

F: breg 0A004
Environmental



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CALIFORNIA DIVISION
650 Capitol Mall, Suite 4-100
Sacramento, CA. 95814
January 20, 2009

IN REPLY REFER TO
HDA-CA
FPN #BRLO-549(014)
Document #P58966

Mike Perovich, District Director
California Department of Transportation
District 8
464 West Fourth Street
San Bernadino, CA 92401-1400

Attention: Olufemi A. Odufala, Office Chief, Environmental Engineering

Dear Mr. Odufala:

SUBJECT: Project-Level Conformity Determination for Boulder Avenue Bridge Replacement Project

On January 7, 2009, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a request for the project-level conformity determination for the Boulder Avenue Bridge Replacement Project pursuant to 23 U.S.C. 327(a)(2)(B)(ii)(1). The project is in an area that is designated Nonattainment for ozone, coarse particulate matter (PM₁₀), and fine particle particular matter (PM_{2.5}), and is designated Attainment/Maintenance carbon monoxide (CO) and nitrogen dioxide (NO₂).

The project-level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the Southern California Association of Government's (SCAG) currently conforming *2008 Regional Transportation Plan (RTP)*, and the *2008 Regional Transportation Improvement Program (RTIP)*. The current conformity determinations for the RTP and RTIP were approved by FHWA and the Federal Transit Administration (FTA) on January 14, 2009. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 C.F.R. 93.116 and 93.123, the localized CO, PM₁₀, and PM_{2.5} analyses are included in the documentation. The CO hotspot analysis was performed with the Caltrans' *Transportation Project-Level Carbon Monoxide Protocol*. The analyses demonstrate that the project will not create any new violation of the standards or increase the severity or number of existing violations.

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Based on the information provided, FHWA finds that the Conformity Determination for the Boulder Avenue Bridge Replacement Project conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93.

If you have any questions pertaining to this conformity finding, please contact Aimee Kratovil, FHWA Air Quality Specialist, at (916) 498-5866.

Sincerely,

/s/ Steve Luxenberg

For
Vincent Mammano
Acting Division Administrator

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A handwritten mark, possibly a signature or initials, consisting of a single, continuous, wavy line that starts on the left and ends on the right, positioned to the right of the 'MOVING THE AMERICAN ECONOMY' logo.

cc: (email)
Mike Brady, Caltrans
C. Gonzalez Caltrans
Steve Luxenberg, FHWA

AKratovil/ac

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Dennis Barton

From: Charlotte Sheehan [charlotte_sheehan@dot.ca.gov]
Sent: Thursday, March 05, 2009 10:51 AM
To: Alicia.colburn@lanengineering.com
Cc: Aaron Burton; dbarton@cityofhighland.org; Mohan.Char@lanengineering.com
Subject: Fw: AQ/Conformity Determination/Project Level/Boulder Avenue Bridge Replacement/District 8

Attachments: 58966-1.doc



58966-1.doc (112 KB)

Alicia

The FHWA AQ Conformormity/Project Level approval is attached below. If you have any questions, please call me.

CHARLOTTE M. SHEEHAN
Associate Environmental Planner
Local Assistance
(909) 383-6389 fax (909) 383-6494
464 West 4th Street, 6th Floor, MS 1162
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----- Forwarded by Charlotte Sheehan/D08/Caltrans/CAGov on 03/05/2009 10:47 AM -----

Christopher
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Fw: AQ/Conformity
Determination/Project Level/Boulder
Avenue Bridge Replacement/District
8

----- Forwarded by Christopher Gonzalez/D08/Caltrans/CAGov on 03/05/2009 10:26 AM -----

"Chau, Anh"
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01/22/2009 11:25
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Subject
AQ/Conformity Determination/Project

Level/Boulder Avenue Bridge
Replacement/District 8

(See attached file: 58966-1.doc)

Fi: bng 04004
Environmental

Boulder Avenue Bridge Over City Creek (Replacement) Project

HABITAT ENHANCEMENT PLAN

City of Highland, San Bernardino County, California
Redlands, California USGS 7.5-minute Topographic Quadrangle
Section 4, Township 1 South, Range 3 West

Prepared for:



City of Highland, Public Works Department
27215 Base Line
Highland, California 92346
Contact: Mr. Ernest Wong, PE
909.864.6861

Prepared by:

ATKINS

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November 11, 2011

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Chapter 1 INTRODUCTION

This Habitat Enhancement Plan (HEP) presents guidelines and specifications for providing 6.35 acres of enhancement mitigation for the Boulder Avenue Bridge Over City Creek (Replacement) Project proposed by the City of Highland (City, Applicant, or Permittee). This document identifies responsible parties and describes the recommended procedures for site preparation, hydroseeding, non-native invasive removal, and supplemental seeding enhancement activities, in addition to the long-term maintenance, monitoring, and reporting requirements for the mitigation effort.

This HEP has been prepared to facilitate implementation of mitigation requirements conditioned for the project by the U.S. Fish and Wildlife Service (USFWS or CFWO) in Endangered Species Act (ESA) Section 7 Biological Opinion (BO) No. FWS-SB-08B0342-09F0799 issued on January 21, 2010; the U.S. Army Corps of Engineers (USACE or Corps) in Clean Water Act (CWA) Section 404 Nationwide Permit (NWP) 14 No. SPL-2007-00144-VCC issued on April 5, 2011; and, the California Department of Fish and Game (CDFG or DFG) in California Fish and Game (CFG) Code Section 1602 Streambed Alteration Agreement (Agreement) No. 1600-2010-0138-R6 issued on May 16, 2011.

1.1 Boulder Avenue Bridge Project Description

The City, in cooperation with California Department of Transportation (Caltrans) and Federal Highway Administration (FHWA), proposes to improve Boulder Avenue over City Creek. The road improvement consists of four components: bridge replacement, road widening, infrastructure improvements and accommodations for a future multi-purpose trail. The area proposed for these improvements is referred to herein and in other documents as the Area of Potential Effects (APE).

Bridge Replacement

The project will replace the existing bridge with a new bridge widened to four (4) lanes to tie into existing improvements on both ends of the project limits. The proposed replacement bridge is a 4-span bridge measuring 385 feet in length and 95.5 feet in width. Sidewalks are proposed on either side of the bridge conforming to the California Department of Transportation Standards. The substructure consists of pier walls and seat-type abutments supported on spread footings. The pier footings will be placed well below the maximum scour depth to eliminate the possibility of footings being exposed during a major flood event. The abutments will be protected by a cut-off concrete wall carried at least 10 ft

below the existing channel bed or by a rock riprap mattress that is sufficiently extended from the toe of the abutment into the waterway.

Road Widening

In addition to bridge work, the proposed project will include significant roadway improvements. The major consideration in setting the roadway/bridge profile is to meet the minimum freeboard requirements of Federal Emergency Management Agency (FEMA) and San Bernardino County Flood Control District (SBCFCD). To accommodate these requirements, the roadway profile had to be raised considerably. The roadway touchdown points are approximately 1,440 feet south of the bridge and 300 feet north of the bridge.

Infrastructure Improvements

As a consequence of roadway widening, the existing pipe culverts, located approximately 600 feet and 1,000 feet from the south abutment, will be extended. Likewise, Bledsoe Creek double-cell Reinforced Concrete Box (RCB) will be replaced and extended to match the new width of the roadway. The roadway widening will also affect certain Metropolitan Water District (MWD) facilities located adjacent to the Bledsoe Creek RCB. These facilities will be relocated in coordination with MWD Design Group.

Accommodations for Future Multi-Purpose Trail

The City's Multi-Use Trail Master Plan shows a community, multi-purpose trail along the north side of City Creek. Accommodations for a future multi-purpose trail crossing underneath the bridge have been incorporated into the project. The trail is designed with sufficient width and vertical clearance to accommodate users such as bicycles, pedestrians and equestrian riders.

Construction

The project site has adequate clearances and access roads for construction. A Temporary Construction Easement (TCE) from SBCFCD would be required for the duration of construction. Vacant parcels owned by SBCFCD and the City at the northwest and northeast corners of the project respectively have been identified as potential staging areas. The majority of the construction activities will occur within the footprint area of existing SBCFCD maintenance operations.

1.2 Regulatory Requirements

The following regulatory approvals and permits have been obtained by the City for the Boulder Avenue Bridge (Replacement) project and prescribe the habitat enhancement conditions and measures relevant to implementation of the HEP, as discussed in further detail below.

ESA Section 7 Biological Opinion No. FWS-SB-08B0342-09F0799 issued by the USFWS

General Conservation Measure 3 from the BO states the following is required by the City:

3. *The City will fund the removal of nonnative grasses from 6.0 ac (2.43 ha) of adjacent alluvial fan terrace habitat owned by the SBCFCD:*
- a. *A habitat enhancement plan outlining proposed methodology and schedule for nonnative grass removal will be submitted to CFWO for review and approval at least 30 days prior to initiating project activities;*
 - b. *This habitat enhancement will be conducted twice yearly for a period of two years;*
 - c. *A brief report will be submitted to the CFWO within 6 weeks following each treatment of habitat. This report will include: (a) photographs taken from permanent photo points displaying before and after views of treatment; (b) the site location and size; and (c) dates of treatment.*

404 Nationwide Permit 14 No. SPL-2007-00144-VCC issued by the USACE

Special Condition 4 of the NWP 14 authorization states the following is required by the City:

4. *Temporary fills shall be removed and the stream shall be re-contoured to preconstruction conditions. Upon completion of the project, the Permittee shall hydroseed the disturbed portions of the earthen lined stream banks with native non-invasive vegetation of facultative upland (FACU) or wetter species, as appropriate, to reduce the potential for erosion. The Permittee shall submit the proposed planting palette for review and approval by the Corps prior to initiation of construction. The Permittee shall ensure the hydroseeded areas are maintained and monitored for a period of two years after completing the seeding activities, such that less than 10 percent of the areas disturbed by the project are vegetated by non-natives and invasive plant species. Monitoring reports shall be submitted by the Permittee to the Corps by May 15 one year and two years following hydroseeding, documenting the recovery of the restored areas.*

1602 Agreement No. 1600-2010-0138-R6 issued by the CDFG

Measures 4.1 and 4.2 of the 1602 Agreement states the following is required by the City:

- 4.1 *Habitat Mitigation and Monitoring Plan. No later than 90 days after signature of this Agreement and prior to the initiation of any project activities in state jurisdictional areas, the Permittee shall submit to the DFG for review and approval a Habitat Mitigation and Monitoring Plan (HMMP) designed to meet the overall mitigation goals identified in Section 3 of this Agreement. At a minimum, the HMMP shall include the following information: (a) a description of the existing physical conditions of the proposed creation (enhancement) site, including hydrology and habitat types, and a map that identifies the location of the site; and (b)*

procedures to ensure that non-native plants are not introduced or allowed to sustain within the creation (enhancement) site and a non-native plant removal plan. Monitoring of the mitigation site shall be conducted annually for a minimum of two years, or until the DFG determines the mitigation site is successful.

4.2 Annual Reporting. An annual report shall be submitted to the DFG for a minimum of two years following mitigation completion or until the DFG deems the site successful. At a minimum, this report shall include the following information: (1) information regarding non-native plant removal, including: (a) the methods used for removal, (b) the amount removed and/or treated, (c) the frequency and timing of removal and treatment, (d) disposal specifics, and (e) a summary of the general successes and failures or failure of the non-native removal plan. The report shall also include wildlife species observed at the creation (enhancement) site during monitoring surveys including sensitive and/or listed species. Photographs from designated photo stations shall be included in the annual report. The first annual report is due to the Department no later than December 31, 2012.

1.3 Responsible Parties

The parties responsible for implementing this HEP are listed below along with a general description of responsibilities.

City of Highland

The City, or its successors in interest or assigns, is ultimately responsible for implementation of the habitat enhancement and monitoring effort and shall provide necessary funding to implement the HEP. The City reserves the right to assign responsibilities of various plan elements to representative agents, contractors, or other qualified designees.

Habitat Management Contractor

The hydroseeding, non-native removal, hand (broadcast)-seeding, and maintenance actions recommended under this plan shall be conducted by a contractor retained by the City with demonstrated riparian and/or upland habitat restoration experience in the region. The contractor, herein referred to as the Habitat Management Contractor, shall be responsible for implementing the hydroseeding, non-native removal, hand-seeding, and maintenance activities, with oversight, and adhering to the maintenance schedule recommended in this HEP.

Restoration Monitor

It will also be necessary to provide for adequate oversight, monitoring, and periodic assessment and reporting of hydroseeding, non-native removal, hand-seeding, and maintenance activities and site

progress. A qualified firm or person with experience in monitoring native habitat restoration projects in the region shall be retained by the City or its designee for this purpose. The monitoring entity, hereinafter referred to as the Restoration Monitor, will oversee implementation of all elements of this plan and will advise and assist the City and Habitat Management Contractor with issues pertaining to the enhancement effort.

The Restoration Monitor will be responsible for the following, at minimum:

- Provide appropriate recommendations where discretion or remedial measures are indicated and will be responsible for documentation and agency coordination.
- Observe the critical phases of enhancement implementation including site preparations, hydroseeding, non-native removal, and supplemental hand-seeding.
- Document deviations from the plan and provide reasonable justification for such changes.
- Periodically assess and document maintenance activities and habitat development.
- Communicate to the City (or designated representative) regarding seeding implementation, maintenance activities, and habitat enhancement progress, and prepare annual monitoring reports for submittal to the USFWS, USACE, and CDFG.

Biological Monitor

In addition, as the proposed enhancement activities will occur within areas potentially occupied by the federally endangered San Bernardino kangaroo rat (*Dipodomys merriami parvus*; SBKR) and the federally and California State endangered Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*; SARWS), it will be necessary for the City to retain a qualified monitoring biologist approved by the USFWS and CDFG to ensure that the hydroseeding, non-native removal, hand-seeding, and maintenance activities do not adversely affect these and other sensitive species and their habitat at any times during implementation. The qualified monitoring biologist, hereinafter referred to as the Biological Monitor, will assist the Restoration Monitor in overseeing all work conducted by the Habitat Management Contractor within potential habitat for SBKR and SARWS.

If it can be demonstrated to the satisfaction of the USFWS and CDFG that the Restoration Monitor meets the minimum qualifications for the Biological Monitor, then the City may only need to retain one qualified firm or person to carry out the responsibilities of both the Restoration Monitor and Biological Monitor.

1.4 Mitigation Site Description / Baseline Conditions

The approximately 6.35-acre mitigation site for the enhancement activities was selected in consultation with the USFWS, USACE, and CDFG, and the location and configuration of the site have been approved by these agencies. The following provides a brief description of the existing physical conditions at the mitigation site.

Mitigation Site Location

The mitigation site is generally located north of Interstate 10, south of State Route 330, and east of State Route 210 in southwestern San Bernardino County, California (Figure 1). The site is depicted within Section 4, Township 1 South, Range 3 West of the Redlands, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 2). Specifically, the site is located in the central portions of the City of Highland, east and west of Boulder Avenue, between Base Line to the north and Greenspot Road (Fifth Street) to the south (Figure 3).

General Land Uses and Ownership

The land containing the mitigation site is owned and maintained by the SBCFCD. General land uses at the site are limited to maintained undeveloped floodplain for City Creek.

