

PEYTON DRIVE WIDENING PROJECT



Draft Environmental Assessment/ Initial Study

Along Peyton Drive 2.4 kilometers (1.5 mile) and along proposed Eucalyptus Avenue
extension 0.55 kilometers (0.34 mile) west of the Peyton Drive/Eucalyptus Avenue
Intersection

EA #: 08-924837

Federal ID #: STPL - 5467(004)

July 2007



General Information About This Document

What's in this document?

This document is an Environmental Assessment/Initial Study (EA/IS), which examines the potential environmental impacts of alternatives for the proposed project located in the City of Chino Hills, County of San Bernardino, California. The document describes why the project is being proposed, alternative methods for constructing the project, the existing environment that could be affected by the project, and potential impacts from each of the alternatives.

What you should do:

- Please read this EA/IS. Additional copies of this document as well as the technical studies are available for review at the City of Chino Hills, 2001 Grand Avenue, Chino Hills, California 91701 and the James S. Thalman Chino Hills Branch Library located at 2003 Grand Avenue, Chino Hills, California 91709.
- We welcome your comments. If you have any concerns regarding the proposed project, please send your written comments to the City of Chino Hills by the deadline. Submit comments via regular mail to: Ms. Anne Dutrey, 2001 Grand Avenue, Chino Hills, California 91701; submit comments via email to adutrey@chinohills.org.
- Submit comments by the deadline: **August 16, 2007.**

What happens after this?

After comments are received from the public and reviewing agencies, the City of Chino Hills (City), California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), may (1) give environmental approval to the proposed project, (2) undertake additional environmental studies, or (3) abandon the project. If the project were given environmental approval and funding were appropriated, the City could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to: City of Chino Hills, Attn: Ms. Anne Dutrey, 2001 Grand Avenue, Chino Hills, California 91709; 909-364-2600 or 909-364-2794 (fax).

Peyton Drive Widening Project
City of Chino Hills, County of San Bernardino, California

**DRAFT ENVIRONMENTAL ASSESSMENT/
INITIAL STUDY**

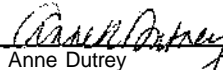
Submitted Pursuant to: (State) Division 13, Public Resources Code
(Federal) 42 USC 4332(2)(C)

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration and
THE STATE OF CALIFORNIA
Department of Transportation

Sponsoring Agency:
CITY OF CHINO HILLS

3/26/01

Date of Approval



Anne Dutrey
City Senior Engineer/
City of Chino Hills

3/30/01

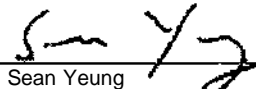
Date of Approval



Alicia Colburn
Environmental Branch Chief, District 8
California Department of Transportation

4/3/2007

Date of Approval



Sean Yeung
District Local Assistance Engineer
Transportation Planning Local Assistance District 8
California Department of Transportation

6/5/07

Date of Approval



George K. Fong
Division Administrator
Federal Highway Administration

ABSTRACT

The City of Chino Hills, in cooperation with FHWA and Caltrans, propose to improve circulation along Peyton Drive from Grand Avenue, south to Chino Hills Parkway, and to extend Eucalyptus Avenue from its current T-intersection terminus at Peyton Drive, 160-meters (530-feet) west. Implementation of the 3.0-kilometer (1.84-mile) proposed project would provide roadway improvements consistent with the *City of Chino Hills General Plan* Circulation Element. Proposed improvements generally consist of widening portions of Peyton Drive from Grand Avenue south to Chino Hills Parkway, extending Eucalyptus Drive from its current T-intersection terminus to 160-meters (530-feet) to the west, storm drain improvements along Peyton Drive, and a crossing of the English Canyon Channel near the intersection of Eucalyptus Avenue and Peyton Drive.



Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The City of Chino Hills, in cooperation with the FHWA and Caltrans, propose to widen Peyton Drive between the limits of Grand Avenue at the northern end and Chino Hills Parkway/SR-142 at the southern end. The project will include widening Peyton Drive to six lanes from Eucalyptus Avenue north to Grand Avenue and to four lanes from Eucalyptus Avenue south to Chino Hills Parkway/SR-142. The project will also include storm drain improvements along Peyton Drive and a crossing of the English Canyon Channel near the intersection of Eucalyptus Avenue and Peyton Drive. Additionally, the project includes the extension of Eucalyptus Avenue from its current T-terminus at Peyton Drive to its existing terminus approximately 160-meters (m) (530-feet [ft]) to the west. These improvements to Eucalyptus Avenue are proposed to be a two-lane road matching the cross section that exists today east of Peyton Drive. These improvements to Eucalyptus Avenue and related impacts were addressed in an EIR certified by the City, are consistent with the City's General Plan Circulation Element, and would reduce neighborhood impacts by reducing or eliminating through traffic. This project is proposed to relieve future (year 2030) traffic conditions within the limits of the improvements and provide overall circulation enhancement within the City of Chino Hills.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the City's intent to adopt an MND for this project. This does not mean that the City's decision regarding the project is final. This MND is subject to modification based on comments received by interested agencies and the public.

The City has prepared an Initial Study (IS) for this project and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The project will not significantly induce population growth that would generate new traffic.
- The project will not have a significant encroachment within a 100-year floodplain, or affect surface and groundwater quality.

