

Final Environmental Assessment

Retaining Walls Construction, Well Houses Fireproofing, & Road Hardening Project

Pauma Valley, California

FEMA-1731-DR-CA, HMGP #1003-41, 1006-43, & 1013-47R

December 2013



Federal Emergency Management Agency
Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, California 94607

THIS DOCUMENT WAS PREPARED FOR



FEDERAL EMERGENCY MANAGEMENT AGENCY, REGION IX
DEPARTMENT OF HOMELAND SECURITY
1111 BROADWAY, SUITE 1200
OAKLAND, CA 94607

THIS DOCUMENT WAS PREPARED BY



1420 KETTNER BOULEVARD, SUITE 500
SAN DIEGO, CA 92101

FEMA-1731-DR-CA, HAZARD MITIGATION GRANT PROGRAM (HMPG)
#1731-1003-41, #1731-1006-43, AND #1731-1013-47R
CONTRACT NO. HSFEHQ-09-D-1127
TASK ORDER HSFE80-12-J-0016
AECOM # 60280185

PHOTO: THE LA JOLLA BAND OF LUISEÑO INDIANS RESERVATION



FINAL ENVIRONMENTAL ASSESSMENT

**RETAINING WALLS CONSTRUCTION,
WELL HOUSES FIREPROOFING,
& ROAD HARDENING PROJECT**

PAUMA VALLEY, CALIFORNIA

LA JOLLA BAND OF LUISEÑO INDIANS

HAZARD MITIGATION GRANT PROGRAM (HMGP)
#1731-1003-41, #1731-1006-43, and #1731-1013-47R

DECEMBER 2013

PREPARED BY

AECOM

1420 KETTNER BOULEVARD, SUITE 500
SAN DIEGO, CA 92101

PREPARED FOR

FEDERAL EMERGENCY MANAGEMENT AGENCY, REGION IX
U.S. DEPARTMENT OF HOMELAND SECURITY
1111 BROADWAY, SUITE 1200
OAKLAND, CA 94607

THIS DOCUMENT HAS BEEN PREPARED CONSISTENT WITH THE REQUIREMENTS OF SECTION 508 OF THE REHABILITATION ACT. SECTION 508 REQUIRES THAT FEDERAL EMPLOYEES AND MEMBERS OF THE PUBLIC WITH DISABILITIES SEEKING INFORMATION OR SERVICES FROM A FEDERAL AGENCY, HAVE ACCESS TO AND USE OF INFORMATION AND DATA THAT IS COMPARABLE TO THAT PROVIDED TO THE PUBLIC AND FEDERAL EMPLOYEES WHO ARE NOT INDIVIDUALS WITH DISABILITIES, UNLESS AN UNDUE BURDEN WOULD BE IMPOSED ON THE AGENCY.

Table of Contents

List of Acronyms and Abbreviations	iv
1.0 Introduction	1
2.0 Purpose and Need	5
2.1 Purpose	5
2.2 Need	5
3.0 Alternatives	7
3.1 Alternative 1: No Action Alternative	7
3.2 Alternative 2: Proposed Project	7
3.2.1 Dwelling Unit Erosion Protection Improvements	7
3.2.2 Well House Improvements	23
3.2.3 Eastern Water Tank Road Improvements	23
3.2.4 Staging Area	27
4.0 Affected Environment and Environmental Consequences	31
4.1 Geology and Soils	32
4.2 Water Resources	33
4.2.1 Groundwater	33
4.2.2 Surface Water and Wetlands	34
4.2.3 Floodplains	36
4.3 Biological Resources	36
4.3.1 Threatened and Endangered Species	37
4.3.2 Migratory Birds	40
4.3.3 Other Biotic Communities	41
4.4 Air Quality	45
4.5 Environmental Justice	47
4.6 Historic Properties	48
4.7 Noise	50
4.8 Transportation	51
4.9 Hazards and Hazardous Materials	52
5.0 Cumulative Impacts	55
6.0 Public Involvement and Agency Consultation	57

7.0	Relationship Between Short-Term Uses of the Environment and Long-Term Productivity.....	59
8.0	Irreversible or Irrecoverable Commitments of Resources	61
9.0	Responsible Federal Official and List of Preparers	63
9.1	Federal Emergency Management Agency	63
9.2	AECOM Mitigation Services.....	63
10.0	References.....	65
	Appendices	67
	Appendix A: Site Photos.....	67
	Appendix B: Conceptual Engineering Drawings.....	79
	Appendix C: Habitat Types in the Proposed Project Area.....	89
	Appendix D: Historic Properties Inventory Report.....	97
	Appendix E: Agency Consultation.....	101
	Appendix F: Notice of Availability of Draft Environmental Assessment	113

List of Figures

Figure 1: Regional Map	2
Figure 2: Project Vicinity.....	4
Figure 3: Project 41 Diversion Brow Ditch for Dwellings 41-1, 41-2, 41-3, 41-4, and 41-5	8
Figure 4: Project 41 Diversion Brow Ditch for Dwellings 41-1, 41-2, 41-3, 41-4, and 41-5	9
Figure 5: Project 41 Retaining Wall for Dwelling 41-6.....	10
Figure 6: Project 41 Retaining Wall for Dwelling 41-7	11
Figure 7: Project 41 Retaining Wall for Dwelling 41-8.....	12
Figure 8: Project 41 Drain Pipes at Existing Wall for Dwelling 41-9	13
Figure 9: Project 41 Retaining Wall for Dwelling 41-11	14
Figure 10: Project 41 Retaining Walls for Dwellings 41-12 and 41-13.....	15
Figure 11: Project 41 Proposed Extension of Existing Wall for Dwelling 41-14	16
Figure 12: Project 41 Retaining Wall for Dwelling 41-15	17

Figure 13: Project 41 Retaining Walls for Dwellings 41-16 and 41-17.....	18
Figure 14: Project 41 Retaining Wall for Dwelling 41-18	19
Figure 15: Project 41 Retaining Walls for Dwellings 41-19 and 41-20.....	20
Figure 16: Project 41 Retaining Wall for Dwelling 20555 Oak Lane	21
Figure 17: Project 43 Harolds Road Well House.....	24
Figure 18: Project 43 Western Well House	25
Figure 19: Project 43 Eastern Well House	26
Figure 20: Project 47 Eastern Water Tank Road North Segment.....	28
Figure 21: Project 47 Eastern Water Tank Road South Segment	29
Figure 22: Project Staging Area.....	30

List of Tables

Table 1: Environmental Topics Omitted from Detailed Discussion	32
Table 2: Vegetation Communities within Site Study Areas.....	43

List of Acronyms and Abbreviations

AC	asphalt concrete
APE	area of potential effects
BMP	best management practice
CAA	Clean Air Act
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
EA	Environmental Assessment
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
HMGP	Hazard Mitigation Grant Program
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO ₂	nitrogen dioxide
NRHP	National Register of Historic Places
N ₂ O	nitrous oxide

O ₃	ozone
PM	particulate matter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
SDAB	San Diego Air Basin
SLR	San Luis River
SO ₂	sulfur dioxide
SR-76	State Route 76
U.S.C.	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

This page intentionally left blank.

