primary need and purpose.
No individual has made any requests at this stage.
Potential impact to scope cost or schedule:
Recommended actions:
Non-standard features:
Design Speed (80Kmh) – Alternatives 2, 3 & 4 Stop Sight Distance (SSD) – Alternatives 2 & 3 Passing Lane for length of ramp connector more than 300m – Alternatives 2 & 3 Superelevation Transition – Alternatives 2 & 3
Potential impact to scope cost or schedule: This may affect project schedule when approval of nonstandard mandatory design features are involved.
Recommended actions: Begin the Fact Sheet “Exceptions to mandatory/advisory design standards” process as early as possible, and get HQ geometric reviewers involve to resolve any critical issues, which may impact project schedule and cost substantially.

If applicable, availability of non-STIP funding sources and commitments:
N/A
Potential impact to scope cost or schedule:
N/A
Recommended actions:
N/A
Deadlines for use of funding, other than STIP funds:
N/A
Potential impact to scope cost or schedule:
N/A
Recommended actions:
N/A
Environmental Investigations (e.g., study windows, right of entry, etc.)
Study windows include water quality, biological resources, hazardous waste, residential business displacements, recreational properties, traffic and noise. Further investigations will be conducted in PA/ED phase to determine any causes, such as right of entry, which may impacts mentioned studies.
Potential impact to scope cost or schedule: The environmental studies play a key role in getting the project approval. It's a long and tedious process, and any issues may result in significantly delaying on project schedule and increasing cost.
Recommended actions: PDT members (Design & Management) should work closely with environmental staff to avoid any detrimental impacts to the environment that could need more resources (time, PY, etc) to complete this document.
Permit Issues (e.g., regulatory requirements, responsible parties)
SWRCB – Storm Water Pollution Prevention Plan RWQCB – Water Quality Certification / Water pursuant to Section 401 of the Clean Water Act Army Corps – Nationwide 33 Permit required for temporary construction access, when construction equipment is placed in the channel, and Section 404 Permit when placing permanent structures in the channel's bottom Fishing & Game – Section 1601, construction activities over stream LA County Flood Control District – Flood Control Permit Others – Historic Property Survey Report, Timing of vegetation removal (March 1 – August 15) and Pre-construction survey for bats, lizard and turtle.
Potential impact to scope cost or schedule: Permit issues will impact project schedule.
Recommended actions:

PDT members (Design & Management) should work closely with environmental staff to avoid any detrimental impacts to the environment that could need more resources (time, PY, etc) to complete this document.

Identification of alternatives that have been suggested which are not considered viable for study.

N/A

Potential impact to scope cost or schedule:

N/A

Recommended actions:

N/A

Right of Way Issues (acquisition, utilities).

R/W acquisition should be studied and investigated thoroughly in PA/ED phase to identify any potential problems to be resolved in PS&E phase.

Utility relocation is needed to maintain minimum radial clearance between freeway and those lines.

Potential impact to scope cost or schedule:

R/W acquisition and utility relocation will have major impacts on project schedule and cost.

Recommended actions:

Identify R/W needs and affected utilities and get relevant units (R/W engineering and Utilities) involved in all the necessary process to resolve any issues

Other issues:

Mapping for roadway and structure design works and bridge site data collection and submittal should be taken into consideration as well.

Widening Clayton OH involves two railroad companies (UPRR & SCRRA), and the process of getting clearance is a longer-than-expected process and very tedious work. This requires lots of coordination work.

Potential impact to scope cost or schedule:

Any delay on mapping and bridge data collection will impact project schedule substantially. Holding up railroad process will have major impacts on project schedule and cost.

Recommended actions:

Mapping for roadway and structure design works should be requested as early as possible to prevent longer waiting time before starting the process (PA/ED or PS&E). Bridge site data collection and submittal should be performed at early stage to provide detailed information for the Office of Structure Design to complete design for proposed structures.

Railroad involvements should be identified at early stage, and actions and efforts to resolve any issues (ADL, Utilities, C&M Agreements, Temporary Construction Easement, costs and staging, etc.) should be made to prevent any potential impacts to the project.

It is understood that for the PSR(PDS), the studies may not be completed and several assumptions must be made. Completion of the checklist represents a snapshot of key issues and opportunities, which are likely to affect the scope, cost or schedule. As such, the checklist can be used to focus discussions with Management on project specific issues. The issues should be summarized in the Project Study Report.

Example issue:

Environmental Investigations (e.g., study windows, right of entry, etc.)
Biological studies will take two seasons to complete. Studies are scheduled to begin in April 2003. Negotiations with property owners for access have begun and initial discussions look promising. Sunset clause for encumbering capital for local agency share is 2006
Potential impact to scope cost or schedule: Lack of access to property for study can delay project for up to two years and put City X funds of \$500,000 at risk.
Recommended actions: Continue to get right of entry from property owners, notify City X of potential risk, identify other funds that may come available if project is delayed.

LOCATION	DESCRIPTION	RA * - NUMBER OF ACCIDENTS/SIGNIFICANCE*	PER *ADT *	TOTAL * - ACCIDENT RATE ACCS/MV+ OR MVM-*	MV+ OR MVM-*	ACTUAL AVERAGE	TOT FAT F+I	TOT FAT F+I	TOT	
LA	THRU LA	GRP (RUS)	MULTI	KLD MAIN	WET DARK	INJ X-ST	FAT F+I	TOT FAT F+I	TOT	
060 LA 07-0001	11.100 THRU LA 013.199 EAST H 2.100M 99-04-01 02-03-31 36 MO NA	H 331	1 69 70 267	29 119	1 125.6	288.78	.003	.24	1.15 .006	.34 1.07
060 LA 07-0001	11.100 THRU LA 013.199 WEST H 2.100M 99-04-01 02-03-31 36 MO NA	H 506	1 114 115 400	69 170	1 125.6	288.78	.003	.40	1.75 .006	.34 1.07
060 LA 07-0002	11.100 THRU LA 013.199 EAST H 2.100M 99-04-01 00-03-31 12 MO NA	H 104	0 19 19 84	9 41	0 125.9	96.77	.000	.20	1.07 .006	.34 1.07
060 LA 07-0002	11.100 THRU LA 013.199 WEST H 2.100M 99-04-01 00-03-31 12 MO NA	H 160	0 48 48 125	27 60	0 125.9	96.77	.000	.50	1.65 .006	.34 1.07
060 LA 07-0003	11.100 THRU LA 013.199 EAST H 2.100M 00-04-01 01-03-31 12 MO NA	H 111	1 20 21 89	9 31	1 125.7	96.10	.010	.22	1.16 .006	.34 1.07
060 LA 07-0003	11.100 THRU LA 013.199 WEST H 2.100M 00-04-01 01-03-31 12 MO NA	H 170	1 35 36 135	25 52	1 125.7	96.10	.010	.37	1.77 .006	.34 1.07
060 LA 07-0004	11.100 THRU LA 013.199 EAST H 2.100M 01-04-01 02-03-31 12 MO NA	H 116	0 30 30 94	11 47	0 125.1	95.91	.000	.31	1.21 .006	.34 1.07
060 LA 07-0004	11.100 THRU LA 013.199 WEST H 2.100M 01-04-01 02-03-31 12 MO NA	H 176	0 31 31 140	17 58	0 125.1	95.91	.000	.32	1.84 .006	.34 1.07