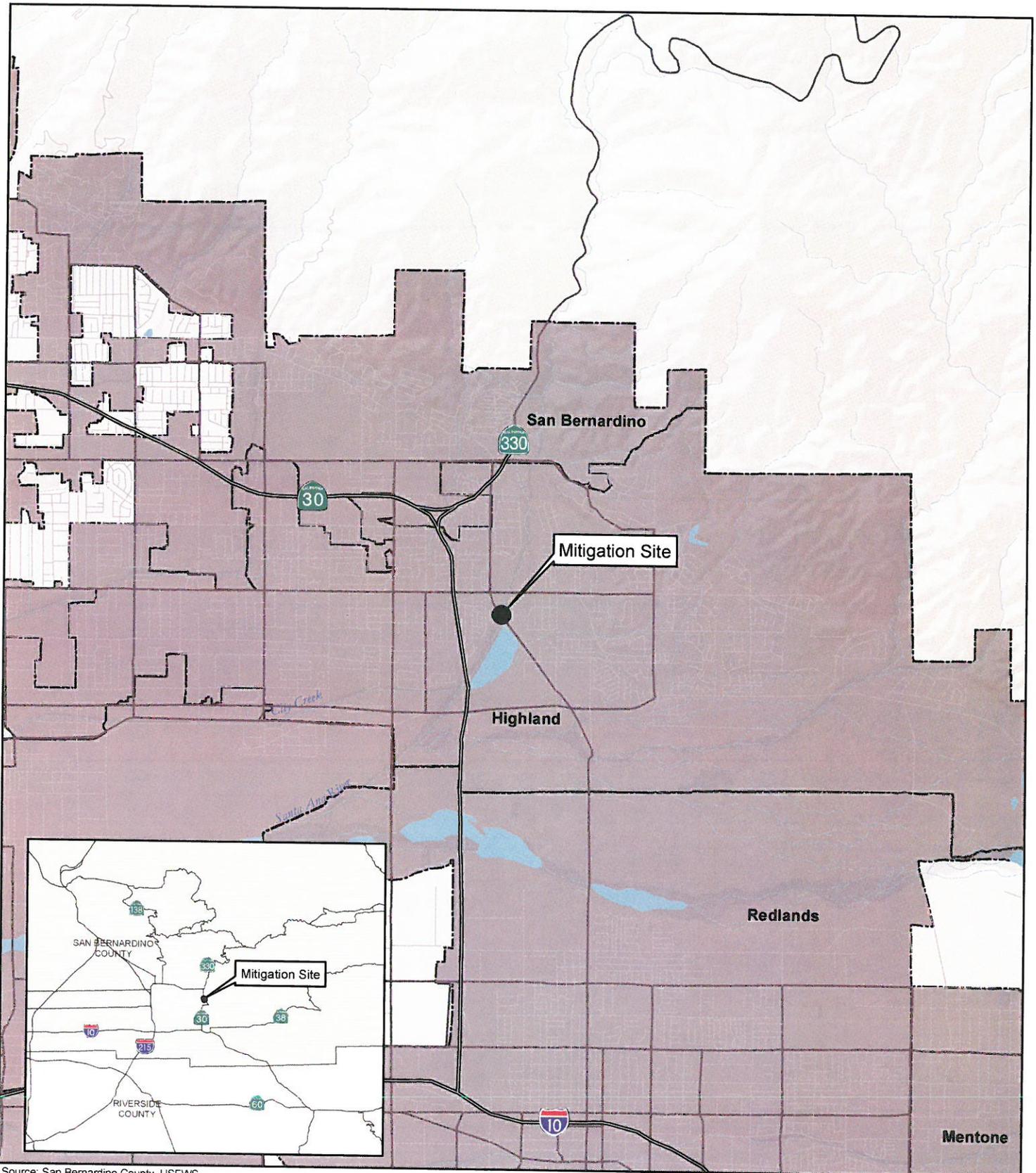
Mitigation Site Access

The area containing the mitigation site is most readily accessed via Boulder Avenue and existing SBCFCD access roads that lead into the City Creek floodplain and adjacent bench areas both north and south of City Creek. Vehicle access onto the mitigation site is restricted. A number of existing dirt trails and access paths traverse the mitigation site that can be used by maintenance crews as pedestrian access to the site. Vehicle, equipment, and pedestrian access will be granted temporarily by the SBCFCD to the City and contractors who will be performing the work required for this HEP.

All access and staging areas required for implementation of this HEP shall be determined prior to any site preparation or enhancement activities by the Habitat Management Contractor, Restoration Monitor, and Biological Monitor, and shall be maintained within existing easements and/or disturbed uplands located in the vicinity of the mitigation site, and outside of existing sensitive habitat and jurisdictional waters and wetlands.

Local Weather Conditions

The local area is subject to both seasonal and annual variations in temperature and precipitation (rainfall), with occasional snowfall. Temperature data measured at the nearby San Bernardino F S 226 station, approximately 3.5 miles to the west, show average maximum temperatures occurring in July and August (96.2 degrees Fahrenheit [°F]), and average minimum temperatures occurring in January (38.5°F). Precipitation data measured at the San Bernardino F S 226 station show that average precipitation is highest in February (3.25 inches) and is lowest in July (0.04 inch). Snowfall averages are recorded at 0.10 inch for the month of January only. The average annual precipitation for the area is 16.12 inches. The total average precipitation varies greatly between drought and flood years.



Source: San Bernardino County, USFWS.



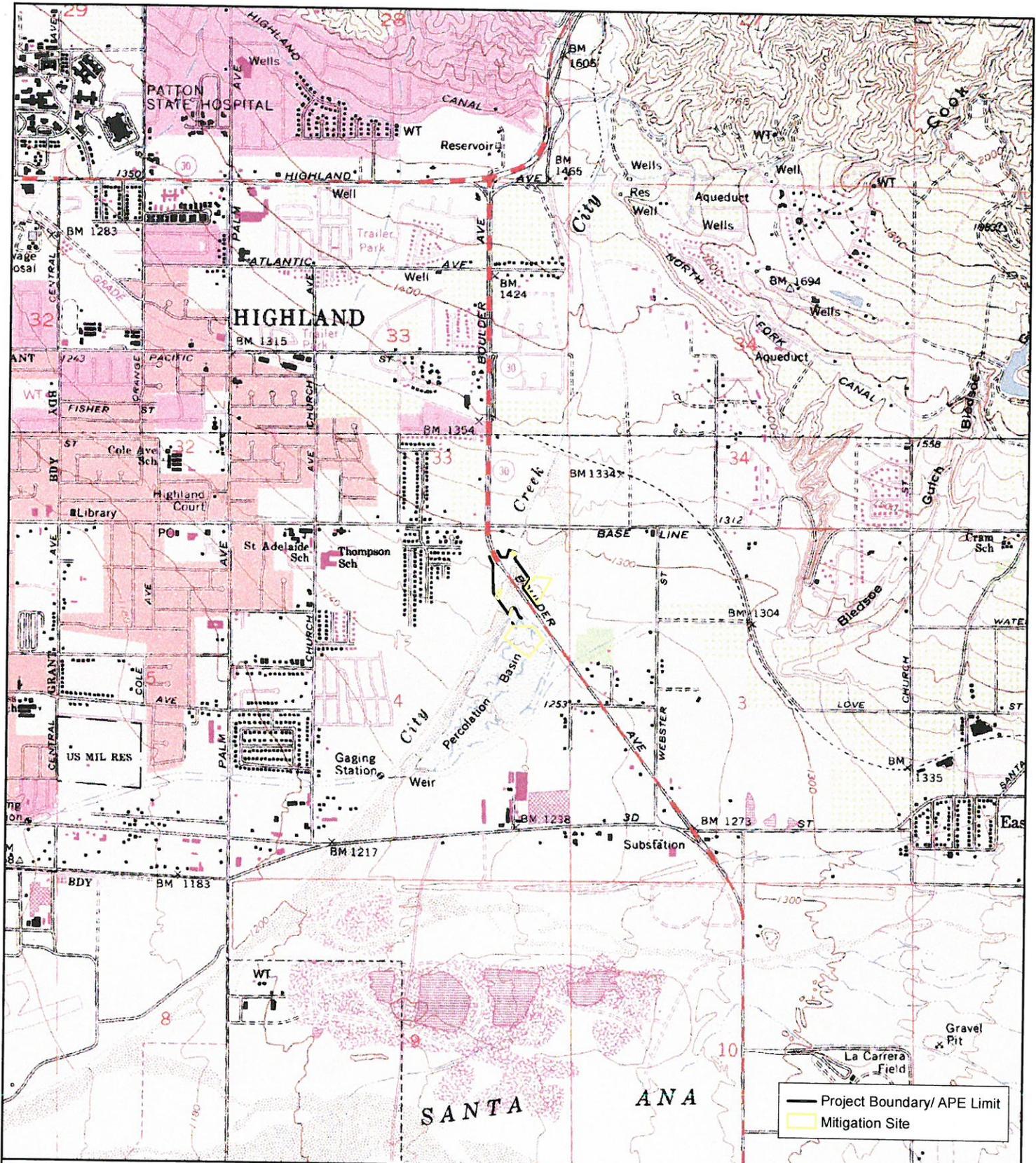
1 inch = 1 miles
 0 0.25 0.5 1 Miles

Figure 1
Regional Location Map

Boulder Avenue Bridge Over City Creek (Replacement) Project
 Habitat Enhancement Plan

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Source: Harrison & Redlands 7.5' USGS Topographic Map.

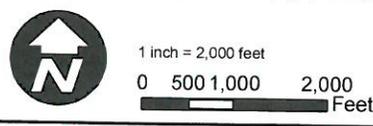
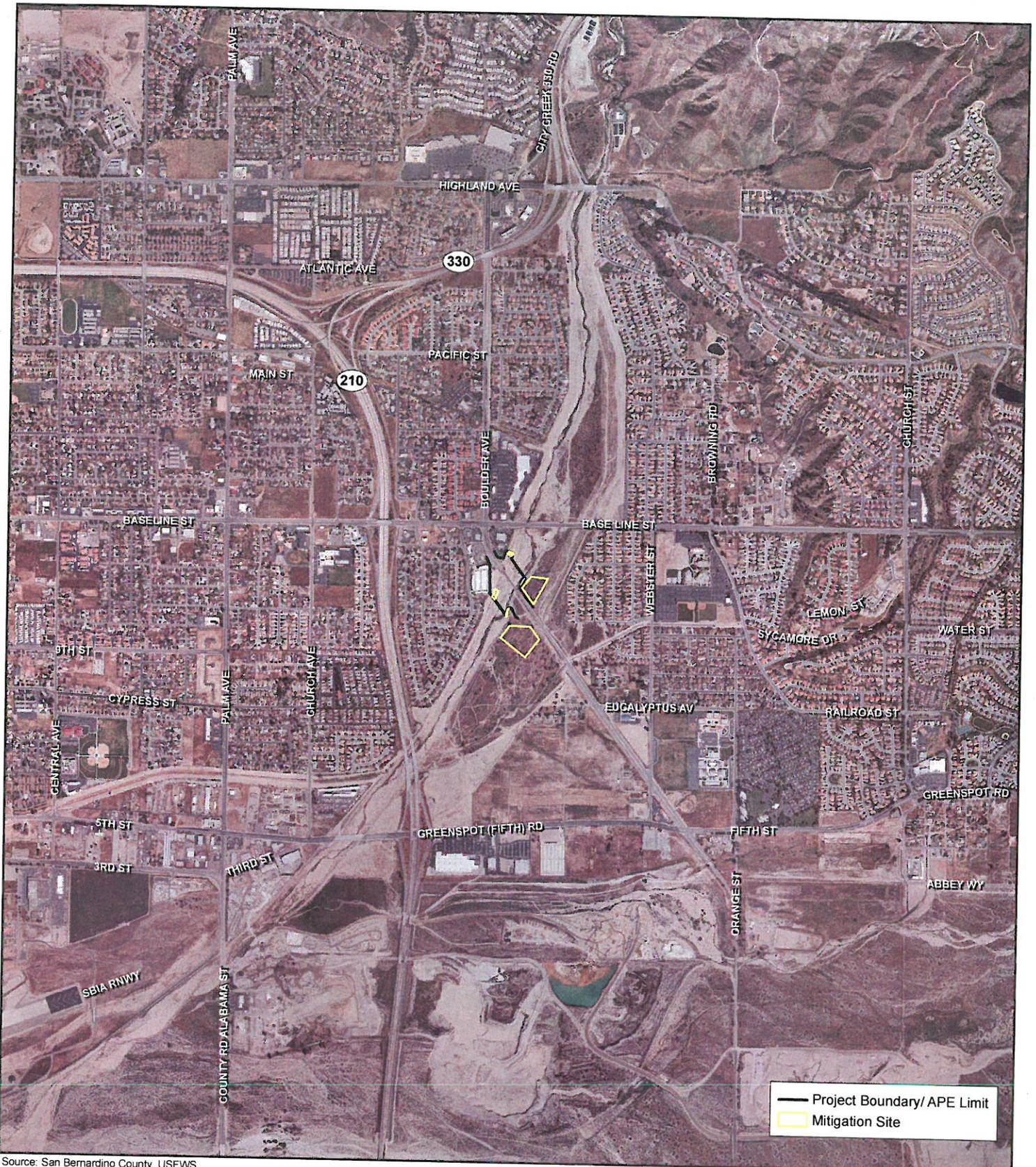


Figure 2
Local Vicinity Map - USGS Topo Based
 Boulder Avenue Bridge Over City Creek (Replacement) Project
 Habitat Enhancement Plan

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— Project Boundary/ APE Limit
 ■ Mitigation Site

Source: San Bernardino County, USFWS.



1 inch = 2,000 feet
 0 500 1,000 2,000
 Feet

Figure 3
Local Vicinity Map - Aerial Based

Boulder Avenue Bridge Over City Creek (Replacement) Project
 Habitat Enhancement Plan

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Disturbance

In addition to natural flood disturbance, the mitigation site is subjected to a number of ongoing anthropogenic disturbances that affect the vegetation composition and pose limitations on habitat quality and wildlife use. For many years, the site and vicinity have been under ownership and maintenance by the SBCFCD. The City Creek bankfull and active floodplain areas are routinely dredged, recontoured, regraded, and reinforced during SBCFCD maintenance after major flood events. The banks of City Creek are regularly reconstructed and reinforced with unconsolidated rip-rap (boulders). The low alluvial fan terrace, although not as actively maintained by SBCFCD, is frequented by off-highway vehicles and pedestrians. These areas contain evidence of illegal dumping and trash.

Topography, Hydrology, and Soils

The mitigation site is relatively flat with a gentle northeast-southwest trending slope and elevations ranging from 1,290 to 1,260 feet above mean sea level (amsl). The site is located within an eastern floodplain bank and an adjacent bench or low terrace for City Creek, a perennial stream and tributary to the Santa Ana River.

The general hydrology of the site varies depending upon the location within the larger floodplain area. Portions of the site that occur within the City Creek bankfull and active floodplain are subject to dramatic shifts of surface and groundwater flow throughout the year. Winter rains and snowmelt entering the City Creek floodplain cause intense flooding and scouring each year. High volume flows fill the bankfull floodplain and activate high-flow channels that are dormant for the majority of the year. When surface flows subside, the channel recedes to a single low-flow channel that carries perennial flows year-round. Portions of the site that occur within the alluvial fan terrace and bench for City Creek experience less-dramatic hydrology changes throughout the year. These low terrace areas contain paleo channels that are generally inactive for the majority of the year. The areas are well-drained and situated above the water table, and the duration of surface flows within the paleo channels is restricted to periods during and immediately after storm events. The existing channels, if present, are relatively stable and do not shift location from year-to-year. Soils are well-developed and vegetation is generally denser and more diverse.

The observed surface soils within the majority of the mitigation site consist of boulders, gravel, sand, and finer sediment typical of an inactive alluvial fan. In some areas, the surface soils have been disturbed as a result of off-highway vehicle use. The soils mapped within the site are Soboba stony loamy sand (2 to 9 percent slopes). These soils are typically associated with alluvial fan landforms at locations from 30 to 4,200 feet amsl that receive a mean annual precipitation of 10 to 20 inches, mean annual air temperature of 61 °F, and a frost-free period of 210 to 330 days. The parent material is alluvium derived from granite. The soils are excessively drained with a depth to restrictive layer and water table of more than 80 inches. The soils are typically non-saline (0.0 to 1.0 mmhos/cm) and have a very low water capacity (about 2.5 inches). A typical profile consists of very stony loamy sand in the upper 10 inches, and very stony sand from 10 to 60 inches.

Vegetation Communities

As depicted on Figure 4, approximately 3.40 acres of pioneer Riversidean alluvial fan sage scrub (RAFSS) and 2.95 acres of intermediate RAFSS occurs within the mitigation site. RAFSS has been described as a variant of coastal sage scrub that is distinct and rare, found primarily on alluvial fans and flood plains along the southern bases of the Transverse Ranges and portions of the Peninsular Ranges in southern California. This relatively open habitat type is adapted to periodic flooding and erosion and is comprised of an assortment of drought-deciduous shrubs and larger evergreen woody shrubs. RAFSS vegetation includes plant species that are often associated with coastal sage scrub, chaparral, or desert transition communities. Three phases (pioneer, intermediate, and mature) have been defined for RAFSS communities that generally correspond to factors such as flood scour, distance from flood channel, time since last catastrophic flood, and substrate features. Common RAFSS plant species include scalebroom (*Lepidospartum squamatum*), California buckwheat (*Eriogonum fasciculatum*), felt-leaf yerba santa (*Eriodictyon crassifolium*), shiny-leaf yerba santa (*Eriodictyon trichocalyx*), Our Lord's candle (*Yucca whipplei*), sugar bush (*Rhus ovata*), lemonade berry (*Rhus integrifolia*), laurel sumac (*Malosma laurina*), California juniper (*Juniperus californicus*), mule fat (*Baccharis salicifolia*), showy penstemon (*Penstemon spectabilis*), golden aster (*Heterotheca villosa*), brittlebush (*Encelia farinosa*), prickly pear and cholla (*Opuntia* spp.), chamise, oaks (*Quercus* spp.), white sage, annual forbs, and native and non-native grasses.

Within the mitigation site, pioneer RAFSS generally defines the lower floodplain areas of City Creek, as well as disturbed portions of the floodplain slopes, levee berms, and upper bench areas to the east of City Creek. Intermediate RAFSS occurs as contiguous stands within the upper bench areas that are not as susceptible to disturbance from flood waters and do not contain evidence of disturbance from previous flood control maintenance or other activities. Dominant plant species characterizing the pioneer RAFSS within the mitigation site include California buckwheat, deerweed (*Lotus scoparius*), brittlebush, and mule fat. Dominant plant species within the intermediate RAFSS include California buckwheat, California sagebrush (*Artemisia californica*), and shiny-leaf yerba santa. Better quality RAFSS continues further to the east and west within the historic floodplain for City Creek.

