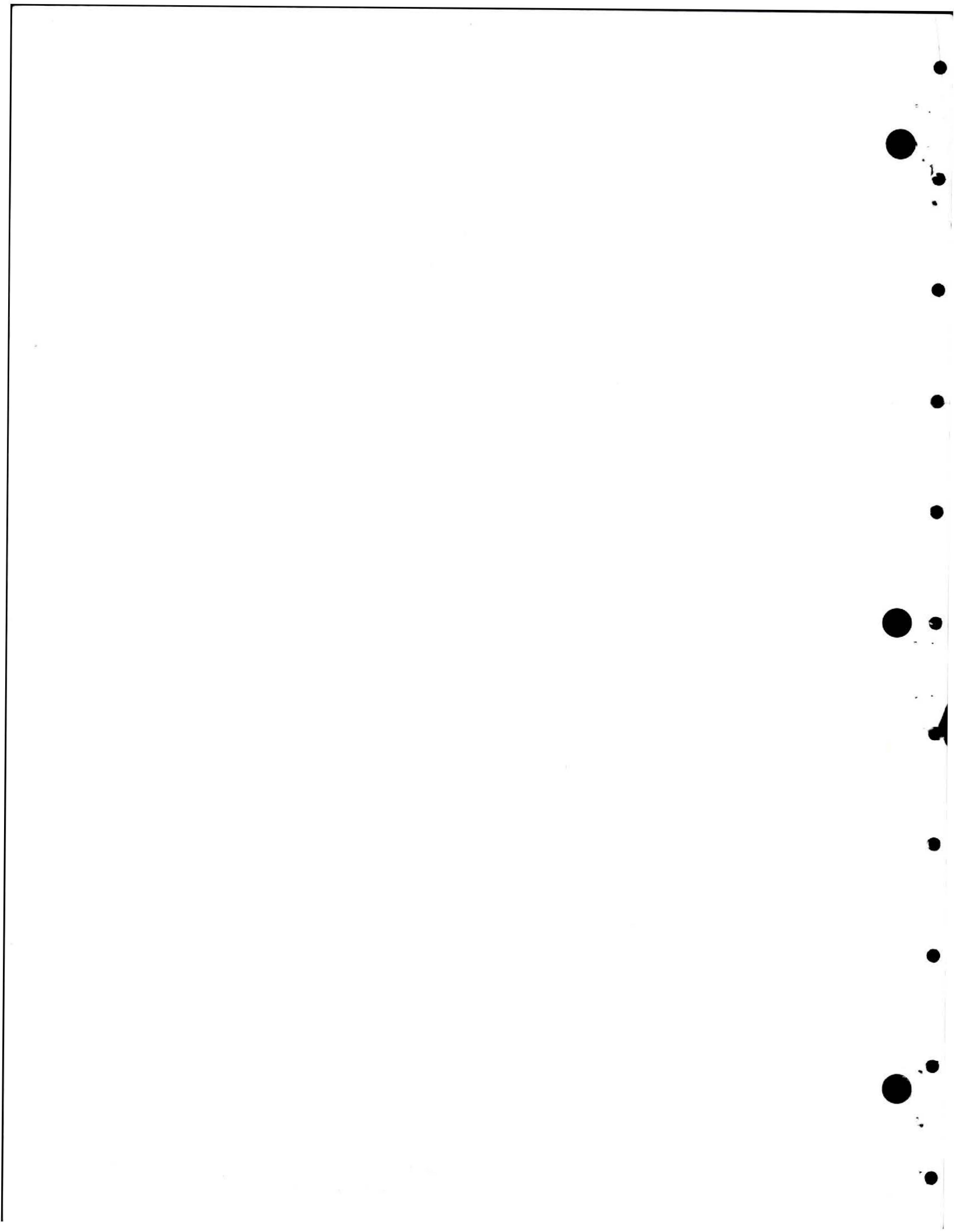


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# MITIGATION PLAN



MITIGATION MEASURES COMMITTED TO  
IN FEIS

MTA LIBRARY

Construction of a 1,200 foot long cut-and-cover tunnel in the vicinity of the South Pasadena High School will substantially reduce noise levels at the school and nearby residences. Noise barriers will not be needed in the immediate vicinity of the tunnel, except possibly at the tunnel portals; they will, however be built at other locations. Approximately 7.7 miles of soundwalls are recommended.