LOCATION	DESCRIPTION	RA	*-NUMBER OF ACCIDENTS/SIGNIFICANCE*	PER	*ADT *	TOTAL *-ACCIDENT RATE ACOS/MV+ OR MVM-*	ACTUAL	AVERAGE	TOT	FAT	F+I	TOT	FAT	F+I	TOT
		GRP	MULTI	KLD	MAIN	MV+ OR									
		(RUS)	F+I VEH	WET	DARK	INJ	X-ST	MVM	FAT	F+I	TOT	FAT	F+I	TOT	
605 LA R 16.900	THRU LA R019.299 NORTH H	H	397	2	116	118	330	38	134	3	108.2	284.34	.007	.41	1.40 .008 .37 1.14
07-0001	2.400M 99-04-01 02-03-31 36 MO NA	H99					H99	192							
605 LA R 16.900	THRU LA R019.299 SOUTH H	H	343	1	97	98	285	39	72	2	108.2	284.34	.004	.34	1.21 .008 .37 1.14
07-0001	2.400M 99-04-01 02-03-31 36 MO NA	H99					H99	150							
605 LA R 16.900	THRU LA R019.299 NORTH H	H	140	1	38	39	114	14	47	1	107.7	94.56	.011	.41	1.48 .008 .37 1.14
07-0002	2.400M 99-04-01 00-03-31 12 MO NA	H99					H97	67							
605 LA R 16.900	THRU LA R019.299 SOUTH H	H	115	0	23	23	94	11	18	0	107.7	94.56	.000	.24	1.22 .008 .37 1.14
07-0002	2.400M 99-04-01 00-03-31 12 MO NA	H99					H99	39							
605 LA R 16.900	THRU LA R019.299 NORTH H	H	112	0	35	35	96	17	32	0	107.4	93.80	.000	.37	1.19 .008 .37 1.13
07-0003	2.400M 00-04-01 01-03-31 12 MO NA	H99					H99	51							
605 LA R 16.900	THRU LA R019.299 SOUTH H	H	102	1	30	31	85	12	24	2	107.4	93.80	.011	.33	1.09 .008 .37 1.13
07-0003	2.400M 00-04-01 01-03-31 12 MO NA	H92					H92	49							
605 LA R 16.900	THRU LA R019.299 NORTH H	H	145	1	43	44	120	7	55	2	109.6	95.97	.010	.46	1.51 .008 .37 1.15
07-0004	2.400M 01-04-01 02-03-31 12 MO NA	H99					H95	74							
605 LA R 16.900	THRU LA R019.299 SOUTH H	H	126	0	44	44	106	16	30	0	109.6	95.97	.000	.46	1.31 .008 .37 1.15
07-0004	2.400M 01-04-01 02-03-31 12 MO NA	H90					H99	62							

DATE 01-05-99

CONFL. LEVEL 99.5 PERCENT

ACCIDENT DESCRIPTION	LOCUS	ACCS	ACCS	ACCS	ACCS	ACCS	ACCS	ACCS	1000 VEH	ACTUAL	AVERAGE	INVT	REQ
		24 MO	12 MO	6 MO	3 MO	1000 VEH	X-ST	F+I	TOT	F+I	TOT	F+I	REQ
9.630 EB ON SR NB RTE 164	O F S R64	5 Y	6 Y	2 N	2 N	3.2	-	0.00	3.44	0.13	0.40	0.40	REQ
11.019 TC 11.219 EAST	06D U H61	45 Y	24 Y	15 N	5 N	115.0	-	0.60	1.80	0.28	0.93	0.93	REQ
11.183 WB OFF BECK RD	F D U R10	36 Y	28 Y	14 Y	7 Y	6.1	-	1.80	6.31	0.61	1.50	1.50	REQ
11.486 EB OFF TO RTE 605	F K S R34	32 Y	22 Y	10 Y	7 Y	37.0	-	0.22	0.74	0.08	0.25	0.25	REQ
11.652 EB ON SE RTE 605	O L S R72	27 Y	11 N	5 N	2 N	19.1	-	0.17	0.86	0.22	0.75	0.75	REQ
11.798 WB ON ER NB RTE 605	O L S R72	24 Y	16 N	7 N	4 N	15.0	-	0.00	1.29	0.22	0.75	0.75	REQ
11.799 TO 11.999 WEST	03D S H62	52 Y	31 N	16 N	8 N	130.0	-	0.32	1.70	0.38	1.14	1.14	REQ
11.973 WB OFF TO RTE 605	F K S R34	43 Y	25 Y	8 N	4 N	50.3	-	0.05	0.44	0.08	0.25	0.25	REQ
12.639 TO 12.839 EAST	05D U H67	44 Y	23 N	10 N	1 N	131.0	-	0.32	1.05	0.30	1.01	1.01	REQ
12.639 TO 12.839 WEST	06D U H67	103 Y	61 Y	39 Y	22 Y	131.0	-	0.63	4.10	0.30	1.01	1.01	REQ
12.995 CROSSRDS PKWY S, WB OFF	F J S R30	15 Y	8 N	3 N	1 N	5.5	-	0.52	1.56	0.31	0.90	0.90	REQ
14.059 TO 14.259 EAST	05D S H62	63 Y	44 Y	18 N	13 Y	131.0	-	0.21	1.89	0.38	1.17	1.17	REQ
14.259 TO 14.459 EAST	05D S H62	61 Y	44 Y	20 Y	11 N	119.7	-	0.23	2.30	0.24	1.09	1.09	REQ
14.443 WB OFF SEVENTH AVE	F H S R26	14 Y	12 Y	7 Y	5 Y	3.5	-	0.00	5.50	0.39	1.15	1.15	REQ
15.719 TO 15.919 EAST	04D S H62	58 Y	46 Y	21 Y	12 Y	119.5	-	0.58	2.42	0.36	1.08	1.08	REQ
15.839 TO 16.039 WEST	04D S H62	65 Y	45 Y	26 Y	12 Y	116.6	-	0.7	3.07	0.35	1.07	1.07	REQ
15.919 TO 16.119 EAST	04D S H62	70 Y	47 Y	19 Y	6 N	114.4	-	0.30	2.29	0.34	1.05	1.05	REQ
16.125 EB ON NE HACIENDA BLVD	O F S R20	18 Y	12 Y	7 Y	3 N	5.9	-	0.47	3.26	0.22	0.60	0.60	REQ
16.179 TO 16.379 WEST	04D S H62	42 Y	25 N	11 N	7 N	114.0	-	0.2	1.53	0.34	1.05	1.05	REQ
17.659 TO 17.859 WEST	04D S H62	42 Y	26 Y	16 Y	11 Y	114.0	-	0.35	2.18	0.34	1.05	1.05	REQ
17.719 TO 17.919 EAST	04D S H62	67 Y	53 Y	26 Y	15 Y	114.0	-	0.24	3.14	0.34	1.05	1.05	REQ
17.911 EB OFF AZUSA AVE	F D S R10	48 Y	35 Y	19 N	7 N	16.9	-	1.17	2.77	0.61	1.50	1.50	REQ
17.911 WB OFF SE AZUSA AVE	O L S R40	15 Y	12 Y	7 Y	4 N	7.4	-	0.00	2.80	0.34	0.75	0.75	REQ
17.999 TO 18.199 WEST	04D U H65	65 Y	44 Y	23 Y	10 N	113.5	-	0.27	2.79	0.32	1.20	1.20	REQ

Y DENOTES MV USED IN TABLES

TASAS TABLE C POTENTIAL INVESTIGATION LOCATIONS .2 MILE DISTRICT 07 DATA FOR 98-10-01 THRU 01-09-30 ALL ACCIDENTS CONFIDENCE LEVEL 99.5 PERCENT