Baseline Vegetation Composition and Diversity

A complete floristic inventory of the RAFSS habitat that occurs on and in the immediate vicinity of the mitigation site was conducted by Michael Brandman Associates (MBA) in May and July 2006 as part of rare plant and focused SARWS survey efforts. Since that time, several biological surveys confirming existing conditions within the mitigation site have occurred that have also included qualitative assessments of the vegetation composition and diversity of the RAFSS habitat. The data gathered from these surveys, in addition to interpretations of photographs and recent aerial imagery, have aided in establishing the baseline condition within the mitigation site, from which the success of the enhancement activities discussed in this HEP can be compared. Seeding locations, number and composition of plant species, and conditions upon completion of initial enhancement activities will also



Figure 4
Existing Vegetation Communities

Boulder Avenue Bridge Over City Creek (Replacement) Project
 Habitat Enhancement Plan

Source: San Bernardino County, USFWS.



1 inch = 180 feet
 0 90 180 360 Feet



PROJECT NO. 309-120012071101, 12/15/2012

be documented by the Restoration Monitor and will help establish the baseline conditions and parameters for annual monitoring. The baseline vegetation composition within the mitigation site is discussed below in terms of percent cover of native versus non-native plant species and diversity.

Percent Cover of Native vs. Non-Native Plant Species

As discussed above and depicted within Figure 4, the vegetation community present within the mitigation site is RAFSS, including both pioneer and intermediate phases. Approximately 3.40 acres of pioneer RAFSS and 2.95 acres of intermediate RAFSS occur. Percent coverage of native and non-native species varies within the mitigation site. In general, the intermediate RAFSS has a higher relative coverage of native species than the pioneer RAFSS, where relative coverage does not take into account the percent coverage of bare ground, which is much more prevalent in the pioneer phase. The approximate relative coverage values within the intermediate RAFSS at the mitigation site is 85% native and 15% non-native. The approximate relative coverage values within the pioneer RAFSS at the mitigation site is 30% native and 70% non-native (non-native, annual grasses, mostly). Therefore, averaging the two RAFSS phases, the total approximate relative coverage values for the entire mitigation site is 57.5% native and 42.5% non-native.

Floristic Diversity

The habitat is fairly homogeneous and exhibits a relatively low floristic diversity compared to other coastal and inland scrub-type habitats in the region. A total of 44 plant species have been previously documented within the habitat. Of the total 44 plant species inventoried, 33 (75%) are native and 11 (25%) are non-native. With respect to life form, 22 (50%) are annual herbs, 9 (20%) are deciduous shrubs, 7 (16%) are perennial herbs, 4 (9%) are evergreen shrubs, and 2 (5%) are stem succulents. Of the total 44 plant species, 7 (16%) function as dominant plant species of the habitat, all of which are native shrubs.

Important Biological Functions and Values

Habitat quality within the mitigation site is considered moderate to high based on habitat connectivity, soils, and vegetation composition, health, and structure. The existing RAFSS habitat provides for a number of important biological functions including providing high quality nesting, refuge, foraging, and dispersal habitat for a number common and sensitive wildlife species. In addition to serving as a sensitive ecotone and transition between upland and lowland habitats, the community provides suitable habitat for a number of narrow-ranging and endemic plants that are locally rare, including the federally and state endangered SARWS, as well as sensitive wildlife species such as the federally endangered SBKR.

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Chapter 2 CITY CREEK AND ALLUVIAL FAN TERRACE HABITAT ENHANCEMENT

2.1 Habitat Enhancement Goals

The overall goal of this enhancement plan is to improve the physical conditions at the mitigation site above the baseline condition. The specific goals translated from the agency approvals and permits for the mitigation effort are to:

- Enhance long-term biological and hydrological function and value of existing jurisdictional waters and wetlands by: (1) hydroseeding temporary construction impact areas within the banks of City Creek; and, (2) removing non-native and invasive species to achieve less than 10 percent total coverage of non-natives within the hydroseeded areas at the completion of the enhancement effort.
- Enhance the long-term biological function and value of existing sensitive RAFSS habitat for SARWS, SBKR, and other wildlife species by: (1) removing trash and non-native and invasive species within the alluvial fan terrace areas east of the City Creek bankfull floodplain; and, (2) performing supplemental seeding of native RAFSS plant species within the alluvial fan terrace areas targeted for trash and non-native and invasive species removal.

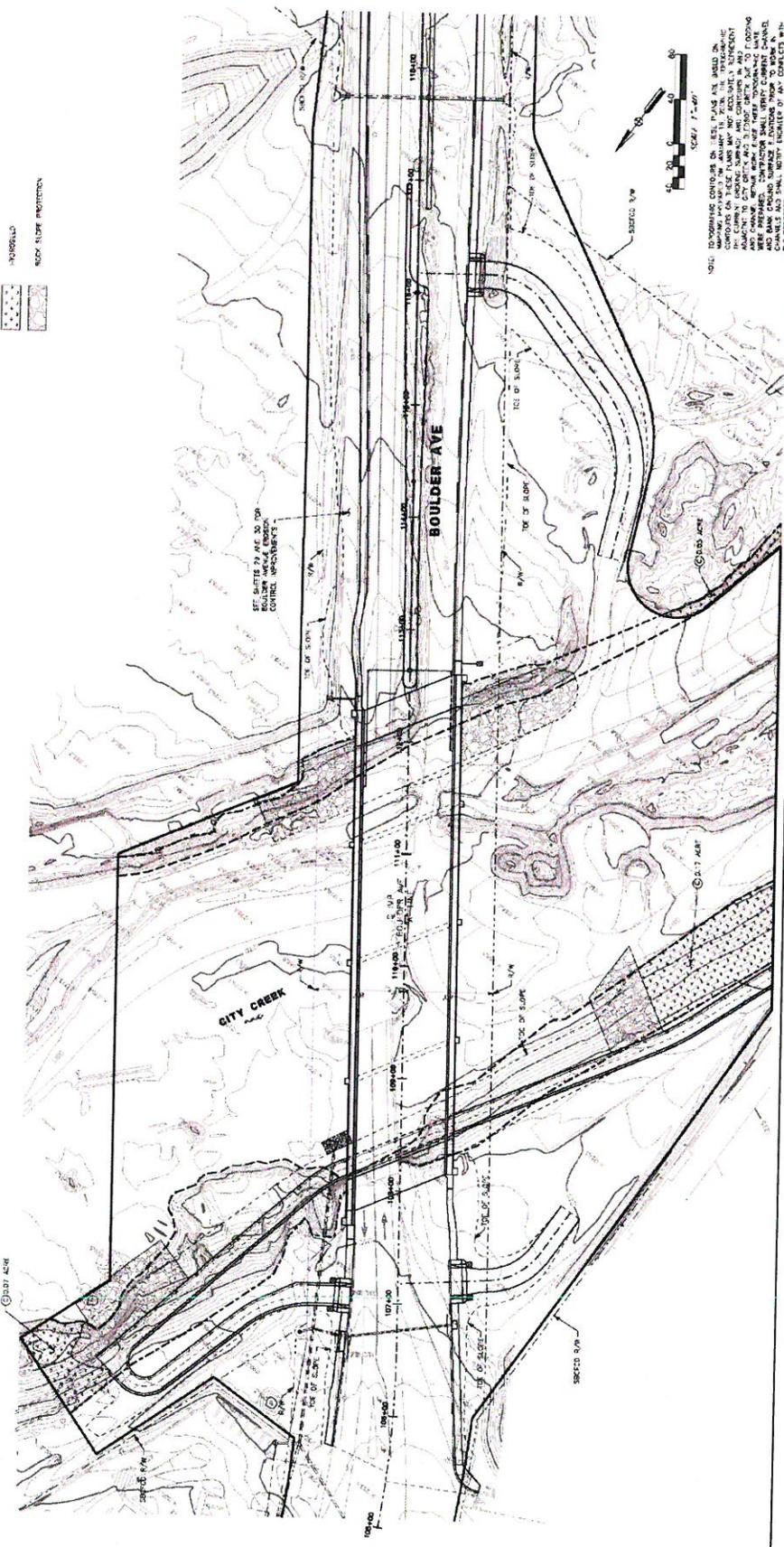
2.2 Habitat Enhancement Areas

The plans provided in Figures 5 and 6 depict the specific locations of the areas proposed for enhancement. Figure 7 provides an all-encompassing graphic of the specific enhancement areas against aerial imagery. The specific enhancement areas include the following:

Enhancement Area 1: As depicted within Figures 5 and 7, Enhancement Area 1 includes three predetermined areas within the banks of City Creek that will be temporarily impacted during construction of the Boulder Avenue Bridge project and subsequently hydroseeded with native plant species. The total acreage of Enhancement Area 1 is 0.27 acre. Upon completion of Boulder Avenue Bridge project construction activities, these areas will be regraded, recontoured, and ripped in preparation for targeted enhancement. Once the sites are prepared, the areas will be hydroseeded with native plant species as specified in this chapter and as shown on the mitigation plans. Upon completion

ESDSON, CONVEYOR, NOTES
 CONTRACT NO. 10-0000000-0000-0000
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- LEGEND**
- PROJECT BOUNDARY/LINE LIMIT
 - - - - - EXTENT OF EASE ACQUISITION
 - - - - - EXTENT OF EASE ACQUISITION
 - ▨ ROWSHELL
 - ▨ ROCK SLOPE PROTECTION



NOTE: TO MAINTAIN CONTINUOUS RECORDS, PLEASE HAVE THE CONTRACTOR VERIFY THE FIELD CONDITIONS AND RECORD THE ACTUAL FIELD CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FIELD CONDITIONS AND RECORDING THE ACTUAL FIELD CONDITIONS. ANY CHANGES TO THE ORIGINAL DESIGN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FIELD CONDITIONS AND RECORDING THE ACTUAL FIELD CONDITIONS.

Figure 5
Mitigation Plans for Enhancement Area 1

Boulder Avenue Bridge Over City Creek (Replacement) Project
 Habitat Enhancement Plan

Series: AEGCOM

10001107-000-0000-0000-0000-0000





- Area of Potential Effects/ Project Boundary
- Enhancement Area 1 (0.27 acre)
- Enhancement Area 2 (6.08 acres)



Figure 7
City Creek and Alluvial Fan Terrace Enhancement Areas

Boulder Avenue Bridge Over City Creek (Replacement) Project
 Habitat Enhancement Plan

Source: San Bernardino County, USFWS.



100013-30-0001001101_01.dwg

of site preparation and hydroseeding activities, the areas will be maintained and monitored for the removal of non-native and invasive plant species for a period of two years, or until the site achieves less than 10 percent total coverage of non-native and invasive plant species, as required by the USACE.

Enhancement Area 2: As depicted within Figures 6 and 7, Enhancement Area 2 includes three predetermined areas within the eastern bank of City Creek and adjacent alluvial fan terrace habitat. The total acreage of Enhancement Area 2 is 6.08 acres. In accordance with the schedules specified in this enhancement plan, these areas will be raked, smoothed, and/or scarified by non-mechanized methods in preparation for targeted enhancement. Once the sites are prepared, the areas will be hand-seeded with native plant species as specified in this chapter. Upon completion of site preparation and hand-seeding activities, the areas will be maintained and monitored for the removal of non-native and invasive plant species for a period of two years, as required by the USFWS and CDFG, or until the enhancement activities are determined successful by CDFG.

2.3 Habitat Enhancement Activities

Mitigation Site Delineation

The mitigation site encompassing Enhancement Areas 1 and 2 has been selected and approved based on previous consultation and agreements made between the City and the appropriate agencies. Permits will be acquired from the SBCFCD to access the mitigation site over the duration of the enhancement activities. Prior to initiating any enhancement activities, the limits of the mitigation site shall be accurately staked in the field by the Habitat Management Contractor according to existing surveys and legal descriptions prior to any grading and site preparation to ensure there is not encroachment into any adjacent areas that may contain sensitive habitat or are part of the Boulder Avenue Bridge project.

Site Protection and Signage

The mitigation site shall be provided with signage at locations adjacent to Boulder Avenue to identify it as "Off Limits - Please Do Not Disturb - Habitat Restoration in Progress" or similar. No fencing of any kind shall be used to contain the mitigation site due to the potential use of the habitat by SBKR.

Site Preparation

Appropriate preparation of the mitigation site prior to hydroseeding in Enhancement Area 1 or hand-seeding in Enhancement Area 2 is essential to the success of the mitigation effort. The site preparation activities will be conducted by the Habitat Management Contractor with oversight from the Restoration Monitor. The Biological Monitor must be present at the mitigation site during all site preparation work. Site preparation activities appropriate for this enhancement program would include recontouring and/or ripping temporary construction impact areas for the acceptance of hydroseed application (Enhancement Area 1), in addition to non-mechanized raking, smoothing, and/or lightly scarifying the

soil surface within areas targeted for supplemental hand-seed application (Enhancement Area 2). Due to the sandy alluvial soil composition of the mitigation site, intensive soil decompaction is not anticipated to be required. However, prior to any hydroseeding or hand-seeding activities, the upper soil horizons (upper 18.0 inches within Enhancement Area 1; upper 0.25 inch within Enhancement Area 2) shall be disturbed to ensure that the seeds have crevices to settle into the ground and maximize germination success. Care shall be taken during the site preparation effort so that existing native species are not disturbed. The Habitat Management Contractor must coordinate site preparation with the Restoration Monitor and Biological Monitor to identify and flag existing native plant species, especially SARWS, and other sensitive resources to avoid and protect.

Removal of Trash and Other Debris

Prior to, during, or immediately after site preparation work, the mitigation site must be cleared of all trash and other debris (e.g., concrete, green waste, dirt spoils, etc.) by the Habitat Management Contractor. The Biological Monitor must be present at the mitigation site during all trash removal work. The mitigation site is subject to illegal dumping and contains scattered trash items that have been carried into the site over the years. No vehicles shall be allowed within the mitigation site, and the removal of trash shall be conducted by hand. It is the responsibility of the Habitat Management Contractor to ensure that all trash removed from the mitigation site is properly disposed. Proper containment, disposal, and removal of trash shall be a priority for all workers at the mitigation site during the duration of the enhancement effort.

Hydroseeding

As depicted within Figures 5 and 7, hydroseed application of native plant species is required within Enhancement Area 1. Although not required, it is expected that the City will hydroseed other temporary construction impact areas with native plant species that may be subject to erosion damage after construction. The native hydroseed mix will be applied to areas shown on the plans by the Habitat Management Contractor with oversight provided by the Restoration Monitor.

Table 1 below provides a list of recommended native RAFSS plant species to be used in the hydroseed palette. The pounds per acre of seed will be adjusted to achieve the specified pounds per acre of pounds of live seed when actual percent purity and germination rates are determined.

The hydroseed will be applied with standard amendments, such as cellulose fiber mulch and organic soil stabilizer, or as otherwise directed by the Restoration Monitor. It is also recommended that an additional 1.8 million mycorrhizae fungi propagules (per acre) be included in the hydroseed mix during the first pass of the 3-step hydroseed application discussed below.

Table 1 Recommended Native Plant Palette for Hydroseed Application

Common Name	Scientific Name	Estimated Minimum Percent Germination	Estimated Minimum Live Seed Per Acre (Lbs)
California sagebrush ²	<i>Artemisia californica</i>	40	2.0
mule fat ²	<i>Baccharis salicifolia</i>	40	2.0
California brome ¹	<i>Bromus carinatus</i>	75	1.0
California suncup ²	<i>Camissonia bistorta</i>	75	1.0
California croton ²	<i>Croton californicus</i>	60	1.0
bush poppy ²	<i>Dendromecon rigida</i>	40	1.0
California brittlebush ²	<i>Encelia farinosa</i>	20	3.0
felt-leaf yerba santa ²	<i>Eriodictyon crassifolium</i>	20	2.0
shiny-leaf yerba santa ²	<i>Eriodictyon trichocalyx</i>	20	3.0
California buckwheat ²	<i>Eriogonum fasciculatum</i>	20	3.0
California poppy	<i>Eschscholzia californica</i> ¹	75	1.0
Spanish lotus ¹	<i>Lotus purshianus var. purshianus</i>	75	1.0
deerweed ²	<i>Lotus scoparius</i>	60	3.0
miniature lupine ¹	<i>Lupinus bicolor</i>	75	1.0
small fescue ¹	<i>Vulpia microstachys</i>	75	1.0

¹Seed source from anywhere in California.

²Seed source from Riverside and San Bernardino Counties or closest available sources, unless otherwise directed by the Restoration Monitor.

It is recommended that the Habitat Management Contractor perform the hydroseeding according to a three-pass application process, as follows:

- Pass 1: 500 lbs. mulch material per acre and additional (optional) mycorrhizae inoculums.
- Pass 2: Seeds (up to twice the indicated palette amount), *Trichoderma* sp. fungi at suppliers recommended rate (i.e., Root Guard), plus 500 lbs. mulch material per acre.
- Pass 3: 1000 lbs. mulch material per acre.

The three-pass system helps to ensure that seeds are trapped in the mulch material to compensate for the mulch lifting from the soil surface during wetting/drying phases. The trapping decreases seed failure due to inconsistent water absorption processes.

Non-Native Invasive Removal

Non-native and invasive species include plant species that shall be eradicated from Enhancement Areas 1 and 2 immediately upon observation. The species in this category have the ability to invade and completely dominate healthy native habitats. These species include plants so well-adapted to survival that they pose an ecological threat to the well being of the habitats within and outside of the mitigation site.