- The project will not have a significant effect upon energy consumption, either during construction or operation.
- No parklands, recreational facilities or culturally significant properties or sites would be disrupted by the project.
- After mitigation, the overall impact on sensitive biological species and habitat that supports wildlife resources will not be significant.
- Mitigation measures will be implemented during construction to reduce air quality impacts.
- After mitigation, no significant traffic noise or visual impacts will occur.

The proposed project would have no significantly adverse effect on Land Use; Community Impacts; Utilities/Emergency Services; Traffic Transportation/Pedestrian and Bicycle Facilities; Visual/Aesthetics; Cultural Resources; Paleontological Resources; Hydrology and Floodplain; Water Quality and Stormwater Runoff; Geology; Soils and Seismicity; Hazardous Waste/Materials; Air Quality; Noise; Natural Communities; Wetlands and Other Waters; Plant Species; Animal Species; or Threatened and Endangered Species because the following mitigation measures would reduce potential effects to insignificance:

- LU1.** Final engineering plans shall specify that no construction staging or stockpiling of materials or equipment shall occur on-site at the Ruben S. Ayala High School.
- LU2.** Access to all school facilities shall be maintained throughout the duration of construction activities. Appropriate construction signage and access shall be provided to route pedestrians, staff, and patrons safely around construction. Crossing guards shall be located near Ayala High School when construction impacts the movement of students to ensure student safety.
- LU3.** The City of Chino Hills Police Department and Chino Hills Independent Fire Department shall be notified and supplied with construction plans before the construction begins. Such information shall include traffic management plans, referring to temporary street closures of adjacent streets and any other restrictions that may be necessary while the project is being completed. The high school shall be informed of traffic lane closures and closed drop-off zones to ensure safe arrival and departure of students.
- COM1.** The Uniform Relocation Assistance and Real Property Acquisitions Policies Act (Uniform Act) of 1970 (Public Law 91-646, 84 Stat. 1894)

mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced by its projects. The Act provides for uniform and equitable treatment by Federal or Federally assisted programs of persons displaced from their homes, businesses, or farms, and establishes uniform and equitable land acquisition policies. The City of Chino Hills will provide affected property owners with a copy of the Uniform Act.

COM2. When acquisitions and relocations are unavoidable, the provisions of the Uniform Act and the 1987 Amendments as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for the Federal and Federally assisted programs adopted by the Department of Transportation, dated March 2, 1989, would be followed. An independent appraisal of the affected property will be obtained, and an offer for the full appraisal will be made.

COM3. The Uniform Act requires that comparable, decent, safe, and sanitary replacement housing that is within a person's financial means be made available before that person may be displaced, in the event that such replacement housing is not available to "re-house" persons displaced by the project within statutory limits for replacement housing payments, "last resort" housing may be provided in a number of prescribed ways.

UTL1. Prior to commencement of construction, the Project Engineer shall coordinate with all affected utility purveyors to establish exact procedures and specifications for all facilities to be relocated during construction. Additionally, the Project Engineer shall notify other service purveyors in the vicinity of the improvements to verify that the proposed activities will not disrupt services to the community.

TRF1. Short-term mitigation to roadway use shall be mitigated by a Traffic Management Plan (TMP) to be established by the project contractor and approved by the City of Chino Hills prior to construction of any improvements. This TMP shall consist of prior notices, adequate sign-posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (prior notices, sign-posting, detours, etc.) as determined appropriate by the City of Chino Hills. Adequate local and emergency access shall be provided at all times to adjacent uses, including schools. Proper detours and

warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

AES1. Prior to approval of final design plans and prior to construction, the City shall coordinate with the affected residents to ensure that all screening and privacy concerns have been addressed and reasonable landscape and architectural treatment measures have been incorporated into the project design to achieve sufficient screening of the project. The landscape design plan shall be developed by a qualified landscape architect. The landscape plan shall also establish areas within the roadway right-of-way (ROW) that allow for incorporation of replacement landscaping.

WQ1. The project is required to meet stormwater management regulations. The City of Chino Hills National Pollutant Discharge Elimination System (NPDES) permit number is CAS618036, Order Number R8-20020012. A copy of the Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and Monitoring Plan shall be submitted to the City Engineer a minimum of thirty days prior to commencing grading operations. The SWPPP shall emphasize structural and non-structural Best Management Practices (BMPs) in compliance with NPDES requirements.

GEO1. Prior to final plan approval, a site-specific geotechnical study shall be prepared by a registered civil engineer or certified engineering geologist who has competence of seismic hazard evaluation and mitigation. The geotechnical report shall contain site-specific evaluations of the seismic hazards affecting the project site; identify portions of the project site containing seismic hazards; and identify any known off-site seismic hazards that could adversely affect the site in the event of an earthquake.

HIS1. Paleontologic monitors should be equipped to salvage fossils as they are unearthed, to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens.

- HIS2.** The development of a preparation process of recovered specimens for identification and permanent preservation that includes washing of sediments to recover small invertebrates and vertebrates.
- HIS3.** Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage (e.g., the SBCM). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not considered complete until such curation into an established museum repository has been fully completed and documented.
- HIS4.** The preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, would signify completion of the program to mitigate impacts to paleontologic resources.
- HIS5.** hi areas of potential but unknown sensitivity, field surveys prior to grading shall be required to establish the need for monitoring.
- HIS6.** Projects requiring grading plans that are located in areas of known fossil occurrences on the overlay, or demonstrated in a field survey to have fossils present, shall have all rough grading (cuts greater than 0.9-m [3-ft]) monitored by trained paleontologic crews working under the direction of a qualified professional so that fossils exposed during grading can be recovered and preserved. Fossils include large and small vertebrate fossils, the latter recovered by screen washing of bulk samples.
- HZ1.** Areas of exposed soils 4.5-m (15-ft) from the edge of existing pavement which will be disturbed during excavation activities should be sampled and tested for lead prior to construction. These samples should be collected prior to the issuance of Plans, Specifications, and Estimates (PS&E) for the project, so that any special handling, treatment, or disposal provisions associated with aurally-deposited lead may be included.
- HZ2.** Should construction activities result in the removal of yellow paint or thermoplastic traffic stripes, the generated wastes must be disposed of to an appropriate permitted disposal facility.

