

2.0 ALTERNATIVES

2.1 DEVELOPMENT OF THE IDENTIFIED PREFERRED ALTERNATIVE

The formulation of the identified Preferred Alternative took into consideration multiple forms of feedback: 1) refined engineering for the project plans; 2) comments received during the public review period of the DEIR/EIS from Federal and local agencies, community associations, and concerned citizens; and 3) planning analysis to determine operational and cost effectiveness of the alternatives under consideration. With modifications to maximize operational and cost efficiency, the (Enhanced) Reduced Build Alternative was identified as the Preferred Alternative. See the discussion in Section 2.1.3 on the formulation and identification of the Preferred Alternative.

2.1.1 Alternatives Formulation Process

The formulation of alternatives for this analysis involved extensive coordination with public agencies and the general public over a five-year period. To develop a set of conceptual alternatives to improve mobility and safety on SR-22, a Major Investment Study (MIS) was developed for the SR-22/West Orange County Connection project, leading to the final set of four conceptual alternatives that were evaluated in the August 2001 DEIR/EIS, and to selection of the (Enhanced) Reduced Build Alternative as the identified Preferred Alternative. The MIS process was initiated in July 1997 by the Orange County Transportation Authority (OCTA) to evaluate the different mode choices to meet the mobility needs of the study area. The MIS process was that prescribed by the federal government.

The MIS Steering Committee was formed in July 1997 as a forum for affected local agencies to provide input to the study. The study's base information, developed under Steering Committee guidance, includes the following:

- Transportation need/problem statement
- Study goals
- Study objectives to meet the goals
- An initial list of conceptual alternatives (provided in Section 2.1.2)
- A series of evaluation criteria
- A public involvement plan
- Resource agency notification and coordination letters

Three public workshops were held in December 1997, along with professionally conducted opinion polls to obtain public input. Following the workshops, a summary of public input was presented to the OCTA Board of Directors in January 1998, and the Board approved further evaluation of improvements in the study area.

The next stage was the screening of alternatives against the evaluation criteria. The results of that analysis are presented in detail in Section 4.0 of the MIS report. The results of the *MIS Evaluation Report* were presented to the public at the scoping meeting described below, to the Steering Committee, and to the Southern California Association of Governments (SCAG's) MIS Peer Review Group.

Additional public input was obtained during the scoping process pursuant to the National Environmental Policy Act/California Environmental Quality Act (NEPA/CEQA) and the public review period of the Draft Environmental Impact Report/Statement (DEIR/EIS). The Notice of Intent (NOI) was published in the *Federal Register* on June 3, 1998; the Notice of Initiation of Studies (NOIS) was sent out on May 1, 1998, and the Notice of Preparation (NOP) was released May 29, 1998. Written responses were received to these notifications. In addition, an open house/public scoping meeting was held on June 23, 1998 to obtain public and agency input. Two discussion session forums were held in September 1997 and June 1998 for elected officials to inquire on the proposed project and provide input on the study.

On August 10, 1998, the OCTA Board met to review the process and consider the next actions in the environmental compliance and preliminary engineering stages for the study alternatives. The Board agreed to proceed with preparation of the draft environmental document and preliminary engineering. On November 9, 1998, the OCTA Board recommended one of the MIS alternatives be carried forward as the "build alternative" for further study, along with the No Build Alternative and the Transportation Systems Management (TSM)/Expanded Bus Service Alternative.

In January 2000, during technical analysis for the DEIR/EIS, the identification of potential environmental impacts associated with the Full Build Alternative (then known as the Build Alternative) led to the decision to study an additional build alternative in an attempt to avoid or minimize certain impacts. This discussion led to the total number of alternatives for the DEIR/EIS phase of project analysis to four: the No Build Alternative, the TSM/Expanded Bus Service Alternative, the Full Build Alternative, and the Reduced Build Alternative.

Section 2.1.2 summarizes the full range of transportation alternatives that were developed very early in the project analysis, including the key steps used to narrow and refine the full range of transportation alternatives to the final four (see MIS Evaluation Report for complete details). The MIS technical evaluation, along with public input and policy considerations, provided the basis for the selection of the final set of transportation alternatives described in Section 2.2. The alternatives that were withdrawn from further study upon completion of the MIS phase of the project are summarized in Section 2.3.

On February 12, 2001, SCAG released a Letter of Completion for the SR-22/WOCC Final MIS. According to the SCAG letter, "the range of alternatives studied in the SR-22 West Orange County Connection Final MIS Evaluation Report is sufficient to meet the requirements of the regionally significant transportation investments study (RSTIS) guidelines. Adequate public involvement was utilized in the planning process through workshops and public hearings. Moreover, public agency involvement was facilitated through numerous meetings and RSTIS Peer Review Group Meetings." For further discussion on the public involvement process, refer to Section 10 of this FEIS/EIR.

2.1.2 Description of Conceptual Alternatives

The following provides a brief synopsis of the full range of transportation alternatives that was developed during the planning stages of the project to address the purpose and need for transportation improvements in the SR-22 corridor study area. These transportation improvements, including the technical evaluation conducted as part of the alternatives development and refinement process, are described in detail in the SR-22/West Orange County Connection MIS Evaluation Report.

The initial set of conceptual alternatives were further refined to a smaller set of alternatives based on their ability to meet the project's purpose and need, and other criteria such as cost factors and limitations on funding sources. These will be further discussed in Section 2.3 and 2.4 for each specific alternative explored during the MIS process. See Table 2.4-1 for a summary of the alternative evaluation results.

Through both technical analysis and public input, the features of the conceptual alternatives have continued to evolve. This is typical for the planning and early environmental phases of project development as the transportation benefits, costs, environmental impacts, and policy implications associated with the various design concepts are evaluated and understood.