1.0 Introduction

The La Jolla Band of Luiseño Indians Reservation (Reservation) is located in Pauma Valley along the southern slopes of Mount Palomar in northern San Diego County, California (Figure 1). Approximately 92 percent of the 9,998-acre Reservation burned in the Poomacha in the fall of 2007, resulting in a severe loss of vegetation throughout the Reservation. Because the Reservation's topography features numerous steep slopes, debris flow and erosion during heavy rains have become major hazards effecting residences and critical infrastructure.

The La Jolla Band of Luiseño Indians (La Jolla Band) has applied to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) for Hazard Mitigation Grant Program (HMGP) funds to implement infrastructure improvement projects at various locations on the Reservation. The proposed hazard mitigation improvements are related to Presidential Disaster declaration FEMA-1731-DR-CA, which was issued in October 2007 for widespread wildfires in southern California, including the Poomacha Fire that affected the Reservation. Approval of this funding is a federal action subject to the National Environmental Policy Act of 1969 (NEPA); thus FEMA has prepared this Environmental Assessment (EA) in compliance with NEPA.

FEMA's approval of these funds would assist the La Jolla Band in protecting the Reservation from hazards related to wildfire, guarding against dangerous erosion and debris flow at existing residences, and protecting critical infrastructure from damage due to future wildfires. FEMA proposes to provide federal financial assistance to the La Jolla Band through the HMGP, pursuant to Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (42 U.S. Code [U.S.C.] § 5170c) and FEMA's implementing regulations Title 44 Code of Federal Regulations (CFR) § 206. This EA has been prepared according to the requirements of NEPA, the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR Parts 1500–1508), and FEMA's implementing regulations (44 CFR Part 10).

Proposed improvements include the construction of retaining walls, brow ditches and/or drainage piping adjacent to 20 residences to protect the dwellings from storm water erosion and debris flow (HMGP #1731-1003-41), the clearing of vegetation around three water well houses and the construction of roof and fence improvements at one of these well houses for fireproofing (HMGP #1731-1006-43), and the paving of an existing dirt road along with the construction of associated storm water management structures to protect access to the La Jolla Band's Eastern Water Tank (HMGP #1731-1013-47R). The improvements proposed under these three HMGP



Source: ESRI 2013

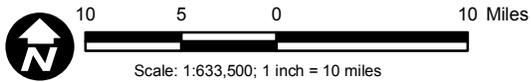
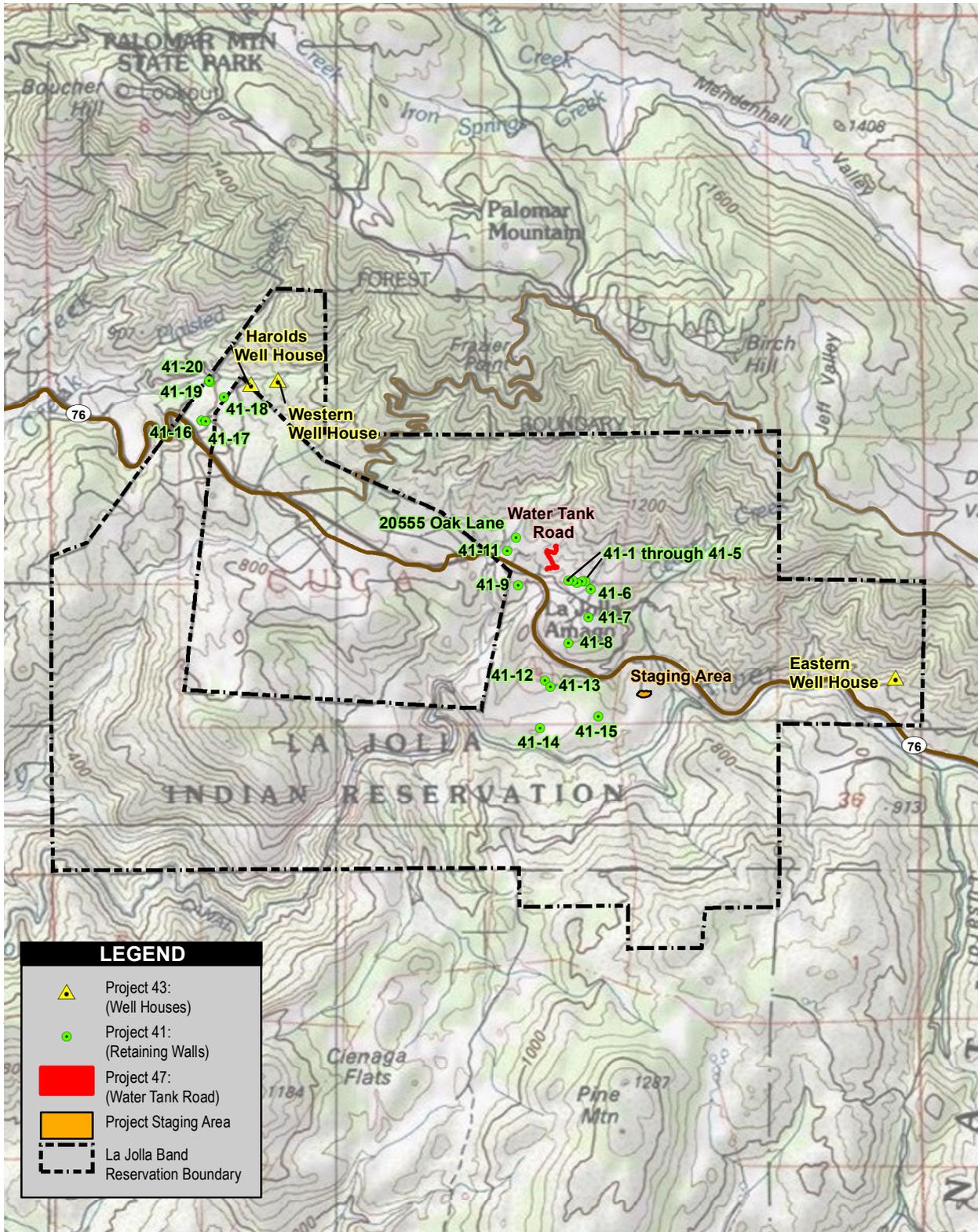


Figure 1
Regional Map

grant applications are interrelated due to their mitigation of wildfire and associated denuded hillside runoff hazards; thus, these improvements are being considered as one project collectively referred to as the proposed project. This EA examines the potential environmental effects of constructing and operating these hazard mitigation improvements that could result should FEMA grant the financial assistance to the Grantee to implement the proposed project.