HZ3. Any demolition of existing buildings must comply with State law, which requires a contractor, where there is asbestos-related work involving 30.3-square m (100-square ft) or more of asbestos containing materials (ACMs), to be certified and that certain procedures regarding the removal of asbestos be followed.

HZ4. It is recommended that the landfill operator be contacted in advance to determine any specific requirements of the landfill regarding the disposal of lead-based paint materials.

HZ5. If unknown wastes or materials are discovered during construction or demolition by the project contractor which he/she believes may involve hazardous waste or materials, the contractor shall:

- Immediately stop work in the vicinity of the suspected contaminant, and remove workers and the public from the area;
- Notify the Project Engineer of the implementing agency;
- Secure the area as directed by the Project Engineer; and
- Notify the implementing agency's Hazardous Waste and Materials Coordination entity.

AQ1. The construction contractor shall adhere to the requirements of the South Coast Air Quality Management District (SCAQMD) rules and regulations on cutback and emulsified asphalt paving materials.

AQ2. The construction contractor shall adhere to the requirements of SCAQMD Rule 403 to reduce fugitive dust emissions. The Best Available Control Measures (BACMs) and Reasonably Available Control Measures (RACMs) specified in the SCAQMD's Rule 403 Implementation Handbook shall be incorporated into project construction.

AQ3. City's Standard Construction Specifications shall be adhered to in order to reduce emissions.

AQ4. Construction contractor shall select the construction equipment used on site based on low emission factors and high energy efficiency. The contractor shall ensure that construction grading plans include a statement that all

construction equipment shall be tuned and maintained in accordance with the manufacturer's specifications.

AQ5. The construction contractor shall utilize electric or diesel-powered equipment in lieu of gasoline powered engines where feasible.

AQ6. The construction contractor shall ensure that construction grading plans include a statement that work crews will shut off equipment when it is not in use.

AQ7. The construction contractor shall time the construction activities so as not to interfere with peak-hour traffic and to minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.

AQ8. The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

N1. The City of Chino Hills limits the hours of construction adjacent to residential or sensitive land uses to the hours between 7:00 a.m. and 7:00 p.m. from Monday through Friday and the hours between 8:00 a.m. and 7:00 p.m. on Saturday. Construction activities are prohibited on Sundays and Federally recognized holidays. Furthermore, construction noise is regulated by Department Standard Specifications, Section 5-1 "Sound Control Requirements," in the Standard Special Provisions. The project will comply with applicable provisions.

WL1. Due to impacts to the English Canyon Channel, the project will require a 404 permit from the U.S. Army Corps of Engineers (ACOE), a 1602 Streambed Alteration Agreement (SAA) from the California Department of Fish and Game (CDFG), and a Section 401 Water Quality Certification from the California Regional Water Quality Control Board (RWQCB). For impacts on non-wetland waters, typical mitigation measures required by the regulatory agencies (ACOE, CDFG, and RWQCB) include the following:

- On-site preservation enhancement.
- Off-site preservation through the purchase of suitable habitat or participation in an existing mitigation bank.

- On-site treatment of flows from developed surfaces prior to such flows entering waters of the U.S. (e.g., mechanical filters, bio-swales, or other similar post-construction BMPs).
- No work will be performed within the English Canyon Channel during periods of excessive water flow.

TE1. Riparian vegetation shall be removed outside the vireo and flycatcher breeding season (March 15 to September 15). To the extent practicable, construction within 91.4-m (300-ft) of riparian habitat shall also be done outside the breeding season. If construction must be completed during this period, then weekly surveys for vireo and flycatcher shall be conducted prior to and during construction activity. If vireo or flycatcher are found, the Carlsbad Fish and Wildlife Office (CFWO) and FHWA shall be contacted and measures shall be taken to reduce sound levels reaching areas used by vireo to less than 60 dBA or the background noise level, whichever is higher.

TE2. The limits of grading shall be clearly marked, and temporary fencing or other appropriate markers shall be placed around any sensitive habitat adjacent to work areas as prior to the commencement of any ground-disturbing activity or native vegetation removal. No construction access, parking, or storage of equipment or materials shall be permitted within the marked areas.

TE3. A biological monitor shall be present during all activities involving removal of vegetation to ensure that impacts to wetland and riparian habitat do not exceed the limits of grading and to minimize the likelihood of inadvertent impacts to vireo, flycatcher, and other wildlife species.

TE4. No material (e.g., litter, debris, trash, etc.) shall be deposited within sensitive habitat areas designated by the project biologist, temporary fencing, or other appropriate markers.

TE5. Appropriate erosion and siltation controls shall be used and maintained during construction and maintenance activities.

TE6. Best Management Practices shall be employed to ensure that toxic materials, silt, debris, or excessive erosion do not enter jurisdictional waters or leave the construction or maintenance areas.