The non-native and invasive species removal activities will be undertaken by the Habitat Management Contractor with oversight provided by the Restoration Monitor. The Biological Monitor must be present at the mitigation site during all non-native invasive removal activities. The removal activities will include an initial intensive treatment at the mitigation site followed by twice-yearly treatments for two years, at minimum, during the duration of the monitoring term.

The California Invasive Plant Council (Cal-IPC) maintains a list of non-native invasive plant species that are known to pose significant ecological impacts. The Cal-IPC ranks species according to their statewide invasiveness. Table 2 below lists non-native species that are considered to be invasive by the Cal-IPC and may occur within the mitigation site. Species with a Cal-IPC classification of Moderate or High shall be specifically targeted during the non-native removal activities.

Table 2 Cal-IPC Invasive Plant Species Targeted for Removal

Common Name	Scientific Name	Cal-IPC Classification
giant reed	<i>Arundo donax</i>	High
black mustard	<i>Brassica nigra</i>	Moderate
birdsrape mustard	<i>Brassica rapa</i>	Limited
Saharan mustard	<i>Brassica tournefortii</i>	High
ripgut	<i>Bromus diandrus</i>	Moderate
red brome	<i>Bromus madritensis ssp. rubens</i>	High
totalote	<i>Centaurea melitensis</i>	Moderate
yellow star thistle	<i>Centaurea solstitialis</i>	High
bermuda grass	<i>Cynodon dactylon</i>	Moderate
fennel	<i>Foeniculum vulgare</i>	High
wild geranium	<i>Geranium dissectum</i>	Moderate
tree tobacco	<i>Nicotiana glauca</i>	Moderate
hore-hound	<i>Marrubium vulgare</i>	Limited
African fountain grass	<i>Pennisetum setaceum</i>	Moderate
bristly ox-tongue	<i>Picris echoides</i>	Limited
castor bean	<i>Ricinus communis</i>	Limited
salt cedar (tamarisk)	<i>Tamarix spp.</i>	High
rattail fescue	<i>Vulpia myuros</i>	Moderate

Cal-IPC Classification

High = Species known to have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure.

Moderate = Species known to have substantial and apparent, but generally not severe, ecological impacts on physical processes, plant and animal communities, and vegetation structure.

Limited = Species that are invasive, but their ecological impacts are minor on a statewide level, or, there was not enough information to justify a higher score.

The non-native removal activities at the mitigation site will specifically target the species provided above within Table 2, as well as any other species determined necessary for removal by the Restoration Monitor. The removal methods most appropriate for the enhancement effort include weeding using

hand tools, focused line trimmer (weed whacker), and focused herbicide application, as discussed below.

Hand Weeding

The purpose of controlling non-native annual grasses and weeds is to temporarily immobilize completion of the growth cycle and prevent the production of additional seeds. Annual weeds are extremely fast-growing and high water/nitrogen consumers. This allows these plants to quickly produce seeds before conclusion of their annual life cycle. Maintenance activities shall be conducted in a manner that controls these annual weeds so that slower growing native species have an opportunity for water and sunlight. These activities may include pulling weeds, spraying herbicides, and using hand tools. The main goal is to promote the germination and growth of natives by controlling the annual weeds.

Appropriate timing of weeding is critical. Therefore, the Habitat Management Contractor must remove, kill, or treat annual weeds at the mitigation site each year before seed production. If the Habitat Management Contractor misses the time period to remove annual weeds before seed production, subsequent removal activities may be ineffective and the effort may be wasted. Annual weeds will die once seed production occurs. Regardless of the success of native species, activities that prevent the production of annual weed seeds will significantly decrease annual weed challenges in the following growing season and increase the chance of success for the enhancement effort.

Perennial weeds must be completely killed or removed in order to eradicate these species. Mowing and line trimming in most cases enhances the growth of these species. Perennial weeds most likely need to be hand pulled or sprayed with appropriate herbicides. Regardless of the success of target species, good removal of perennial weeds will offer significant advancements in project success.

The Habitat Management Contractor and Restoration Monitor will be responsible for ensuring that the weed control methods do not damage, destroy, or hamper existing or growing natives. The Biological Monitor is responsible for ensuring that the weed control activities are conducted in a manner that prevents impacts to SARWS, SBKR, and other sensitive biological resources.

Line Trimming

The Habitat Management Contractor may choose to line trim (weed whack) specific areas within the mitigation site for three reasons: 1) efficient clearing prior to seeding; 2) effective reduction of exotic seed recruitment; and, 3) enhancement of native perennial plant growth from seed. Line trimming for the purposes of thinning an area before seeding can be conducted within various heights as needed by the Habitat Management Contractor. However, line trimming for the purposes of seed removal and enhancement activities needs to be carefully considered and conducted under close supervision by a qualified person that can properly identify plant species within the mitigation site. The most common mistake in maintaining native habitats comes from mowing heights. Contractors routinely mow perennial plants below their recoverable thresholds or mow non-target species. Therefore, the Habitat Management Contractor, under the close direction of the Restoration Monitor, must take note of all

species present on the mitigation site to determine appropriate target species and trimming heights in specific treatment areas. It is imperative that the Biological Monitor be present at the mitigation site during all line trimming work.

Selective Herbicide Application

In specific circumstances, targeted herbicide applications may be necessary for the enhancement effort. It is anticipated that herbicide application will not be required in Enhancement Area 2, as the goal for enhancement in this area is to remove non-native grasses and other non-native species that can probably be treated by hand-weeding. The Habitat Management Contractor is responsible for determining the appropriate herbicide to achieve the maintenance goals and prevent misuse within unauthorized areas. The Habitat Management Contractor is also responsible for ensuring materials are applied in a manner that will not damage desirable plants or impose damages to the natural environment, especially habitat for listed species and aquatic sites.

The Habitat Management Contractor, under the direction of the Restoration Monitor, shall selectively apply herbicide directly onto the leaves and stems of non-native invasive plants within the mitigation site. A surfactant may be used to enable herbicide penetration of the plant cuticle. Common herbicide products that may be appropriate for the enhancement effort include 2,4-D, Clopyralid, Dicamba, Glyphosate, Chlorsulfuron, and Triclopyr. All herbicides registered for use in the U.S. and California must have a label certifying that the Federal Environmental Protection Agency (EPA) and the California Department of Pesticide Regulation (DPR) have approved the herbicide for use. Prior to the use of herbicides in SBKR suitable habitat, the Biological Monitor will consult with the USFWS and CDFG to ensure they are safe to use in sensitive habitat areas. Further, certain herbicides shall not be used at aquatic sites. It is the Habitat Management Contractor's responsibility to obtain the correct products for the enhancement effort and read all product labels carefully for appropriate use. Herbicide shall only be used if approved by the City or Designee.

Supplemental Hand-Seeding

Upon completion of all site preparation and non-native invasive removal activities, areas within Enhancement Area 2 (Figures 6 and 7) will be hand-seeded with native RAFSS species by the Habitat Management Contractor, with oversight from the Restoration Monitor, in an effort to increase native species coverage and prevent non-natives from recolonizing the area. The Biological Monitor shall be present at the mitigation site during hand-seeding activities.

The first treatment of hand-seeding shall be conducted by the Habitat Management Contractor during late fall/early winter (October to January), and preferably, immediately prior to or during the earliest winter rain storms of the season. Repeat application of hand-seeding following maintenance activities over the monitoring term will likely be required to achieve the best results.

Table 3 below provides a list of recommended native RAFSS plant species to be used in the hand-seeding palette. The pounds per acre of seed will be adjusted to achieve the specified pounds per acre of pounds of live seed when actual percent purity and germination rates are determined. The Restoration Monitor may determine the need for higher quantities of seed depending on the effectiveness and response of the site to site preparation activities.

Table 3 Recommended Native Plant Palette for Hand-Seeding Application

Common Name	Scientific Name	Estimated Minimum Percent Germination	Estimated Minimum Live Seed Per Acre (Lbs)
California sagebrush ²	<i>Artemisia californica</i>	40	3.0
California brome ¹	<i>Bromus carinatus</i>	75	2.0
California brittlebush ²	<i>Encelia farinosa</i>	20	3.0
shiny-leaf yerba santa ²	<i>Eriodictyon trichocalyx</i>	20	3.0
California buckwheat ²	<i>Eriogonum fasciculatum</i>	20	8.0
deerweed ²	<i>Lotus scoparius</i>	60	4.0

¹Seed source from anywhere in California.

²Seed source from Riverside and San Bernardino Counties or closest available sources, unless otherwise directed by the Restoration Monitor.

Prior to seed application, the soil surface within the areas targeted for supplemental hand-seeding shall be conducted by non-mechanized means by mildly smoothing the surface with a drag chain or roughing and scarifying by landscape rakes (metal hand rakes). The seed mix shall be evenly hand-broadcasted throughout the treatment areas at 90 degree passes. After seed and any required amendments (see below) have been applied, the upper 0.25 inch of soil shall be lightly raked again to mix the applied seed with the top surface of the soil. Light application of a carbon-based mulch material (e.g., wood fiber mulch or straw) may also be used to improve success. Application of carbon-based mulch will provide erosion protection, increase seed germination, and decrease weed growth. The carbon-based material and applied seeds shall be pressed firmly to achieve good contact with the native soil by means of a standard landscape roller or hand tools. Seeds shall not be incorporated deeper than 0.25-inch, hence raking and pressing is preferential to any intensive soil disturbance or amendments.

Optional Amendments

This section discussed amendments to the seeding, soil conditions, and general enhancement approach that shall be considered by the Habitat Management Contractor and Restoration Monitor to improve enhancement success.

Mycorrhizae

The application of mycorrhizae fungi by the Habitat Management Contractor at a minimum rate of 3.6 million propagules per acre should be considered prior to hand-seeding activities within Enhancement Area 2. The mycorrhizae should be hand-broadcasted and then mixed or raked into the soil to a minimum depth of six inches, where feasible. Endonet® mycorrhizae products are pre-approved.

Mycorrhizae materials must not be exposed on the soil surface for more than 30 minutes, regardless of weather conditions. Any materials exposed on the surface more than the allocated time will be considered damaged and the Habitat Management Contractor will be required to reapply those materials at the Habitat Management Contractor's expense. All mycorrhizae products must be stored in cool dry areas until the time of application. Materials observed in direct sunlight will be considered damaged and new materials will be required at the Habitat Management Contractor's expense.

Native Soil from the Mitigation Site

Use of native soil from the mitigation site and immediate vicinity during hand-seeding application at Enhancement Area 2 should be considered for the enhancement effort. The upper soils horizons at the base of existing native shrubs (e.g., *Eriogonum fasciculatum*) within dense RAFSS on the mitigation site contain native seeds, fungi, and other beneficial compounds that could be collected and used to supplement the mitigation effort. Should such an amendment be implemented during the enhancement effort, small soil samples (0.5 L) should be collected within the upper 6 inches at the base of native shrubs, and the samples should be mixed into the upper 0.25 inches of soil within areas treated with hand-seeding application. Samples should be stored in cool dry areas away from direct sunlight until the time of application. Collection of soil samples must be conducted under supervision of the Biological Monitor.

Salvaged Plant Material from the Boulder Bridge Project Site

Use of salvaged RAFSS plant material (and surface soils) scraped from the Boulder Bridge project, if feasible, should be considered during site preparation at Enhancement Area 2. Upon removal at the Boulder Bridge project, the plant material and soil could be temporarily stockpiled within disturbed upland areas adjacent to the mitigation site. The Habitat Management Contractor could mulch (chip) and disperse the plant material by hand at the mitigation site during the site preparation activities to improve soil conditions and enhance the native seed bank. This method incorporates the use of native materials from the mitigation site vicinity and has been demonstrated to increase success of habitat creation efforts. Application of material by the Habitat Management Contractor must be conducted under supervision of the Restoration Monitor and Biological Monitor.

Organic Fertilizers and Applications

Broadcast applications of nitrogen-based fertilizers are not allowed in the enhancement areas. Soluble nitrogen products only promote the competition of annual weedy plant species, and provide little benefit to the establishment of slow-growing perennial native species. The only exception of nitrogen application is the discretionary use of organic slow-release nitrogen "tablets" or similar applications mixed into the surface soils prior to or during any supplemental hand-seeding. Prior to the use of organic fertilizers in SBKR suitable habitat, the Biological Monitor will consult with the USFWS and CDFG to ensure they are safe to use in sensitive habitat areas.

Organic applications involve mechanical and pneumatic equipment designed to apply straw, compost, biosolids, or other organic carbon-based materials (e.g., straw blower, "terra seeder"). Hydroseeding is not included as a type of organic application. Organic applications, above and beyond those that may be required during hydroseeding, are not anticipated to be needed for the enhancement effort. If the Restoration Monitor and Habitat Management Contractor determine that organic applications are appropriate, then upon completing the site preparation process, the surface should be mildly smoothed by a drag chain or landscape raking. Seed should be manually cross broadcast prior to straw applications or injected into blown straw stream. In straw applications, one-half of the recommended mycorrhizae propagules (1.8 million) may be incorporated into the seed injection process if the Habitat Management Contractor can exhibit a benefit to not including that one-half of material into the soil preparation process. In pneumatic compost applications, the entire recommended mycorrhizae propagules (3.6 million) may be incorporated into the seed injection process if the Habitat Management Contractor can exhibit a benefit to not including that full amount of material into the soil preparation process. In applying compost, biosolids, or other heavy based materials, the seed injections must occur within the upper 0.25 inch powdering of the material application.

2.4 Habitat Enhancement Schedule

Site preparation and the initial non-native invasive removal effort should be implemented as close to the anticipated fall/winter start date for seeding and installation as possible, and preferably in the late summer through early fall before the rainy season (June to October) in effort to avoid site neglect and minimize the establishment of non-target plant species within the site while it is waiting to be treated. Supplemental non-native removal activities must occur during the spring months (March to May). Initial seeding should generally be conducted during the late fall and winter months (October to January) after all site preparations are completed. Likewise, supplemental seeding (if needed) shall be conducted during the same time period in subsequent years.

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Chapter 3 **MAINTENANCE DURING MONITORING PERIOD**

Timely maintenance activities are vital to the success of any enhancement program. The Habitat Management Contractor should be aware that overly aggressive and improper maintenance activities may create more damage than good. All maintenance activities should be thoroughly planned by the Habitat Management Contractor and Restoration Monitor before taking any action. It is the Habitat Management Contractor's responsibility to achieve the underlying goal of the enhancement program of keeping highly invasive non-native plant species under strict management during the duration of the effort.

3.1 Maintenance Activities

Maintenance activities anticipated during the monitoring period include ongoing trash removal, non-native invasive removal (including hand weeding, line trimming, and herbicide application), and supplemental hand-seeding. The general methods associated with these activities are described within Chapter 2. The Restoration Monitor will be responsible for determining the extent to which maintenance activities are required within the mitigation site in order to achieve habitat enhancement. The Restoration Monitor will direct the Habitat Management Contractor as to which maintenance activities are required within the mitigation site. All maintenance activities within the mitigation site must be conducted under the supervision of the Biological Monitor.

3.2 Maintenance Schedule

Trash removal can occur at any time of the year. Maintenance involving non-native invasive removal at the mitigation site shall be performed every year during the spring months (March to May), and most importantly, before weed species set and go to seed. More than one treatment of non-native invasive removal (e.g., one treatment in the spring, and a subsequent treatment in the summer and/or fall) may be necessary at the mitigation site to maximize success, as determined by the Restoration Monitor. Any supplemental hand-seeding required after the initial seeding treatment shall occur during late fall/early winter (October to January), and preferably, immediately prior to or during the earliest winter rain storms of the season.

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Chapter 4 **PERFORMANCE MONITORING AND REPORTING**

4.1 General Performance Criteria

No performance standards or success criteria have been specifically conditioned for the enhancement effort, with the exception of the areas proposed for hydroseed application in Enhancement Area 1, as discussed in further detail below. The general performance standard for assessing success of the enhancement effort shall be based on establishing a condition that is better than the baseline environment, and in particular, a condition that enhances habitat function and value for SARWS and SBKR. The baseline condition within the mitigation site is described in Section 1.4 in terms of vegetation composition, including percent coverage of native versus non-native plant species and floristic diversity.

The general performance goals of the enhancement effort are to:

- Enhance biological functions and values (e.g., species diversity, forage and cover for wildlife) of the RAFSS habitat when compared to pre-existing conditions at the mitigation site, especially for SARWS and SBKR.
- Substantially reduce coverage and deter the establishment of non-native species, particularly noxious invasive species.
- Provide reasonably effective erosion control, where appropriate.

With respect to these goals, the criteria for measuring success shall be vegetative cover and diversity. Cover shall be expressed in terms of the total cover (all vegetation) throughout the restoration area, as well as the relative cover (percent of vegetated areas) provided by either native plants or by weedy species. Diversity is expressed in terms of the number of species of native plants that are dominant or sub-dominant in the restoration area.