The individual proposed project sites that comprise the entire project area are spread across the Reservation (Figure 2). The Reservation was established in 1875 by executive order of President Ulysses S. Grant and consists of 9,998 acres of federal land. There are approximately 700 enrolled La Jolla Band of Luiseño Indians Tribal Members. Tribal Government consists of a five-member Tribal Council, with a Tribal Chairperson, Vice Chairperson, Secretary, Treasurer, and a Council Member.

The EA process provides steps and procedures to evaluate the potential environmental, social, and economic impacts of the Grantee's proposal and a range of reasonable alternatives to it including the No Action Alternative. These potential impacts are measured by their context and intensity, as defined in the CEQ regulations. This process includes an opportunity for members of the public and local, tribal, state, and federal agencies to review and provide comments. To date, there has not been an official scoping process for this EA.



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

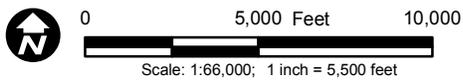


Figure 2
Project Vicinity

2.0 Purpose and Need

2.1 Purpose

The objective of FEMA's HMGP is to reduce the loss of life and property due to natural disasters and to enable the implementation of long-term hazard-mitigation measures during the recovery period following a Presidential Disaster Declaration. Through the HMGP, FEMA provides funding assistance to States, Tribal governments, local governments, and eligible private nonprofit organizations to implement measures intended to eliminate long-term risk to people and property.

The purpose of the Proposed Action assessed in this EA is to provide HMGP funding to the grantee, the La Jolla Band, for implementation of their proposed hazard mitigation project.

2.2 Need

During the major wildfires that swept through the southern California region in the fall of 2007 (FEMA-1731-DR-CA), approximately 92 percent of the 9,998-acre Reservation burned in the Poomacha Fire. The fire resulted in a severe loss of vegetation throughout the Reservation and because the Reservation is located on the side of Palomar Mountain's steep slopes, debris flow and erosion during heavy rains have become major issues on the Reservation.

Following the fire, temporary pre-cast modular concrete barriers (K-Rails) were installed to divert debris from 20 of the most vulnerable residences. Permanent hazard mitigation is now needed to prevent post-wildfire storm water, erosion and debris hazards from affecting these dwellings.

In addition to the post-disaster erosion and debris-flow conditions, the Reservation remains highly susceptible to additional wildfire hazards, and the La Jolla Band needs to protect their critical water infrastructure from damage due to potential future fires. Specifically, vegetation clearing is needed around three existing water well houses to provide defensible space around these structures that house water pumping equipment. Also, a new roof and fence are needed at one of the three well houses to replace the roof and fence that were destroyed when a large tree fell from the steep slope above the well house as a result of the disaster.

In addition, the existing dirt road leading to the Reservation's Eastern Water Tank needs to be improved with hard surface pavement and associated storm water management structures to repair damage caused by heavy erosion that occurred due to post-fire storm water flows and

ensure its function of providing permanent continuous access to the critical water tank facility under all conditions.

FEMA's federal action under consideration in this EA is necessary to provide federal funding assistance to the La Jolla Band that would be used to implement improvements at these selected sites and mitigate future hazards due to wildfire or erosion of denuded slopes and storm water debris flow.

3.0 Alternatives

The proposed project sites identified as needing hazard mitigation improvements are located across a broad area of the Reservation. Two alternatives will be considered in this EA, the No Action Alternative and the Grantee's proposed project with assistance provided by FEMA through its HMGP.

3.1 Alternative 1: No Action Alternative

A No Action Alternative is required to be included in the environmental analysis and documentation pursuant to CEQ regulations implementing NEPA. The No Action Alternative maintains the status quo with no issuance of federal financial assistance and no project implementation. The No Action Alternative is used to evaluate the environmental effects of not providing assistance for the proposal.

This EA assumes that, under the No Action Alternative, none of the residence protection, vegetation clearing, well house improvements, and Eastern Water Tank Road improvements would be implemented. All of the dwellings that are part of the residence protection aspect of the proposed project would continue to face hazards related to erosion and debris flow during heavy storms. The three well houses would continue to be subject to fire hazards, and the Eastern Well House would maintain its wooden roof and be exposed to hazards from falling trees and rocks. The Eastern Water Tank Road would continue to be exposed to erosion during heavy storms, with limited accessibility under bad weather conditions.

3.2 Alternative 2: Proposed Project

Alternative 2 involves constructing three main components— protection of residences (HMGP #1731-1003-41), well house improvements (HMGP #1731-1006-43), and Eastern Water Tank Road improvements (HMGP #1731-1013-47R). The locations of these components as well as the location of the construction staging area serving the entire proposed project are shown in a project vicinity map in Figure 2.

3.2.1 Dwelling Unit Erosion Protection Improvements

The proposed project entails constructing improvements to protect 20 on-Reservation dwelling units from erosion and debris flow. The locations of these dwelling units are shown in Figure 2. Figures 3 through 16 show aerial images of the dwelling units where the project-related improvements are proposed and include line drawings showing the extent of the proposed



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

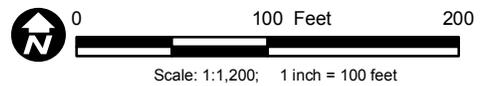
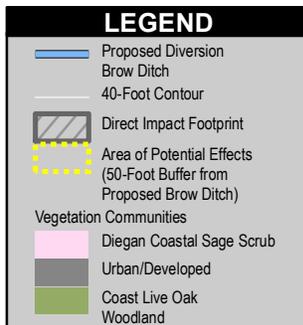
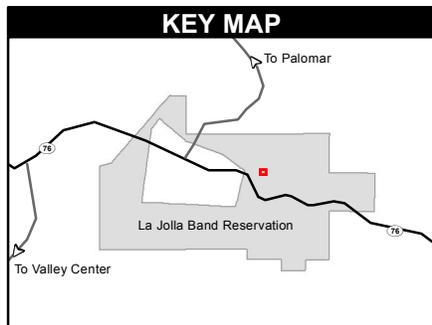