The total cost for noise barriers is \$10 million.

### 3. Socioeconomic

A Relocation Assistance Advisory Program has been developed to aid all residential displacees in locating decent, safe, and sanitary replacement housing units. It will compensate eligible displaced persons for certain costs incurred in relocation including moving costs, purchase supplement, rent supplement, down payment, and last resort housing. Residential replacement dwellings will be in equal or better neighborhoods at rents or prices within the financial means of the displacees, and reasonably accessible to their places of employment. The estimated cost for right-of-way acquisition and relocation is \$426.6 million.

Disruption of communities and neighborhoods will be lessened by maximizing vehicular and pedestrian circulation across the freeway, using a less intrusive depressed freeway design where feasible, and cut-and-cover tunnels at key residential locations. The Meridian Variation will include a cut-and-cover tunnel in the vicinity of South Pasadena High School and another over the northbound Route 110 to northbound route 710 connector adjacent to the Buena Vista District.

### 4. Historic Properties

Several measures will be used to mitigate the project's impacts on historic properties. These include the use of retaining walls and cantilevered overhangs to reduce right-of-way requirements, and the appropriate placement of freeway ramps. Certain excess parcels will be designated for the relocation of historic structures. Of the 51 historic residences displaced by the freeway, it is proposed to relocate and restore those 17 buildings possessing exceptional architectural distinction. Other measures to mitigate impacts on historic properties will be considered by Caltrans at the recommendation of a mitigation advisory group during the project design phase. The current cost estimate for mitigation of impacts on historic properties is \$26.4 million.

### 5. Construction Activities

Construction impacts will be mitigated by several methods. Freeway contractors will be required to control dust by applying water in the work area. Construction noise will be confined to

periods of normal human activity and by use of noise attenuation devices on machinery. Soil runoff will be prevented from entering flood control channels and drains by a system of dikes, settling basins, or other methods. Traffic and community disruption will be minimized by employing techniques such as staged construction, signalized detours, and confining haul routes to adjacent freeways and primary arterials.

#### 6. Seismic Events

To reduce the impact of a major seismic event on the freeway facility, each individual bridge structure will be designed to current standards to not collapse when subjected to the maximum credible seismic forces expected at its site. These forces would be those resulting from a maximum credible earthquake of Magnitude 7.5 on the San Fernando Fault or 7.5 on the Raymond Fault. The current bridge design standards include the use of hinge restrainers to hold together superstructure elements during extreme motions; heavy keys to limit relative transverse movement at superstructure expansion joints; increased seat widths at expansion joints and abutments to allow for seismic related longitudinal displacements; increased column lateral reinforcement to resist shear and confine flexural reinforcement; and highly ductile supports which allow considerable relative displacement of supports without danger of complete collapse.

#### 7. Hazardous Waste

No hazardous waste sites have been found along the recommended route. There are sites that have been identified using hazardous materials. These are typically private businesses or municipal facilities that use chemical solvents or have underground gasoline storage tanks. Preliminary site investigations so far indicate that there are no contamination problems with any of these facilities. The Department of Health Services has agreed to review Caltrans workplans and provide technical assistance where necessary.

In the event of previously unidentified hazardous waste being encountered during construction, all work in the area will be immediately suspended. Caltrans will work with the appropriate agencies to develop a plan to investigate the site and determine protective measures for public health and the environment.

#### 8. Hazardous Spills

Within Caltrans District 7, spill cleanup operations on freeways are coordinated by either the California Highway Patrol (CHP), local fire departments, or District 7 Maintenance branch, depending on who arrives on the scene first. Other public agencies or chemical firms are contacted to provide expertise for proper identification and decontamination processes.

Fire suppression and disposal of flammable materials are generally under the control of local fire departments. Flammable materials which are not in immediate danger of burning are picked up by vacuum trucks for disposal in Class I dump sites.

#### 9. Travel Through Tunnels

Because of public concern about the transportation of flammable liquids through tunnels, Assembly Bill (AB) 2457 was passed by the Legislature and approved by the Governor September 21, 1982. AB 2457 requires that prior to approving local regulations restricting or prohibiting the use of tunnels on state highways by authorized vehicles carrying flammable liquids Caltrans must hold public hearings and consult with the CHP. AB 2457 also authorizes Caltrans to adopt its own rules and regulations for tanker travel through tunnels, subject to the same public hearing and consultation process.