- TE7.** All vehicle maintenance, staging, storage, and dispensing of fuel shall occur in designated upland areas and in such a manner as to prevent any runoff from entering waters of the U.S.
- TE8.** Raw cement/concrete or washing thereof, asphalt, paint or other coating material, oil or other petroleum products or any other substances which could be hazardous to wildlife resulting from project-related activities shall be prevented from contaminating the soil and/or entering any jurisdictional waters.
- TE9.** Construction crews shall be briefed on the presence of vireos and measures to be taken to minimize impacts to the vireo and its habitat before activities are conducted.
- TE10.** 0.58-hectares (ha) (1.45-acres [ac]) of mixed willow woodland and mulefat scrub shall be restored in English Channel following project completion, consistent with a future habitat restoration plan. The restoration plan shall be completed and submitted to FHWA and CFWO for review and approval prior to initiating impacts to riparian habitat. Site preparation and restoration shall be implemented immediately following project completion.
- TE11.** As part of the restoration plan, invasive non-native species, including castor bean, pampas grass, and fan palm shall be removed from the riparian vegetation in English Channel, from the boundary with the McCoy Equestrian Center (approximately 457.2-m [1,500-ft] upstream of the culvert under Peyton Drive) to approximately 152.4-m (500-ft) downstream of the culvert.
- TE12.** A conservation easement or deed restriction shall be placed over 1.37-ha (3.40-ac) of English Channel between McCoy Equestrian Center at the upstream end and the proposed "Armorflex mat" at the downstream end. Following proposed restoration, the entire conserved area shall contain riparian habitat consisting of mixed willow woodland and mulefat scrub, with small patches of emergent wetland. The easement or deed restriction shall accommodate educational field trips in the channel and a potential pedestrian bridge over the creek. The City of Chino Hills shall enforce the easement or deed restriction and maintain the habitat (e.g., remove trash and non-native invasive weed species) in perpetuity. A draft easement or deed restriction

shall be submitted to the CFWO for review and approval, and the easement or deed restriction shall be adopted prior to impacting riparian habitat.

- TE13. Two cowbird traps shall be placed at the equestrian center or other mutually agreed upon location in close proximity to the proposed project and operated for a period of two years.
- TE14. Signs shall be placed on either side of the riparian habitat identifying it as a sensitive habitat type that supports federally endangered species and requesting that park patrons use identified trails to minimize impacts to the habitat and wildlife.
- IS1. Landscape designs shall be submitted for review and approval by a qualified biologist. The review shall determine that no invasive, exotic plant species will be used in any proposed landscaping, and that suitable substitutes are proposed.

City of Chino Hills

Date



Summary

The City of Chino Hills, in cooperation with the FHWA and Caltrans, propose to improve circulation and stormwater conveyance along Peyton Drive from Grand Avenue south to Chino Hills Parkway/SR-142 and along Eucalyptus Avenue from its current T-intersection terminus with Peyton Drive, westward. Implementation of the 3.0-kilometer (km) (1.8-mile [mi]) proposed project would provide roadway improvements consistent with the *City of Chino Hills General Plan* Circulation Element. The proposed extension of Eucalyptus Avenue from its current terminus at Peyton Drive would continue westward approximately 160-meters (m) (530-feet [ft]).

Currently, Peyton Drive southbound is three lanes at Grand Avenue, narrowing to one lane at English Road. The widening will expand Peyton Drive to its ultimate six-lane divided Major Arterial configuration between Grand Avenue and Eucalyptus Avenue. The portion of Peyton Drive south of Eucalyptus Avenue will be widened from two lanes to its ultimate planned classification (four-lane Major Highway configuration) to Chino Hills Parkway/SR-142 (State Route 142).

The proposed undertaking includes the extension of Eucalyptus Avenue from Peyton Drive westward approximately 160-m (530-ft). The proposed Eucalyptus Avenue extension is designed as a two-lane roadway consistent with the existing roadway cross section west of Peyton Drive. All proposed improvements are consistent with the *City of Chino Hills General Plan* Circulation Element, and will not cause an adverse impact.

Construction is anticipated to begin in the first quarter of 2008 and to last approximately 18 months. A minimum of one travel lane in each direction shall remain open on Peyton Drive at all times during construction to ensure ongoing access to properties and businesses within the project area. No detour routes will be required during the construction duration.

This project is included in the 2001 Regional Transportation Plan (RTP) of the Southern California Association of Governments (SCAG) and the amended 2004 cost-constrained Regional Transportation Improvement Program (RTIP). Total project cost is estimated at \$13,000,000.

Approximately \$8,000,000 has been secured by the City of Chino Hills, San Bernardino County Flood Control District and the Environmental Protection Agency (EPA) for this project. \$4,700,000 in Federal funding has been earmarked for the City of Chino Hills, and the City is asking San Bernardino Association of

Governments (SANBAG) for \$90,000 in State Transportation Plan (STP) funds for construction in return for the City's Measure I funds.

The proposed project is subject to review under both the California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code [PRC] Section 21000 et seq.), and the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [USC] 4321 et seq.). The Lead Agency for CEQA compliance is the City of Chino Hills and the Lead Agency for NEPA compliance is FHWA.

S.1 Summary of All Reasonable Alternatives Considered

Two project alternatives were developed to address both projected traffic growth and local area needs and are illustrated in detail within Chapter 2. One design solution for Peyton Drive (referred to as the Build Alternative) and a No Build Alternative are deemed viable alternatives. Within the Build Alternative, two channel design configurations are considered for the crossing of the English Canyon Channel.