A. INITIAL SET OF CONCEPTUAL ALTERNATIVES

The MIS Steering Committee developed an initial set of ten conceptual alternatives at the beginning of the MIS evaluation process. This initial set of conceptual alternatives included:

- Initial Alternative 1: No Build
- Initial Alternative 2: TSM/Expanded Bus Service
- Initial Alternative 3: General-Purpose Lane on SR-22
- Initial Alternative 4: Alternative 3, plus former Pacific Electric right-of-way (as general-purpose arterial)

- Initial Alternative 5: Rail
- Initial Alternative 6: HOV Lane on SR-22 (as reflected in the SCAG 1998 RTP)
- Initial Alternative 7: Alternative 6, plus former Pacific Electric right-of-way (as HOV/high-occupancy/toll [HOT] arterial)
- Initial Alternative 8: Alternative 7, plus SR-22/ I-405 HOV Connector
- Initial Alternative 9: Alternative 8, plus Four-Lane HOV on I-405 between SR-22 and I-605, with I-405/I-605 HOV Connector
- Initial Alternative 10: Alternative 9, plus SR-22/SR-55 HOV Connector

B. REFINED SET OF CONCEPTUAL ALTERNATIVES

Upon further consideration, the Steering Committee determined that the initial ten conceptual alternatives were not sufficiently distinct from each other. For example, Alternatives 6 through 10 were considered to be variations of the same basic alternative. They were combined to form one alternative for analysis. The Steering Committee revised the conceptual alternatives list to incorporate all of the individual components into the following list containing six refined conceptual alternatives. These refined alternatives included:

- Refined Alternative 1: No Build
- Refined Alternative 2: TSM/Expanded Bus Service
- Refined Alternative 3: Fixed Guideway
- Refined Alternative 4: General-Purpose Lanes (consisting of sub-alternatives 4A and 4B)
- Refined Alternative 5: HOV Lanes on SR-22 (as reflected in the SCAG 1998 RTP)
- Refined Alternative 6: HOV Lanes Full System (consisting of sub-alternatives 6A, 6B, and 6C)

C. FINAL SET OF CONCEPTUAL ALTERNATIVES

The six refined alternatives were analyzed in detail during the technical evaluation conducted for the MIS Evaluation Report. This technical evaluation, along with public input and policy considerations, resulted in OCTA Board approval of a “final” set of three conceptual alternatives for study in this DEIR/EIS. These alternatives incorporated the following transportation elements: Highway, HOV, Bus, and Advanced Transportation Systems (ATS). The three alternatives carried forward were as follows:

- No Build Alternative
- TSM/Expanded Bus Service Alternative
- Build Alternative

D. ADDITIONAL ALTERNATIVE

Early in the DEIR/EIS documentation process, it became apparent that the environmental impacts would result from the “build alternative” would be more substantial than expected. Thus, another smaller-scale build alternative that could potentially result in fewer environmental impacts was identified and added to the project analysis.

The “build” alternative was renamed the Full Build Alternative when the Reduced Build Alternative was added in January 2000. The four alternatives carried forward for evaluation in the DEIR/EIS are (described in Section 2.2):

- No Build Alternative
- TSM/Expanded Bus Service Alternative
- Full Build Alternative
- Reduced Build Alternative

2.1.3 IDENTIFICATION OF THE PREFERRED ALTERNATIVE PROCESS

As discussed above, the two “build” alternatives along with the no build and TSM/Expanded Bus Service alternatives were considered in the DEIR/EIS and were the subject of the public review and comment process. Additional analyses were conducted on the “build” options along with the TSM/Expanded Bus Service Alternative to determine the maximum benefits to the SR-22 corridor while reducing the environmental and economic impacts to the surrounding communities. Through these analyses, the Reduced Build Alternative was determined to meet this criterion, as outlined in the MIS.

During the final documentation phase, and as a result of comments received during the public review and comments of the DEIR/EIS, the Department re-analyzed multiple sections of the SR-22 corridor to refine right-of-way limits for the proposed project. Since the Full and Reduced Build Alternatives were the only two build options with potential right-of-way impacts, they were both analyzed. In refining the engineering plans, some of the proposed right-of-way displacements and acquisitions were avoided. The refined engineering plans also allowed determination of the proximity of setback for possible landscaping and determination of preliminary noise barriers.

The public comment/review period for the DEIR/EIS afforded the opportunity for governmental agencies and concerned citizens to provide feedback on ways to improve and/or acknowledge their concerns on environmental impacts resulting from the proposed SR-22/WOCC project. Approximately 1,100 comments were received during the 65-day public comment/review period of the DEIR/EIS; about half of the comments were non-duplicative. Comments were received from various governmental agencies such as the United States Environmental Protection Agency (USEPA), County of Orange, Cities of Garden Grove, Orange, Seal Beach, Tustin, school districts, and concerned citizens from the cities along the SR-22 corridor. The comments consisted of a range of concerns for environmental impacts resulting from the project including air quality, noise, right-of-way, traffic, and visual. The majority of the comments were drawn from the western portions of the project limits such as the Community of Rossmoor and the City of Seal Beach. The primary concern for the citizens in these areas was the proposed I-405/605 direct HOV connector and the environmental impacts associated with this structure. Other concerns regarding the proposed SR-22/WOCC project came from the citizens in the City of Garden Grove, focusing primarily on noise issues. To address these and other concerns, multiple sections of the EIR/EIS were reanalyzed. The air quality, Historic Property Survey Report/Historic Architectural Survey Report (HPSR/HASR), Initial Site Assessment, Natural Environmental Study, noise, relocation impacts, traffic and visual impact sections were reanalyzed to avoid and minimize environmental impacts to the surrounding communities along the SR-22 corridor. Please see Section 4.0 (Environmental Consequences) to review the appropriate sections. The comments along with their responses are attached as Appendix A (Volumes II and III), and those comments that were received after October 30, 2001 are included in Volume IV.

At this junction in the environmental process, the project “identifies” a Preferred Alternative for inclusion in the Final Environmental Impact Statement/Report (FEIS/R). Once the Record of Decision (ROD) is adopted, and the Notice of Determination (NOD) filed, the identified Preferred Alternative is then considered “selected”.

During the preparation of the final environmental document, additional planning efforts were utilized in the process to find the best solution in alleviating traffic congestion and improving safety on the SR-22 corridor. The Department, and its partnering agency, the OCTA, in conjunction with the Federal Highway Administration (FHWA), examined various methods to operationally improve the corridor and enhance safety. These methods included incorporating a component of the SR-22/SR-55 direct HOV connector, which was previously analyzed under the Full Build Alternative during the August 2001 DEIR/EIS. The SR-22/SR-55 direct HOV connector feature of the Full Build Alternative included the extension of HOV lanes on the Mainline (in both directions) from Glassell Street to the eastern terminus of SR-22 at Tustin Avenue/SR-55. The added feature to the Reduced Build Alternative extends the improvements (in both directions) from Glassell Street to approximately SR-55, resulting in the (Enhanced) Reduced Build Alternative. In addition, there were other improvements that were made to the (Enhanced) Reduced Build Alternative. These additions include: realignment of the I-405/605 HOV connector (See Figure 2.2-1a-c), replacement/realignment of the Pearce Street pedestrian overcrossing (See Figures 2.2-2a & b) to

comply with the Americans with Disabilities Act (ADA) standards, and modifications of Sorrel Street (for further details, refer to Section 2.2). Please refer to Section 2.2 for a discussion on the identified Preferred Alternative, (Enhanced) Reduced Build Alternative, and the Full Build Alternative for specific discussion on how they affect each of the build alternatives. Below is a synopsis of reasons why the (Enhanced) Reduced Build is the identified Preferred Alternative.