Figure 3
Project 41
Diversion Brow Ditch for Dwellings
41-1, 41-2, 41-3, 41-4, and 41-5



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

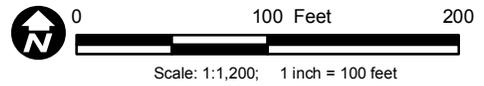
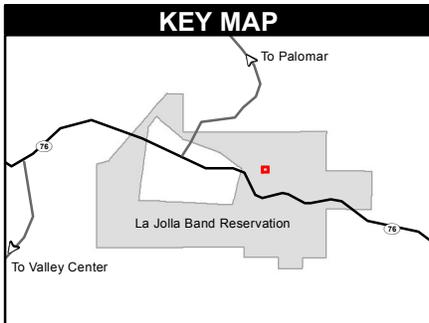


Figure 4
Project 41
Diversion Brow Ditch for Dwellings
41-1, 41-2, 41-3, 41-4, and 41-5



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

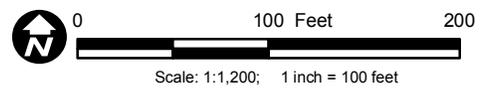
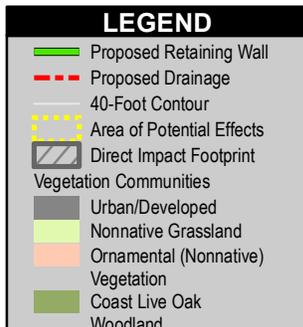
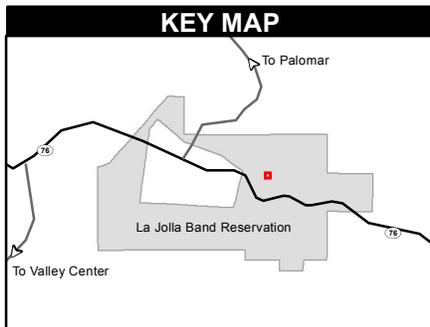
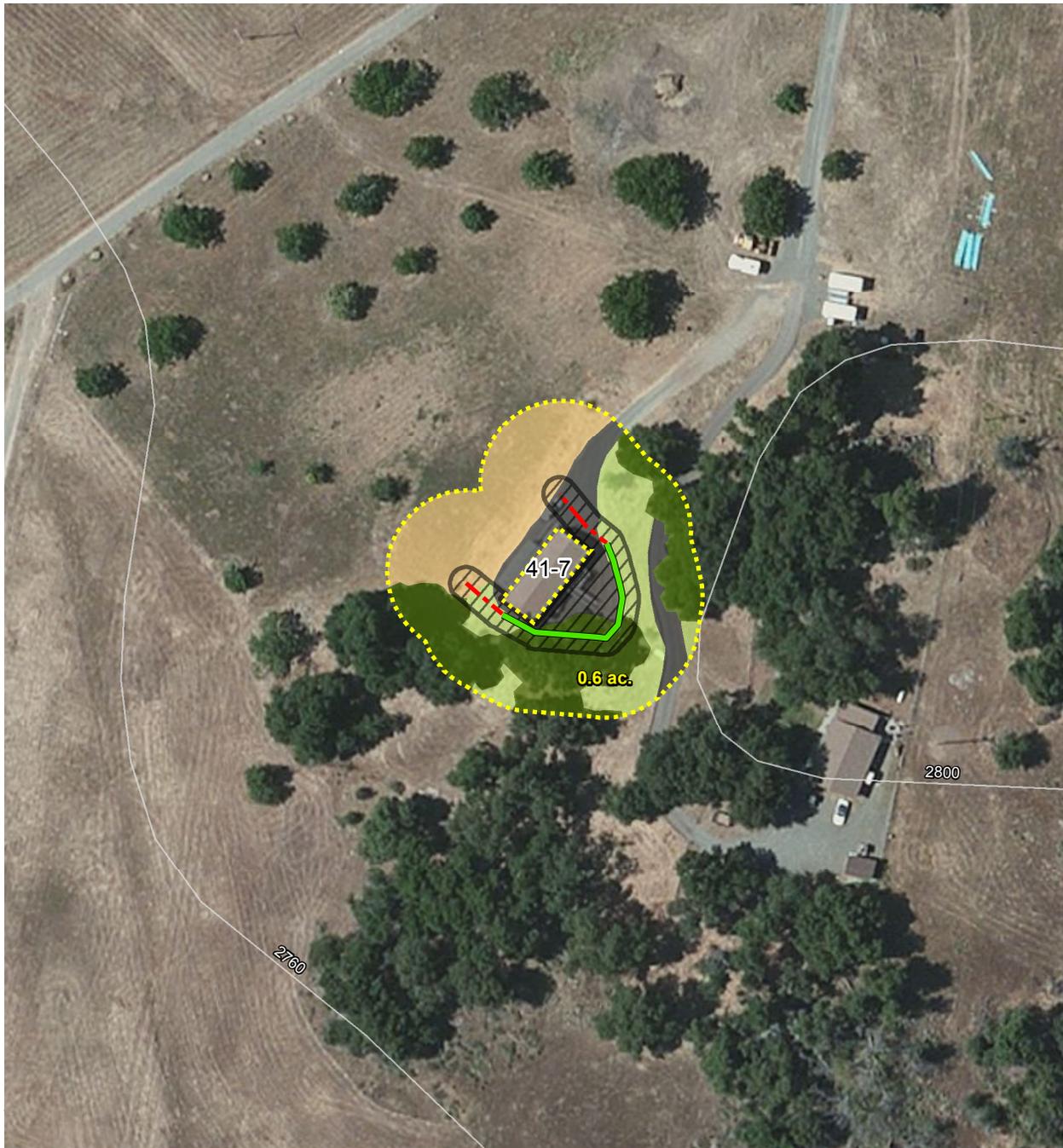