S.1.1 Build Alternative (Locally Preferred)

The locally preferred design configuration includes improvements along Peyton Drive between Grand Avenue and Chino Hills Parkway/SR-142. Project implementation would result in the widening of Peyton Drive to six lanes from Grand Avenue south to Eucalyptus Avenue, and the widening of Peyton Drive from two to four lanes from Eucalyptus Avenue south to Chino Hills Parkway/SR-142. The proposed undertaking includes the extension of Eucalyptus Avenue from Peyton Drive westward approximately 160-m (530-ft). The proposed Eucalyptus Avenue extension is designed as a two-lane roadway consistent with the existing roadway cross section west of Peyton Drive. All proposed improvements are consistent with the *City of Chino Hills General Plan* Circulation Element.

The proposed project includes critical stormwater conveyance improvements at the existing Peyton Drive crossing of English Canyon Channel, south of Eucalyptus Avenue. Two alternative channel improvement concepts have been developed in order to address stormwater conveyance deficiencies and flood hazards at the Peyton Drive/English Canyon Channel interface. The alternatives evaluate both culvert replacement and channel improvements to increase the hydraulic capacity of both the channel and the culvert. Each alternative incorporates a 1.2-m (4-ft) high levee on the east side of English Canyon Channel, upstream of the culvert to prevent flows from flooding Peyton Drive. Maintenance vehicle access roads are incorporated along both banks extending the limits of the channel improvements. An access ramp

downstream of the culvert is also included. Traditional concrete lining was not considered as a viable alternative because of environmental concerns.

5.1.1.1 Channel Design Configuration No. 1 (Locally Preferred)

Channel Design Configuration No. 1 comprises constructing a triple-barrel, 2.7-m-by-4.2-m (9-ft-by-14-ft) box culvert under Eucalyptus Avenue and Peyton Drive southwest of their intersection, replacing the existing 91-centimeter (cm) (36-inch [in]) and 152-cm (60-in) reinforced concrete pipe (RCP). A new channel will be cut from the proposed culvert entrance to the existing channel approximately 107-m (350-ft) upstream of Eucalyptus Avenue. Approximately 121-m (400-ft) downstream of Peyton Drive, the channel will be widened and tie into the previously improved portion of English Canyon Channel. The slopes and invert of the proposed channel grading upstream and downstream of Peyton Drive will be lined with articulated concrete block (Armorflex) or equivalent turf-reinforcing mat.

Implementation of this channel design configuration eliminates the existing riparian habitat upstream of Eucalyptus Avenue. By placing Armorflex or a turf-reinforcing mat on the channel slopes and invert where new grading is being done, erosion in the proposed channel will be avoided. Armorflex and turf-reinforcing mats also allow effective vegetation growth in the channel while still protecting the channel against erosion.

5.1.1.2 Channel Design Configuration No. 2

Channel Design Configuration No. 2 is a similar concept to the initial alternative, but uses riprap lining instead of Armorflex reinforcement. This configuration was considered viable because riprap is commonly used for projects with similar characteristics. This channel design configuration includes constructing a triple-barrel, 2.7-m-by-4.2-m (9-ft-by-14-ft) box culvert under Eucalyptus Avenue and Peyton Drive southwest of their intersection, replacing the existing 91-cm (36-in) and 152-cm (60-in) RCP. A new channel will be cut from the proposed culvert entrance to the existing channel approximately 107-m (350-ft) upstream of Eucalyptus Avenue. Approximately 121-m (400-ft) downstream of Peyton Drive, the channel will also be widened and tie into the previously improved portion of English Canyon Channel. The sides of the proposed channels upstream and downstream of the proposed box culvert will be lined with riprap, but the invert will remain earthen. Placing riprap lining helps avoid erosion, but does not allow effective vegetation growth in the channel.

S.1.2 No Build Alternative

The No Build Alternative undertakes no roadway improvements along Peyton Drive, but rather maintains the existing roadway geometry. Under this alternative no improvements to English Channel would occur. This alternative serves as the baseline against which to evaluate the effects of the Build Alternative. The No Build Alternative would produce no immediate environmental impacts other than routine roadway maintenance within the project area; consequently, no mitigation would be required. However, compared to the proposed Build Alternative, the No Build Alternative does not provide enhanced circulation or public safety benefits within the area and does not meet the defined project purpose and need.

S.2 Summary of Environmental Impacts

Table S-1, below, summarizes potential impacts of each project alternative evaluated in detail in this document. Several environmental issue areas are then summarized to complement the table.