#### 10. Wildlife Habitat

The removal of thousands of cultivated trees and vegetation for freeway construction, particularly in the Monterey Hills area, will result in the loss of grasslands and wooded area that wildlife depends upon for support. This impact will be mitigated with the revegetation and planting required for erosion control and highway landscaping.

It is anticipated that excess material will be hauled to one of the exhausted quarry sites in Irwindale or Azusa, some 17 miles from the project site. Before these sites could be used, a biological assessment will be made. This is to ascertain any impacts on wildlife that may have become associated with standing water accumulated in the pits. A wildlife mitigation plan may be required.

#### 11. Businesses

Implementation of the Meridian Variation Alternative will result in the displacement of 23 businesses employing about 320 people. One of the displaced businesses is the South Pasadena Convalescent Hospital, employing about 100 people. All of these businesses will be eligible for the Business Relocation Assistance Program. In addition to providing current lists of properties suitable for relocation needs, certain types of payments will be available to businesses. These include moving expenses, personal property losses, site searching expenses, payment "in lieu" of moving expenses, and expenses for reestablishing business operations. (The estimated cost for business acquisition and relocation is included in the residential right-of-way cost estimate in Item 3 above.)

In addition to the above benefits, the South Pasadena Convalescent Hospital would be given special considerations. These include allowing an extended relocation period, with

usually one person being relocated at a time. Caltrans will assist the owner in relocation.

## 12. Visual Environment

The loss of cultivated landscaping resulting from project implementation would alter the view of several landscape units. This would be particularly true for the Monterey Hills Landscape Unit because of a side hill cut along the east slope of the Monterey Hills.

The loss of vegetation would be mitigated in the short term with revegetation required for erosion control. Long term mitigation would be attained with highway landscaping, which includes extensive revegetation and the planting of trees and shrubs. Highway landscaping would also serve to decrease the visual impact of the freeway on adjacent residents and freeway users. To insure that the freeway would be as aesthetically appealing as possible it will be depressed below ground wherever feasible, with soundwalls and cut-and-cover tunnels at key locations. The estimated cost of the two tunnels is approximately \$32.5 million. A mitigation advisory group will also be consulted during the project design phase to determine the need for other aesthetic impact mitigation measures.

## 13. Advisory Group

During design refinement activities there will be many opportunities for further reducing environmental impacts. In order to capitalize on these opportunities, an advisory group will be formed to provide recommendations about other possible mitigation measures to Caltrans. Invitations for participation in this advisory group will be extended to local governments and other parties directly affected by the project. The final mitigation plan will be subject to FHWA approval.

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ROUTE 710 MITIGATION ADVISORY  
COMMITTEE



ROUTE 710 PROJECT MITIGATION COMMITTEE CHARTER

PURPOSE

The Final EIS for Route 710 identifies the Meridian Variation Alignment as the preferred alternative. The FHWA approved the Final EIS as adequate for public disclosure of information on the preferred alternative regarding potential impacts and proposed mitigation as required by the National Environmental Policy Act (NEPA). However, because of the controversy surrounding the project and the magnitude of the impacts relating to potential community disruption, residential relocation, business dislocation, and harm to cultural resources, the FHWA has not approved the final project concept and location for the preferred alternative. The FHWA will not consider approving the project concept and location and issuing a Record of Decision until after the recommendations of the Mitigation Committee are developed and considered for the preferred alternative.

The Mitigation Committee is being established to develop more comprehensive mitigation and enhancement measures to reduce further the impacts of the project. It will focus its efforts on both the mitigation and enhancement measures mentioned in the Final EIS and on the identification and development of appropriate additional mitigation and enhancement opportunities which will minimize the facility's "footprint" through the environmentally and historically sensitive areas the project traverses.

MEMBERSHIP

The Mitigation Committee will consist of a professional facilitator, the National Trust for Historic Preservation, and the four mayoral representatives from the Cities of South Pasadena, Pasadena, Los Angeles, and Alhambra plus four citizen representatives, one each from South Pasadena, Pasadena, Alhambra, and El Sereno; a representative from the Executive Director of the Los Angeles County Transportation Commission and the Executive Director of the Southern California Association of Governments.