Figure 5
Project 41
Retaining Wall for Dwelling 41-6



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

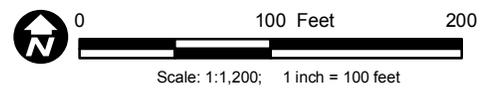
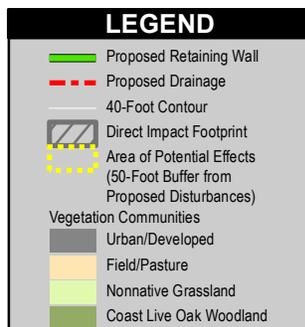
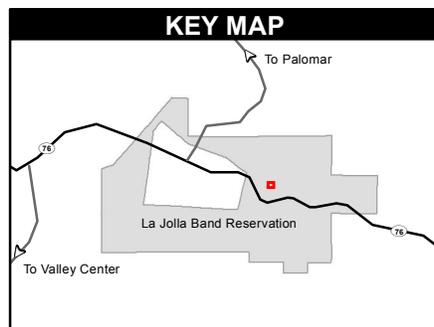
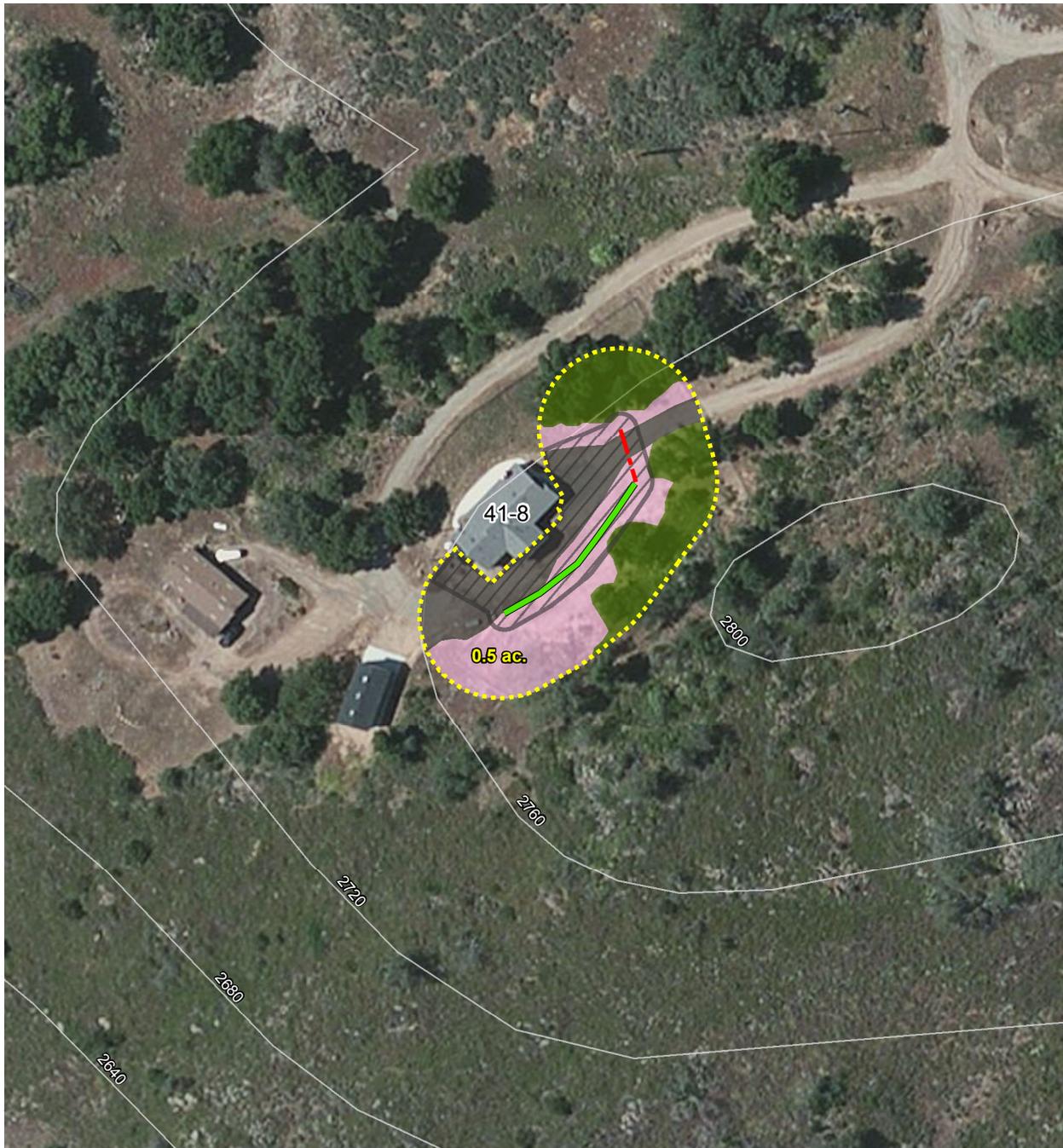


Figure 6
Project 41
Retaining Wall for Dwelling 41-7



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

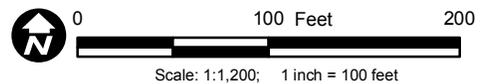
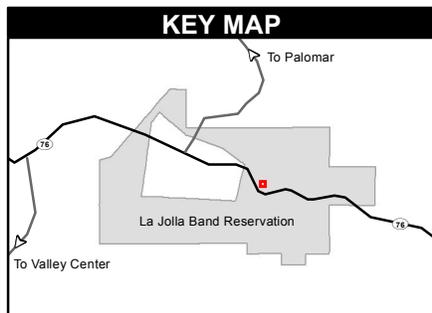


