

Appendix I Evaluation of Montecito Association's Proposal

As discussed in Chapter 4 of this document, Caltrans has provided numerous opportunities for community involvement and input since the beginning of the project development process for the South Coast 101 HOV Lanes project. In spring 2009, staff from Caltrans and the Santa Barbara County Association of Governments (SBCAG) began outreach efforts to communities such as Montecito, Summerland, Toro Canyon, Carpinteria, and Santa Barbara that would potentially be affected by the project. Various public scoping meetings were held in 2009. Once the community became aware of the upcoming project, the Montecito Association 101 subcommittee was formed. As part of the public outreach, Caltrans staff scheduled and held at least 10 meetings with the Montecito Association subcommittee between 2010 and 2012 (refer to Chapter 4 for a list of those meetings).

The draft environmental document was released in March 2012, and the comment period closed July 9, 2012. Although a comment letter was received from the Montecito Association within the allotted timeframe, the Montecito Association also submitted a proposal of two concepts for the Cabrillo Boulevard/Hot Springs Road Interchange in November 2012 and March 2013. To address the proposed concepts, Caltrans staff gave a Plan Evaluation and Findings PowerPoint presentation to the Santa Barbara County Association of Governments board on May 16, 2013.

Although the two concepts were submitted after the public comment period, Caltrans and Santa Barbara County Association of Governments staff felt it was in the best interest of the project and the community to review and discuss the Montecito Association concepts as part of this final environmental document. Note that these two concepts were also on the Common Sense 101/Community Coalition website.

This overview compares and explains certain elements of the Cabrillo Interchange configurations that were previously considered and dismissed by the team. One issue creating differing opinions was the existing left-hand on- and off-ramps at Cabrillo Boulevard and Sheffield Drive. Caltrans leadership considered whether to allow these ramps to remain but, based on stated policies and the present configurations of the ramps, determined that these left-hand ramps cannot remain. The Montecito Association on the other hand believes the left-hand ramps function fine as they are.

This appendix discussion explains how issues relative to the two interchanges were evaluated and why certain features were not carried forward.

The following are three components of the Montecito Association's Alternative Plan:

- Cabrillo Interchange Concept
 - Concept 1 (October 2012)
 - Concept 2 (May 2013)
- Sheffield Interchange Concept
- Elimination of HOV lanes in Montecito

The evaluation process for considering the Montecito's Alternative Plan consisted of:

- Developed concepts into working designs
- Designed horizontal and vertical alignments
- Applied engineering standards and principles

The stated goals of the Montecito Association's Alternative Plan are to:

- Solve the congestion problem—add a third lane
- Minimize time required for construction
- Minimize disruption impacts on local roads and regional businesses
- Spend the money wisely