LOCATION DESCRIPTION	SCL R RATE*	TOTAL ACCIDENTS	AVE ADT*	MOS RATE	ACCS/MV-MVM*	INVENTORY
	RMP U GRP 36	MO 24 MO 12 MO 6 MO 3 MO	1000 VEH	ACTUAL	AVERAGE	REQ
	LNS S	ACCS ACCS ACCS ACCS	MAIN X-ST	F+I TOT	F+I TOT	REQ
605 LA R 14.500 TO R 14.700 NORTH	04D U H65	38 N 32 N 20 Y 9 N 4 N	114.0	0.36	2.42	0.38 1.20 REQ
605 LA R 15.340 TO R 15.540 NORTH	04D U H65	50 Y 38 Y 20 Y 7 N 3 N	114.0	0.36	2.42	0.38 1.20 REQ
605 LA R 15.460 TO R 15.660 SOUTH	04D U H65	48 Y 28 N 15 N 11 N 8 Y	114.7	0.72	1.80	0.38 1.20 REQ
605 LA R 15.580 TO R 15.780 NORTH	04D U H65	47 Y 28 N 17 N 10 N 4 N	115.5	0.36	2.03	0.38 1.21
605 LA R 15.733 NB ON FR ROSE HILLS RD	O D U R12	8 Y 4 N 4 N 1 N 1 N	2.9	0.00	3.79	0.32 0.80 +
605 LA R 16.440 TO R 16.640 NORTH	04D U H65	56 Y 38 Y 21 Y 10 N 3 N	115.5	0.48	2.50	0.38 1.21 REQ
605 LA R 16.480 TO R 16.680 SOUTH	04D U H65	38 N 29 N 19 N 13 Y 9 Y	114.8	0.60	2.28	0.38 1.20 REQ
605 LA R 17.220 TO R 17.420 SOUTH	03D S H61	56 N 39 N 23 Y 12 N 10 Y	110.6	0.50	2.86	0.54 1.53 REQ
605 LA R 17.520 TO R 17.720 SOUTH	03D S H62	55 Y 40 Y 25 Y 11 Y 5 N	105.5	1.04	3.26	0.32 0.99 REQ
605 LA R 17.520 TO R 17.720 NORTH	05D S H62	41 Y 34 Y 19 Y 11 Y 5 N	105.5	0.39	2.48	0.32 0.99 REQ
605 LA R 17.563 SB OFF RTE 60	F K S R34	27 Y 12 N 5 N 3 N 3 N	34.2	0.08	0.40	0.08 0.25 +
605 LA R 18.960 TO R 19.160 NORTH	04D S H62	40 Y 26 N 13 N 10 N 7 Y	105.5	0.26	1.70	0.32 0.99 REQ
605 LA R 19.160 TO R 19.360 NORTH	04D S H62	66 Y 43 Y 23 Y 13 Y 10 Y	105.5	0.65	3.00	0.32 0.99 REQ
605 LA R 19.480 TO R 19.680 NORTH	04D U H65	58 Y 45 Y 26 Y 12 Y 6 N	103.5	1.20	3.46	0.35 1.13 REQ
605 LA R 19.500 TO R 19.700 SOUTH	04D U H65	41 Y 29 Y 13 N 4 N 1 N	103.5	0.40	1.73	0.35 1.13
605 LA R 20.041 SEG SB TO/FR RTE 10	Z B U R04	36 Y 23 Y 13 N 7 N 2 N	46.9	0.00	0.76	0.10 0.35 +
605 LA 22.366 NBON LOWER AZUSA/LA ST	O E U R16	6 Y 5 Y 3 N 2 N 0 N	3.9	0.70	2.11	0.14 0.35 +
605 LA 23.418 NB OFF SEG WB LIVE OAK	F L U R38	35 Y 25 Y 13 Y 10 Y 7 Y	6.4	3.01	5.60	0.42 1.25 + REQ
605 LA 23.880 TO 24.080 SOUTH	04D U H65	22 Y 17 Y 5 N 0 N 0 N	60.6	0.45	1.13	0.26 0.82
710 LA 5.980 TO 6.180 NORTH	05D U H65	10 N 10 N 10 Y 5 N 2 N	57.0	0.48	2.41	0.25 0.80 REQ
710 LA 6.331 SB OFF TO EB ANAHEIM ST	F L U R38	- - 4 Y 0 N 0 N	1.0	0.00	11.01	0.42 1.25 + REQ
710 LA 6.510 NB ON FR WB ANAHEIM ST	O F U R20	- - 5 Y 2 N 1 N	1.0	5.50	13.76	0.22 0.60 + REQ
710 LA 6.740 TO 6.940 SOUTH	03D U H64	26 N 21 N 14 Y 7 N 3 N	60.9	0.67	3.14	0.33 1.07 REQ
710 LA 6.800 TO 7.000 NORTH	03D U H64	64 Y 43 Y 18 Y 13 Y 7 Y	65.2	0.63	3.77	0.35 1.12 REQ