Therefore, if the general success standard for the enhancement is establishing a condition that is better than the baseline environment, then the following should be achieved at the conclusion of the mitigation effort with respect to vegetation composition and diversity:

- The total relative coverage values for the entire mitigation site should exceed 57.5% native species coverage.
- The relative coverage values within the intermediate RAFSS at the mitigation site should sustain or exceed 85% native species coverage. The intermediate RAFSS is in good health and is not expected to require extensive enhancement.
- The relative coverage values within the pioneer RAFSS at the mitigation site should exceed 30% native species coverage. The pioneer RAFSS is in poor to fair health and is expected to require extensive enhancement, particularly in the areas comprised of non-native grasses.
- More than 75% of the total plant species inventoried should be native.
- More than 16% of the total plant species inventoried should represent dominant native plant species.

It is important to note that RAFSS habitat that is too dense may not necessarily be optimal for wildlife species potentially using the mitigation site, most notably, SBKR. Moderate densities (30 to 60 percent total coverage) typical of a pioneer and intermediate RAFSS community may be preferred by SBKR at this site location; therefore, enhancement activities at the mitigation site may not necessarily have to result in the establishment of high densities of natives to truly enhance the area for SBKR. Removal of trash and reduction of non-native species coverage and richness at the site should result in effective enhancement of the habitat given the scope of the effort.

Success Criteria Required for Enhancement Area 1

The hydroseed areas within Enhancement Area 1 are required by the USACE to achieve a less than 10 percent total coverage of non-native invasive plant species upon completion of the long-term maintenance and monitoring. This means that 90 percent of the areas proposed for hydroseed application must consist of native plant species and/or bare alluvial soils with less than 10 percent non-natives. Percent coverage will be determined by qualitative assessments only, as conducted by the Restoration Monitor in accordance with the monitoring procedures recommended below. The Restoration Monitor and Habitat Management Contractor will be responsible for ensuring that proper site preparation, hydroseed application, maintenance, and corrective action is performed in Enhancement Area 1 in order to achieve less than 10 percent coverage of non-natives.

4.2 Monitoring Procedures

All progress monitoring and performance assessments within Enhancement Areas 1 and 2 will be conducted by the Restoration Monitor or designated qualified personnel familiar with the flora and fauna of the local area.

Monitoring of Completion/As-Built Environment

The monitoring will include documentation at completion of the initial site preparation, hydroseeding, and hand-seeding activities at Enhancement Areas 1 and 2. Seeding locations, number and composition of plant species, and conditions upon completion of initial enhancement activities will be documented and will help establish the baseline conditions and parameters for subsequent annual monitoring reports. The documentation will include photographs from designated permanent photo stations to be used throughout the monitoring period.

Annual Monitoring

After initial site preparation, hydroseeding, and hand-seeding are accomplished, Enhancement Areas 1 and 2 will be inspected at least once a year during the spring (March to May), or as otherwise directed by the Restoration Monitor, for a minimum period of two years, in order to perform qualitative assessments and provide recommendations for supplemental seeding and maintenance actions that shall be warranted at the mitigation site.

Qualitative data will be collected annually to determine survivorship, relative and total coverage by species, and to assess species composition and diversity. Qualitative surveys, consisting of a general site walkover and characterization of the coverage and species distribution exhibited throughout the entire mitigation site, will be completed during each yearly monitoring visit. General observations will be noted in each site walkover, including fitness and health of the revegetation species, weed or pest problems, and wildlife species observations, including sensitive and/or listed species.

The annual monitoring will include photographs from the permanent photo stations that were established during the initial documentation of completion monitoring effort.

4.3 Annual Reporting

Monitoring results for Enhancement Areas 1 and 2 will be recorded and included in annual monitoring reports to be submitted to the City, USFWS, USACE, and CDFG.

Documentation of Completion/As-Built Environment

At the conclusion of the initial documentation of completion monitoring effort, the Restoration Monitor shall prepare a brief "As-Built Report" to document the implementation of the site preparations hydroseeding, and hand-seeding activities for both Enhancement Areas 1 and 2. This report shall briefly confirm the site preparation and enhancement dates and methods used, species and quantities of seed applied, seeding methods, and seeding areas. Any significant problems encountered will be included in the report.

Year One and Year Two Monitoring Reports

In the spring following enhancement activities, annual progress reports summarizing monitoring results of activities within Enhancement Areas 1 and 2 will be prepared and distributed by the Restoration Monitor. The reports will document the enhancement and maintenance activities, site performance, and recommend corrective measures if deficiencies are observed.

Annual reports will generally describe observed features including qualitative estimates of species cover and survivorship, success or failure rates of seeded species, and growth of perennial species. Coverage values will be determined by general inspection and qualitative assessment. The observed weed or pest problems, additional maintenance procedures, and general condition and health of the vegetation will be noted in each annual report. Recommendations and schedules for corrective measures will be identified and described. The annual report will include attached photographs from the permanent photo stations.

At minimum, the reports are required to include the following, as specified by the agency approvals and permits:

- 1) Mitigation site location and size;
- 2) Dates of non-native removal and treatment;
- 3) Methods used for non-native removal;
- 4) Amount of material removed and/or treated;
- 5) Frequency and timing of removal and treatment;
- 6) Disposal (of trash and non-natives) specifics;
- 7) Summary of the general successes and failures or failure of the non-native removal;
- 8) Wildlife species observed at the enhancement site during monitoring surveys, including sensitive and/or listed species; and,
- 9) Photographs taken from permanent photo points displaying before and after views of treatment.

4.4 Monitoring and Reporting Schedule

Monitoring of the enhancement progress will be conducted by the Restoration Monitor once a year, for a minimum period of two years, as required by agency approvals and permits. Annual performance evaluations shall be conducted by the Restoration Monitor or designated qualified personnel during the spring of each year (March to May) after the leaf-out period for most plants inhabiting the mitigation site.

Although not specified in the agency approvals and permits, the brief As-Built Report shall be submitted to the City, USFWS, USACE, and CDFG within six weeks of completion of initial enhancement activities.

Year one and two annual monitoring reports are required to be submitted to the USFWS, USACE, and CDFG according to different submittal instructions and dates specified in the approvals and permits:

- Annual reports covering enhancement activities for Enhancement Area 1 are to be submitted to the USACE no later than May 15 of the year the enhancement and monitoring activities took place.
- Annual reports covering enhancement activities for Enhancement Area 2 are to be submitted to the USFWS within six weeks of completion of enhancement activities, and to CDFG no later than December 31 of the year the enhancement and monitoring activities took place.



File: brg 04004
Environmental

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Memorandum

TO: Mr. Dennis Barton
City of Highland

DATE: March 9, 2012

CC: Mr. Mohan Char, Ph.D., P.E.
Vice President Transportation
AECOM

FROM: Mr. Karl Osmundson
Project Biologist
ATKINS

SUBJECT: **MMRP and ECR Comparison Memorandum
Boulder Avenue Bridge Over City Creek (Replacement) Project
City of Highland, San Bernardino County, California**

Mr. Barton:

This brief memorandum serves as documentation of a comparison of the biological resources and regulatory permitting related mitigation measures contained within the Mitigation Monitoring and Reporting Plan (MMRP) and Environmental Commitments Record (ECR) for the City of Highland's (City) Boulder Avenue Bridge Over City Creek (Replacement) Project located in the City of Highland, San Bernardino County, California. The purpose of this memorandum is to note any differences between the MMRP and ECR measures and determine which requirements are no longer be needed as a result of conditions from resource agency permits. Where requirements from the MMRP and ECR are no longer needed, a brief explanation is provided. This memorandum is intended to substantiate project compliance with the California Environmental Quality Act (CEQA).

Table 1 below identifies whether the relevant mitigation measures from the MMRP are also addressed in the ECR and if those measures are no longer required as a result of resource agency permitting.

Table 1 MMRP Mitigation Measure Comparison

MMRP Mitigation Measure	Also Addressed in ECR?	No Longer Required as a Result of Agency Permit?
BIOLOGICAL RESOURCES		
BIO-01. Prior to project implementation, a 4-foot high, 0.5-inch temporary steel mesh SBKR exclusionary fence shall be placed along the right-of-way limits where suitable SBKR habitat exists. The bottom of the exclusionary fence will be buried belowground a minimum depth of 12 inches to minimize the potential that SBKR can re-enter the construction area and to preclude impacts to adjacent habitat.	No	<u>No longer required.</u> A temporary steel mesh SBKR exclusionary fence is no longer required per Biological Opinion. See Biological Opinion for measures pertaining to SBKR.
BIO-02. Trapping shall be conducted for SBKR within 30 days prior to ground-disturbing activities associated with the project. Trapping	No	<u>No longer required.</u> SBKR trapping is no longer required per Biological Opinion.

Table 1 MMRP Mitigation Measure Comparison

MMRP Mitigation Measure	Also Addressed in ECR?	No Longer Required as a Result of Agency Permit?
<p>shall be conducted by a permitted biologist using standard protocol measures associated with SBKR and other sensitive mammal species. The exclusionary trapping effort shall be conducted in such a way that information regarding the abundance and distribution of SBKR within the project footprint can be gathered and so that the effort shall be repeatable post-project. The area within the exclusionary fence shall be trapped for a maximum of 8 nights and any trapped animals shall be relocated to suitable habitat outside the fenced construction limits in previously constructed artificial burrows. All SBKR trapped shall be marked by clipping their fur to identify them if individuals are recaptured.</p>		<p>See Biological Opinion for measures pertaining to SBKR.</p>
<p>BIO-03. A qualified biological monitor shall be present during ground-disturbing activities within suitable habitat for SBKR. The monitor shall have the authority to stop activities should it be required to avoid take of the species. The monitor shall also be responsible for ensuring the project is in compliance with conditions set forth by the USFWS in the incidental take authorization for SBKR pursuant to the FESA.</p>	<p>Yes</p>	<p><u>Required.</u> See Biological Opinion for measures pertaining to SBKR.</p>
<p>BIO-04. The temporary SBKR exclusionary fence shall be maintained in place throughout the duration of construction in these areas to minimize take of SBKR during the construction phase and preclude the inadvertent disturbance of outlying areas by construction personnel. Access to SBKR habitat outside of the construction limits shall be prohibited and posted accordingly. Because SBKR are nocturnal, the exclusionary fence shall be inspected daily before dusk and shall be repaired as necessary so that there are no gaps greater than 0.5 inch on any portion of the fence that could allow SBKR entry into the project area.</p>	<p>No</p>	<p><u>No longer required.</u> Maintenance of a steel mesh SBKR exclusionary fence is no longer required per Biological Opinion. See Biological Opinion for measures pertaining to SBKR.</p>
<p>BIO-05. Within construction limits in any potentially suitable habitat for SBKR in or adjacent to City Creek, all excavated, steep-walled holes or trenches more than 2 feet deep are covered at the close of each working day with plywood or provide one or more escape ramps constructed of earth fill or wooden planks to prevent entrapment of SBKR during construction. The ramps shall be located at no greater than 100 foot intervals, with slopes less than 45 percent, and be at least 1 foot in width.</p>	<p>Yes</p>	<p><u>Required.</u> See Biological Opinion for measures pertaining to SBKR.</p>
<p>BIO-06. Trenches and holes shall be inspected for entrapped wildlife each morning prior to the onset of construction. Holes and trenches shall be thoroughly inspected for entrapped animals prior to the holes and trenches being filled. Any animals discovered shall be removed from the</p>	<p>Yes</p>	<p><u>Required.</u> See Biological Opinion for measures pertaining to SBKR.</p>

Table 1 MMRP Mitigation Measure Comparison

MMRP Mitigation Measure	Also Addressed in ECR?	No Longer Required as a Result of Agency Permit?
trench or hole by a qualified biologist and released.		
<p>BIO-07. All construction pipes, poles, culverts, or similar structures with a diameter of 1.5 inch or greater stored at a construction for one or more overnight periods shall be thoroughly inspected for the presence of SBKR before the pipe is subsequently buried, capped, or otherwise used or moved in any way. Unburied pipes laid in trenches overnight shall be capped. If SBKR are discovered inside a pipe, the section of pipe where the SBKR is discovered shall not be moved until a qualified biologist has been consulted. If necessary and under the direct supervision of a qualified biologist, the pipe may be moved only once to remove it from the path of construction activity until the animal has been removed and released.</p>	Yes	<p><u>Required.</u></p> <p>See Biological Opinion for measures pertaining to SBKR.</p>
<p>BIO-08. Each employee, contractor, or subcontractor involved in project construction (including temporary contractors and subcontractor) shall receive training prior to working within or near areas that may affect federally listed or proposed species.</p>	Yes	<p><u>Required.</u></p> <p>See Biological Opinion for measures pertaining to SBKR.</p>
<p>BIO-09. The permittee shall develop and implement an employee education/ awareness program in coordination with Carlsbad Fish and Wildlife Office (CFWO). At a minimum, the "Workers Environmental Awareness Program" must include the following information:</p> <ul style="list-style-type: none"> • Identification of sensitive habitats and all federally listed and proposed species that may occur in the action areas. • Habitat needs of all federally listed and proposed species and areas where they are known to occur, or could potentially occur within the action areas. • Reasons for protecting biological resources. • Measures that shall be taken to avoid and minimize incidental take during construction, operation, and maintenance activities. • Location of conservation and protected areas within the action areas. • Reporting procedures for observation of listed and proposed species. • Reporting procedures for incidents involving the take or potential for take of listed and proposed species. • Information regarding whom to contact if personnel have further comments or questions 	No	<p><u>No longer required.</u> The minimum information listed in this measure is no longer required per Biological Opinion.</p> <p>See Biological Opinion for measures pertaining to SBKR.</p>

Table 1 MMRP Mitigation Measure Comparison

MMRP Mitigation Measure	Also Addressed in ECR?	No Longer Required as a Result of Agency Permit?
<p>regarding the materials presented during training.</p> <ul style="list-style-type: none"> Information regarding whom to contact at CFWO to report non-compliance with the terms and conditions of the Incidental Take. Statement (or other potential violations of the Act) in the biological opinion. The content of the "Workers Environmental Awareness Program" and the qualifications of the proposed instructor(s) must be submitted to CFWO for review no later than thirty days prior to the proposed initiation of training. Pre-construction meetings and environmental awareness meetings shall be conducted for construction personnel. Contractors' pets shall be prohibited in and adjacent to the construction and environmentally sensitive areas. 		
<p>BIO-10. Prior to implementation of the project, the permittee shall complete consultation with the USFWS pursuant to FESA Section 7 for the replacement of habitat that supports SBKR, CAGN, and other sensitive species or natural communities affected by the project in a USFWS-recognized mitigation bank.</p>	Yes	<u>Required.</u>
<p>BIO-11. Prior to project implementation, fencing of SARWS in proximity to but outside of the impact area shall occur. Any SARWS that would be temporarily impacted by construction activities shall be relocated into revegetation areas containing suitable habitat for SARWS.</p>	No	<p><u>No longer required.</u> The specific actions referenced in this measure are no longer required per Biological Opinion and 2081 Incidental Take Permit.</p> <p>See 2081 Incidental Take Permit for measures pertaining to SARWS.</p>
<p>BIO-12. If vegetation removal occurs during the bird breeding season (February through August), a pre-construction bird survey shall be required less than 7 days before ground disturbance activities. If passerine birds are found to be nesting, a 250-foot buffer, in which no vegetation disturbance would be permitted, shall be required around the active nest. For raptors, the buffer shall be extended to 500 feet. If nesting birds are found during the pre-construction bird survey, Mitigation Measure BIO-13 shall apply. Conversely, if no nesting birds are found, then Mitigation Measure BIO-13 shall not apply.</p>	Yes	<u>Required.</u>
<p>BIO-13. If nesting birds are found during the pre-construction bird survey, a qualified biologist shall closely monitor the nest until it is determined that the nest is no longer active, at which time vegetation can be removed.</p>	Yes	<u>Required.</u>
<p>BIO-14. Prior to the issuance of a Section 401 (Water Quality Certification) Section 404 and Section 1602 (Streambed Alteration Agreement)</p>	Yes	<u>Required.</u>

Table 1 MMRP Mitigation Measure Comparison

MMRP Mitigation Measure	Also Addressed in ECR?	No Longer Required as a Result of Agency Permit?
<p>permit, the permittee shall consult and coordinate with the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB) and the CDFG to determine mitigation measures for impacts to the waters of the United States, waters of the State, and wetlands located on site. This may include, but not be limited to, contribution of a total of 0.52 acre (2:1 ratio) to an approved mitigation bank within the Santa Ana River watershed for off-site habitat preservation. The final amount of mitigation credits to be purchased will be based on final approval from the ACOE, RWQCB, and CDFG.</p>		
HYDROLOGY AND WATER QUALITY		
<p>HYD-01. Prior to the issuance of grading permits, the project proponent shall submit the Waste Discharge Identification Number to the City of Highland as proof that the project's Notice of Intent (NOI) to be covered by the General Construction Permit has been filed with the appropriate RWQCB.</p>	Yes	<u>Required.</u>

Table 2 below identifies whether the relevant mitigation measures from the ECR are also addressed in the MMRP and if those measures are no longer required as a result of resource agency permitting.