Figure 1 shows the existing interchange



Figure 2 shows Concept 1

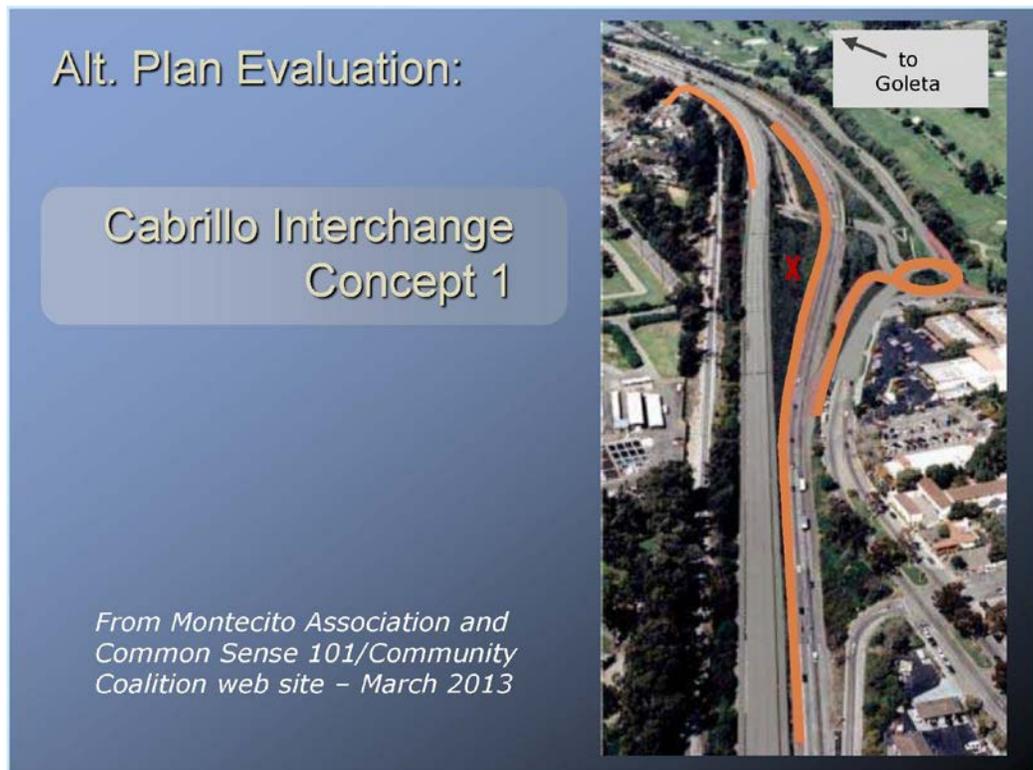
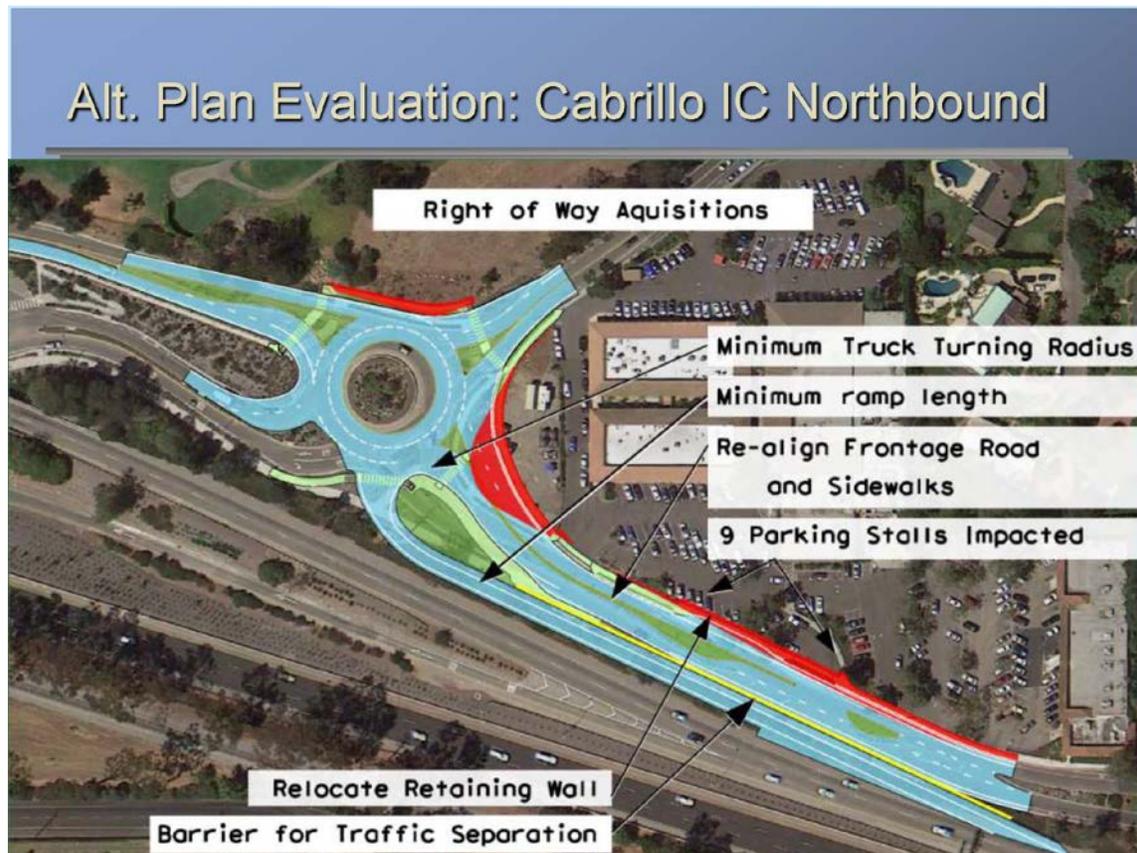


Figure 3 shows a graphic assessment of Concept 1



Concept 1 involves the roundabout, which required an additional iterative design and operational analysis. The conclusions of this analysis were as follows:

- The roundabout configuration shown above would result in unacceptable operations as the new off-ramp would queue or cause a backup of vehicles onto the mainline.
- This concept would require a larger roundabout configuration that provides increased spacing between entry points (refer to figure on next page).
- A larger roundabout that provides for adequate operations would result in extensive right-of-way impacts to the golf course and/or shopping center.

Figure 4 shows a close-up of the size of the roundabout and associated features



Figure 5 shows the existing Los Patos off-ramp conditions



Figure 6 shows the railroad bridge height constraints

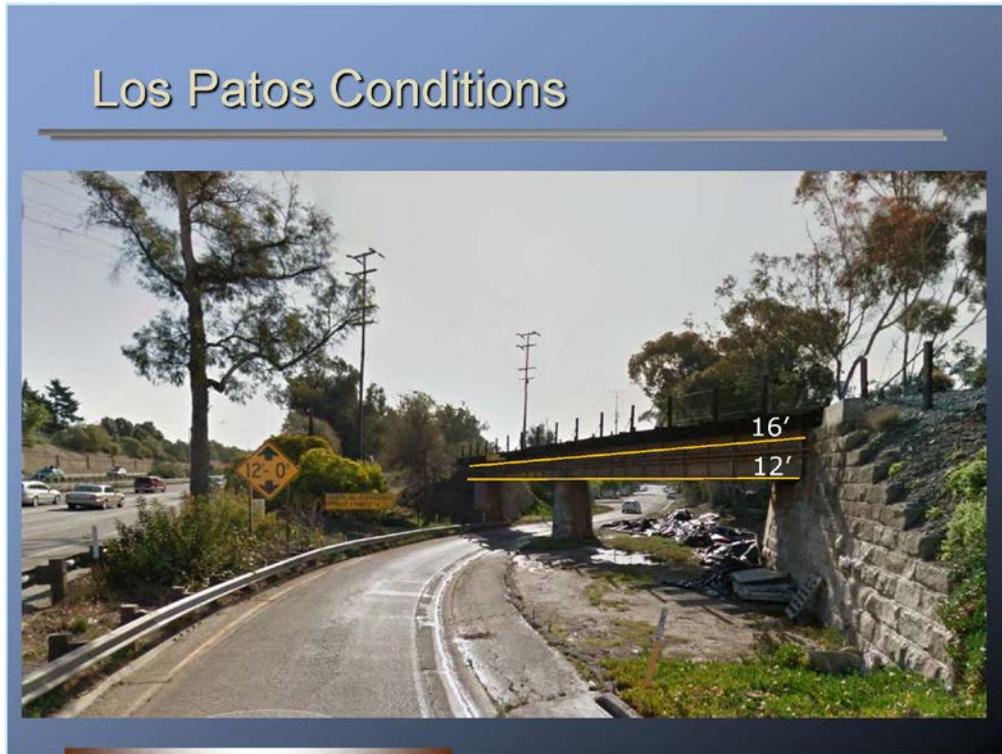


Figure 7 shows accidents caused by the low clearance of Los Patos Railroad Overcrossing