Figure 7
Project 41
Retaining Wall for Dwelling 41-8



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

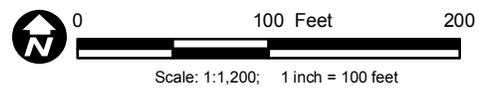
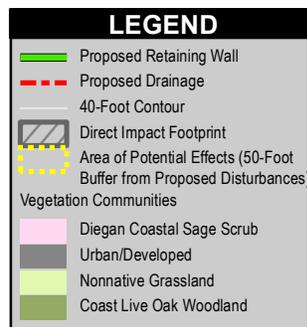
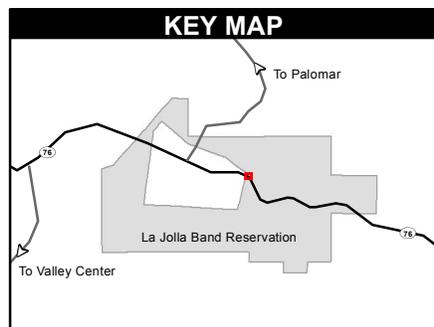
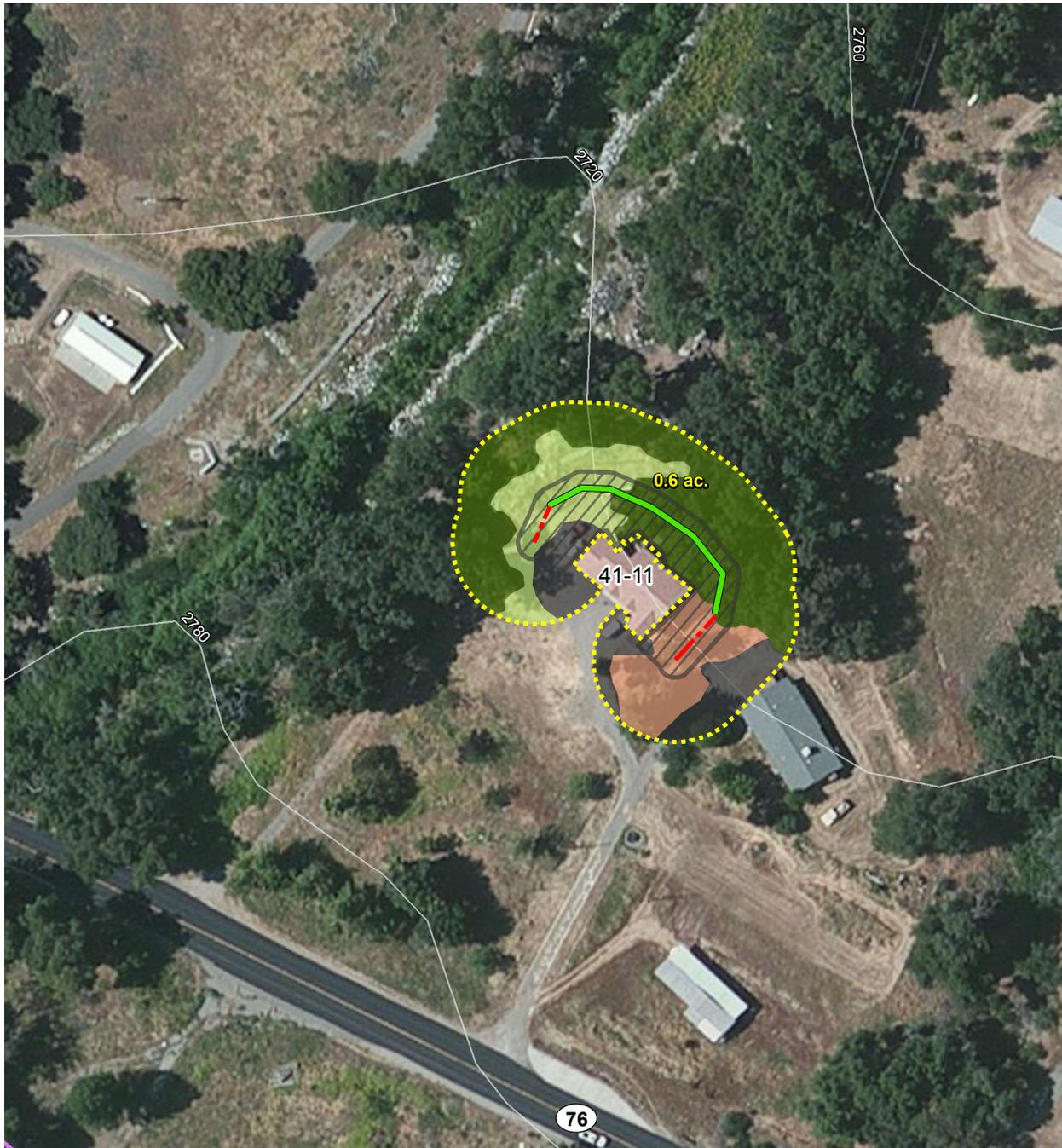


Figure 8
Project 41
Drain Pipes at Existing Wall
for Dwelling 41-9



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

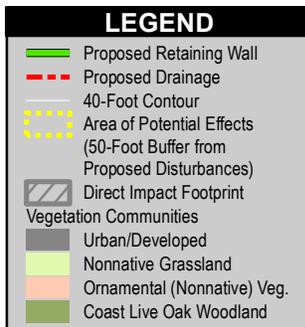
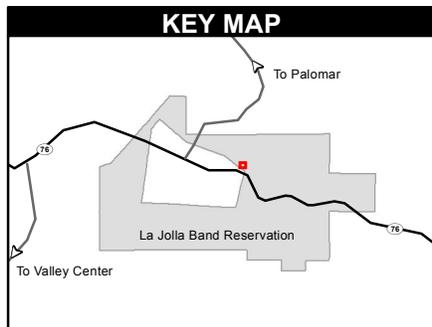


Figure 9
Project 41
Retaining Wall for Dwelling 41-11



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

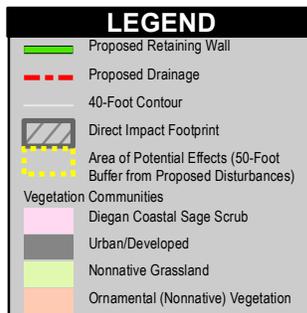
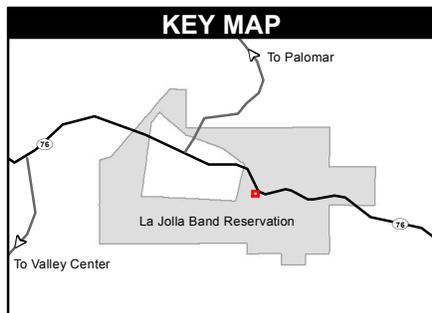


Figure 10
Project 41
Retaining Walls for
Dwellings 41-12 and 41-13



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

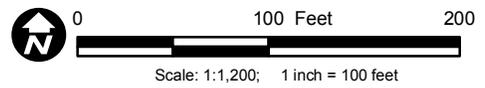
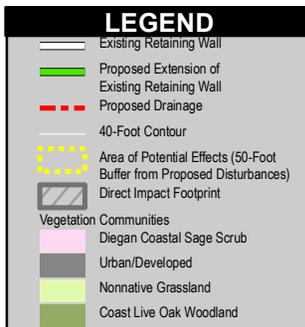
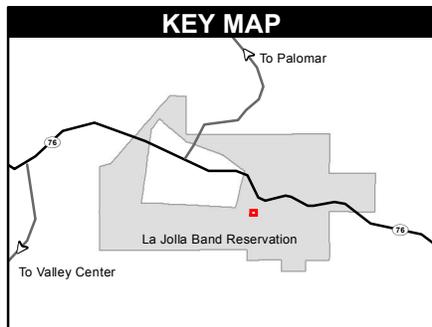