REQ-INVESTIGATION REQUIRED (4 OR MORE ACCS. & SIGNIFICANT IN 12,6 OR 3 MONTHS) + DENOTES MV USED IN RATES

TASAS TABLE C POTENTIAL INVESTIGATION LOCATIONS .2 MILE

0605 LA R 10.460 TO R 10.660 SOUTH 04D U H65 116 Y 70 Y 34 Y 17 Y 9 Y 108.5 - 0.38 4.32 0.37 1.16 REQ

0605 LA R 10.660 TO R 10.860 SOUTH 04D U H65 70 Y 45 Y 24 Y 9 N 3 N 108.5 - 1.02 3.05 0.37 1.16 REQ

0605 LA R 11.160 TO R 11.360 SOUTH 04D U H65 74 Y 52 Y 24 Y 8 N 1 N 108.5 - 0.76 3.05 0.37 1.16 REQ

0605 LA R 11.440 TO R 11.640 SOUTH 04D S H62 123 Y 86 Y 39 Y 11 Y 7 Y 107.8 - 0.38 4.98 0.33 1.00 REQ

0605 LA R 11.440 TO R 11.640 NORTH 04D S H62 62 Y 38 Y 23 Y 5 N 3 N 107.8 - 0.13 2.94 0.33 1.00 REQ

0605 LA R 11.594 NB OFF PIONEER/SLAUSON F H S R26 31 Y 20 Y 9 N 5 N 3 N 11.3 - 0.97 2.19 0.39 1.15 +

0605 LA R 11.640 TO R 11.840 SOUTH 04D S H62 55 Y 39 Y 20 Y 6 N 4 N 107.0 - 0.90 2.57 0.33 1.00 REQ

0605 LA R 11.660 TO R 11.860 NORTH 04D S H62 34 N 28 Y 14 N 4 N 3 N 107.0 - 0.26 1.80 0.33 1.00

0605 LA R 11.701 SEG SBOFF TO SLAUSON AV F D S R10 26 Y 17 N 8 N 4 N 2 N 8.7 - 0.63 2.53 0.61 1.50 +

0605 LA R 11.920 TO R 12.120 SOUTH 04D S H62 65 Y 47 Y 21 Y 9 N 7 Y 109.5 - 0.50 2.64 0.33 1.02 REQ

0605 LA R 11.980 TO R 12.180 NORTH 04D S H62 41 N 29 N 23 Y 11 Y 8 Y 111.6 - 0.62 2.84 0.34 1.03 REQ

0605 LA R 12.120 TO R 12.320 SOUTH 04D S H62 76 Y 52 Y 28 Y 7 N 6 N 114.0 - 0.48 3.38 0.34 1.05 REQ

0605 LA R 12.203 SEG SBOFF WB WASHINGTON F F S R18 22 Y 16 Y 8 Y 5 Y 2 N 4.5 - 0.61 4.89 0.33 0.90 + REQ

0605 LA R 12.340 TO R 12.540 SOUTH 04D S H62 78 Y 47 Y 21 Y 10 N 3 N 114.0 - 0.36 2.54 0.34 1.05 REQ

0605 LA R 13.320 TO R 13.520 SOUTH 04D S H62 43 Y 31 Y 14 N 8 N 3 N 114.0 - 0.97 1.69 0.34 1.05

0605 LA R 14.300 TO R 14.500 SOUTH 04D U H65 72 Y 53 Y 24 Y 13 Y 6 N 114.0 - 0.24 2.90 0.38 1.20 REQ

0605 LA R 14.420 TO R 14.620 NORTH 04D U H65 53 Y 42 Y 27 Y 12 Y 8 Y 114.0 - 0.24 3.26 0.38 1.20 REQ

0605 LA R 15.360 TO R 15.560 NORTH 04D U H65 56 Y 41 Y 21 Y 7 N 3 N 114.0 - 0.48 2.54 0.38 1.20 REQ

0605 LA R 15.600 TO R 15.800 SOUTH 04D U H65 51 Y 36 Y 19 N 12 N 8 Y 115.5 - 0.60 2.27 0.38 1.21 REQ

0605 LA R 15.733 NB ON FR ROSE HILLS RD O D U R12 8 Y 3 N 3 N 2 N 0 N 2.9 - 0.00 2.84 0.32 0.80 +

0605 LA R 16.440 TO R 16.640 NORTH 04D U H65 61 Y 39 Y 22 Y 10 N 7 N 115.5 - 0.48 2.62 0.38 1.21 REQ

0605 LA R 17.202 NB OFF RTE 60 F K S R34 25 Y 13 N 5 N 4 N 1 N 46.5 - 0.12 0.30 0.08 0.25 +

0605 LA R 17.280 TO R 17.480 SOUTH 03D S H61 55 Y 37 N 18 N 13 N 4 N 109.0 - 0.38 2.27 0.53 1.51

0605 LA R 17.520 TO R 17.720 SOUTH 03D S H62 51 Y 40 Y 25 Y 11 Y 6 N 105.5 - 1.17 3.26 0.32 0.99 REQ

0REQ=INVESTIGATION REQUIRED (4 OR MORE ACCS. & SIGNIFICANT IN 12,6 OR 3 MONTHS)

+ DENOTES MV USED IN RATES

TASAS TABLE C POTENTIAL INVESTIGATION LOCATIONS .2 MILE

DISTRICT 07 DATA FOR 98-07-01 THRU 01-06-30

ALL ACCIDENTS

CONFIDENCE LEVEL 99.5 PERCENT

SCL R RATE*-----TOTAL ACCIDENTS-----* *---AVE ADT--* *---12 MOS RATE ACCS/MV-MVM--*

LOCATION DESCRIPTION	RMP U GRP	36 MO	24 MO	12 MO	6 MO	3 MO	1000 VEH	MAIN	X-ST	ACTUAL F+I	TOT	AVERAGE F+I	INV REQ
LNS S	ACCS	ACCS	ACCS	ACCS	ACCS	ACCS				F+I	TOT	F+I	REQ
0605 LA R 17.520 TO R 17.720 NORTH	05D S H62	41 Y	30 Y	18 Y	12 Y	6 N	105.5		-	0.78	2.35	0.32	0.99 REQ
0605 LA R 17.563 SB @FF RTE 60	F K S R34	24 Y	10 N	3 N	0 N	0 N	34.2		-	0.00	0.24	0.08	0.25 +
0605 LA R 18.800 TO R 19.000 NORTH	04D S H62	36 Y	25 N	18 Y	5 N	4 N	105.5		-	0.65	2.35	0.32	0.99 REQ
0605 LA R 19.000 TO R 19.200 NORTH	04D S H62	45 Y	28 Y	10 N	7 N	3 N	105.5		-	0.26	1.30	0.32	0.99 REQ
0605 LA R 19.200 TO R 19.400 NORTH	04D S H62	53 Y	38 Y	14 N	8 N	2 N	105.4		-	0.13	1.83	0.32	0.99 REQ
0605 LA R 19.365 NB ON EB VALLEY BLVD	O L S R40	5 Y	2 N	2 N	1 N	0 N	1.2		-	0.00	4.56	0.24	0.70 +
0605 LA R 19.440 TO R 19.640 SOUTH	04D U H65	37 N	30 Y	14 N	6 N	3 N	103.5		-	0.53	1.86	0.35	1.13
0605 LA R 19.480 TO R 19.680 NORTH	04D U H65	58 Y	42 Y	21 Y	13 Y	6 N	103.5		-	0.93	2.80	0.35	1.13 REQ
0605 LA R 20.041 SEG SB TO/FR RTE 10	Z B U R04	36 Y	29 Y	14 Y	9 Y	5 N	46.9		-	0.06	0.82	0.10	0.35 + REQ
0605 LA 20.680 TO 20.880 NORTH	05D U H66	19 N	15 N	12 Y	6 N	2 N	80.5		-	0.17	2.05	0.26	0.83 REQ
0605 LA 22.366 NBON LOWER AZUSA/LA ST	O E U R16	7 Y	6 Y	4 Y	3 Y	2 N	3.9		-	1.41	2.82	0.14	0.35 + REQ
0605 LA 23.418 NB OFF SEG WB LIVE OAK	F L U R38	29 Y	24 Y	11 Y	4 N	3 N	6.4		-	2.15	4.73	0.42	1.25 + REQ
0605 LA 23.880 TO 24.080 SOUTH	04D U H65	23 Y	17 Y	8 N	4 N	0 N	60.6		-	0.91	1.81	0.26	0.82
0710 LA 6.331 SB OFF TO EB ANAHEIM ST	F L U R38	-	-	-	3 Y	0 N	1.0		-	-	-	-	+ +
0710 LA 6.510 NB ON FR WB ANAHEIM ST	O F U R20	-	-	-	3 Y	1 N	1.0		-	-	-	-	+ +
0710 LA 6.740 TO 6.940 NORTH	03D U H64	48 N	32 N	19 N	8 Y	6 Y	60.9		-	0.47	4.45	0.33	1.07 REQ
0710 LA 6.740 TO 6.940 SOUTH	03D U H64	24 N	19 N	16 N	9 Y	4 N	60.9		-	1.17	3.74	0.33	1.07 REQ
0710 LA 6.801 SB ON FR SB/NB RTE 1	O K U R36	6 Y	4 N	2 N	2 N	0 N	4.5		-	0.00	1.23	0.08	0.25 +
0710 LA 7.640 TO 7.840 NORTH	03D U H64	29 N	23 Y	15 Y	9 Y	5 N	71.5		-	0.58	2.89	0.37	1.19 REQ
0710 LA 7.719 NB OFF EB WILLOW ST	F F U R18	6 Y	5 Y	2 N	2 N	2 N	1.3		-	2.12	4.24	0.33	0.90 +
0710 LA 7.825 SB OFF EB WILLOW ST	F L U R38	19 Y	13 Y	6 N	3 N	1 N	4.3		-	0.64	3.84	0.42	1.25 +
0710 LA 7.840 TO 8.040 NORTH	03D U H64	49 Y	27 Y	11 N	4 N	2 N	76.9		-	0.18	1.97	0.39	1.25
0710 LA 7.900 TO 8.100 SOUTH	03D U H64	40 Y	25 N	12 N	5 N	5 N	78.5		-	0.35	2.11	0.39	1.26
0710 LA 8.055 SB OFF WB WILLOW ST	F F U R18	32 Y	26 Y	17 Y	11 Y	5 Y	6.7		-	1.23	6.99	0.33	0.90 + REQ

0REQ=INVESTIGATION REQUIRED (4 OR MORE ACCS. & SIGNIFICANT IN 12,6 OR 3 MONTHS) + DENOTES MV USED IN RATES

Memorandum

To : Elaheh Yadegar
Office of Project Studies
Division of Planning

Attn: Juan Arias

Date : August 16, 2002

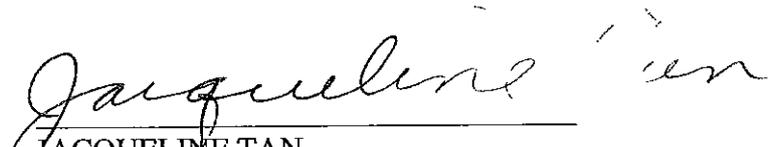
File : 07-LA-60-KP 18.8/20.9
(PM 11.7/13.0)
07-LA-605- KP R28.0/R30.1
(PM 11.7/13.0)
07-23560K

From : **DEPARTMENT OF TRANSPORTATION**
Jacqueline Tan
Office of ITS Development
(213) 897-4698

Subject : PDS Traffic Forecasting, Analysis and Operations Scoping Checklist

Per your request, we have prepared a cost estimate for the work to replace or modify the existing fiber optic communication system impacted by the proposed project. The estimated cost is \$1,200,000.00. We have identified the anticipated locations of work as highlighted on the attached plans. In addition, we are also requesting that the project limits be extended, from Route 605 (to the North) to KP 21.2 (PM 13.2) and from Route 60 (to the East) to KP 31.0 (PM 19.3). A break in the existing fiber optic cables requires that the entire length of the cables be replaced from one splice vault to the next, which are outside of the existing project limits.