Figure 8 shows a Los Patos bridge concept



Figures 9, 10, and 11 show three concepts for the Los Patos on-ramp





Three ramp alignment options were evaluated. It was determined through this evaluation that a shift in the mainline lanes would be required to fit a ramp between the existing railroad structure abutments. This inland shift of the mainline lanes would move into the locations where the southbound left-side ramp currently exists.

Figure 12 shows a cost comparison - Montecito Association's Concept 1 versus F Modified

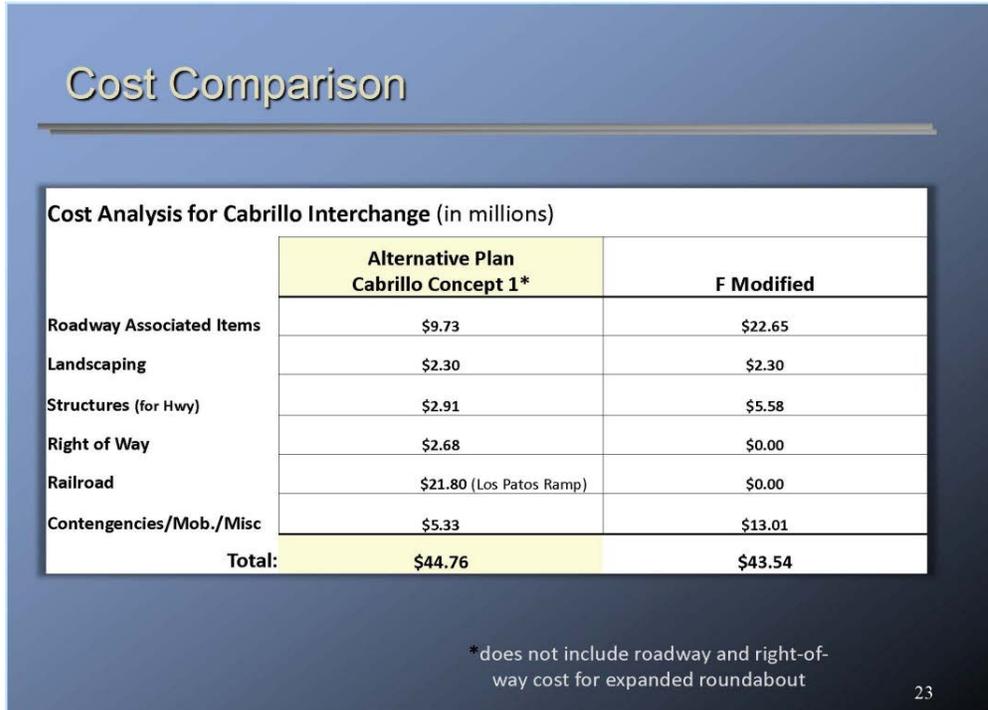
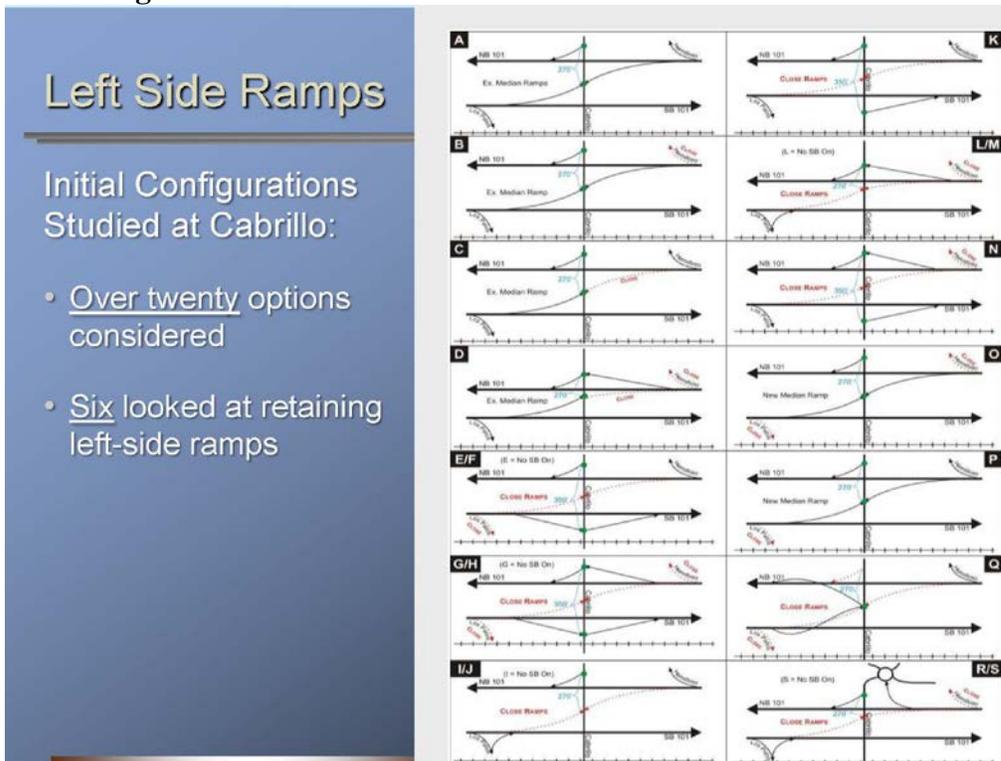


Figure 13 shows the configurations considered for Cabrillo Boulevard Interchange



Left-Side Ramps

In addition to the following, please refer to the fact sheet that is contained in Appendix L.