The identified Preferred Alternative, (Enhanced) Reduced Build Alternative, was determined to be the environmentally preferred option due to its lessened impacts to residential and non-residential properties, the local economy, and preservation of a historic resource. Specifically, the (Enhanced) Reduced Build Alternative has fewer right-of-way impacts, when compared to the Full Build Alternative. The identification of the (Enhanced) Reduced Build as the Preferred Alternative would result in fewer right-of-way impacts, when compared to the Full Build. The large number of right-of-way impacts for the Full Build Alternative can be attributed to the Pacific Electric Arterial and direct HOV connector features at I-5 and SR-55. Due to fewer right-of-way acquisitions, the local economy would not be as negatively impacted with the (Enhanced) Reduced Build Alternative. This would result in the affected jurisdictions' ability to retain existing property and sales tax revenues, when compared to the Full Build Alternative. With the proposed Pacific Electric Arterial, included as a feature of the Full Build Alternative, the former Pacific Electric Bridge (eligible for listing on the National Register of Historic Places) would be removed from its existing location.

The absence of HOV lanes on the SR-22 freeway is a missing link in the Orange County HOV system. The (Enhanced) Reduced Build Alternative would provide for HOV system continuity and connectivity, tying to I-605 and I-405, thereby helping to improve congestion in the study area. The traveling public has little incentive or opportunity to switch from single-occupancy vehicles to carpooling or transit, as there are no dedicated facilities for this purpose on SR-22. The identified Preferred Alternative, by providing connectivity for the HOV system while meeting the goals and objectives of the project, would provide the infrastructure needed to encourage high vehicle occupancy on the region's roads. This would indirectly relieve traffic congestion in the region, both by removing HOVs from general-purpose lanes and by encouraging single occupant vehicles (SOV) to shift their modal choice from drive-alone to carpool.

2.2 ALTERNATIVES UNDER CONSIDERATION

Three action alternatives and a no build alternative described below were identified for study in the Draft Environmental Impact Report/Statement (DEIR/EIS). This section of the Final Environmental Impact Statement/Report (FEIS/EIR) will focus on the identified Preferred Alternative, which is the (Enhanced) Reduced Build Alternative. For the purposes of consistent analysis for all of the alternatives under study in the DEIR/EIS, the other alternatives previously reviewed will be under a different subsection.

A. IDENTIFIED PREFERRED ALTERNATIVE

(Enhanced) Reduced Build Alternative

The Reduced Build Alternative, as presented in the DEIR/EIS, has been modified and renamed the (Enhanced) Reduced Build Alternative. The (Enhanced) Reduced Build Alternative includes all of the Reduced Build Alternative's project features, as presented in the August 2001 DEIR/EIS, and two project components from the Full Build Alternative. One is the freeway mainline section (HOV lanes in each direction from Glassell to approximately SR-55) without the HOV freeway to freeway connecting structure. Another feature is an auxiliary lane from Glassell Street to Tustin Avenue in the eastbound direction (approximately 1.77 km [1.1 miles]). The extended portion of the Mainline, approximately 1.93 km (1.2 miles) at the eastern terminus of the project limits, was analyzed as part of the Full Build Alternative in the August 2001 DEIR/EIS. The added feature to the Reduced Build alternative extends the eastern terminus improvements in both directions from Glassell Street to approximately SR-55, resulting in the creation of the (Enhanced) Reduced Build Alternative.

As a result of the comments received on the DEIR/EIS, and the process of refining the engineering plans, including the availability of more detailed design level surveys that revealed

the exact location of the existing right-of-way line in relation to the proposed roadway improvements, impacts were generally reduced throughout the project limits.

The modifications in the project limits to create the (Enhanced) Reduced Build Alternative would not contribute to any new environmental impacts because all of the improvements are within the existing roadway. Potential environmental impacts from this added portion have been previously analyzed as part of the Full Build Alternative (SR-22/SR-55 HOV connector) in the August 2001 DEIR/EIS. Therefore, the impacts and proposed mitigation measures for this added portion would be similar to those of the Full Build Alternative. See Figure 2.2-3 for the features of the (Enhanced) Reduced Build Alternative, including the proposed right-of-way impacts.

As presented in the DEIR/EIS, the Reduced Build Alternative was created by eliminating the following elements of the Full Build Alternative from the project design: the new arterial in the former Pacific Electric right-of-way, the HOV connectors between SR-22 and I-5, and the HOV connectors between SR-22 and SR-55. These dismissed features, if included, would have resulted in substantial right-of-way impacts, additional costs, and adverse operational impacts to I-5 and SR-55. These facilities lack additional capital improvements to relieve added traffic demand from SR-22. See Figure 2.2-4 for the features of the Reduced Build Alternative, as presented in the August 2001 DEIR/EIS, including the proposed right-of-way impacts.

All of the elements contained in the No Build and TSM/Expanded Bus Service Alternatives are included in the (Enhanced) Reduced Build Alternative. The (Enhanced) Reduced Build Alternative also includes the following design features to improve the operational characteristics of the facility in certain locations that currently experience congestion, resulting from bottlenecks (choke-points):

- Continuous lane in each direction from Beach Boulevard to I-5.
- Auxiliary lanes between interchanges at various locations
- Interchange improvements at Beach Boulevard and Brookhurst Street
- A collector/distributor road along the eastbound SR-22 at the SR-22/I-5/SR-57 confluence

The (Enhanced) Reduced Build Alternative's route is divided into three segments for analysis purposes:

1. I-405/I-605 Connector – Katella Avenue south to Seal Beach Boulevard a distance of 3.7 kilometers (2.3 miles). The alignment of this connector has been modified from the original design. See the discussion for the I-405/605 HOV connector in the latter part of this section.
2. I-405/SR-22 Connector – Seal Beach Boulevard east to Valley View Street, a distance of 3.7 kilometers (2.3 miles)
3. SR-22 Mainline – Valley View Street east to approximately SR-55, including The City Drive improvements, a distance of 17.9 kilometers (11.1 miles). [Refer to previous text regarding extension of the mainline]

The (Enhanced) Reduced Build Alternative, discussed above, is the identified Preferred Alternative for the following reasons:

- Meets the purpose and need of the project;
- Reduces congestion, considers both existing and future traffic demands, and improves safety;
- Provides HOV connectivity to other major freeways in central Orange County (I-405/I-605);
- Is the most cost-effective build alternative;
- Provides multi-modal choices (e.g. HOV, TSM, expanded bus service, etc.); and
- Is the least environmentally damaging practicable build alternative.