Table 2 ECR Mitigation Measure Comparison

ECR Mitigation Measure	Also Addressed in MMRP?	No Longer Required as a Result of Agency Permit?
THREATENED AND ENDANGERED SPECIES		
<p>1 Prior to implementation of the project, the permittee shall complete consultation with the USFWS pursuant to FESA Section 7 for the replacement of habitat that supports SBKR, CAGN, SARWS, and other sensitive species or natural communities affected by the project in a USFWS-recognized mitigation bank.</p>	Yes	<u>Required.</u>
<p>2 The City will retain a biologist knowledgeable about SBKR, woolly-star, and their habitat to function as a biological monitor. At least 30 days prior to initiating project activities, the City will submit to the CFWO, in writing, the name(s), any permit numbers, and resumes of all prospective biological monitors. Project activities will not begin until a biological monitor has been approved by the CFWO:</p>	No	<u>Required.</u>

Table 2 ECR Mitigation Measure Comparison

ECR Mitigation Measure	Also Addressed in MMRP?	No Longer Required as a Result of Agency Permit?
<p>a. The biological monitor will ensure compliance with the project description including Conservation Measures and Terms and Conditions of the FWS biological opinion issued on 1-21-10, and have the authority to halt/suspend all activities until appropriate corrective measures have been taken. The biological monitor will report any noncompliance immediately to the CFWO and the California Department of Fish and Game.</p> <p>b. The biological monitor will develop and implement a contractor education program to be provided to all personnel (including temporary contractors and subcontractors) over the life of the project. Prior to conducting any work on the site, personnel will be instructed regarding: i) the purpose of resource protection, ii) a description of SBKR and its critical habitat and a description of woolly-star and its habitat, iii) the conservation measures that will be implemented in conjunction with project construction, and iv) the general provisions of the Act;</p> <p>c. The biological monitor will be present during vegetation clearing and grading prior to project construction and during construction to monitor habitat conditions and construction impacts as deemed necessary in coordination with the CFWO.</p>		
<p>3 Following initial habitat clearing and grading, the biological monitor will visit the project site at intervals to ensure that project-related activities do not result in incidental take of the SBKR beyond that anticipated in this biological opinion. Monitoring during project construction will include walk-over surveys of the project area 2 days a week (or at some other interval agreed upon with the CFWO) prior to the start of daily construction for the purpose of detecting any evidence that SBKR are entering the construction footprint (e.g., scat, dust-baths, burrows consistent with kangaroo rats) and locating any dead or injured SBKR within the limits of construction. If monitoring detects impacts to SBKR from operation of the proposed project in excess of that described in the above Incidental Take Statement, Caltrans, City or their agents, and/or biological monitor will contact the CFWO immediately.</p>	<p>No</p>	<p><u>Required.</u></p>

Table 2 ECR Mitigation Measure Comparison

ECR Mitigation Measure	Also Addressed in MMRP?	No Longer Required as a Result of Agency Permit?
<p>4 The proposed habitat enhancement activities will be conducted with reasonable caution to avoid crushing or collapsing burrows. If during the course of work, the work crew observes that foot or vehicle traffic associated with enhancement activities is causing soils to collapse, they will avoid these areas and Caltrans, City or their agents, and/or biological monitor will contact the CFWO immediately.</p>	No	<u>Required.</u>
<p>5 Prior to initiating habitat enhancement, the work crew will be instructed by the biological monitor on the listed status of the SBKR and its critical habitat, its appearance, and its basic biology and habitat requirements.</p>	No	<u>Required.</u>
<p>6 Prior to any ground disturbance, all limits of project construction will be delineated and marked so as to be clearly visible to personnel on foot and in heavy equipment. All construction-related activities (e.g., vegetation removal, grading, equipment lay-down and storage, contractor parking) will occur inside the limits of construction. Construction staging and equipment storage will be located outside of any potential habitat areas (i.e., within vacant parcels owned by the SBCFCD and City at the northwest and southwest corners of the project area). All movement of contractors, subcontractors, or their agents and equipment will be restricted to the limits of construction and these staging areas.</p>	No	<u>Required.</u>
<p>7 Caltrans or the City will submit a report to the CFWO covering the results of the monitoring visits to the project site during construction. Reports will be submitted monthly until project completion and will include date of site visits and results of monitoring.</p>	No	<u>Required.</u>
<p>8 The City will fund the removal of nonnative grasses from 6.0 ac (2.43 ha) of adjacent alluvial fan terrace habitat owned by the SBCFCD:</p> <ul style="list-style-type: none"> a. A habitat enhancement plan outlining proposed methodology and schedule for nonnative grass removal will be submitted to CFWO for review and approval at least 30 days prior to initiating project activities; b. This habitat enhancement will be conducted twice yearly for a period of two years. c. A brief report will be submitted to the CFWO within 6 weeks following each treatment of habitat. This report will include: (a) photographs taken from permanent photo points displaying before and after views of treatment; (b) the site location and size; and (c) dates of treatment. 	No	<u>Required.</u>
<p>9 The following Best Management Practices will be implemented during project construction:</p>	No	<u>Required.</u>

Table 2 ECR Mitigation Measure Comparison

ECR Mitigation Measure	Also Addressed in MMRP?	No Longer Required as a Result of Agency Permit?
<ul style="list-style-type: none"> a. All equipment maintenance and dispensing of fuel, oil, coolant, or any other such activities will be restricted to the designated staging areas within the vacant lots behind the west-bank levee of City Creek to prevent the release of a hazardous substance into the project site or City Creek. Any accidental spills will be immediately contained and properly disposed of; b. No pets will be allowed in or adjacent to the project site; c. Rodenticides, herbicides, insecticides, or other chemicals that could potentially harm SBKR or woolly-star will not be used; d. Trash will be stored so that it is inaccessible to scavengers (e.g., crows and raccoons) and will be removed from the construction site on a daily basis so as not to attract potential SBKR predators e. Spoils and rubble will not be deposited outside the limits of construction and all fill and material waste generated by the proposed project will be disposed of offsite. 		
<p>10 The City will purchase 6.0 ac (2.43 ha) of credit from the Cajon Creek Conservation Bank, Vulcan Materials located in San Bernardino County, California. A signed conservation certificate will be submitted to CFWO prior to project implementation.</p>	No	<u>Required.</u>
<p>11 Prior to project-related vegetation clearing and grading, snow fencing or other highly-visible fencing will be installed along the northern and southern construction limits (boundary fencing) from Bledsoe Creek to the edge of the east channel of City Creek. Silt fencing (or similar material) will be installed at the base of the boundary fencing along habitat areas for SBKR as deemed appropriate by the biological monitor:</p> <ul style="list-style-type: none"> a. A fence design will be submitted to the CFWO for approval at least 30 days prior to emplacement; b. The boundary fencing will be inspected by either the biological monitor or a designated agent (e.g., the construction foreman) at the close of each work day to ensure that it is in place and properly maintained. The boundary fencing with silt fencing will remain in place and be maintained until project construction is completed. 	No	<u>Required.</u>
<p>12 Any excavated, steep-walled holes or trenches more than 2 ft (61 cm) in depth will be backfilled or covered with plywood at the close of each working day to help prevent entrapment of SBKR during construction. Though this measure is not applicable to the deep excavations in sandy (unstable) soils within City Creek, these trenches will be sloped rather than steeply angled.</p>	Yes	<u>Required.</u> See Biological Opinion for measures pertaining to SBKR.

Table 2 ECR Mitigation Measure Comparison

ECR Mitigation Measure	Also Addressed in MMRP?	No Longer Required as a Result of Agency Permit?
13 All unfilled holes or trenches will be inspected for entrapped SBKR each morning prior to the onset of construction. Any SBKR so discovered will be removed from the trench or hole by the biological monitor and released outside of the limits of construction.	Yes	<u>Required.</u> See Biological Opinion for measures pertaining to SBKR.
14 Unburied pipes or conduit laid in trenches overnight will be capped. All other pipes or conduit with a bore-diameter of 1.5 inches (in) [32 centimeters (cm)] or greater stored overnight within the construction site for one or more nights will be thoroughly inspected for the presence of SBKR before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If SBKR are discovered inside a pipe, the biological monitor will supervise movement or relocation of the pipe until the animal has been removed and released.	Yes	<u>Required.</u> See Biological Opinion for measures pertaining to SBKR.
15 No night-time construction will occur.	No	<u>Required.</u>
16 Following construction, all permanent lighting installed along the bridge, new road alignments, and trail-crossing bridge will be permanently shielded and directed onto the roadway or trail.	No	<u>Required.</u>
17 The biological monitor will harvest seed capsules after seed set from the woolly-star plants growing within the project footprint. The capsules will be collected and stored in a paper bag in a cool, dry place. Prior to the rainy season, the woolly-star seed capsules will be broken into small pieces and scattered within the adjacent property north of Boulder Avenue on the east bank in an area agreed upon by the landowner (i.e., SBCFCD) and CFWO.	No	<u>Required.</u> See 2081 Incidental Take Permit for measures pertaining to SARWS.
18 Caltrans and/or City will monitor and report on compliance with established take thresholds for the SBKR associated with the proposed action.	No	<u>Required.</u> See Biological Opinion for measures pertaining to SBKR.
19 Caltrans and/or City will monitor and report on compliance with and the effectiveness of project Conservation Measures.	No	<u>Required.</u> See Biological Opinion for measures pertaining to SBKR.
RIPARIAN HABITAT		
1 Prior to the issuance of a Section 401, Section 404 and Section 1602 (Streambed Alteration Agreement) permit, the City will mitigate the loss of riparian habitat, per negotiation with the resource agencies during the permitting phase. This may include, but not be limited to, contribution to an approved mitigation bank for off-site habitat preservation.	Yes	<u>Required.</u>

Table 2 ECR Mitigation Measure Comparison

ECR Mitigation Measure	Also Addressed in MMRP?	No Longer Required as a Result of Agency Permit?
MIGRATORY BIRDS		
1 Vegetation removal should be conducted outside of the avian breeding season (February-August) to avoid impacts to nesting birds. If removal occurs during the breeding bird season, a pre-construction bird survey would be required less than 7 days from disturbance activities. If passerine birds are found to be nesting, a 250-ft buffer, in which no vegetation disturbance would be permitted, will be required around the active nest. For raptors, this buffer is usually expanded to 500 ft. A qualified biologist would closely monitor the nest until it is determined that the nest is no longer active, at which time vegetation could be removed.	Yes	<u>Required.</u>
INVASIVE SPECIES		
1 To ensure that no invasive plant species are allowed to germinate and spread, an annual weed abatement program will be adopted for a period of 3 years.	No	<u>Required.</u>
WATER QUALITY		
1 The project proponent shall comply with the provisions of the <i>Statewide National Pollutant Discharge Elimination System (NPDES) General Construction Activity Permit</i> (NPDES Permit No. CAS000002) and any subsequent permit or individual permit if required by the Santa Ana Regional Water Quality Control Board (RWQCB) as it relates to construction activities for the project including dewatering. This shall include a Notice of Intent (NOI) to the State Water Resources Control Board prior to the start of construction. Upon completion of work and the stabilization of all disturbed areas. A Notice of Termination shall be submitted to the Santa Ana RWQCB.	Yes	<u>Required.</u>
2 The project proponent shall submit a complete notification package and associated fees to the California Department of Fish and Game (CDFG) regional office that serves the County where the streambed alteration activity will take place. This shall include coordination with the CDFG with respect to the drafting and acceptance of a Section 1602 Streambed Alteration Agreement from the CDFG for construction activities that are anticipated to occur within the City Creek and Bledsoe Creek channels.	Yes	<u>Required.</u>
3 The project proponent shall obtain a Section 404 permit from the U.S. Army Corps of Engineers (Corps) for activities that would discharge materials into a water of the U.S. This shall include coordination with the Corps with respect to the submittal of the permit application and supplemental information required for permit processing.	Yes	<u>Required.</u>

Table 2 ECR Mitigation Measure Comparison

ECR Mitigation Measure	Also Addressed in MMRP?	No Longer Required as a Result of Agency Permit?
4 The project proponent shall obtain a 401 Certification from the Santa Ana Regional Water Quality Control Board for activities that would discharge materials into navigable waters. This shall include coordination with the Santa Ana RWQCB with respect to the submittal of the permit application and supplemental information required for certification	Yes	<u>Required.</u>

I appreciate the opportunity to provide you with this memorandum and thank you for your time. Should you have any questions or require additional information, please do not hesitate to contact me at (858) 514-1068 or karl.osmundson@atkinsglobal.com.

Respectfully,



Karl Osmundson, ATKINS Project Biologist

PRELIMINARY ENVIRONMENTAL STUDIES (PES) FORM

TO: Chief of Local Assistance, District 8 464 West 4 th Street San Bernardino, California 92401 (909) 383-4030	FEDERAL PROJECT NUMBER: BRLO – 5449 (014)																																																												
FROM: City of Highland 27215 Baseline Highland, California 92346 Ernest Wong (909) 864-8732	FINAL DESIGN: November 2007																																																												
Is this project “ON” the State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No IF YES, STOP HERE and contact the District DLAE regarding the completion of other environmental documentation.	FSTIP: SCAG Final 2004 RTIP, Dec 23, 2005, Page #43 FY for which each Project Component is Programmed for delivery in the FSTIP: ENG 2008 ROW 2008/2009 CONST 2009/2010																																																												
PROJECT DESCRIPTION AS SHOWN IN FSTIP: Boulder Avenue across City Creek south of Baseline, reconstruct existing bridge from 2 to 4 lanes; also widen Boulder Ave from 190 feet north to 1,430 south of the bridge from 2-4 lanes.																																																													
DETAILED PROJECT DESCRIPTION: (Include scope of work, project limits, purpose and need, logical termini and independent utility). Please see detailed project description contained in the “Notes” at end of PES. <small>(Continue description on “Notes” sheet, last page of this Exhibit, if necessary)</small>																																																													
PRELIMINARY DESIGN INFORMATION Does the project involve any of the following? Please check the appropriate boxes and delineate on an attached map, plan, or layout including any additional pertinent information																																																													
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REQUIRED ATTACHMENTS: <input checked="" type="checkbox"/> Regional Map <input checked="" type="checkbox"/> Project Location Map <input checked="" type="checkbox"/> Project Footprint Map (Showing Existing/Proposed ROW) <input checked="" type="checkbox"/> Engineering drawings (Existing and Proposed Cross Sections), (if available) <input type="checkbox"/> Borrow/Disposal Site Location Map (if applicable) Note: All maps should be at a minimum scale of 1" = 200' (1" = 60.96 meters) Maps may be ordered online at http://mapping.usgs.gov/																																																													

EXAMINE FOR POTENTIAL EFFECTS ON THE ENVIRONMENT, DIRECT OR INDIRECT, AND ANSWER THE FOLLOWING QUESTIONS (Utilize the notes page at the end of the PES Form to document conclusions)

A. The Physical Environment

	<u>Yes</u>	<u>To Be Determined</u>	<u>No</u>
1. Is the project a Type I project as defined in 23 CFR 772.5(h); "construction on new location or the physical alteration of an existing highway, which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are there water resources (rivers, streams, bays, inlets, lakes, drainage sloughs) within or immediately adjacent to the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is project within a designated sole-source aquifer?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is project within the State Coastal Zone?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is the construction area located within a regulatory floodway or within the base floodplain (100-year) elevation of a watercourse or lake?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the project within or immediately adjacent to a Wild and Scenic River System?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Is there a potential for a federally listed, threatened, or endangered species or their critical or sensitive habitat within the construction area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Is there a potential for wetlands within the construction area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Is there a potential for agricultural wetlands within the construction area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Air Quality			
a. Transportation Conformity (Air) Does Transportation Conformity apply?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Is the project exempt from the requirement to determine conformity (40 CFR 93.126)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Air Quality: Does the project have the potential for adverse emission impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Is there a potential for prime or unique farmlands within or immediately adjacent to the construction area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Is there a potential for hazardous materials (including underground tanks) or hazardous material remains within or immediately adjacent to the construction area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Are there any publicly owned public parks, recreation areas, or wildlife or waterfowl refuges [Section 4(f)] within construction area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. Are there any aesthetically visual resources within the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

B. The Social and Economic Environment

	<u>Yes</u>	<u>To Be Determined</u>	<u>No</u>
16. Will the project require any right-of-way, including partial or full takes? Consider construction easements and utility relocations.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Is the project inconsistent with plans and goals adopted by the community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18. Will the project result in the need for public services, including utilities other than those presently available or proposed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19. Will the project involve changes in access control?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20. Will project involve the use of a temporary road, detour or ramp closure?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21. Will the project reduce available parking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22. Will the project require future construction to fully utilize the design capabilities included in the proposed project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23. Will the project generate public controversy based on potential environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
24. Will project construction encroach on State or Federal Lands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25. Are there National Register listed or potentially eligible historic properties or archaeological resources [Section 106, Section 4(f)] <small>NOTE: CT PQS DETERMINES APPLICABILITY OF QUESTION #25.</small>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
26. Is there a potential for the introduction or spread of invasive species?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SECTION C, D & E – CHECK APPROPRIATE BOX TO INDICATE REQUIRED TECHNICAL STUDIES, COORDINATION, PERMITS OR APPROVALS