AASHTO's A Policy on Geometric Design of Highways and Streets, 2011: Extreme care should be exercised to avoid left-hand entrances and exits in the design of interchanges (p. 10-103)

California Department of Transportation, Highway Design Manual 2012: All freeway entrances and exits shall connect to the right of through traffic. (504.2)

As noted in the collision discussion in Section 2.1.5 of the final environmental document, the current left-side ramps at Cabrillo have a higher-than-average accident rate:

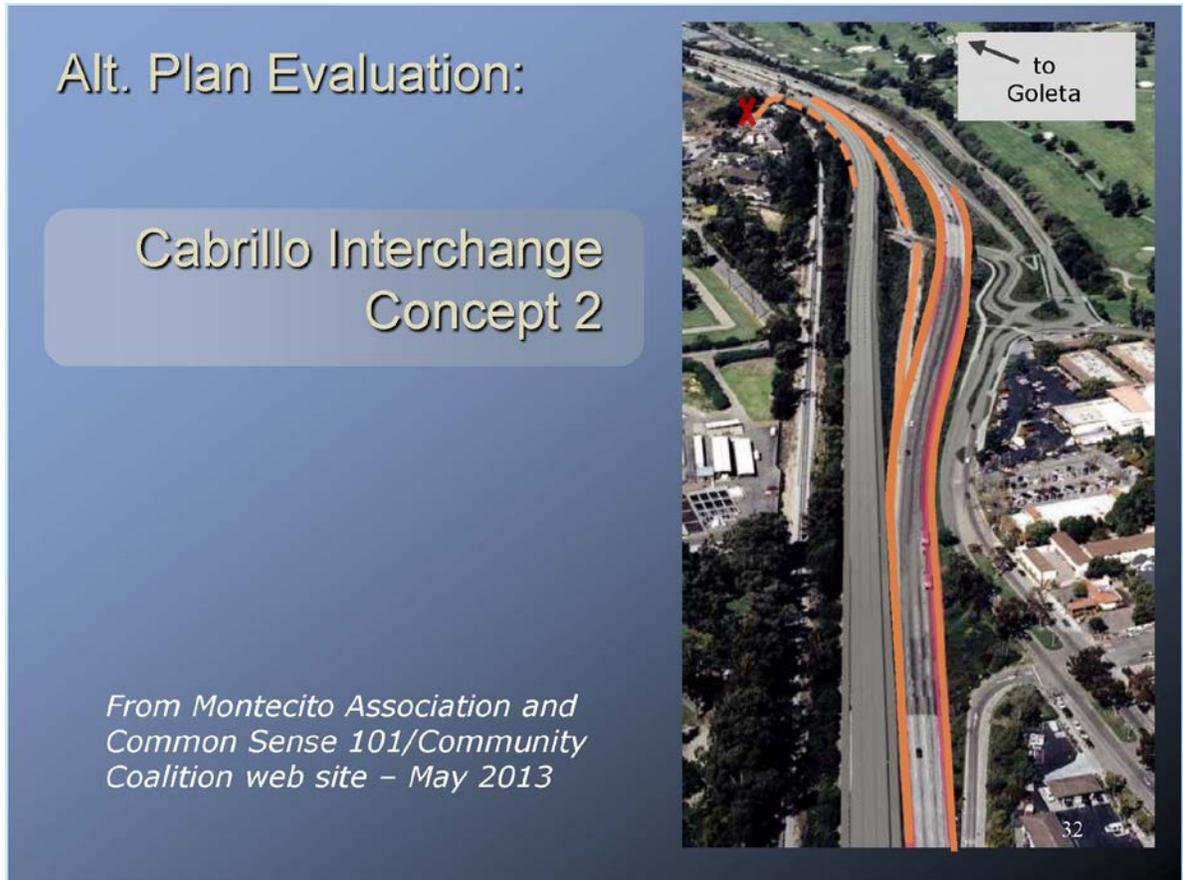
- Northbound Cabrillo left-side off-ramp: 35% higher than average (total collisions)
- Southbound Cabrillo left side off-ramp: 50% higher than average – over twice the average (injury accidents)