If you have any question or require additional information, please contact me at (213) 897-4698 or Candace Fung at (213) 897-6824.



JACQUELINE TAN
Senior Transportation Electrical Engineer
Office of ITS Development

Attachments

cc : C. Fung

ATTACHMENT L

TRANSPORTATION MANAGEMENT PLAN DATA SHEET

(Preliminary TMP Elements and Costs)

Co/Rte/PM LA-60-PM 11.7/13.0 EA 07-23560k Alternative No. _____

Project Limit In Los Angeles at Rte 60/605 Interchange

Project Description HOV Connector from W/B 60 to N/B 605 and E/B 60 to S/B 605

1) Public Information

<input type="checkbox"/>	a. Brochures and Mailers	\$
<input checked="" type="checkbox"/>	b. Press Release	
<input checked="" type="checkbox"/>	c. Paid Advertising	\$50,000.00
<input type="checkbox"/>	d. Public Information Center/Kiosk	\$
<input type="checkbox"/>	e. Public Meeting/Speakers Bureau	
<input type="checkbox"/>	f. Telephone Hotline	
<input type="checkbox"/>	g. Internet	
<input checked="" type="checkbox"/>	h. Others <u>Printing/Fact Sheets</u>	\$25,000.00

2) Motorists Information Strategies

<input type="checkbox"/>	a. Changeable Message Signs (Fixed)	\$
<input checked="" type="checkbox"/>	b. Changeable Message Signs (Portable)	\$250,000.00
<input checked="" type="checkbox"/>	c. Ground Mounted Signs	\$25,000.00
<input type="checkbox"/>	d. Highway Advisory Radio	\$
<input type="checkbox"/>	e. Caltrans Highway Information Network (CHIN)	
<input type="checkbox"/>	f. Others _____	\$

3) Incident Management

<input checked="" type="checkbox"/>	a. Construction Zone Enhanced Enforcement Program (COZEEP)	\$1,800,000.00
<input checked="" type="checkbox"/>	b. Freeway Service Patrol	\$350,000.00
<input checked="" type="checkbox"/>	c. Traffic Management Team	
<input type="checkbox"/>	d. Helicopter Surveillance	\$
<input type="checkbox"/>	e. Traffic Surveillance Stations (Loop Detector and CCTV)	\$
<input type="checkbox"/>	f. Others _____	\$

4) Construction Strategies

<input checked="" type="checkbox"/> a. Lane Closure Chart	
<input type="checkbox"/> b. Reversible Lanes	
<input type="checkbox"/> c. Total Facility Closure	
<input type="checkbox"/> d. Contra Flow	
<input type="checkbox"/> e. Truck Traffic Restrictions	\$
<input type="checkbox"/> f. Reduced Speed Zone	\$
<input type="checkbox"/> g. Connector and Ramp Closures	
<input type="checkbox"/> h. Incentive and Disincentive	\$
<input type="checkbox"/> i. Moveable Barrier	\$
<input type="checkbox"/> j. Others _____	\$

5) Demand Management

<input type="checkbox"/> a. HOV Lanes/Ramps (New or Convert)	\$
<input type="checkbox"/> b. Park and Ride Lots	\$
<input type="checkbox"/> c. Rideshare Incentives	\$
<input type="checkbox"/> d. Variable Work Hours	
<input type="checkbox"/> e. Telecommute	
<input type="checkbox"/> f. Ramp Metering (Temporary Installation)	\$
<input type="checkbox"/> g. Ramp Metering (Modify Existing)	\$
<input type="checkbox"/> h. Others _____	\$

6) Alternative Route Strategies

<input type="checkbox"/> a. Add Capacity to Freeway Connector	\$
<input type="checkbox"/> b. Street Improvement (widening, traffic signal... etc)	\$100,000.00
<input checked="" type="checkbox"/> c. Traffic Control Officers	\$75,000.00
<input checked="" type="checkbox"/> d. Parking Restrictions	
<input type="checkbox"/> e. Others _____	\$

7) Other Strategies

<input type="checkbox"/> a. Application of New Technology	\$
<input type="checkbox"/> e. Others _____	\$

TOTAL ESTIMATED COST OF TMP ELEMENTS = \$2,675,000.00

Project Notes:

Public Awareness Campaign cost estimate of was provided by the Office of Public Affairs/Media Relations

Cost estimate of \$1,800,000.00 for COZEEP efforts was provided by the Construction Traffic Manager (1800 lane closures x 2 Officers x 8 hours x \$60/Officer = Say \$1,800,000.00

Currently, Freeway Service Patrol (FSP) is available on Rte 605 from 6 - 10 A.M. and 2:30 - 6:30 P.M. during weekdays. Additional services will be provided to have full coverage from 6 A.M. to 8:00 P.M during weekdays, and 8 hours on Saturdays and Sundays. In addition, Freeway Service Patrol is available on Rte 60 from 6 - 10 A.M. and 2:30 to 6:30 PM during weekdays. Use of additional FSP on Rte 60 is not anticipated as the shoulder is expected to be available at all times on one side of the freeway.

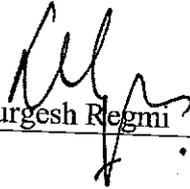
Cost of FSP = (20 months x 2 FSP Units x 22 days/month x 6 hrs/day + 20 months x 4.28 weeks per month x 2 days/weekend x 2 FSP Units) \$ 60/hr = say \$ 350,000.00 for two units

PCMS Cost = \$3,000.00/month x 4 each x 20 months = say \$250,000.00

TMP cost estimates are based on a project duration of 1000 working days (about 45 months) and that the FSP will be required for 20 months, mostly on Rte 605 (no inside shoulder)

The work shall be done in accordance with the Lane Closure Charts provided in the Maintain Traffic Specifications.