C.	REQUIRED TECHNICAL STUDIES	D. COORDINATION	E. PERMIT/APPROVALS
<input checked="" type="checkbox"/>	NOISE STUDY <input checked="" type="checkbox"/> Traffic-Related <input checked="" type="checkbox"/> Construction-Related	<input checked="" type="checkbox"/> FHWA <input checked="" type="checkbox"/> FHWA	
<input checked="" type="checkbox"/>	WATER QUALITY STUDY <input checked="" type="checkbox"/> Discharge Dredged/Fill material (U.S. waters) <input type="checkbox"/> Construction in Navigable Waters <input type="checkbox"/> Construction of Bridges/Causeways Across Navigable Waters <input checked="" type="checkbox"/> Construction of Bridge <input checked="" type="checkbox"/> Stream or Lake Alteration <input type="checkbox"/> NEPA/404 MOU	<input checked="" type="checkbox"/> U.S. Army Corps of Engineers <input type="checkbox"/> U.S. Army Corps of Engineers <input type="checkbox"/> U.S. Coast Guard <input checked="" type="checkbox"/> California Regional Water Quality Control Board <input checked="" type="checkbox"/> California Department of Fish & Game <input type="checkbox"/> FHWA	<input checked="" type="checkbox"/> Issues Section 404 Permit <input type="checkbox"/> Section 10 Permit <input type="checkbox"/> Approves Plans <input checked="" type="checkbox"/> Water Quality Certification <input checked="" type="checkbox"/> Section 1601/03 Permit
<input type="checkbox"/>	SOLE-SOURCE AQUIFER	<input type="checkbox"/> EPA (S.F. Regional Office)	<input type="checkbox"/> Contamination Threat
<input type="checkbox"/>	COASTAL ZONE	<input type="checkbox"/> State Coastal Zone Management Agency <input type="checkbox"/> California Coastal Commission (CCC)	<input type="checkbox"/> Coastal Zone Consistency
<input checked="" type="checkbox"/>	FLOODPLAIN STUDY*	<input checked="" type="checkbox"/> Federal Emergency Management Agency <input type="checkbox"/> FHWA	<input type="checkbox"/> Floodplain Finding
<input type="checkbox"/>	WILD & SCENIC RIVERS	<input type="checkbox"/> U.S. Department of Interior <input type="checkbox"/> Heritage Conservation/Recreation Service	
<input checked="" type="checkbox"/>	BIOLOGY STUDY* Natural Environment Study (NES)	<input checked="" type="checkbox"/> FHWA <input checked="" type="checkbox"/> California Department of Fish & Game	<input checked="" type="checkbox"/> Sec 7 Consultation <input type="checkbox"/> Incidental Take Permit
<input checked="" type="checkbox"/>	WETLANDS STUDY* Agricultural Wetlands	<input type="checkbox"/> FHWA/EPA <input type="checkbox"/> U.S. Fish & Wildlife <input checked="" type="checkbox"/> U.S. Army Corps of Engineers <input type="checkbox"/> National Marine Fisheries Service <input type="checkbox"/> Natural Resources Conservation Service	<input type="checkbox"/> Wetlands Findings <input checked="" type="checkbox"/> Verifies juris. Wetlands <input type="checkbox"/> Verifies agri. Wetlands
<input checked="" type="checkbox"/>	AIR QUALITY STUDY*	<input checked="" type="checkbox"/> FHWA	<input checked="" type="checkbox"/> Conformity Finding
<input type="checkbox"/>	FARMLANDS STUDY	<input type="checkbox"/> Natural Resources Conservation Service <input type="checkbox"/> U.S. Army Corps of Engineers	<input type="checkbox"/> Verifies prime/unique <input type="checkbox"/> Approves Conversions

* FHWA has responsibility for consultation under regulation or interagency agreement or FHWA has responsibility for a finding or determination required by law, regulation or Executive Order.

C.	REQUIRED TECHNICAL STUDIES	D. COORDINATION	E. PERMIT/APPROVALS
<input checked="" type="checkbox"/>	HAZARDOUS MATERIAL STUDY Initial Site Assessment (ISA) * (Cleanup of Hazardous Material Sites)	<input type="checkbox"/> 1. CALIF. EPA; Department of Toxic Substances Control, Biennial Reports, Lists of Active Annual Work plan Sites <input type="checkbox"/> 2. CALIF. Office of Planning and Research; Hazardous Wastes & Substances Sites List, List of Contaminated Sites <input checked="" type="checkbox"/> 3. LOCAL; Health & Human Services Dept., Hazardous Waste Operations Division	
<input type="checkbox"/>	SECTION 4(f) EVALUATION *	<input type="checkbox"/> FHWA <input type="checkbox"/> Public Official w/Jurisdictional Responsibility <input type="checkbox"/> SHPO/ACHP (as appropriate) <input type="checkbox"/> DOI/DOA/HUD/USDA (as appropriate)	<input type="checkbox"/> Makes Determination
<input type="checkbox"/>	SECTION 6(f) EVALUATION	<input type="checkbox"/> Park Official <input type="checkbox"/> DOI	
<input type="checkbox"/>	VISUAL IMPACT STUDY (AESTHETICS)	<input type="checkbox"/> FHWA	
<input type="checkbox"/>	RELOCATION IMPACTS STUDY	<input type="checkbox"/> State & Local Planning Departments	
<input type="checkbox"/>	SOCIOECONOMIC STUDY	<input type="checkbox"/> Airports, Schools, State and Local Planning Departments	
<input checked="" type="checkbox"/>	TRAFFIC	<input checked="" type="checkbox"/> FHWA	
<input checked="" type="checkbox"/>	SECTION 106 STUDY * <input type="checkbox"/> Exempt Undertaking <input checked="" type="checkbox"/> APE Map <input checked="" type="checkbox"/> Historic Property Survey Report (HPSR)	<input checked="" type="checkbox"/> Caltrans (PQS & DLAE approve APE) <input type="checkbox"/> Caltrans <input checked="" type="checkbox"/> Caltrans <input checked="" type="checkbox"/> Local Preservation groups and/or Native American Tribes <input type="checkbox"/> FHWA <input checked="" type="checkbox"/> SHPO	<input type="checkbox"/> Determines whether project qualifies as exempt <input type="checkbox"/> Determines applicability of Minimal APE <input checked="" type="checkbox"/> Approves document <input checked="" type="checkbox"/> Provides comment on concerns with project <input type="checkbox"/> Concurs or Consults with SHPO/ACHP <input checked="" type="checkbox"/> Concurs
<input type="checkbox"/>	CONSTRUCTION/ENCROACH ON STATE LANDS <input type="checkbox"/> Under State Lands Commission Jurisdiction <input type="checkbox"/> Under Caltrans Jurisdiction	<input type="checkbox"/> State Lands Commission <input type="checkbox"/> Caltrans	<input type="checkbox"/> General Permit/Revise General Plans <input type="checkbox"/> Encroachment Permit
<input type="checkbox"/>	CONSTRUCTION/ENCROACHMENT ON FEDERAL LANDS	<input type="checkbox"/> U.S. Bureau of Reclamation <input type="checkbox"/> Private Land Owner	<input type="checkbox"/> Encroachment Permit <input type="checkbox"/> Right-of-Entry Permit
Additional studies may be required for other federal agencies.			

* FHWA has responsibility for consultation under regulation or interagency agreement or FHWA has responsibility for a finding or determination required by law, regulation or Executive Order.

F. Public Hearing and Public Availability

- Not Required
- Notices of Availability
- Environmental Document ONLY
- Opportunity for a Public Hearing
- Public Hearing Required

G. Preliminary Environmental Document Classification (NEPA)

Based on the evaluation of the project, the environmental document to be developed should be:

- Environmental Impact Statement
- Environmental Assessment
- Categorical Exclusion, with required technical studies (involving federal action)
- Programmatic Categorical Exclusion, without required technical studies
- Programmatic Categorical Exclusion, with required technical studies (not involving federal action)

LOCAL AGENCY STAFF or CONSULTANT SIGNATURE

Prepared by: _____ Date: February 1, 2006 Telephone #: (951) 781-9310

LOCAL AGENCY PROJECT ENGINEER SIGNATURE:

This document was prepared under my supervision, in accordance with the *Local Assistance Procedures Manual*, Exhibit 6-B, "Instructions for Completing the Preliminary Environmental Study Form."

Signature local agency: _____ Date: _____ Telephone #: _____

THE FOLLOWING SIGNATURES ARE REQUIRED FOR ALL PCEs, REGULAR CEs, EAs, AND EISs

CALTRANS DISTRICT ENVIRONMENTAL OFFICE CHIEF (EOC) OR DESIGNEE SIGNATURE

I have reviewed this Preliminary Environmental Study (PES) form and determined that the submittal is complete and sufficient. I concur with the studies to be performed and the recommended level of environmental document (if required).

Signature EOC (or designee): _____ Date: _____ Telephone #: _____

CALTRANS DISTRICT PROFESSIONALLY QUALIFIED STAFF (PQS) SIGNATURE

- Project does not meet definition of an "undertaking". No further review is necessary under Section 106. ("No" Sec B, #25)
- Project meets the definition of an "undertaking", involves the types of activities listed in Attachment 2 of the Section 106 PA, and, based on the information provided in the PES Form, does not have the potential to affect historic properties. ("No" Sec B, #25)
- Project meets the definition of an "undertaking" and involves the types of activities listed in Attachment 2 of the Section 106 PA, but the following additional procedures or information is needed, to determine the potential for effect: ("To Be Determined" Sec B, #25)
- Records Search _____ _____ _____
- The proposed undertaking is considered to have the potential to affect historic properties. Further studies for 106 compliance are indicated in Sections C, D and E of this PES Form. ("Yes" Sec B, #25)

Signature PQS: _____ Date: _____ Telephone #: _____

DLAE SIGNATURE:

I have reviewed this Preliminary Environmental Study (PES) form and determined that the submittal is complete and sufficient. I concur with the studies to be performed and the recommended level of environmental document (if required).

Signature DLAE: _____ Date: _____ Telephone #: _____

THE FOLLOWING SIGNATURE IS REQUIRED FOR EAs, EISs, AND (WHEN RECOMMENDED BY THE EOC (or DESIGNEE), OR DLAE) FOR REGULAR CEs:

FHWA SIGNATURE:

I concur with the studies to be performed and the recommended level of environmental document.

Signature FHWA: _____ Date: _____ Telephone #: _____

Distribution:

Original: District Local Assistance Engineer Copy: Local Agency Project Files, District EOC (or designee), District PQS

PRELIMINARY ENVIRONMENTAL INVESTIGATION NOTES TO SUPPORT THE CONCLUSIONS OF THIS CHECKLIST

PROJECT LIMITS

In the City of Highland, on Boulder Avenue, approximately 0.14 mile south of Base Line at the City Creek crossing (Figures 1 and 2).

PURPOSE

The purpose of the proposed project is to:

- ❖ Replace the existing bridge which is structurally deficient and functionally obsolete with a new bridge widened to four (4) lanes to tie in to existing improvements on both ends of the project limits.

PROJECT DESCRIPTION

The City of Highland, in cooperation with the California Department of Transportation (Department) and the Federal Highway Administration (FHWA), proposes to improve the Boulder Avenue. The existing Boulder Avenue Bridge is a two (2) lane bridge over City Creek. The bridge has a Sufficiency Rating (SR) of 47.8 and has been designated as structurally deficient. Local scour has been observed at Pier No. 6. and Caltrans has recommended performing a bridge analysis to provide solutions for the scouring issue. The roadway section approaching the bridge from both the north and the south is four (4) lane roadway; therefore, this two lane bridge becomes a bottleneck for traffic. In order to resolve these problems with the existing bridge, the City of Highland intends to replace the existing two (2) lane Boulder Avenue Bridge with a four (4) lane bridge.

The proposed action will include, but not be limited to, the following improvements:

1. Replace the Boulder Avenue Bridge over City Creek. The widened bridge will span 385 feet across City Creek and will be 110 feet wide.
2. Construct roadway approaches, approximately 190 feet to the north and 1,430 feet to the south, to tie into the existing four (4) lane roadway section.
3. Construction of street improvements include; utility construction, pavement widening, curbs, gutters, sidewalks, and decorative street lighting
4. Construct/modify the levee at the bridge abutment corners to protect the bridge abutments.
5. Improve the roadway to provide the clearance for multiuse-trail under the bridge, and the freeboard in accordance to the hydraulic analysis as required.
6. Extend two existing culverts, located approximately 600 feet and 1,000 feet from the south abutment, to accommodate a four (4) lane roadway section.
7. Extend Bledsoe Creek double-cell Reinforced Concrete Box (RCB).
8. Relocate/modify MWD overflow outlet, located adjacent to the Bledsoe Creek RCB if required.
9. Relocate utilities as needed.
10. Other miscellaneous improvements.

FIGURES

- | | |
|----------|-------------------------------|
| Figure 1 | Regional and Project Location |
| Figure 2 | Project Plans |
| Figure 3 | State Farmland |
| Figure 4 | FEMA Flood Zones |
| Figure 5 | Critical Habitat |

Figure 1 Regional and Project Location



Figure 2 Project Area and Aerial Photograph

Figure 3 Flood Zones

Figure 4 Critical Habitat

Figure 5 State Designated Farmland

PRELIMINARY ENVIRONMENTAL STUDY (PES) FORM – CHECKLIST RESPONSES

A. The Physical Environment

1. *Is the project a Type 1 project as defined in 23 CFR 772.5(h); “construction on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increase the number of through traffic lanes.”*

Yes. The proposed project will widen the roadway from two (2) lanes to four (4) lanes to tie into existing four (4) lane improvements before and after the project limits 200 feet north of the bridge to 1,400 feet south of the bridge.

2. *Are there water resources (rivers, streams, bays, inlets, lakes, drainage sloughs) within or immediately adjacent to the project area?*

Yes. Boulder Avenue crosses City Creek, a tributary of the Santa Ana River. The proposed project includes the construction of channel improvements to protect new bridge abutments; therefore, a potential for impacts to the stream channel or up/down stream waters exist, preparation of a Water Quality Study will be required.

3. *Is the project within a designated sole-source aquifer?*

No. The Boulder Bridge replacement project is not located in or near any of the existing or proposed sole source aquifers in the State (located in Fresno, Santa Cruz, Butte, or Imperial Counties).

4. *Is the project within the State Coastal Zone?*

No. The project site is located approximately 55 miles east of the Pacific Ocean and is, therefore, not located within the State Coastal Zone.

5. *Is the construction area located within or immediately adjacent to a regulatory floodway or within the base floodplain (100-year) elevation of a water course or lake?*

Yes. Based on Flood Insurance Rate Map Number 06071C8702 F (FEMA, March 18, 1996), the Boulder Avenue bridge crossing of City Creek is located within Zone “A”(no base flood elevation determined) of this area. Because the proposed project will require construction within the channel of City Creek, preparation of a Floodplain Study will be required.

6. *Is the project within or immediately adjacent to a Wild and Scenic River System?*

No. The nearest river to the proposed project site is the Santa Ana River, which is not designated as a Wild and Scenic River.

7. *Is there a potential for a federally-listed, threatened, or endangered species (including candidate species) or their critical or sensitive habitat within the construction area?*

To be Determined. The proposed project will entail the demolition and replacement of the existing bridge, which will require construction within the channel of City Creek. Additionally approaches to the bridge will be widened to match the alignment of Boulder Avenue. Activities associated with the bridge replacement and street widening project may result in direct and indirect impacts to endangered and threatened species including (but not limited to) San Bernardino kangaroo rat (*Dipodomys merriami parvus*), coastal California gnatcatcher (*Polioptila californica californica*), Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*), and the slender-horned spineflower (*Dodecahema leptoceras*). Because the proposed project may impact threatened and/or endangered

species, preparation of biological resource studies, including focused surveys and/or small mammal trapping, will be required.

8. *Is there a potential for wetlands within the construction area?*

To Be Determined. As the Boulder Avenue Bridge crosses City Creek, an active stream channel, there is potential for wetlands within the project site; therefore, preparation of a jurisdictional delineation and wetlands study will be required as determined by field surveys conducted during preparation of the NES.

9. *Is there a potential for agricultural wetlands within the construction area?*

No. The bridge replacement project would entail the widening of bridge approaches from 200 feet north of the bridge to 1,400 feet south of the bridge. Properties adjacent to the proposed limits of the bridge replacement and road widening project are designated as “Urban” or “Other” by the Farmland Mapping and Monitoring Program (California Department of Conservation). As no agricultural wetlands are located within the limits of the proposed project, no impacts to agricultural wetlands will occur.

10. *Air Quality*

a) *Is the project included in a currently conforming regional transportation plan (RTP) and transportation improvement program (TIP)? Have there been no substantial changes in the design concept and scope as used in the TIP?*

Yes. The proposed project (Project ID 200018) is included in the Southern California Association of Governments (SCAG) Final 2004 Regional Transportation Improvement Plan (RTIP) 2004 Update (Volume III, page 50 which was approved by federal agencies on September 2004). No substantial changes to the design and/or scope of the project have occurred.

b) *Is the project exempt from the requirement to determine conformity (40 CFR 93.126)?*

No. The project site is located within the South Coast Air Basin (SCAB). Air emissions in the SCAB region are regulated by the South Coast Air Quality Management District (SCAQMD). The Department has concluded that this project is not exempt from an air quality analysis because the project is not listed in Table 2 or 3 in the Carbon Monoxide (CO) Protocol. Therefore, both project and regional emissions analysis is required.