Furthermore, implementation of the (Enhanced) Reduced Build Alternative would provide improved operational efficiency on SR-22. Under the original proposal for the Reduced Build

Alternative (as presented in the August 2001 DEIR/EIS), the Mainline segment of the project was from approximately Valley View to Glassell Street. Under the (Enhanced) Reduced Build Alternative, SR-22 would be three lanes at the eastern terminus once the HOV lane ceases at Glassell Street. With the added features, this Alternative would add an extra lane.

Figure 2.2-3 shows the proposed (Enhanced) Reduced Build Alternative route map and locations of the proposed capital improvements. The (Enhanced) Reduced Build Alternative cross sections (i.e. lane, median, shoulder, and buffer widths) are illustrated on Figure 2.2-5 (A, B, & C). Under the (Enhanced) Reduced Build Alternative, the freeways within the SR-22/WOCC project would be improved to full geometric design standards with the exception of the following:

- Non-standard inside shoulder on I-605 and I-405 at transition areas to join to an existing non-standard shoulder. Also on I-405 and SR-22 at spot locations where California Highway Patrol (CHP) enforcement areas are recommended.
- Non-standard lane widths 10.8 to 11.8 ft. (3.3 to 3.6 meters) on I-605 northbound and southbound north of the HOV connector, and on Brookhurst Street dual left turn and lanes No. 1 and 2 at eastbound SR-22 ramp.
- Non-standard median widths on I-605 north of the HOV connector, on I-405 at I-605, and on I-405 at SR-22

The following nonstandard features would remain unmodified in the (Enhanced) Reduced Build:

- non-standard weaving sections on I-605/I-405 and I-405/SR-22 interchanges, and on SR-22 between Haster Street and Glassell Street
- 15 ft. (4.6-meter) clearance at Main Street
- various existing interchange spacing deficiencies along SR-22 at Valley View, Golden West/Beach Boulevard, The City Drive/Bristol Street, I-5/The City Drive, I-5/Bristol Street, I-5/Main Street, and Glassell Street/Tustin Avenue.

During the final documentation phase, and as a result of comments received during the public review and comments on the DEIR/EIS, the Department further analyzed multiple sections of the SR-22 corridor to refine right-of-way limits and reduce environmental impacts for the proposed project. Additional design modifications to the Reduced Build Alternative, as originally presented in the August 2001 DEIR/EIS, were made to avoid right-of-way acquisitions and to reduce environmental impacts while maintaining the design standards. These efforts resulted in avoidance of acquisitions and reduction of impacts at the following locations:

- The partial acquisitions of six properties along Martha Ann Drive in the Rossmoor Community as well as utility relocation were avoided by tightening the curvature of the S405/N605 connector while shortening the gore area further to the south;
- The right-of-way impact at the City of Seal Beach's reservoir was avoided by tightening the curvature of the Seal Beach Boulevard off-ramp while shifting the exit nose further to the south;
- The I-405/605 HOV connector has been realigned and lowered from the DEIR/EIS proposal to reduce impacts to the community of Rossmoor and the City of Seal Beach (Please refer to Figure 2.2-1a-c for the modified plans);
- The full acquisitions of six properties along Almond Avenue in the City of Seal Beach as well as the relocation of overhead power lines and reconstruction of existing soundwalls were avoided by: 1) shifting the I-405 freeway centerline toward the south; 2) tightening the curvature; and 3) shifting the southbound I-405 to eastbound SR-22 connector gore area (divergence point) further to the east. This was achieved without changing the impacts to the United States Naval Weapons Station (USNWS) utility easement or facility on the south side of I-405;
- The partial acquisitions of four homes properties along Enloe Way in the City of Garden Grove were avoided by shifting the SR-22 eastbound Magnolia on-ramp alignment closer to the freeway mainline and shifting the gore area (convergence point) further to the west; and
- The displacements of two residential units (along Trask Avenue) and eighteen businesses (along Euclid and Trask Avenue) at the Euclid interchange in the City of Garden Grove are no longer necessary because the Pacific Electric connection would not

be part of this alternative, and the ramp alignments would be shifted toward the freeway mainline.

Refined engineering plans and the availability of more detailed design level surveys have identified the Pearce pedestrian overcrossing to be replaced since it would conflict with the proposed footing of the SR-22/WOCC project just west of the Haster Street exit. The Pearce Pedestrian Overcrossing is an existing pedestrian overcrossing that is not Americans with Disabilities Act (ADA) compliant.

In refining the engineering plans and with the availability of more detailed design level surveys, a total of nineteen new partial acquisitions were identified in this FEIS/EIR that were not previously included in the August 2001 DEIR/EIS. These include partial acquisitions on Dunklee Avenue and Sorrell Drive on the north side of the freeway and on El Prado Avenue on the south side of the freeway in the City of Garden Grove. Please see Figure 2.2-3 for the (Enhanced) Reduced Build Alternative features, as presented in this FEIS/EIR, and Figure 2.2-4 for the Reduced Build Alternative features, as presented in the August 2001 DEIR/EIS.

I-405/605 HOV Connector Synopsis

The I-405/605 HOV connector alignment presented in the DEIR/EIS was proposed over three existing facilities: the I-405 freeway, the connector from eastbound SR-22 to northbound I-405, and the connector from southbound I-405 to northbound I-605. The peak elevation of the alignment as shown in the August 2001 DEIR/EIS of the proposed connector structure occurred at approximately 95 ft. (29 meters) high where the minimum vertical clearance is required over the existing southbound I-405 to northbound I-605 connector. During the public review period of the August 2001 DEIR/EIS, which included a 60-day public comment period and two Public Hearings, concerns from the Rossmoor residents arose regarding traffic noise, visual, air quality, and traffic issues. In an effort to address these concerns, several different design variations have been studied. Among them, one preferred design solution has been identified that reduces the height of the HOV connector by shifting the alignment of the proposed HOV connector southerly such that the revised alignment runs parallel between the eastbound SR-22 and the southbound I-605 to southbound I-405 connectors at the same elevations. The peak elevation of this alignment shown in the FEIS/EIR is approximately 72 ft. (22 meters) high where the connector crosses over the eastbound SR-22 connector (approximately 2300 ft. [700 meters] east of the previously identified peak elevation point). See Figures 2.2-1 a, b, and c for more detail on the I-405/605 HOV connector realignment.