PREPARED BY


Durgesh Regmi

DATE 8/22/02

APPROVAL RECOMMENDED BY

DATE

APPROVED BY

DATE

WBS Code	Activity Description	Task Mgr	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
23560 LA-060-11.7/17.4:HOV CONNECTOR ON RTE 10&60 :MMS										
0.100	PERF PROJ MGMT	MS	1	3,224*	3,224*	01/03/03	07/02/15	01/03/03	07/02/15	0
0.100.05	PROJ MGMT - PID	MS	90	519	10	07/01/02A	01/16/03	07/01/02A	01/16/03	0
0.100.10	PROJ MGMT - PA&ED	MS	0	792	792	07/01/04*	07/27/07	07/01/04*	07/27/07	0
0.100.15	PROJ MGMT - PS&E	MS	0	1,015	1,015	07/31/07	07/06/11	12/31/07	12/05/11	108
0.100.20	PROJ MGMT - CONSTR	MS	0	922	922	12/06/11	07/02/15	12/06/11	07/02/15	0
0.100.25	PROJ MGMT - R/W	MS	0	1,761	1,761	07/31/07	05/27/14	09/04/08	07/02/15	284
1.150	DEV PROJ INITIATION DOC	MS	5	534	10	07/01/02A	01/16/03	07/01/02A	01/16/03	0
2.160	PERF PRELIM ENGRG STUDIES	RD	0	664	664	07/02/04	01/30/07	07/02/04	01/30/07	0
2.165	PERF ENVIRO STUDIES &	MS	0	664	664	07/02/04	01/30/07	07/02/04	01/30/07	0
2.175	CIRCULATE DED & SELECT	MS	0	80	80	01/31/07	05/22/07	01/31/07	05/22/07	0
2.180	PREP & APPROVE PROJ RPT &	RD	0	48	48	05/23/07	07/30/07	05/23/07	07/30/07	0
2.205	OBT PERMITS/AGREMENTS &	-	0	1,625	1,625	07/02/04	10/20/10	07/02/04	10/20/10	0
3.185	PREP BASE MAPS & PLAN	RD	0	176	176	07/31/07	04/03/08	07/31/07	04/03/08	0
3.190	PREP STRUC SITE PLANS	RD	0	110	110	04/04/08	09/05/08	04/04/08	09/05/08	0
3.210	PREP PRELIM STRUC DSGN	RD	0	152	152	09/08/08	04/09/09	09/08/08	04/09/09	0
3.215	PREP STRUC GENERAL PLANS	RD	0	152	152	09/08/08	04/09/09	09/08/08	04/09/09	0
3.230	PREP DRAFT PS&E	RD	0	657	657	04/04/08	10/20/10	04/04/08	10/20/10	0
3.235	MITIGATE ENVIRO IMPACTS &	N/A	0	753	753	05/08/08	04/08/11	05/08/08	04/08/11	0
3.240	PREP DRAFT STRUC PS&E	RD	0	395	395	04/10/09	10/20/10	04/10/09	10/20/10	0
3.250	PREP FNL STRUC PS&E PKG	RD	0	120	120	10/21/10	04/08/11	10/21/10	04/08/11	0
3.255	CIRCULATE/REV & PREP FNL	RD	0	90	90	12/02/10	04/08/11	12/02/10	04/08/11	0
3.260	PREP CONTRACT DOCS	N/A	0	60	60	04/11/11	07/01/11	04/11/11	07/01/11	0
3.265	ADVERTISE/OPEN	N/A	0	80	80	08/16/11	12/05/11	08/16/11	12/05/11	0
4.195	R/W PROP MGMT & EXCESS	-	0	1,600	1,600	04/21/09	07/02/15	04/21/09	07/02/15	0
4.200	COORDINATE UTIL	UBA	0	827	827	04/04/08	06/17/11	04/04/08	06/17/11	0
4.220	PERF R/W ENGRG	JMI	0	269	269	04/04/08	04/20/09	04/04/08	04/20/09	0
4.225	OBT R/W INTERESTS FOR	JGC	0	558	558	04/21/09	06/17/11	04/21/09	06/17/11	0
4.245	POST R/W CERTIFICATION	-	0	1,042	1,042	06/20/11	07/02/15	06/20/11	07/02/15	0
4.300	PERF FNL R/W ENGRG	JGC	0	922	922	12/06/11	07/02/15	12/06/11	07/02/15	0
5.270	PERF CONSTR ENGRG &	N/A	0	793	793	12/06/11	01/02/15	12/06/11	01/02/15	0
5.285	PREP & ADMINISTER	N/A	0	922	922	12/06/11	07/02/15	12/06/11	07/02/15	0
5.290	RESOLVE CONTRACT CLAIMS	TPH	0	922	922	12/06/11	07/02/15	12/06/11	07/02/15	0
5.295	ACPT CONTRACT/PREP FNL	N/A	0	129	129	01/05/15	07/02/15	01/05/15	07/02/15	0
M000	ID NEED	MS	100	0	0		07/01/02A		07/01/02A	
M010	APPROVE PID	-	0	0	0		01/16/03		01/16/03	0
M015	PROG PROJ	MS	0	0	0		07/01/04*		07/01/04*	0
M020	BEGIN ENVIRO	MS	0	0	0		07/01/04		07/01/04	0
M030	NOP	-	0	0	0		07/01/04		07/01/04	0
M035	NOI	-	0	0	0		07/01/04		07/01/04	0
M040	BEGIN PROJ	SSK	0	0	0		07/01/04		07/01/04	0
M120	CIRC DED	MS	0	0	0		01/30/07		01/30/07	0
M160	APPROVE FED	-	0	0	0		07/30/07		07/30/07	0
M200	PA&ED	SSK	0	0	0		07/30/07*		07/30/07*	0
M221	BRIDGE SITE DATA ACCEPTED	N/A	0	0	0		09/05/08		09/05/08	0
M222	BEGIN BRIDGE	N/A	0	0	0		09/05/08		09/05/08	0
M224	R/W MAPS	N/A	0	0	0		04/03/08		04/03/08	0
M225	REGULAR R/W	N/A	0	0	0		04/20/09		04/20/09	0
M275	GENERAL PLANS	N/A	0	0	0		04/09/09		04/09/09	0
M300	CIRC PLANS IN DIST	SSK	0	0	0		10/20/10		10/20/10	0

Start Date 01/01/80
Finish Date 07/02/15
Data Date 01/03/03
Run Date 12/23/02 10:12

MODL - TD00

Sheet 1 of 2

Caltrans District 7

Dynamic Workplan Model

Classic Schedule Layout

ATTACHMENT N
Sheet 1 of 2

WBS Code	Activity Description	Task Mgr	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
M318-D7	DESIGN SAFETY REVIEW	SSK	0	0	0		11/17/10		11/17/10	0
M328-D7	CONSTRUCTABILITY REVIEW	SSK	0	0	0		11/17/10		11/17/10	0
M377	PS&E TO DOE	SSK	0	0	0		12/01/10		12/01/10	0
M378	DRAFT STRUC PS&E	SSK	0	0	0		10/20/10		10/20/10	0
M380	PROJ PS&E	N/A	0	0	0		04/08/11*		04/08/11*	0
M410	R/W CERT	N/A	0	0	0		06/17/11		06/17/11	0
M460	RTL	N/A	0	0	0		07/01/11*		07/01/11*	0
M480	HQ ADVERT	N/A	0	0	0		08/15/11		08/15/11	0
M500	APPROVE CONTRACT	N/A	0	0	0		12/05/11		12/05/11	0
M588-D7	FINAL SAFETY REVIEW	N/A	0	0	0		01/02/15		01/02/15	0
M600	CONTRACT ACCEPT	N/A	0	0	0		01/02/15*		01/02/15*	0
M700	FINAL REPORT	N/A	0	0	0		07/02/15		07/02/15	0
M800	END PROJ	MS	0	0	0		07/02/15*		07/02/15*	0

Memorandum

*Flex your power!
Be energy efficient!*

To: MS. ELAHEH YADEGAR - 07
Office of Project Studies

Date: December 19, 2002
File: 07-LA-60-KP17.9/20.9
07-20560K
PSR

From: DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Geotechnical Services
Office of Geotechnical Design – South 1

Subject: Review of Project Study Report for Construction of HOV Direct Connector on SR-60/I-605 Interchange – Final Draft

At your request, the Office of Geotechnical Design – South 1 of the Division of Engineering Services has conducted a review of the information provided for the subject project. The review is limited to geotechnical aspect of the project. The information provided and reviewed for this project are listed as follows:

- Final Draft of Project Study Report for Construction of HOV Direct Connector on Route SR-60/I-605 Interchange from SR-60 KP 17.9/I-605 KP R27.2 to SR-60 KP 20.9/I-605 KP R30.1 in Los Angeles County, California, prepared by Office of Project Studies of the Division of Planning dated November 25, 2002.