Caltrans' Findings for Cabrillo Interchange Concept 1

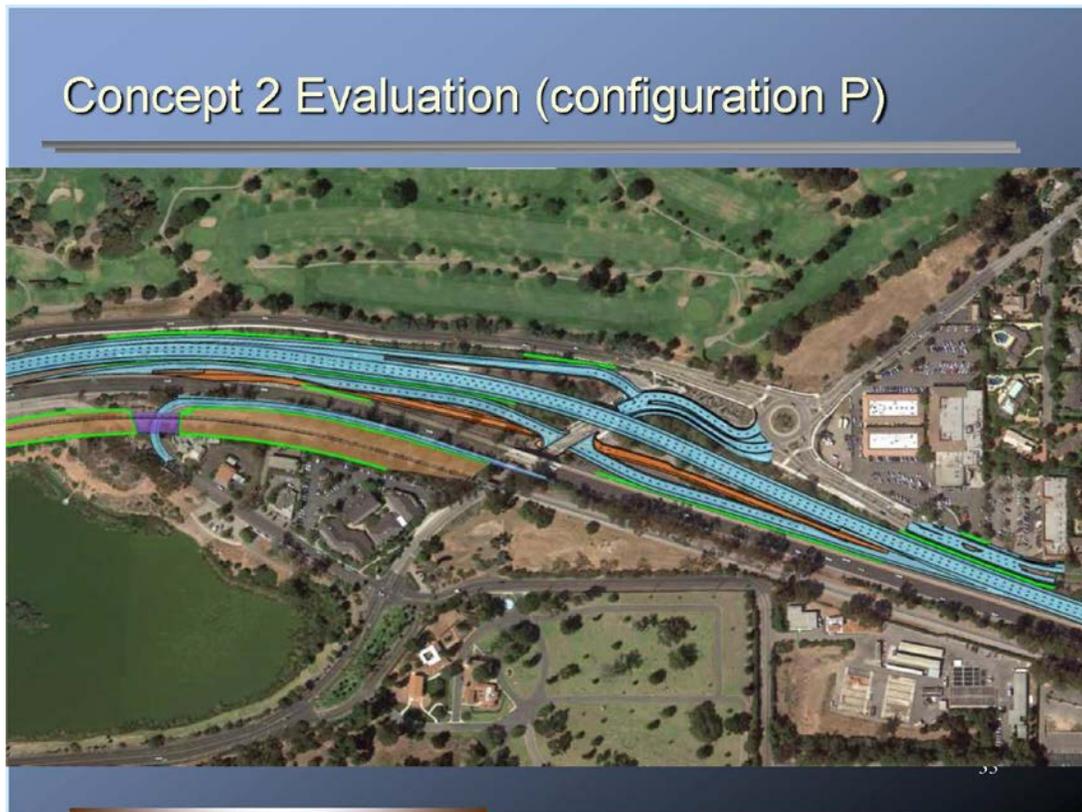
- Acquisition of private and commercial property would be required to reconstruct the roundabout.
- Union Pacific Railroad will not permit modifications at Los Patos as proposed by Montecito Association.
- Concept 1 would not result in cost savings.
- Left-side ramps cannot be retained due to safety and operational reasons (refer to Fact Sheet for left-side ramps in Appendix J)

Cabrillo Interchange Concept 2

Figure 14 shows the Montecito Association's proposal for Concept 2



This proposal is effectively the same as configuration P previously considered by the Project Development Team shown in Figure 15



Caltrans' Findings for Cabrillo Interchange Concept 2

- Concept 2 requires reconstruction of existing ramps.
- Concept 2 requires partial reconstruction of Coast Village Road.
- The order of magnitude costs: \$27 million.
- Adding a future southbound on-ramp would require railroad reconstruction and an on-ramp at Los Patos (+\$21 million = \$48 million).
- Left-side ramp user expectation, weave, and diverge issues remain.
- Total estimated construction duration would be approximately 28 months.

Cabrillo Interchange Construction Staging

Caltrans worked quickly to provide details for staging the construction of the F Modified configuration to address the following concerns raised by the community:

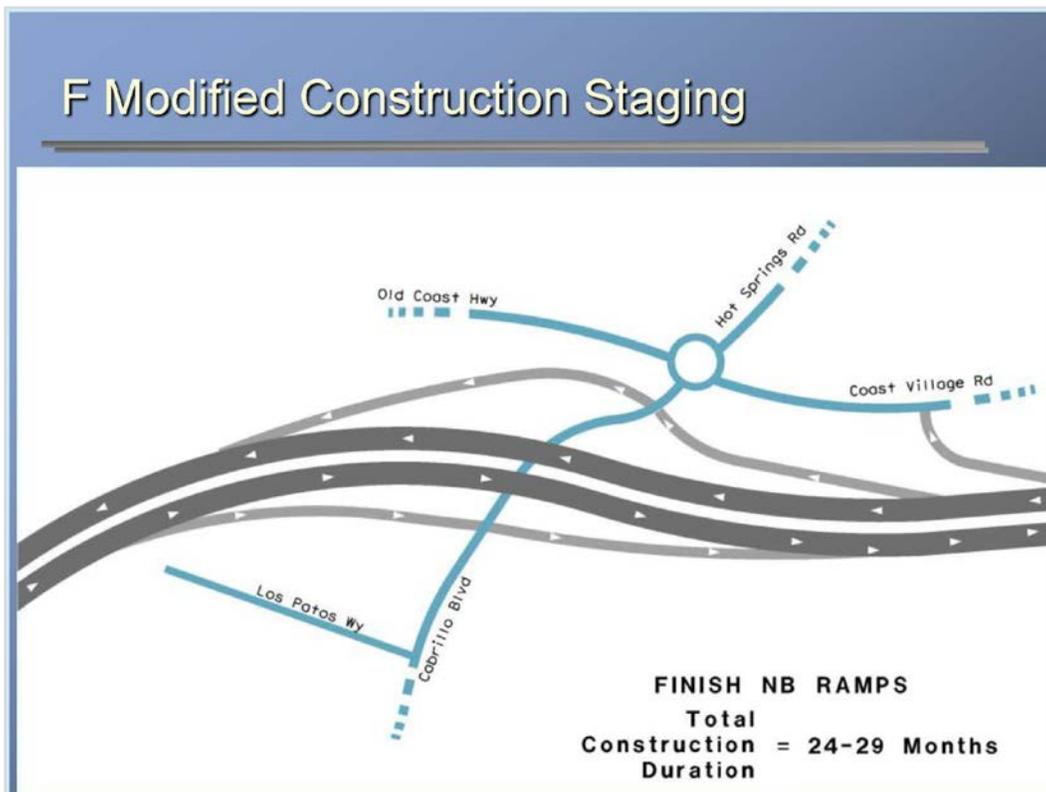
- Need for the freeway lanes and Cabrillo Boulevard to be open for traffic and emergency response.
- Need to limit extended ramp closures to avoid traffic diversions.