Pearce Street Pedestrian Overcrossing Synopsis

Refined engineering plans and the availability of more detailed design level surveys have identified the Pearce Street pedestrian overcrossing to be replaced since it would conflict with the proposed widening of the SR-22/WOCC project. The original Preliminary Engineering plans in the August 2001 DEIR/EIS for the SR-22/WOCC pedestrian overcrossing assumed it would be replacement in kind at the same location as the existing facility. The Pearce Street pedestrian overcrossing is located between the Fairview Street and Harbor Boulevard exits on SR-22, just east of Harbor Boulevard. The Pearce Street pedestrian overcrossing is an existing pedestrian overcrossing that is not compliant with the Americans with Disabilities Act (ADA). The replacement of the pedestrian overcrossing would have to comply ADA standards. ADA requires a minimum of 8.3% grade, and an eight-foot width for the walkway of the pedestrian overcrossing. The existing Pearce Street pedestrian overcrossing is approximately at a 15% grade and it is approximately eight feet (2.4 meters) wide. The refined engineering plans enable the Department to determine the proximity of setback for possible landscaping and determination of preliminary noise barriers. The plans for the Pearce Street pedestrian overcrossing will be finalized at the design stage of the project. The replacement Pearce Street pedestrian overcrossing proposed in this FEIS/EIR is ADA compliant, and would be approximately 360 ft. (110 meter) east of the existing overcrossing. Please refer to Figure 2.2-2 b for a schematic of the replacement proposal.

In order to determine the usage of the Pearce Street pedestrian overcrossing, surveys were sent to residents within a half-mile radius of the pedestrian overcrossing. During the development of the FEIS/EIR, the proposed ADA compliant pedestrian overcrossing identified three residential displacements that were not previously identified during the DEIR/EIS. As part of the environmental documentation process, the Department's right-of-way staff contacted these three potential displacees. This led to concerns raised by the displacees. Due to the concerns, the Department elected to survey the usage of the pedestrian overcrossing and hold a public meeting. A Public Meeting was held on December 17, 2002 to present to the community the different plans to replace the existing Pearce Street pedestrian overcrossing. The purpose of the Public Meeting was to supplement the survey by sharing information with the community and to solicit their input on the replacement of the pedestrian overcrossing. Approximately 50 residents in the community attended the meeting. Comment Forms were available at the meeting and 42 of them were received. The Pearce Street pedestrian overcrossing user survey results, as well as the Public Meeting, and the Comment Form are summarized in Section 2.2 of this chapter. The three potential displacements have been avoided by redesigning and relocating the overcrossing east of the existing location (Please see Figure 2.2-2 b for the modified proposed design of the overcrossing). Additional discussions are in Section 10.5.3, Comments and Coordination.

Summary of Pearce Street Pedestrian Survey

On December 4, 2002, 2389 surveys were sent to residents within a half-mile radius of the Pearce Street pedestrian overcrossing. The survey was available in English and Spanish, and was sent out by a mailing services company. Upon discovering that the mailing services company inadvertently omitted the Bahia Village Mobile home Park (less than 0.40 Km [0.25 mile] away from pedestrian overcrossing), 177 additional surveys were hand-carried to this mobile home park. The questions in the survey solicited information such as whether the respondent uses the pedestrian overcrossing, their purpose for using it, their age, their destination, and if they would have other means of transportation if the pedestrian overcrossing were removed. A total of 263 (11.01%) surveys were returned, forty-seven respondents (17.87%) indicated that they use the pedestrian overcrossing, and 216 respondents (82.13%) indicated that they do not use the pedestrian overcrossing. Forty-six surveys were returned by the Postmaster as undeliverable due to properties that are vacant. Please see Figure 2.2-2a for a summary map of the Pearce Street pedestrian overcrossing survey results.

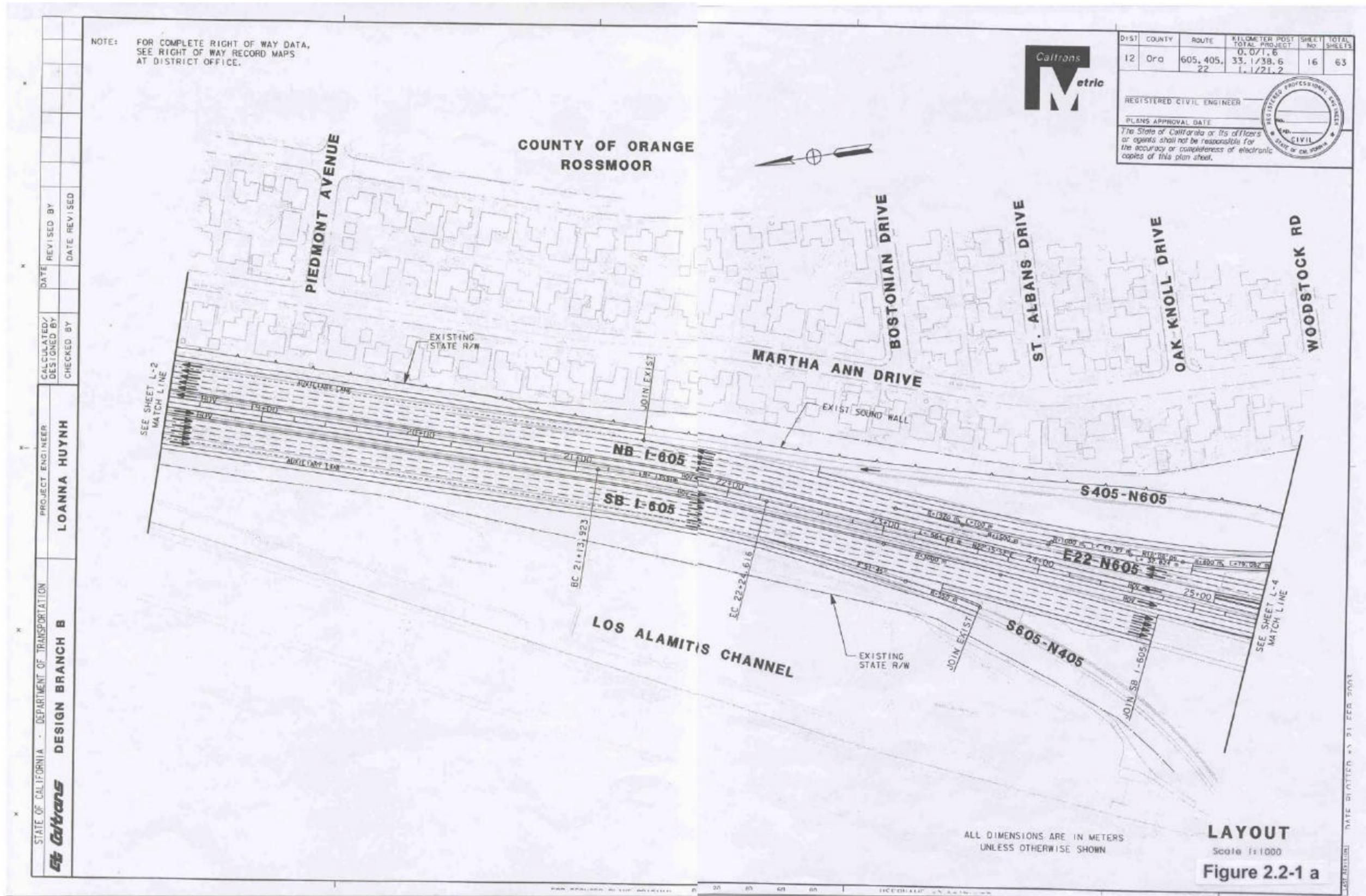
Summary of December 17, 2002 Pearce Street Public Meeting