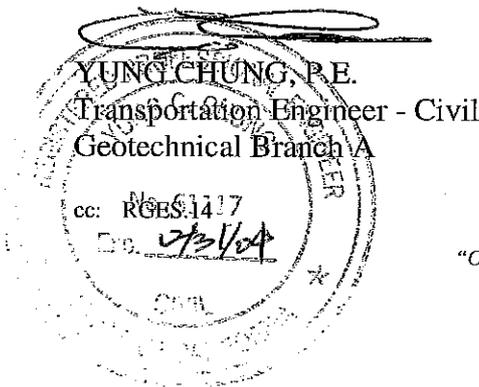
After reviewing the reports provided, the following comments are made:

1. Regarding the geotechnical issues of this project, please refer to the comments made on the previous review report dated October 15, 2002, which is included in Attachment O in this report.
2. We have no further comments.

If you have any questions or comments, please call Yung Chung at (916) 227-5398 or CalNet 8-498-5398.

Prepared by: _____ Date: 12/20/02

Supervised by: _____ Date: 12/20/02



Deh-Jeng Jang
 DEH-JENG JANG, P.E., Acting Chief
 Geotechnical Branch A
 Office of Geotechnical Design-South 1

"Caltrans improves mobility across California"



M e m o r a n d u m

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To: MS. ELAHEH YADEGAR - 07
Office of Project Studies

Date: October 15, 2002
File: 07-LA-60-KP17.9/20.9
07-20560K
PSR

From: DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Geotechnical Services
Office of Geotechnical Design - South

Subject: Review of Project Study Report for Construction of HOV Direct Connector on SR-60/I-605 Interchange

At your request, the Office of Geotechnical Design - South of the Division of Engineering Services has conducted a review of the information provided for the subject project. The review is limited to geotechnical aspect of the project. The information provided and reviewed for this project are listed as follows:

- Project Study Report for construction of HOV Direct Connector on Route SR-60/I-605 Interchange from SR-60 KP 17.9/I-605 KP R27.2 to SR-60 KP 20.9/I-605 KP R30.1 in Los Angeles County, California, prepared by Office of Project Studies of the Division of Planning dated September 17, 2002.

After reviewing the reports provided, the following comments are made:

1. Based on the data presented in the reports, it appears that there is no geotechnical issues will have a detrimental impact on the selection of any of the Alternatives presented in the report. Construction of any of the Alternatives presented in the report is feasible from the geotechnical standpoint. However, Mechanical Stabilized Earth (MSE) walls are cost-effective alternatives for most applications of conventional retaining walls, depending upon the proposed wall height. Therefore, it is recommended that the comparison study between MSE and conventional retaining walls should be performed.
2. The Study Report consists of four Alternatives. The proposed alignment for any of the four Alternatives except No-Build Alternative will required construction of new bridges, widening of existing bridges, slope mitigation, retaining walls and/or soundwall. It is advised that foundation investigation for all the bridge and roadway structures shall be performed in accordance with Caltrans Guidelines for Foundation Investigations and Reports (Version 1.2, June 2002). The proposed boring plan for each structure including number of borings, boring locations and boring depths should be submitted in advance for

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Attachment O
Sheet 2 of 3

review and approval. If possible, the proposed borings should be located as closely as possible to the actual structure foundation locations.

If you have any questions or comments, please call Yung Chung at (916) 227-5398 or CalNet 8-498-5398.

Prepared by:

Date:

Supervised by:

Date:

YUNG CHUNG, P.E.
Transportation Engineer - Civil
Geotechnical Branch A

DEH-JENG JANG, P.E., Acting Chief
Geotechnical Branch A
Office of Geotechnical Design-South

cc: RGES.14

NPDES INFORMATION SUBMITTAL

Project name: HOV Direct Connector Dist 07 Co. LA
 Rte: 60/605
Description of Work: To construct and elevated KP: R27.2/30.1 PM: R16.9/18.7
 HOV direct connector between I-605 and SR-60 EA: 23560K
Project Engineer: Ben Ramos Phone: (213)897-9605
Project Manager: Maen Shaar Phone: (213)897-8665
Dist PS&E date: 12/09/2009 PS&E to HQ date: 02/05/2010
Target construction beginning and completion date: 01/15/2015

- | | Yes | No |
|--|-------------------------------------|--------------------------|
| ▪ Will project impact existing slopes? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Will project create new slopes? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Have Federal or State listed aquatic resources been identified in receiving waters on or adjacent to the site? If yes, what? Southwestern Pond Turtle | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Is soil disturbing activity occurring within 1/4 mile of a perennial surface water or a storm drain that drains directly to a perennial surface water? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Any requirements regarding water quality identified in the Environmental Document? If yes, what? To be obtained in PA/ED phase | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Any Federal or State permit required for this project? If, yes, please list the names of the permits: NPDES, 401, 404, & 1601 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Will the project use lead contaminated soil as backfill? N/A | <input type="checkbox"/> | <input type="checkbox"/> |

- Total land disturbed: 9 hectares, 22 acres
- What is the proposed slope gradient (v:h): 1:4 or flatter
- What is the existing soil type (i.e. sandy, clay, etc.)? Sandy
- Is it potential for significant sediment discharge? Information is not available
- Describe condition of existing vegetative coverage on existing slopes: lanscape with Typical of highway planting of the 1950's and some Myoporum.
- What is the existing drainage pattern? **Runoff is collected in freeway drainage and storm Drain system and flows toward San Gabriel River and San Jose Creek.**
- Identify receiving waters: San Gabriel River & San Jose Creek
- What is their condition? San Gabriel river is running all year around stream.
- Area exposed for the following work (hectares/acres):
 Area to be cleared NA, Area to be cut N/A , Area to be filled N/A
 Staging area _____, Access road: N/A , Utility relocation: N/A
- Estimate the type of areas adjacent to project site, approximately; 100% urban
- 1% undeveloped, 80% residential, 19% others.
 Describe the proposed location and condition of access road: Access will be taken from The existing freeway ramps and median.

Additional remarks: Detail information will be provided at the later phases PA/ED and PS&E.

Submit by: Elabek Yadege Date: 12/16/2002

CONTROL CHECK LIST OF WATER POLLUTION HDM SECTION 110.2
PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT) PHASE

EA NO: 23560K

Senior T.E. : Elaheh Yadegar

Route & KP:
LA-60 KP 17.9/20.9 (PM 11.1/13.0)
I-605 KP R27.2/R30.1 (PM R16.9/R18.7)

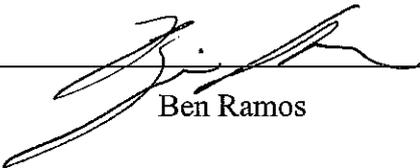
Project Engineer : Ben Ramos

The following check list, based on Section 110.2 of the Highway Design Manual should be used during the PSR(PDS) phase. Please see relevant Section of Highway Design Manual for detailed information.