11. *Does the project have the potential for adverse emission impacts?*

To be Determined. The SCAB region is a “serious” non-attainment area for carbon monoxide (CO) and particulate matter (PM₁₀), “extreme” non-attainment for ozone (O₃), and in a “maintenance” attainment area for nitrogen dioxide (NO₂). All projects included in the 2004 RTIP conform to the State Implementation Plan (SIP) for the SCAB region. The replacement (demolition and construction) of the bridge and the widening of Boulder Avenue will produce a limited amount of pollutants during construction in an existing “non-attainment” area. Preparation of an air quality study will be required to ascertain potential construction and operation air quality impacts associated with replacement the bridge and the widening of Boulder Avenue.

12. *Is there a potential for prime or unique farmlands within or immediately adjacent to the construction area?*

No. No agricultural operations are located adjacent or near the project alignment. Based on the San Bernardino County Important Farmland Map (Farmland Mapping and Monitoring Program), land adjacent to the proposed project limits is designated “Urban” (land occupied by structures with a building

density of at least one unit to each 1.5 acres) or "Other" (land that does not meet the criteria of any other category). As no prime or unique farmland is located within or adjacent to the proposed project site, no conversion of or impact to prime or unique farmlands will occur.

13. *Is there a potential for hazardous materials (including underground tanks) or hazardous material remains within or immediately adjacent to the construction area?*

To Be Determined Because the proposed project will entail the replacement (demolition and reconstruction) of the existing bridge and the widening of Boulder Avenue, a potential for exposure to hazardous materials, in the form of aerially deposited lead (ADL), asbestos bridge materials, or past hazardous materials spills is present on-site. As required by Caltrans, a Hazardous Materials and Initial Site Assessment (ISA) Checklist has been prepared. The ISA Checklist concluded that a Phase I Assessment will be required to identify potential hazardous materials impacts resulting from the construction and operation of the proposed project. An asbestos survey is required for demolition of the bridge.

14. *Are there any publicly owned public parks, recreation areas, or wildlife or waterfowl refuges [Section 404(f)] within the construction area?*

No. No publicly owned parks, recreation area, or wildlife or waterfowl refuges are located within or adjacent to the construction area.

15. *Are there any aesthetically visual resources within the project area?*

No. Boulder Avenue is designated a "roadway of local interest" in the City's General Plan. These roadways exhibit similar visual characteristics of "rolling topography, open views of the mountains, boulder-strewn wash areas, and agriculture," providing "glimpses" of historic land use patterns and natural conditions. Land uses within the project limits consist of roadway features or open space. The project will not require a large amount of cut-or fill, nor will the project result in the construction of any feature that will alter the existing aesthetic character within the project limits. No City or State designated significant visual resource is located within the limits of the proposed project. The proposed action does include lighting within the project limits. The bridge will be designed with architectural features to complement the aesthetics of the area and will be reviewed and approved by the City.

B. The Social and Economic Environment

16. *Will the project require any right-of-way, including partial or full takes? Consider construction easements and utility relocations.*

To be Determined. While the limits of Boulder Avenue bridge replacement and street widening project will be limited to the existing bridge, channel, and approaches; encroachment onto areas outside the existing right-of-way may be necessary for the demolition and reconstruction of the bridge, construction of street and parking improvements, the staging of materials and equipment, and other project-related activities. As Boulder Avenue is an existing feature, widening of this roadway will not disrupt or divide an existing community. The project does not require the demolition of any existing business or residence; therefore, no displacement of persons or businesses will occur. No minority or low-income populations are located in the immediate vicinity of the project limits. The proposed action will facilitate the movement of goods and persons into and through the City. The proposed action will not induce growth that has not been previously planned by the City. The extent and location of any such acquisitions will be addressed in the environmental document.

17. *Is the project inconsistent with the plans and goals adopted by the community?*
- No.** Boulder Avenue is designated as a “Primary Arterial” in the City’s General Plan. This designation envisions a minimum of two to three travel lanes in each direction. The proposed bridge and street widening, in conjunction with the ongoing improvements to Boulder Avenue, will accommodate increases in traffic volumes projected by the City and, therefore, is consistent with the plans and goals adopted by the City.
18. *Will the project result in the need for public services, including utilities other than those presently available or proposed?*
- No.** The proposed project includes the demolition and reconstruction of the existing bridge over City Creek and widening of Boulder Avenue north and south of the new bridge. The provision of public service and/or utilities beyond that currently required is not necessary.
19. *Will the project involve changes in access control?*
- No.** Because Boulder Avenue is a primary point of access, implementation of the proposed project will modify (temporarily) access to and through the City. Lane closures may be required through the duration of the bridge replacement/roadway widening project. Upon completion of the proposed project, access to and through the City will be improved. Any required lane closures and/or detours will be operated in accordance with applicable City and Caltrans requirements. No permanent change in access control will occur.
20. *Will the project involve the use of a temporary road, detour, or ramp closure?*
- No.** The replacement of Boulder Avenue Bridge over City Creek will not require the closure of Boulder Avenue for the duration of construction. No change in local traffic patterns will result from the proposed action. Any required lane closures and/or detours will be operated in accordance with applicable City and Caltrans requirements.
21. *Will the project reduce available parking?*
- No.** No parking is currently available on the Boulder Avenue Bridge; therefore, the replacement of this bridge will not reduce the availability of parking.
22. *Will the project require future construction to fully utilize the design capabilities included in the proposed project?*
- No.** The proposed project will result in the widening of Boulder Avenue Bridge and its approaches from two lanes to four lanes. A separately funded roadway improvement project has been completed south of the project limits. Upon completion of the Boulder Avenue Bridge replacement and street widening project, the configuration of Boulder Avenue will be consistent from Fifth Street to Base Line; therefore, future construction will not be required to fully utilize the design capabilities of the proposed project.
23. *Will the project generate public controversy based on potential environmental effects?*
- To Be Determined.** As stated in earlier responses, the widening of the Boulder Avenue Bridge and street widening may result in direct and/or indirect impacts to (or related to): biological resources, floodways, air quality, hazardous materials, or cultural resources. The preparation of technical studies, reports, or surveys will be required to assess the significance of potential environmental impacts and to identify mitigation. There is no anticipated public controversy based on potential environmental effects.

24. *Will project construction encroach on State or Federal lands?*

No. The City Creek channel is owned and maintained by the San Bernardino County Flood Control District. While it will be necessary to obtain permits from State and/or Federal regulatory agencies, the proposed project will not encroach on State and/or Federal lands.

25. *Are there National Register listed or potentially eligible historic properties [Section 106, Section 4(f)] within the construction area?*

To Be Determined. While there are no known cultural resources located within the limits of the proposed project, preparation of a cultural resource survey/report will be required for the Area of Potential Effect (APE) identified by Caltrans.

26. *Is there a potential for introduction or spread of invasive species?*

No. No components of the project will involve the introduction of invasive species. Work associated with the proposed project will conform to Executive Order 13112 (February 1999) regulating invasive species.

THE FOLLOWING DOCUMENTS WERE REFERENCED DURING PREPARATION OF THE PES FORM

City of Highland, September 2005. General Plan and Draft Environmental Impact Report, Planning Network.

Code of Federal Regulations, U.S. Government Printing Office, revised July 1, 2003.

Farmland Mapping and Monitoring Program, Department of Conservation, 2002.

Federal Emergency Management Agency, Flood Insurance Rate Map Number 06071C8702 F, March 18, 1996.

Southern California Association of Governments (SCAG) Final 2004 Regional Transportation Improvement Program (RTIP)-Local Highway Projects, September 2004

Local Assistance Procedures Manual, California Department of Transportation, 1998 (Chapter 6 revisions dated January 26, 2004).

Dennis Barton

From: Alicia Colburn [Alicia.Colburn@lanengineering.com]
Sent: Wednesday, June 06, 2007 1:30 PM
To: Lynn Hayes
Cc: dbarton@cityofhighland.org; Mohan Char
Subject: Revised Boulder PES form

Hi Lynn,
I made changes to page 1, 4, 5, 8, and 17.

Thanks,

Alicia Colburn
Environmental Manager
Lim And Nacimiento Engineering
1887 Business Center Drive
Suite 6, 2nd Floor
San Bernardino, CA 92408
P: 909.890.0477
F: 909.890.0467
C: 909.631.8822
Alicia.Colburn@LANEngineering.com

Dennis Barton

Full Name: Chris Tran
Last Name: Tran
First Name: Chris
Job Title: Region Resource Manager
Company: SCE

Business Address: 1851 West Valencia Drive
Fullerton, CA 92833-3215

Business: (714) 870-3121
Pager: (714) 806-4504
Business Fax: (714) 870-3298

E-mail: chris.tran@sce.com

Filing 04-004
Env.
DATE FILED & POSTED

Notice of Determination



To: Office of Planning and Research From: City of Highland,
1400 Tenth Street, Room 121 Planning Division
Sacramento, CA 95814 27215 Base Line
Highland, California 92346

County Clerk of the Board of Supervisors
County of San Bernardino
385 N. Arrowhead Avenue, 2nd Floor
San Bernardino, California 92415-0130

27215 Base Line
Highland, CA 92346
(909) 864-6861
FAX (909) 862-3180
www.ci.highland.ca.us

City Council

Mayor
Penny Lilburn

Mayor Pro-Tem
Ross B. Jones

Larry McCallon
Jody Scott
John P. Timmer

City Manager
Joseph A. Hughes

Subject: Filing of Notice of Determination in compliance with Section 21152 of the Public Resources Code.
Boulder Avenue Bridge Replacement Project (ENV-005-002)

Project Title

SCH: 2008121051 Lawrence A. Mainez, City Planner (909) 864-8732, Ext 215

State Clearinghouse Number **Lead Agency** **Area Code/Telephone/Extension**
(If submitted to Clearinghouse) **Contact Person**

The Project is located in the central portion of the City of Highland on Boulder Avenue east of SR210, south of Base Line, north of Greenspot Road, west Webster Street, and crosses over City Creek.

Project Location (include county)

Project Description:

The proposed Project is the replacement of the existing two-lane Boulder Avenue Bridge with a new four-lane structure, and widens northern and southern approaches to match the existing configuration of Boulder Avenue north and south of the project limit. The proposed Project would also include the construction of street improvements (e.g., curbs, gutters, sidewalks, and decorative lighting); the extension, relocation, and/or modification of drainage features; and the relocation (as necessary) of utility features. In addition to the Bridge Replacement, accommodation of the future extension of the multifunction trail (pedestrian, bicycle, and equestrian use) will be incorporated into the project design for possible future connection with the Santa Ana River Trail. At its Hearing on Tuesday, January 20, 2009, the Planning Commission found that information set forth in the Initial Study/Mitigated Negative Declaration adequately considered and analyzed the potential environmental impacts associated therewith.

This is to advise that the City of Highland has approved the above-described project on Lead Agency Responsible Agency January 20, 2009, and has made the following determinations regarding the above described project:

- 1. The project [will will not] have a significant effect on the environment.
- 2. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
- 3. Mitigation measures were were not] made a condition of the approval of the project.
- 4. A statement of Overriding Considerations [was was not] adopted for this project.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at:

City of Highland, 27215 Base Line, Highland, California 92346

Lawrence A. Mainez 1/20/09 City Planner
Signature Date Title
Date received for filing at OPR: N/A

COUNTY OF SAN BERNARDINO
CALIFORNIA
09 JAN 27 AM 11:02
CLERK OF THE BOARD OF SUPERVISORS



MITIGATED NEGATIVE DECLARATION

TO: Clerk of the Board
385 N. Arrowhead Ave.
Second Floor
San Bernardino, CA 92411

FROM: City of Highland
Community Development Department, Planning Division
27215 Base Line
Highland, CA 92346

Project Title: Boulder Avenue Bridge Replacement (ENV-05-002)

Applicant: City of Highland

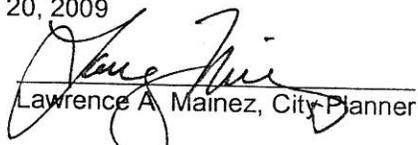
Project Location: The project is located in the central portion of the City of Highland on Boulder Avenue east of SR210, south of Base Line, north of Greenspot Road, west Webster Street, and crosses over City Creek.

Project Description: The proposed project is the replacement of the existing two-lane Boulder Avenue Bridge with a new four-lane structure, and widens northern and southern approaches to match the existing configuration of Boulder Avenue north and south of the project limit. The proposed Project would also include the construction of street improvements (e.g., curbs, gutters, sidewalks, and decorative lighting); the extension, relocation, and/or modification of drainage features; and the relocation (as necessary) of utility features. In addition to the Bridge Replacement, accommodation of the future extension of the multifunction trail (pedestrian, bicycle, and equestrian use) will be incorporated into the project design for possible future connection with the Santa Ana River Trail.

Finding of Non-Significance: An Initial Study prepared for the proposed project determined there could be potentially significant impacts to air quality, biological and cultural resources, hazards and hazardous materials, hydrology/water quality, and noise unless Mitigation Measures are implemented. The Initial Study identified Mitigation Measures that will reduce the potential impacts to less than significant when implemented. Those Mitigation Measures have been included in the Mitigation Monitoring Program for the proposed Project. There were no negative impacts anticipated, as a result of the Project that could not be mitigated to a level of non-significance. Subject to the compliance with the Mitigation Measures the design of the roadway realignment and bridge replacement is not likely to cause substantial environmental damage or substantially and avoidably injure fish and wildlife or their habitat and a Mitigated Negative Declaration/Mitigation Monitoring Program is proposed for the Project.

Date: January 20, 2009

Signature:


Lawrence A. Mainez, City Planner

Telephone: (909) 864-8732 ext. 215

Fax: (909) 862-3180



State of California—The Resources Agency
DEPARTMENT OF FISH AND GAME

12 MILES

2009 ENVIRONMENTAL FILING FEE CASH RECEIPT

RECEIPT # 375325

STATE CLEARING HOUSE # (If applicable)

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY

LEAD AGENCY	City of Highland Planning	DATE	11/27/09
COUNTY/STATE AGENCY OF FILING	Co. San Bernardino	DOCUMENT NUMBER	
PROJECT TITLE	Boulder Ave. Bridge Replacement Project (ENV-WSW)		
PROJECT APPLICANT NAME	City of Highland Planning	PHONE NUMBER	909 (626) 8732215
PROJECT APPLICANT ADDRESS	27215 Baseline CITY Highland	STATE	CA ZIP CODE 912346

PROJECT APPLICANT (Check appropriate box):

Local Public Agency School District Other Special District State Agency Private Entity

CHECK APPLICABLE FEES:

<input type="checkbox"/> Environmental Impact Report	\$2,768.25	\$	
<input checked="" type="checkbox"/> Negative Declaration	\$1,993.00	\$	1993.00 -
<input type="checkbox"/> Application Fee Water Diversion (State Water Resources Control Board Only)	\$850.00	\$	
<input type="checkbox"/> Projects Subject to Certified Regulatory Programs	\$941.25	\$	
<input checked="" type="checkbox"/> County Administrative Fee	\$50.00	\$	50.00 -
<input type="checkbox"/> Project that is exempt from fees			
<input type="checkbox"/> Notice of Exemption			
<input type="checkbox"/> DFG No. Effect Determination (Form Attached)			
<input type="checkbox"/> Other			

PAYMENT METHOD: # 51322

Cash Credit Check Other

TOTAL RECEIVED \$ 3043.00

SIGNATURE: X J. Prunty

TITLE: Deputy Clerk



State of California—The Resources Agency
DEPARTMENT OF FISH AND GAME

12 MILES

2009 ENVIRONMENTAL FILING FEE CASH RECEIPT

RECEIPT #

375325

STATE CLEARING HOUSE # (if applicable)

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY

LEAD AGENCY	City of Highland, Planning	DATE	1/27/09
COUNTY/STATE AGENCY OF FILING	Co. San Bernardino	DOCUMENT NUMBER	
PROJECT TITLE	Boulder Ave. Bridge Replacement Project (ENV-15002)		
PROJECT APPLICANT NAME	City of Highland, Planning	PHONE NUMBER	909 (62) 8732 x 215
PROJECT APPLICANT ADDRESS	27215 Baseline CITY Highland	STATE	CA ZIP CODE 912346

PROJECT APPLICANT (Check appropriate box):

- Local Public Agency
- School District
- Other Special District
- State Agency
- Private Entity

CHECK APPLICABLE FEES:

- Environmental Impact Report \$2,768.25
- Negative Declaration \$1,993.00
- Application Fee Water Diversion (State Water Resources Control Board Only) \$850.00
- Projects Subject to Certified Regulatory Programs \$941.25
- County Administrative Fee \$50.00
- Project that is exempt from fees
 - Notice of Exemption
 - DFG No. Effect Determination (Form Attached)
- Other

PAYMENT METHOD:

- Cash
- Credit
- Check # 91322
- Other

TOTAL RECEIVED \$ 2043.00

SIGNATURE

X [Signature]

TITLE

Deputy Clerk

WHITE - PROJECT APPLICANT

YELLOW - DFG/ASB

PINK - LEAD AGENCY

GOLDEN ROD - COUNTY CLERK

FG 753.5a (Rev. 7/08)