TABLE S-1. Summary of Major Potential Impacts from Alternatives

Potential Impact		Build Alternative		No Build Alternative
		Channel Design Config. #1 (Preferred)	Channel Design Config. #2	
Land Use	Consistency with the <i>City of Chino Hills General Plan</i>	YES	YES	NO
	Consistency with the <i>County of San Bernardino General Plan</i>	YES	YES	NO
Farmland		0.0 AC	0.0 AC	0.0 AC
Social and Economic		Not Substantial	Not Substantial	No Impact
Relocation	Business displacements	No Impact	No Impact	No Impact
	Housing displacements	3 (SFR)	3 (SFR)	No Impact
	Utility service relocation	Not Substantial	Not Substantial	No Impact
Pedestrian and bicycle facilities		Enhanced Safety	Enhanced Safety	Long-Term Negative Impact
Air quality		Temporary Impacts/ Long-Term Benefits	Temporary Impacts/ Long-Term Benefits	Long-Term Negative Impact
Noise		Mitigation Not Feasible/Temporary Construction	Temporary Construction	No Impact
Waterways and hydrologic systems		Erosion Potential - Some Opportunities for Vegetation Reestablishment	Erosion Potential and Limited Potential for Vegetation Re-establishment	No Impact
Water quality		Temporary Construction Impacts/Long-Term Water Quality Benefits	Temporary Construction Impacts/Long-Term Water Quality Benefits	Continued Flooding/Flooding Continues to Wash Manure into English Channel/ Long-Term Negative Impact
Wetlands/Waters of the U.S.		0.07-ha (permanent) 0.01 (temporary)	0.08 ha (0.20 ac) Wetland	No Impact

Wildlife	Enhanced Wildlife Movement	Enhanced Wildlife Movement	No Wildlife Movement Improvements
Floodplain	Beneficial Long-Term Impact	Beneficial Long-Term Impact	Negative Long-Term Impact
Wild and scenic rivers	No Impact	No Impact	No Impact
Threatened or endangered species	Potential Impact	Potential Impact	No Impact
Historic/Archaeological	No Impact	No Impact	No Impact
Paleontological	Potential Impact	Potential Impact	No Impact
Hazardous waste sites	No Impact	No Impact	No Impact
Visual	Temporary Construction Impacts	Temporary Construction Impacts	No Impact
Construction	Temporary Air, Noise, Circulation Impacts	Temporary Air, Noise, Circulation Impacts	No Impact
Cumulative Impacts	Not Substantial	Not Substantial	No Impact
Growth inducement	Not Substantial	Not Substantial	No Impact

5.3 Long-Term Beneficial Impacts

Implementation of the proposed project will result in a positive long-term impact related to improving traffic flow capacity along Peyton Drive. Therefore, with improved LOS and associated reduced idling, pollutant emissions would generally decrease. The proposed improvements to Peyton Drive and Eucalyptus Avenue are consistent with the *City of Chino Hills General Plan* Circulation Element. The project will reduce existing and future (year 2030) traffic deficiencies on Peyton Drive and enhance the overall operation and safety of the roadway. Implementation of the proposed project would neither increase nor prohibit the planned capacity of Peyton Drive, and therefore is considered consistent with the plans and goals adopted by the City of Chino Hills. Furthermore, the proposed project would remove Peyton Drive from the floodplain, reducing flooding periods during severe storm events.

5.4 Areas of Controversy

The City of Chino Hills conducted an Open Forum Information Meeting at the McCoy Equestrian Center in the City of Chino Hills on May 12, 2004. The meeting was conducted to introduce the proposed project to the public and to answer any questions, concerns, and comments that citizens may initially have. During the forum, comment cards were passed out and collected. Those in attendance were also encouraged to present verbal comments and concerns relative to the design and procedures of the proposed Build Alternative. There have been both support and opposition for this project from elected officials and the affected community. Those opposing the project generally cited concerns of increased traffic, vehicular speed along Eucalyptus Avenue, increased noise, aesthetics, and safety.

S.5 Other Actions Required for the Proposed Action

Several utilities are located within the project area. Coordination with the following agencies and utility companies may be required:

- Verizon Telephone Company
- Southern California Gas Company
- Time Warner Cable Company
- Southern California Edison
- City of Chino Hills Public Facilities and Operations

S.6 Environmental Commitment Record

S.6.1 Summary of Required Permits and Environmental Commitment

Table S-2, below, summarizes required permits and environmental commitments for each project impact. Responsible staff and project timing are indicated within the Table. In addition, each commitment contains a reference to further discussion within the document. The Environmental Commitment Record (ECR) should be continually updated through the final design process, specifically after the permits have been obtained. The ECR should be signed as actions are taken.

TABLE S-2. Summary of Required Permits and Environmental Commitment

	Ref.	NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
PERMITS AND AGREEMENTS						
The City of Chino Hills National Pollutant Discharge Elimination System (NPDES) permit number is CAS618036, Order Number R8-20020012.	p.67		Project Engineer	Pre-const.		
A copy of the Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and Monitoring Plan shall be submitted to the City Engineer. The SWPPP shall emphasize structural and non-structural Best Management Practices (BMPs) in compliance with NPDES requirements.	p.68		Project Engineer	Pre-const.		
The paleontologist must have a written repository agreement.	p.75		Contractor	Pre-const.		
404 permit form the ACOE	p.107		City Staff	Pre-const.		
A 1602 SAA from the CDFG	p.107		City Staff	Pre-const.		
Section 401 Water Quality	p.107		City Staff	Pre-const.		