Item	Yes	No	N/A	Provisions in PSR to minimize Water Pollution
1. Are there any waters in the vicinity of the project that may effect construction, maintenance, and operational activities?	X			
2. Are there any of the following waters where water quality may be affected by the proposed construction? a) Fresh Water b) Saline Water c) Surface d) Underground	X			In PA/ED phase, the WPCP/SWPPP will be developed to prevent surface water from being polluted.
3. Are there any of the following sources for domestic water supplies? a) Watersheds b) Aquifers c) Wells d) Reservoirs e) Lakes f) Streams			X	
4. Are any of the following aquatic resources located in the vicinity of the project? a) Sensitive Fishery b) Wildlife c) Recreational d) Agricultural e) Industrial	X			
5. Has possible relocation or realignment been considered to avoid or minimize the possibility of pollution of existing waters?	X			
6. Are there any variations in erosive characteristics of the soil in the area that may warrant any consideration for relocation or grade changes that would			X	

minimize erosion?				
Item	Yes	No	N/A	Provisions in PSR to minimize Water Pollution
7. Are there any unstable area where construction may cause future landslides?		X		

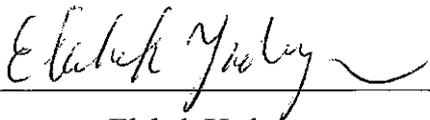
Project Engineer



 Ben Ramos

Date: 2-13-03

Senior T.E.



 Elaheh Yadegar

Date: 2-13-03

Preliminary Storm Water Cost Estimate

Alternative 2

Construction Cost	\$110,280,000	
Construction Site BMPs	\$4,411,200	[4% of total cost, working near 303(d) listed water body]
SWPPP cost (5 ac. +)	\$10,000	
WCP sheets (10 sheets)	\$2,000	(\$200 per sheet)
Supplemental Funds	\$1,102,800	(25% of Construction Site BMPs)
Sampling Analysis Plan	\$200,000	[\$50,000 per year(4) construction]
Treatment BMP	\$3,250,000	(\$250K*13mi)*
Total	\$8,976,000	

*1500m length of roadway widening at 13 lanes (See Typical Cross Section)

Alternative 3

Construction Cost	\$156,326,000	
Construction Site BMPs	\$6,253,040	[4% of total cost, working near 303(d) listed water body]
SWPPP cost (5 ac. +)	\$10,000	
WCP sheets (10 sheets)	\$2,000	(\$200 per sheet)
Supplemental Funds	\$1,563,260	(25% of Construction Site BMPs)
Sampling Analysis Plan	\$200,000	[\$50,000 per year(4) construction]
Treatment BMP	\$3,250,000	(\$250K*13mi)*
Total	\$11,278,300	

*1500m length of roadway widening at 13 lanes (See Typical Cross Section)

Alternative 4

Construction Cost	\$207,214,000	
Construction Site BMPs	\$8,288,560	[4% of total cost, working near 303(d) listed water body]
SWPPP cost (5 ac. +)	\$10,000	
WCP sheets (10 sheets)	\$2,000	(\$200 per sheet)
Supplemental Funds	\$2,072,140	(25% of Construction Site BMPs)
Sampling Analysis Plan	\$200,000	[\$50,000 per year(4) construction]
Treatment BMP	\$3,250,000	(\$250K*13mi)*
Total	\$13,822,700	

*1500m length of roadway widening at 13 lanes (See Typical Cross Section)

Memorandum

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**To: SAM EKRAMI, CHIEF
CENTRAL AREA MANAGER**

Date: February 14, 2003

**File: 07-LA-I-10, I-605
& SR-60
I-10/I-605 & I-605/SR60
HOV Direct Connectors
07-186-23570K & 23560K**

**From: DEPARTMENT OF TRANSPORTATION
MELVIN L. HODGES, CHIEF
OFFICE OF PROJECT STUDIES - MS 16**

Subject: Recommendation for Programming Resources for combined PA/ED

The above-mentioned projects propose to construct HOV Direct Connectors at two locations, I-10/I-605 and I-605/SR-60, to maintain system consistency and connectivity for the HOV network along the corridors of SR-60, I-605 and I-10.

It is recommended that, after both PSR/PDS(s) are approved, sufficient resources be programmed to combine both projects and prepare only **one Project Approval/Environmental Document (PA/ED)** for both projects.



Melvin L. Hodges, Chief
Office of Project Studies

**Cc: Rose Casey, Deputy District Director, Planning
Raja J. Mitwasi, Deputy District Director, Program Project Management
Ron Kosinski, Deputy District Director, Environmental Planning
Jim Deluca, HQ Project Development Coordinator
Susanne Glasgow, HQ Environmental Coordinator
Jimmy Shih, Program Manager
Mehdi Salehinik, Project Manager
Maen Shar, Project Manager
Gary Iverson, Senior Environmental Planner
Elaheh Yadegar, Senior Transportation Engineer
Mohamed A. Ahmed, Senior Transportation Engineer**

Sam Ekrami

12/04/2002 08:32 AM

To: Jim Deluca/HQ/Caltrans/CAGov@DOT
cc: Elaheh Yadegar/D07/Caltrans/CAGov@DOT, I-Chung
Chu/D07/Caltrans/CAGov@DOT, Melvin
Hodges/D07/Caltrans/CAGov@DOT, Mohamed A
Ahmed/D07/Caltrans/CAGov@DOT,
alberto.angelini@dot.ca.gov@DOT, Jimmy
Shih/D07/Caltrans/CAGov@DOT, mehdi.salehinik@dot.ca.gov@DOT,
maen.shaar@dot.ca.gov@DOT
Subject: Re: Design Scoping Checklist for I-10/605 HOV Direct Connector - EA
23570K

The projects will be combined as one after the PSR/PDS has been approved. We will request funding only for PAED phase from MTA under a parent EA as a combined project.

Jim Deluca

Jim Deluca

12/04/2002 08:13 AM

To: I-Chung Chu/D07/Caltrans/CAGov@DOT
cc: Mohamed A Ahmed/D07/Caltrans/CAGov@DOT, Elaheh
Yadegar/D07/Caltrans/CAGov@DOT, Melvin
Hodges/D07/Caltrans/CAGov@DOT, Sam
Ekrami/D07/Caltrans/CAGov@DOT
Subject: Re: Design Scoping Checklist for I-10/605 HOV Direct Connector - EA
23570K

As I've stated in past PDT meetings and discussed with Elaheh yesterday, I will concur with the scoping of the project (both I-10/605 and 60/605) if it is studied as a single project through PA&ED. However if they are to go forward as two independent projects and separate environmental documents/project reports, I do not concur with the design scoping, as there's a real possibility that the two projects will not match or a gap will be left between (on I-605), depending on which alternatives are selected. Also, by studying the each project independently, you will not be addressing the stated purpose and need (HOV system connectivity). From recent e-mails between project studies and project management it still appears unclear as to which direction will be taken. Once a decision is made on that direction, I will be able to concur (or not).

I-Chung Chu

I-Chung Chu

12/04/2002 06:49 AM

To: Jim Deluca
cc: Mohamed A Ahmed/D07/Caltrans/CAGov@DOT
Subject: Design Scoping Checklist for I-10/605 HOV Direct Connector - EA
23570K

Jim,

Please let me know what are the current status of Design Scoping Checklists for EA 23570K? Any comments or suggestions.....? Thanks!

Ivan Chu
Project Studies

Memorandum

To: **ROBERT W. SASSAMAN**
District 7 Director

Date: December 27, 2001

From: **DEPARTMENT OF TRANSPORTATION**
DIRECTOR'S OFFICE - MS 49

Subject: **HOV Direct Connectors**

To improve the effectiveness of the District's HOV System for HOV commuters from the Eastern part of the Los Angeles metropolitan area to downtown Los Angeles, the proposed HOV lanes on Route 60 east of Route 605 need to be connected to the existing HOV lanes on Route 605 and Route 10.

To accomplish this, HOV direct connectors need to be constructed at the Route 60/605 Interchange and the Route 10/605 interchange.

Direct your staff to prepare the required Project Study Reports (PSR) for the needed HOV direct connectors at these two interchanges so these projects can compete for ITIP funds in the 2004 STIP.

The PSRs need to be completed by January 2003.


TONY V. HARRIS
Chief Deputy Director

c: Jeff Morales, Director
Brian Smith, Deputy Director