Figure 11
Project 41
Proposed Extension of Existing Wall for Dwelling 41-14



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

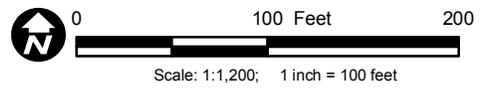
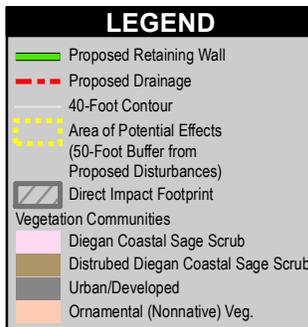
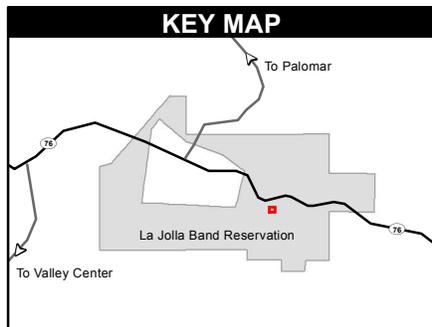


Figure 12
Project 41
Retaining Wall for Dwelling 41-15



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

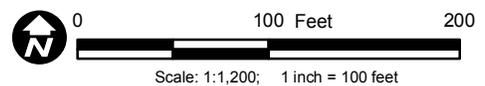
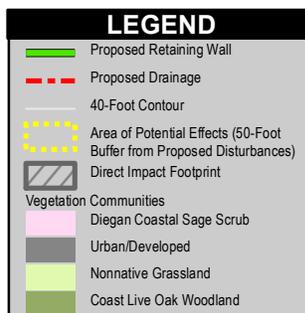
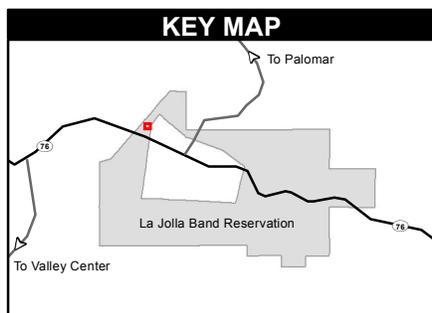


Figure 13
Project 41
Retaining Walls for
Dwellings 41-16 and 41-17



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

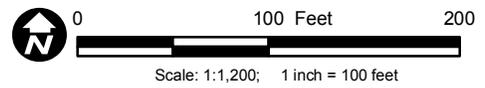
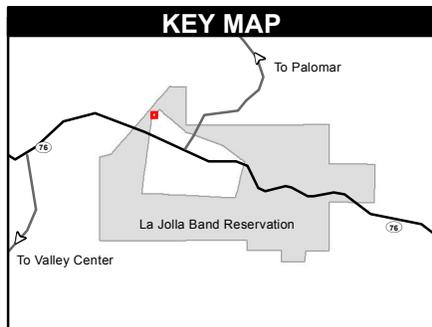
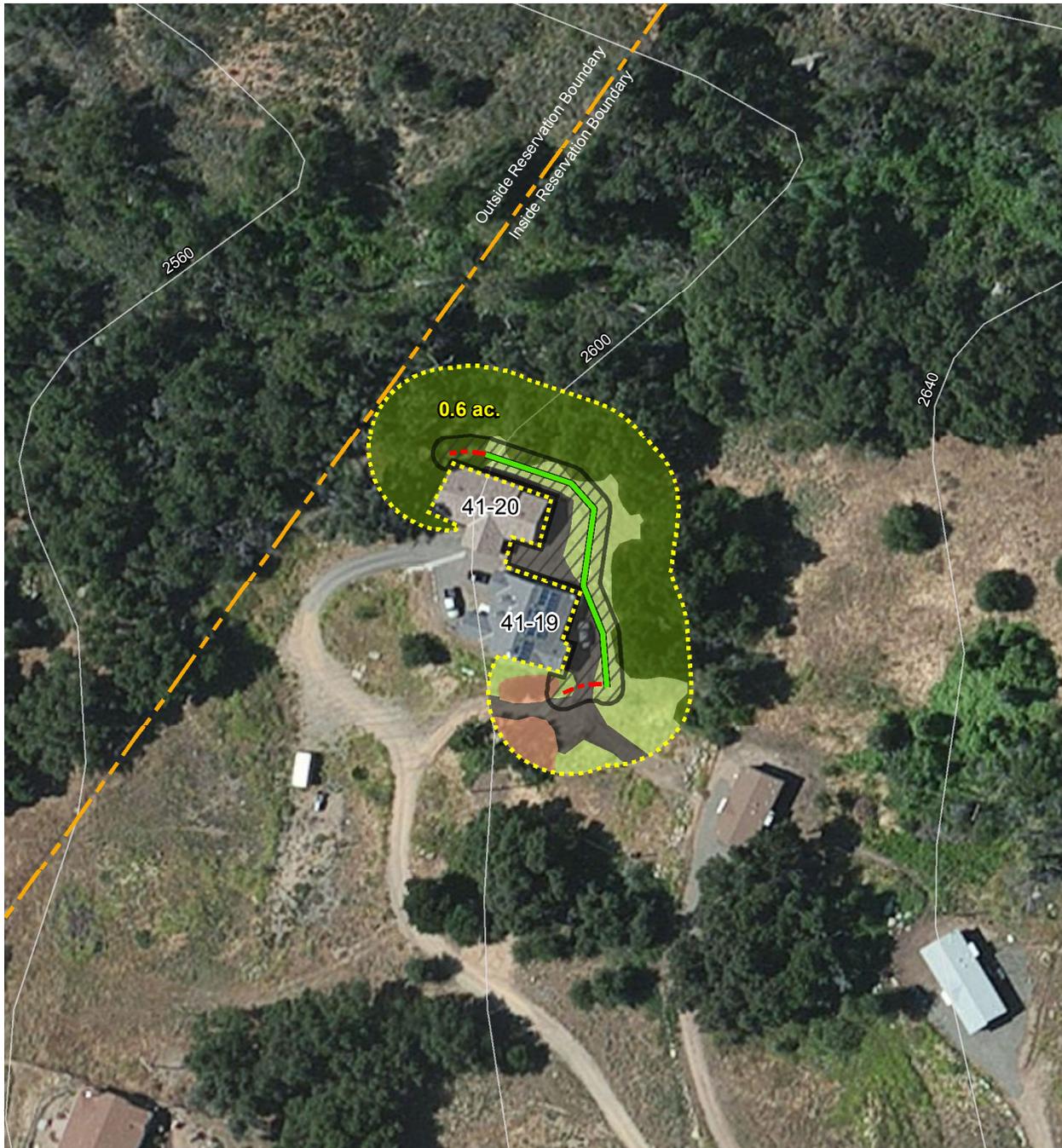