	Ref.	NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
Certification from the RWQCB.						
Landscape designs shall be submitted for review and approval by a qualified biologist.	p. 125		Contractor	Pre-const.		
A draft conservation easement over 1.37 hectares (3.40 acres) shall be submitted to the CFWO for review and approval (non-eligible for federal aid).	p.126		City Staff	Pre-const.		
ENVIRONMENTAL COMMITMENTS						
Hazardous Materials Investigation/Treatment						
Areas of exposed soils 5.4 m (15 ft) from the edge of existing pavement which will be disturbed during excavation activities should be sampled and tested for lead prior to construction. These samples should be collected prior to the issuance of Plans, Specifications, and Estimates (PS&E) for the project, so that any special handling, treatment, or disposal provisions associated with aerially-deposited lead may be included.	p. 81		Contractor	Prior to the issuance of Plans, Specification, and Estimates (PS&E) for the Project.		
Yellow paint or thermoplastic traffic stripes must be disposed of to an appropriate permitted disposal facility.	p. 81		Contractor	Const/Post Const.		
There must be a certified contractor where there is asbestos-related work involving 30.3 m ² (100 ft ²) or more of asbestos containing materials (ACMs) and procedures regarding the removal of asbestos must be followed.	p. 81		Contractor	Pre-const.		
The landfill operator should be contacted in advance to determine any specific requirements of the landfill regarding the disposal of lead-based paint materials.	p. 81		Contractor	Pre-const.		
If unknown wastes or materials are discovered, the contractor shall immediately stop work and remove workers and the public from the area, notify the Project Engineer of the implementing agency, secure the area, and notify the implementing agency's Hazardous Waste and Materials Coordination entity.	p.81		Project Engineer	Const.		
Air Quality						
The construction contractor	p. 91		Contractor	Const.		

Summary

	Ref.	NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
shall adhere to the requirements of the South Coast Air Quality Management District (SCAQMD) rules and regulations on cutback and emulsified asphalt paving materials.						
The construction contractor shall adhere to the requirements of SCAQMD Rule 403 to reduce fugitive dust emissions.	p. 91		Contractor	Const.		
The Best Available Control Measures (BACMs) and Reasonably Available Control Measures (RACMs) specified in the SCAQMD's Rule 403 Implementation Handbook shall be incorporated into project construction.	p. 91		Contractor	Const.		
City's Standard Construction Specifications shall be adhered to in order to reduce emissions.	p. 92		Contractor	Const.		
Construction contractor shall select the construction equipment used on site based on low emission factors and high energy efficiency.	p. 92		Contractor	Const.		
The contractor shall ensure that construction grading plans include a statement that all construction equipment shall be tuned and maintained in accordance with the manufacturer's specifications.	p. 92		City Staff	Const.		
The construction contractor shall utilize electric- or diesel-powered equipment in lieu of gasoline-powered engines where feasible.	p. 92		Contractor	Const.		
The construction contractor shall ensure that equipment will be shut off when not in use.	p. 92		Contractor	Const.		
The construction contractor shall time construction activities so as not to interfere with peak-hour traffic and to minimize obstruction of through-traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.	p. 92		Contractor	Const.		
The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.	p. 92		Contractor	Const.		
Geology, Soils, Seismicity, Topography						

	Ref.	NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
A site-specific geotechnical study shall be prepared by a registered civil engineer or certified engineering geologist who has competence of seismic hazard evaluation and mitigation. The geotechnical report shall contain site-specific evaluations of the seismic hazards affecting the project site; identify portions of the project site containing seismic hazards; and identify any known off-site seismic hazards that could adversely affect the site in the event of an earthquake.	p. 73		Project Engineer	Pre-const.		
Paleontology						
Paleontologic monitors should be equipped to salvage fossils as they are unearthed, to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates.	p.75		Trained paleontologic crew	Const.		
Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens.	p.75		Trained paleontologic crew	Const.		
The development of a preparation process of recovered specimens for identification and permanent preservation that includes washing of sediments to recover small invertebrates and vertebrates.	p.75		Trained paleontologic crew	Const.		
Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage.	p.75		Trained paleontologic crew	Const.		
The preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, would signify completion of the program to mitigate impacts to paleontologic resources.	p.76		Trained paleontologic crew	Const/Post Const.		
In areas of potential but	p.76		Trained	Prior to		

Summary

	Ref.	NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
unknown sensitivity, field surveys prior to grading shall be required to establish the need for monitoring.			paleontologic crew	grading.		
Projects requiring grading plans that are located in areas of known fossil occurrences on the overlay, or demonstrated in a field survey to have fossils present, shall have all rough grading monitored by trained paleontologic crews working under the direction of a qualified professional so that fossils exposed during grading can be recovered and preserved. Fossils include large and small vertebrate fossils, the latter recovered by screen washing of bulk samples.	p. 76		Trained paleontologic crew	Const.		
Noise						
The City of Chino Hills limits the hours of construction adjacent to residential or sensitive land uses to the hours between 7am and 7pm from Monday through Friday and the hours between 8am and 7pm on Saturday. Construction activities are prohibited on Sundays and Federally recognized holidays.	p. 99		Contractor	Const.		
Construction noise is regulated by Department Standard Specifications, Section 5-1 "Sound Control Requirements" in the Special Provisions.	p. 99		Contractor	Const.		
Threatened and Endangered Species						
Riparian vegetation shall be removed outside the vireo and flycatcher breeding season (March 15 to September 15). If practicable, construction within 91.4 m (300 ft) of riparian habitat shall also be done outside the breeding season. If construction must be completed during this period, then weekly surveys for vireo and flycatcher shall be conducted prior to and during construction activity. If vireo or flycatcher are found, the Carlsbad Fish and Wildlife Office (CFWO) and FHWA shall be contacted and measures shall be taken to reduce sound levels reaching	p. 121		Contractor	Pre-const/Const.		