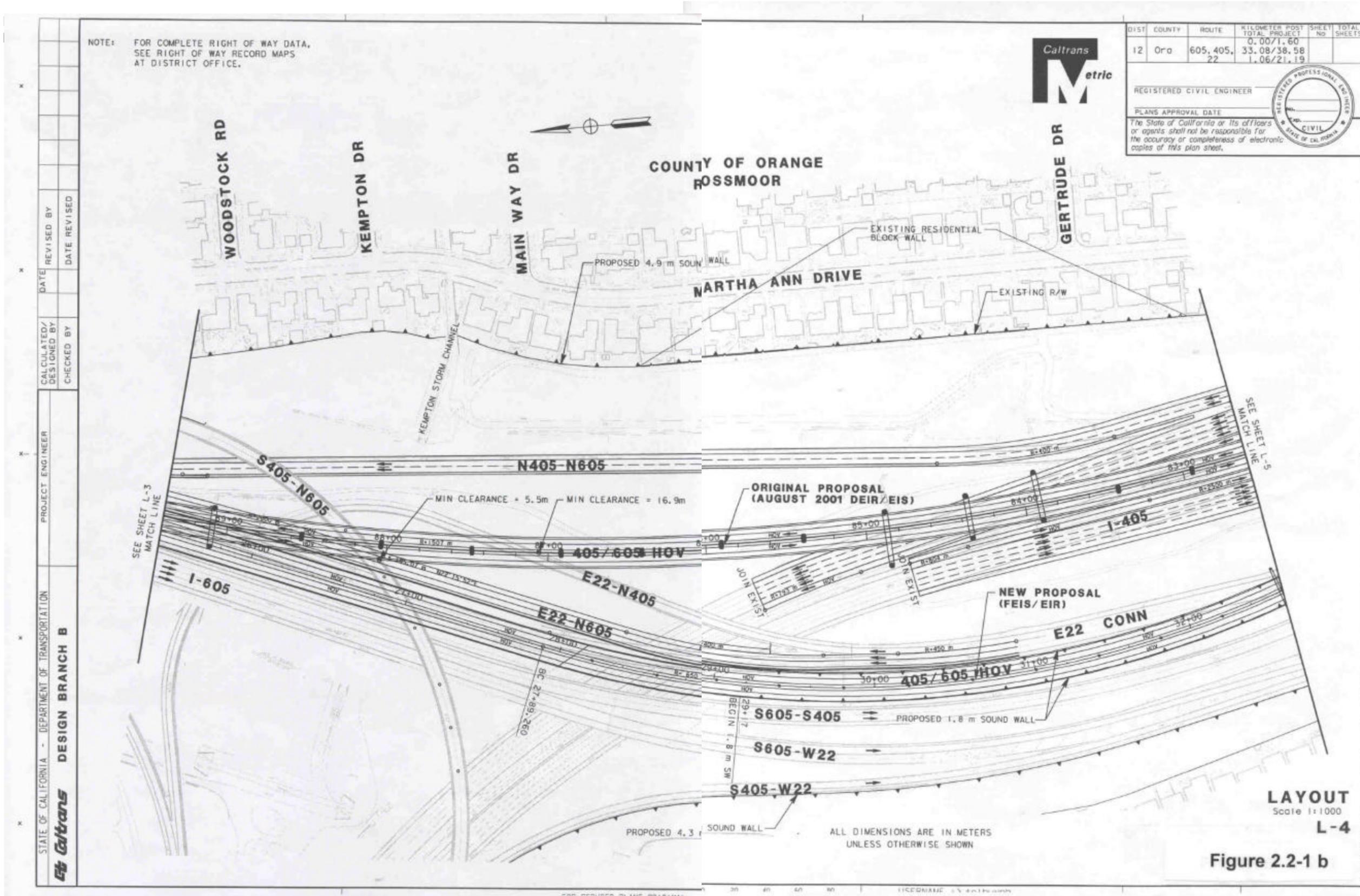
On December 17, 2002, approximately 50 interested parties attended the Public Meeting. The materials at the Public Meeting included visual representations of preliminary proposals for replacement of the Pearce Street pedestrian overcrossing. There were eight proposals, including an "elimination" option that would eliminate the Pearce Street pedestrian overcrossing. The seven "build" options included variations of where the new pedestrian overcrossing was proposed. A comment form was available at the Public Meeting to solicit input from the attendees.