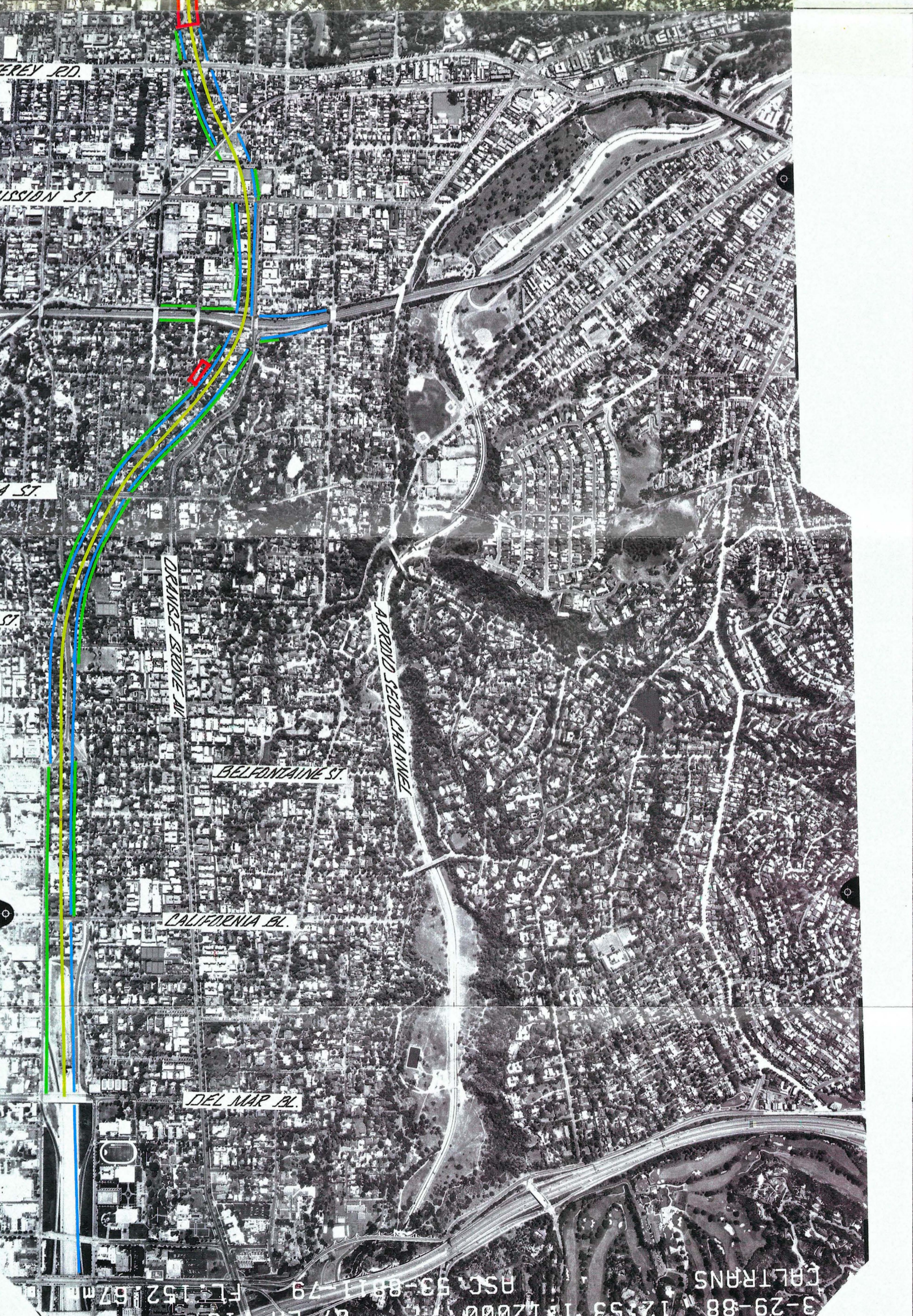
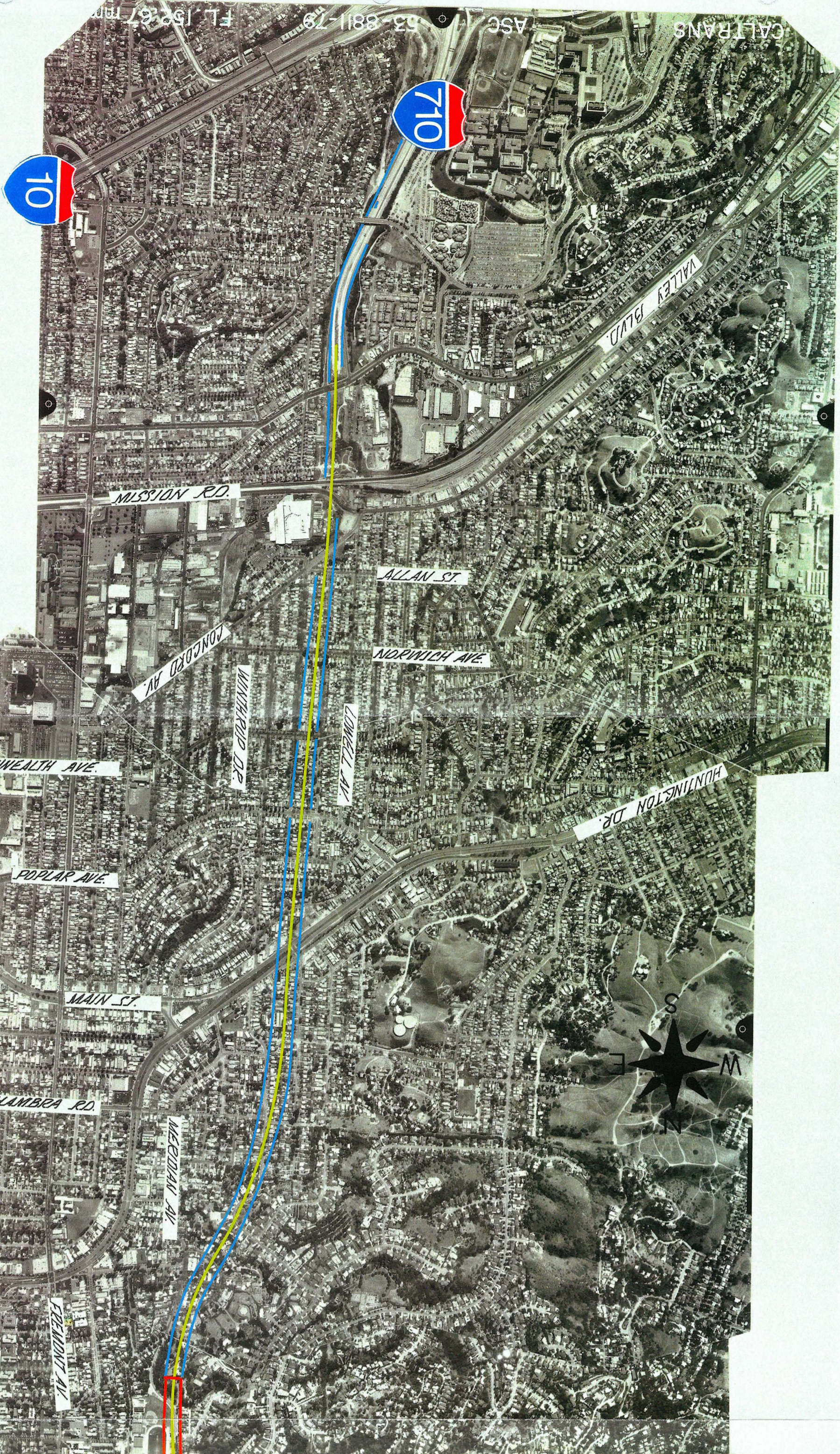
Caltrans and the FHWA will each be ex-officio members of the Committee.