- Need to expedite construction duration and avoid lengthy construction impacts.

The details for the construction staging plans for F Modified are as follows:

- Two lanes would remain open on U.S. 101 in each direction except for intermittent nighttime lane closures.
- Cabrillo Boulevard would remain open except for intermittent nighttime lane closures.
- Access to and from Cabrillo Boulevard would be maintained.
- No traffic would be diverted to Los Patos Way.
- Hermosillo off-ramp would be the only northbound off-ramp for one month or less.
- The total construction duration would be 24-29 months.

Figure 16 shows the staging for constructing F Modified



Sheffield Interchange

Figure 17 shows the Montecito Association's Alternative Plan for Sheffield Interchange



Figure 18 shows the cross-section of the interchange, which is located in a constrained location



Figure 19 shows the layout required to retain the median planter

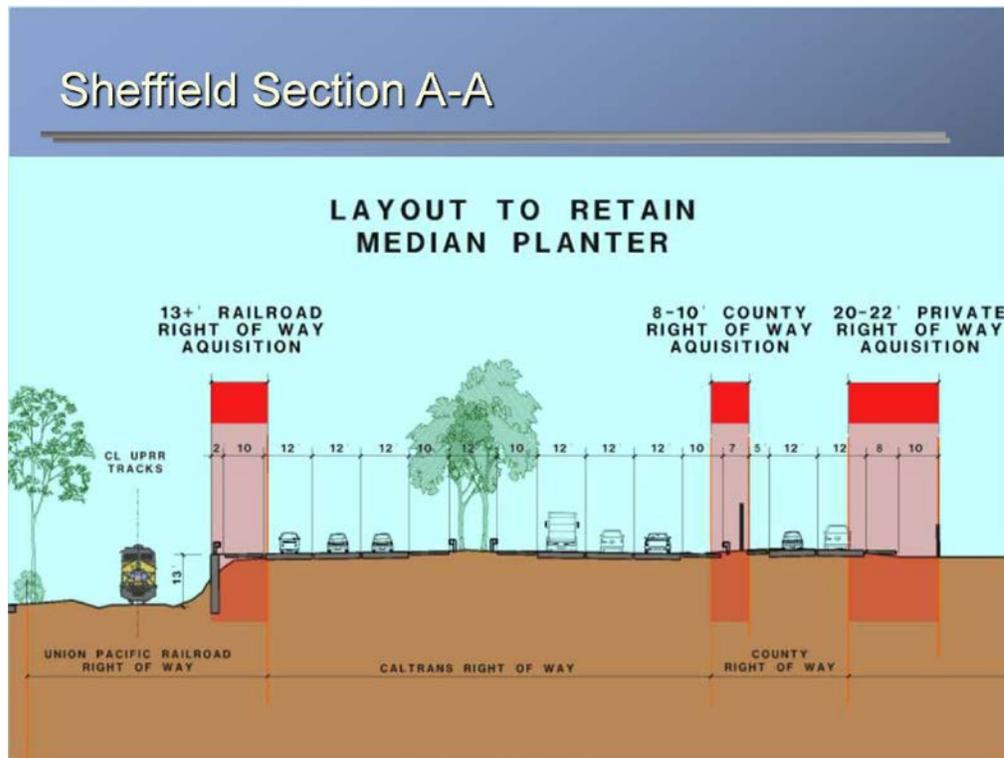


Figure 20 shows a cross-section of the Montecito Association's proposal for Sheffield; the design requires acquisition of 6 feet of railroad right-of-way