Recommended Design for Replacement of Pearce Street Pedestrian Overcrossing

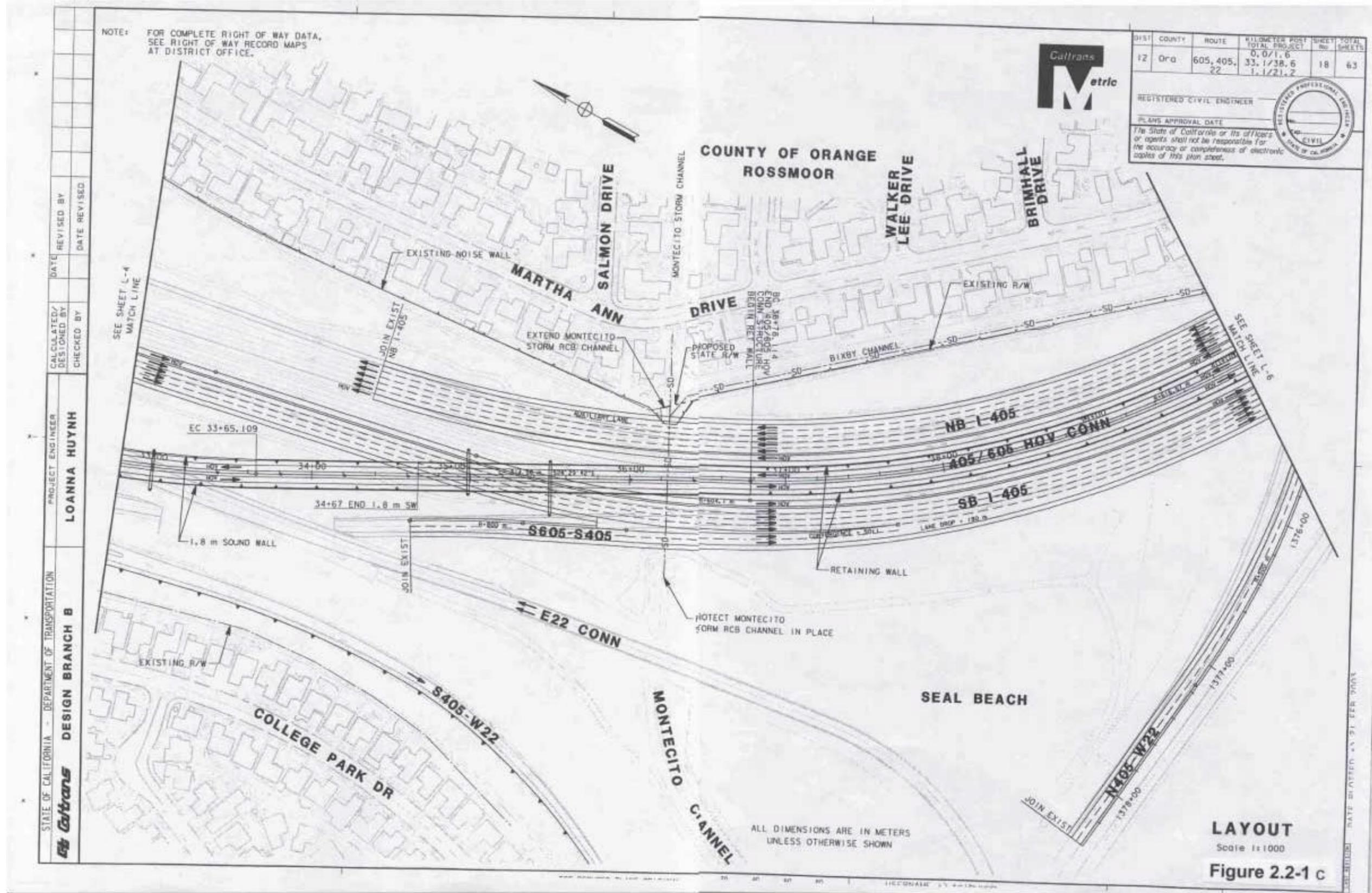
Based on input from various stakeholders, the Department elected to proceed with Pearce POC Alternative 5B, as shown in Figure 2.2-2b which utilizes a sliver of the existing maintenance road alongside the maintenance access road of the Wintersburg Channel. The Wintersburg Channel is under the jurisdiction of the Orange County Flood Control District (OCFCD). Alternative 5B utilizes the existing entrance/exit point at Flagstone Place (north side) and it proposes a new entrance/exit point at Pearce Street (south side), where the new entrance/exit point is parallel to Wintersburg Channel. Please See Figure 2.2-2 b for a schematic of Alternative 5B.

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Figure



**State Route 22
West Orange County Connection
Pearce Street
Pedestrian Overcrossing Survey
December 2002**

2,566 surveys were sent to residents approx. within a half-mile (0.5 mile) radius of the Pearce St. Pedestrian Overcrossing (POC) in the City of Garden Grove. The purpose of the survey was to estimate the usage of the POC. About 10% (262 responses) of the surveys were returned. Negative responses indicated no use of the overcrossing while positive responses indicated POC usage.

SURVEY RESULTS

	Responses	(%)
Negative Response*	216	(82.13)
Positive Response	47	(17.87)
TOTAL**	263	(100)

*Six negative responses were returned by residents along Cypress St. (west of the intersection of Harbor Blvd/Trask Ave.), which is beyond the 0.5 mile radius. Therefore, these responses are not shown on the map.

**58 surveys (all negative responses) were returned without an address indicated. Therefore, these responses are not shown on the map.

LEGEND

- Negative Response
- Positive Response
- ▲ Public Schools
- ▲ Pearce Street Pedestrian Overcrossing
- Local Streets
- State Route 22
- Survey Area