COMMITTEE OPERATIONS

The Committee shall make its recommendations by consensus, by majority vote, or by whatever process that the Committee deems appropriate. The Committee may consider information from any source which the Committee believes to be of use in formulating its recommendations to Caltrans, although it is not contemplated that the Committee will hold additional public hearings.

FINAL PRODUCT

Caltrans shall submit a report to the FHWA within four months from the date of formation of the Mitigation Committee. The report should include the results and recommendations of the Committee and Caltrans' response to the recommendations. The Committee's duties will cease upon submittal of its final report. However, Caltrans may reconvene the Committee to provide continuing advice to Caltrans on mitigating the efforts of the 710 Project.

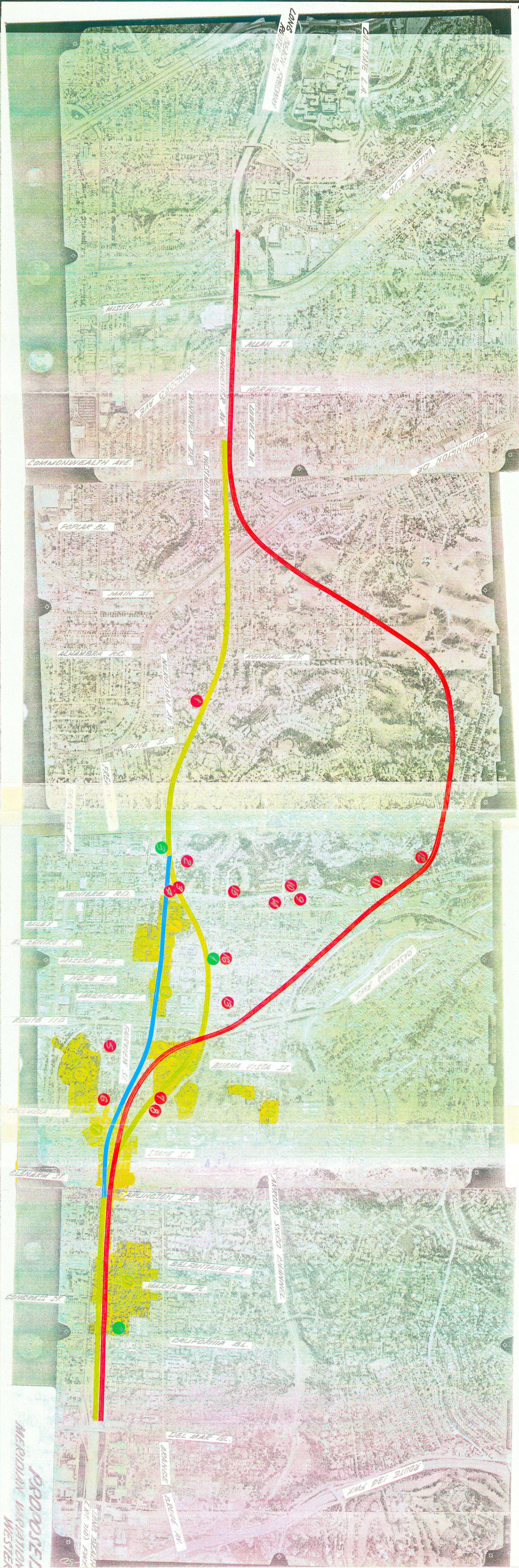


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**LEGEND**  
 RETAINING WALL  
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**MITIGATION MEASURES ROUTE 710**

FL 152.67m



**LEGEND**

**HOUSE**

- 1 GROKOWSKY HOUSE
- 2 WYNVALE
- 3 PIERCE HOUSE
- 4 921 MONTEREY ROAD
- 5 GROSSE HOUSE
- 6 SHERRY HOUSE
- 7 THOMSON HOUSE
- 8 RIGGINS HOUSE
- 9 NEWBERG HOUSE
- 10 GATES HOUSE
- 11 DIETERLE HOUSE
- 12 MARVIN HOUSE
- 13 658 GRAND AVENUE
- 14 1102 INDIANA AVENUE
- 15 BILCKE HOUSE
- 16 BARANGER STUDIOS

**PARK AREAS**

- 1 ORANGE GROVE PARK
- 2 SINGER PARK
- 3 SOUTH PASADENA HIGH SCHOOL AND PLAYING FIELD

**HISTORIC DISTRICTS**

- 1 SOUTH OF MISSION DISTRICT
- 2 SOUTH PASADENA HISTORIC BUSINESS DISTRICT
- 3 NORTH OF MISSION DISTRICT
- 4 BUENA VISTA DISTRICT
- 5 PROSPECT CIRCLE DISTRICT
- 6 OAK LAWN DISTRICT
- 7 PASADENA AVENUE DISTRICT
- 8 MARBHAM PLACE DISTRICT
- 9 HILLSIDE ROAD DISTRICT
- 10 GRAND AVENUE NORTH DISTRICT
- 11 ARROYO SQUARE DISTRICT

**ROUTES**

- 1 WESTERLY CORRIDOR
- 2 MERIDIAN VARIATION
- 3 MERIDIAN ALTERNATIVE

**PROPOSED ROUTE 710 EXTENSION**  
**MERIDIAN VARIATION, MERIDIAN ALTERNATIVE AND**  
**WESTERLY CORRIDOR**  
 FIGURE X-40