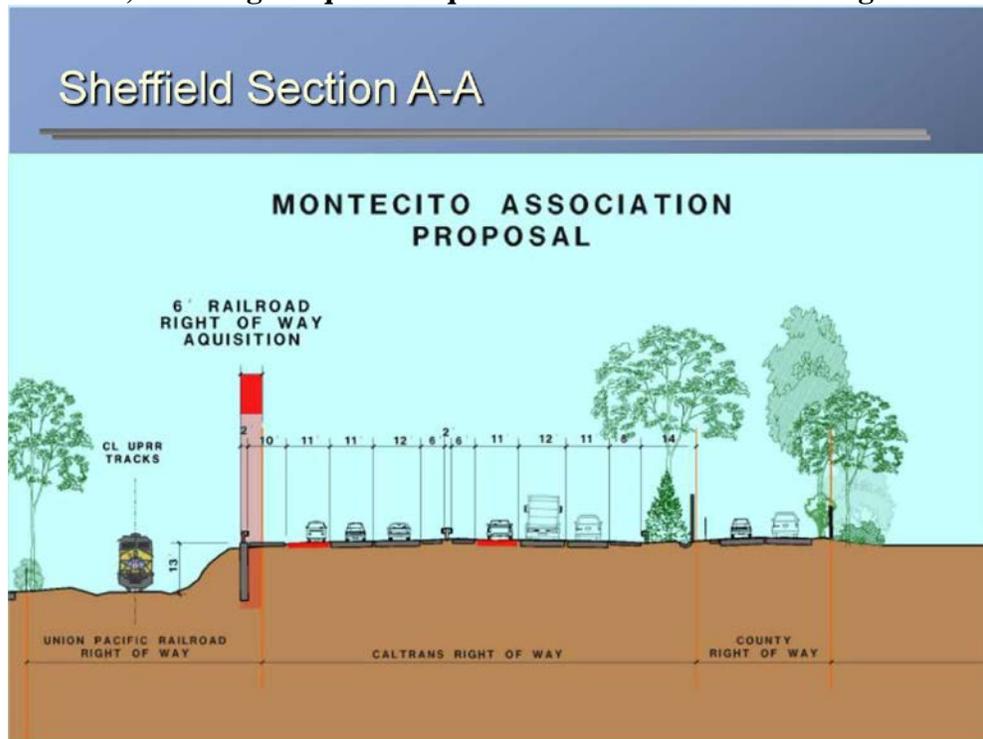
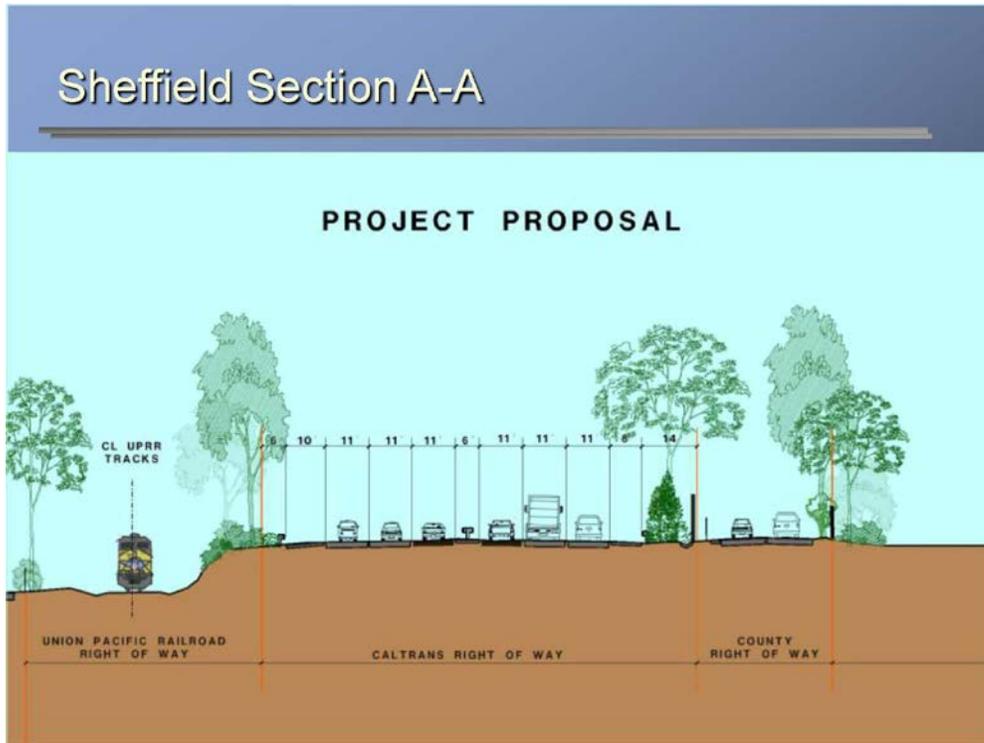


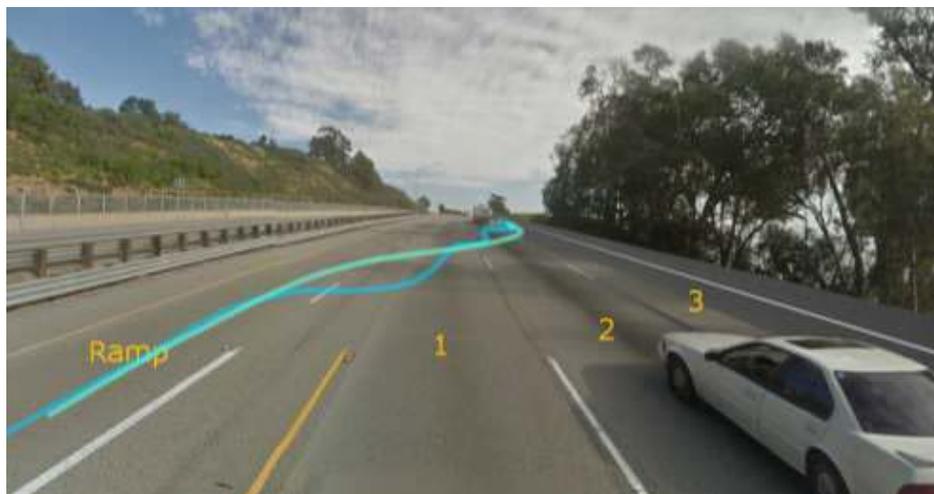
Figure 21 show the Caltrans proposal for Sheffield



Additional Considerations for Sheffield

Southbound Ramp Conditions:

- The existing southbound on-ramp enters from below the freeway on uphill grade into the fast lane.
- Spacing to Evans off-ramp - there is limited area for weaving between successive ramps.
- Left-side ramps - Added lane would exacerbate operational and safety issues.



Caltrans Findings for the Montecito Association Concept for the Sheffield Interchange

- Acquisition of property from Union Pacific Railroad is required.
- Median landscaping cannot be maintained without acquisition of private residential properties along North Jameson.
- Left-side ramps cannot be retained due to safety and operational reasons.