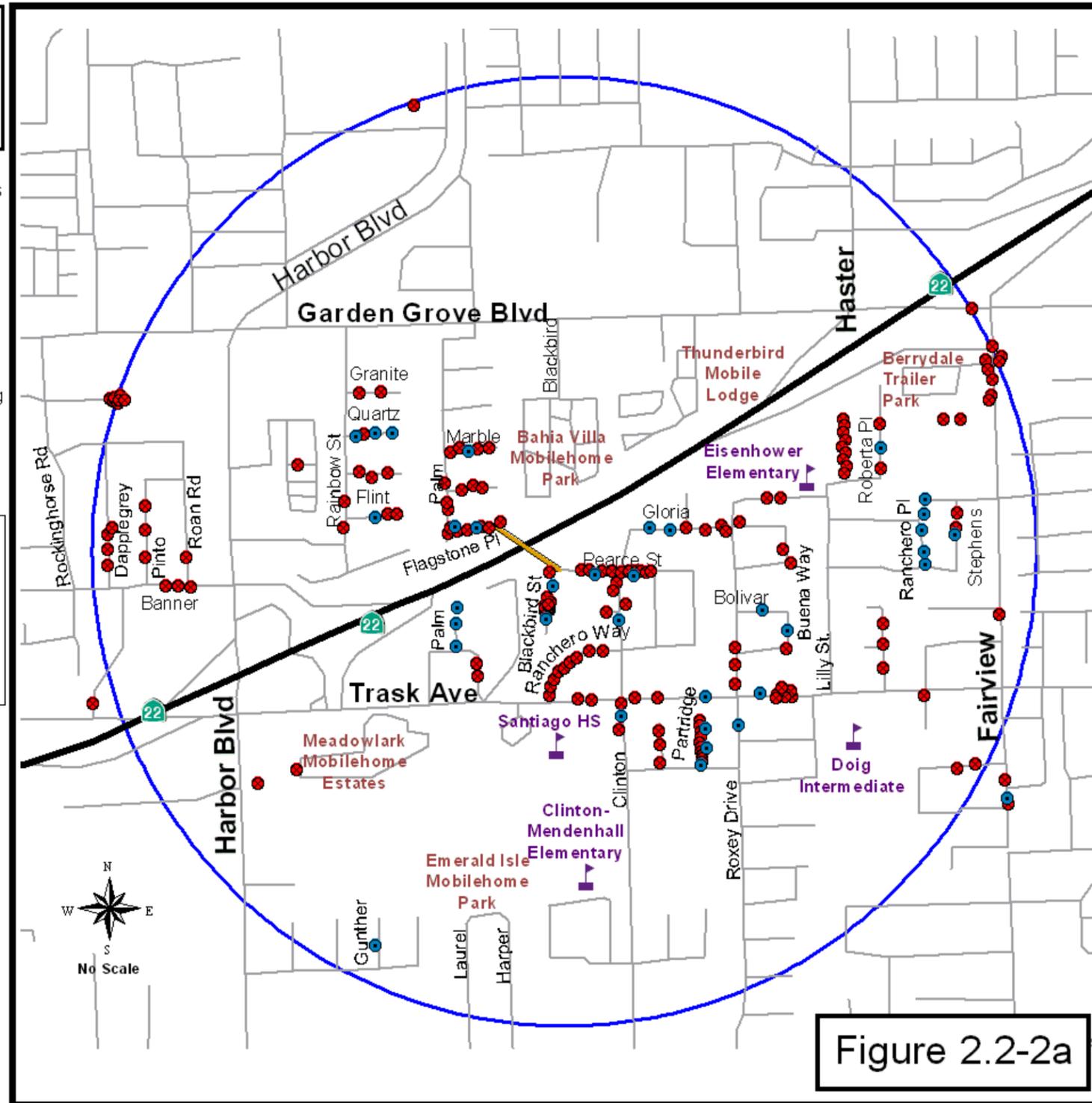
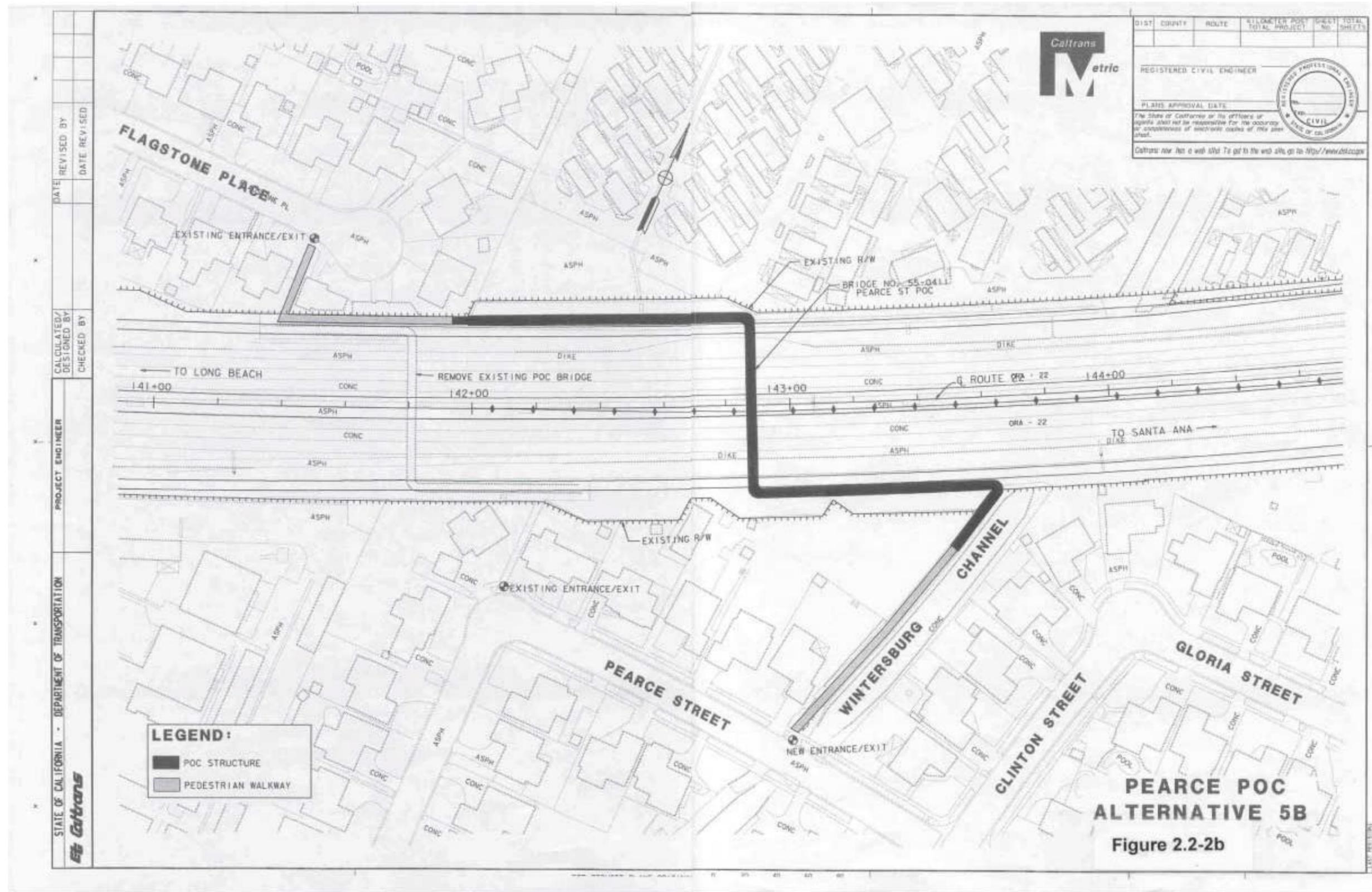


Figure 2.2-2a



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