	Ref.	NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
areas used by vireo to less than 60 dBA or the background noise level, whichever is higher.						
The limits of grading shall be clearly marked, and temporary fencing or other appropriate markers shall be placed around any sensitive habitat adjacent to work as prior to the commencement of any ground-disturbing activity or native vegetation removal. No construction access, parking, or storage of equipment or materials shall be permitted within the marked areas..	p. 121		Contractor	Prior to grading activities		
A biological monitor shall be present during all activities involving removal of vegetation.	p. 121		Contractor	Pre-const.		
No material shall be deposited within sensitive habitat areas designated by the project biologist, temporary fencing, or other appropriate markers.	p. 122		Contractor	Pre-const/Const.		
Appropriate erosion and siltation controls shall be used and maintained during construction and maintenance activities.	p. 122		Contractor	Const.		
Best Management Practices shall be employed to ensure that toxic materials, silt, debris, or excessive erosion do not enter jurisdictional waters or leave the construction or maintenance areas.	p. 122		Contractor	Const.		
All vehicle maintenance, staging, storage and dispensing of fuel shall occur in designated upland areas and in such a manner as to prevent any runoff from entering waters of the U.S.	p. 122		Contractor	Const.		
Raw cement/concrete or washing thereof, asphalt, paint or other coating material, oil, or other petroleum products or any other substances which could be hazardous to wildlife shall be prevented from contaminating the soil and/or entering any jurisdictional waters.	p.122		Contractor	Const.		
Construction crews shall be briefed on the presence of vireos and measures to be taken to minimize impacts to the vireo and its habitat before activities are conducted.	p.122		Contractor	Pre-const./Const.		
0.58 hectares (1.45 acres)	p. 122		Contractor	Project		

Summary

	Ref.	NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
of mixed willow woodland and mulefat scrub shall be restored in English Channel following project completion, consistent with a future habitat restoration plan.				completion		
Invasive non-native species shall be removed from the riparian vegetation in the English Channel from the boundary with the McCoy Equestrian Center (approximately 457.2-m[1,500-ft] upstream of the culvert under Peyton Drive) to approximately 152.4-m (500-ft) downstream of the culvert.	p. 122		Contractor	Project completion		
Non-participating measure (non-eligible for federal aid): A conservative easement of deed restriction shall be placed over 1.37 hectares (3.40 acres) of English Channel between McCoy Equestrian Center at the upstream end and the proposed "Armorflex mat" at the downstream end. The City of Chino Hills shall enforce the easement or deed restriction and maintain the habitat in perpetuity.	p. 126		Contractor	Project completion		
Two cowbird traps shall be placed at the equestrian center or other mutually agreed upon location in close proximity to the proposed project and operated for a period of two years.	p. 126		Contractor	Project completion		
Signs shall be placed on either side of the riparian habitat identifying it as a sensitive habitat type that supports federally endangered species and requesting that park patrons use identified trails to minimize impacts to the habitat and wildlife.	p. 126		Contractor	Project completion		
Traffic						
The City of Chino Hills Police Department and Chino Hills Independent Fire Department shall be notified and supplied with construction plans before the construction begins. Such information shall include traffic management plans, referring to temporary street closures of adjacent streets and any other restrictions that may be necessary while the	p. 28		Contractor	Pre-Const.		

	Ref.	NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
project is being completed. The high school shall be informed of traffic lane closures and closed drop-off zones to ensure safe arrival and departure of students.						
Short-term mitigation to roadway use shall be mitigated by a Traffic Management Plan (TMP) to be established by the project contractor and approved by the City of Chino Hills. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. It shall include adequate local and emergency access.	p. 57		Contractor	Pre-Const.		
Visual/Aesthetics						
The landscape plan shall also establish areas within the roadway right-of-way (ROW) that allow for incorporation of replacement landscaping.	p. 58		Contractor	Design/Pre-const.		
The City shall coordinate with the affected residents to ensure that all screening and privacy concerns have been addressed and reasonable landscape and architectural treatment measures have been incorporated into the project design to achieve sufficient screening of the project.	p. 58		Contractor	Design/Pre-const.		
Community/Social/Land Use Impacts						
The Federal or Federally assisted programs will provide uniform and equitable treatment of persons displaced from their homes, businesses, or farms, and establishes uniform and equitable land acquisition policies. The City of Chino Hills will provide affected property owners with a copy of the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970.	p. 38		City Staff	Design/Const.		
An independent appraisal of the affected property will be obtained, and an offer for the full appraisal will be made.	p. 39		City Staff	Prior to construction		
Comparable, decent, safe, and sanitary replacement housing that is within a	p. 39		City Staff	Prior to construction		

Summary

	Ref.	NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
person's financial means will be made available before that person may be displaced. If such housing is not available, "last resort" housing may be provided in a number of prescribed ways.						
Construction						
No construction staging or stockpiling of materials or equipment shall occur on site at the Ruben S. Ayala High School.	p. 28		Contractor	Pre-Const./ Const.		
Access of all school facilities shall be maintained throughout the duration of construction activities. Appropriate signage and access shall be provided to direct pedestrians around construction.	p. 28		Contractor	Const.		
Crossing guards shall be located near Ayala High School when construction impacts the movement of students.	p. 28		Contractor	Const.		
Utilities						
The Project Engineer shall coordinate with all affected utility purveyors to establish exact procedures and specifications for all facilities to be relocated during construction.	p. 45		Project Engineer	Pre-Const.		
The Project Engineer shall notify other service purveyor in the vicinity of the improvements to verify that the proposed activities will not disrupt services to the community.	p. 45		Project Engineer	Pre-Const.		