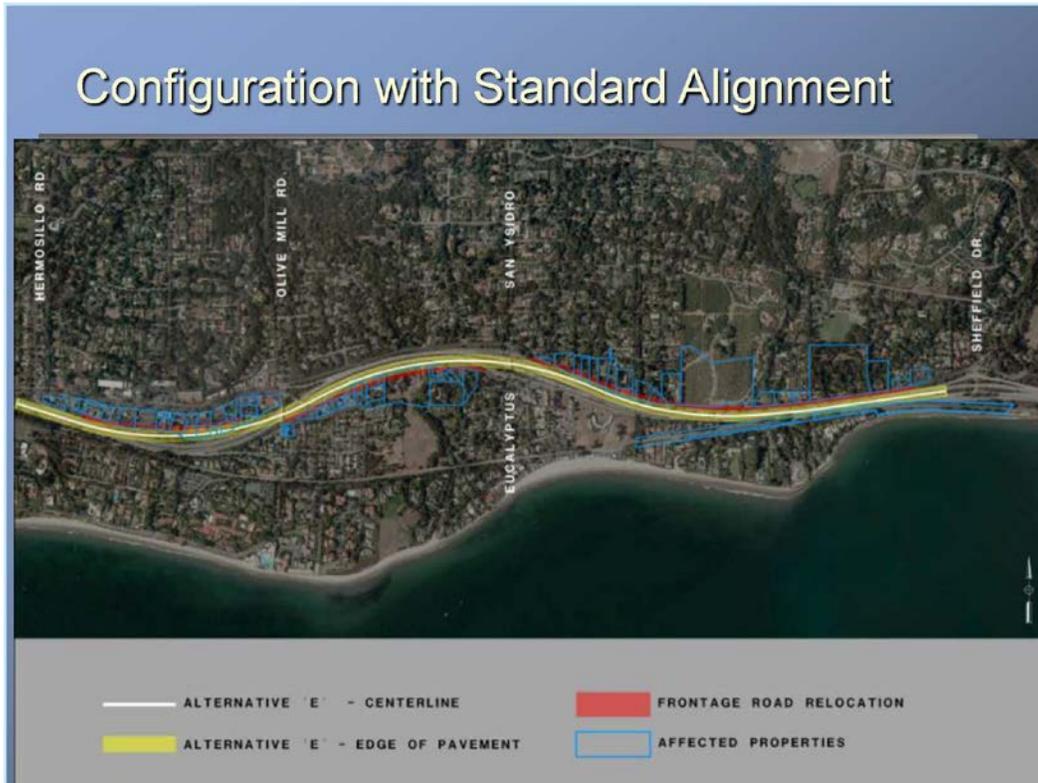
Figure 22 shows the Sheffield Interchange refinements made by Caltrans



Montecito Area Design Considerations Standard Alignment Summary (Alternative E)

- This configuration was evaluated early in the environmental phase by the Project Development Team
- The alternative would have:
 - Provided standard alignment.
 - Accommodated median planting.
 - Retained some nonstandard features.

Figures 23-26 show the Standard Alignment Configuration (Alternative E)

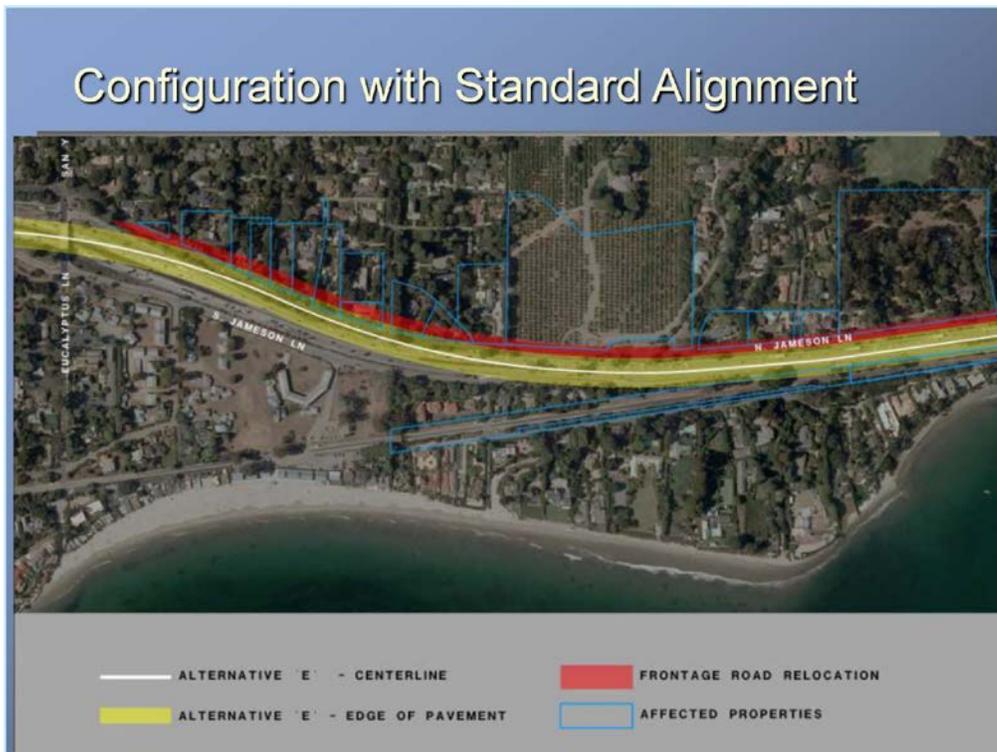


Configuration with Standard Alignment



Configuration with Standard Alignment





Summary of Caltrans' Evaluation of the Standard Alignment

Alternative E would have resulted in:

- Realignment of U.S. 101 and many frontage roads.
- Acquisition of over 50 private properties (some partial).
- Direct effects to historic properties.
- Conflicts with sensitive species and cultural resources.
- Significant loss of mature landscaping.
- Costs beyond the available funding (over \$700 million).

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