Figure 14
Project 41
Retaining Wall for Dwelling 41-18



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

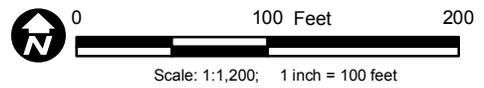
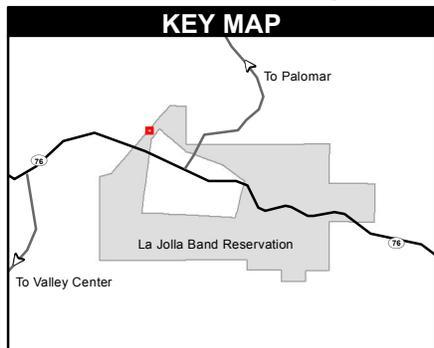


Figure 15
Project 41
Retaining Walls for
Dwellings 41-19 and 41-20



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

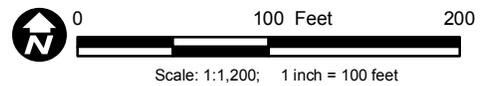
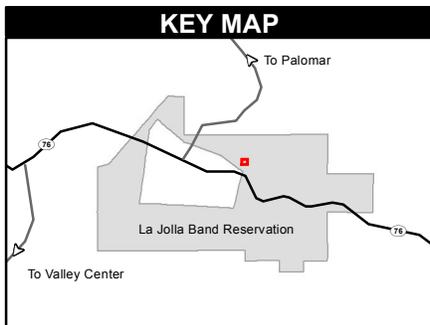


Figure 16
Project 41
Retaining Wall for
Dwelling 20555 Oak Lane

retaining walls and brow ditches. These figures also show the proposed direct impact footprints for each of the improvements and a 50-foot buffer for the area of potential effects (APE), as used in the historic properties investigation conducted for the proposed project.¹ Photographs of each site are provided in Appendix A.

The improvements would consist of brow ditches, retaining walls and drainage piping. Grading and other earth disturbance would be required in the vicinity of the proposed walls, ditches, and piping in order to install the improvements. The anticipated limits of this project-related earth disturbance at each site are shown as the direct impact area in the respective figures.

Each proposed project site contains a single-family residential dwelling referred to in this EA as Dwellings 41-1 through 41-9 (see Figures 3 through 8) and Dwellings 41-11 through 41-20 (see Figures 9 through 15), with the twentieth proposed project site referred to by its address, 20555 Oak Lane (see Figure 16). Of the 20 project sites, 14 would be improved by removing the existing temporary K-Rails, if present, and constructing a retaining wall to divert water flow. Each retaining wall would vary in length per site conditions and would generally be a maximum of 4 feet in height as measured from the finished grade at the base of the wall. The retaining walls would be designed by a qualified civil engineer. The retaining walls are currently proposed to be constructed of mortar-filled concrete masonry units with steel reinforcing bars, in conjunction with a poured-in-place concrete footing. Conceptual details of the proposed retaining walls are shown in engineering drawings provided in Appendix B. Drainage fabric and pipes would be installed as part of the retaining wall system to divert storm water and ground water to underground drainage pipes extending from the ends of the retaining wall. Twelve new retaining walls would be constructed (some would protect multiple residences) and one existing retaining wall would be extended on both ends, totaling approximately 9,600 linear feet of retaining wall construction to protect a total of 15 dwelling units.

At Dwellings 41-1 through 41-5 (see Figures 3 and 4), the proposed project entails digging a single linear brow ditch along the contour on the residences' northern edge and installing gabion structures adjacent to the ditch for erosion control. The total length of the ditch and gabion installation would be approximately 960 feet. A retaining wall is not proposed at this location.

At Dwelling 41-9 (see Figure 8), an existing retaining wall would be augmented by installing a drainage pipe. The pipe's outlet would require trenching through the existing residential driveway. An existing retaining wall at Dwelling 41-14 (see Figure 11) would be augmented with

¹ "APE", as defined in 36 CFR Part 800.16, is a term used in historic properties research and surveys; inclusion of the APE information on the project maps is not meant to imply that the proposed project will impact the entire 50-foot buffer shown on the maps.

additional retaining walls placed at angles at either end of the existing retaining wall and installation of a drainage pipe.

3.2.2 Well House Improvements

Vegetation clearing around three existing water well houses on the Reservation and additional improvements at one of the well houses is also a part of the proposed project. The three well houses are known as the Harolds Road Well House, Western Well House, and Eastern Well House, as located in Figure 2 and shown in detail on aerial images in Figures 17 through 19. The Harolds Road Well House and Western Well House (see Figures 17 and 18) are located near each other on gently sloping ground in the northwestern portion of the Reservation, north of State Route-76 (SR-76) and west of Palomar Mountain Road. The Eastern Well House (see Figure 19) is located near the Reservation's eastern boundary and north of SR-76, set adjacent to a spring that runs down a steep ravine.

Vegetation clearing would be performed at these locations to enhance fire safety at these critical components of the La Jolla Band's drinking water infrastructure, providing defensible space around the perimeter of the wells and minimizing the threat of major damage to facilities during a wildfire. Vegetation clearing would be performed as needed within a radius of approximately 100 feet of the wells, as shown in the respective figures. An exception to this clearing radius is at the Harolds Road Well House, which is located within 100 feet of an off-Reservation residence. The La Jolla Band does not have the authority to clear vegetation on this private off-Reservation property as part of the proposed project, but would coordinate with the property owner to determine whether they would allow the La Jolla Band clearing vegetation in the off-Reservation area within the 100-foot radius. Grass and low-lying shrubs located within that radius would be subject to complete removal, and tree branches would be trimmed. There would be no full removal of any trees.

In addition to the vegetation clearing, additional improvements would be made to the Eastern Well House. The well house structure is currently composed of masonry block walls and a wooden roof, with a chain-link fence enclosing the structure. The proposed project entails replacing the wooden roof with a concrete roof for purposes of fire protection and to prevent damage from trees, branches, and rocks that could fall down the adjacent steep slope. The existing chain-link fence would be replaced with a new chain-link fence.

3.2.3 Eastern Water Tank Road Improvements

The third component of the proposed project entails paving the existing dirt access road to the Reservation's water tanks (referred to in this EA as the Eastern Water Tank Road) and constructing storm water drainage facilities in the road to direct storm flows and prevent erosion



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

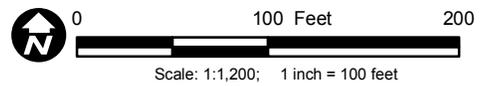
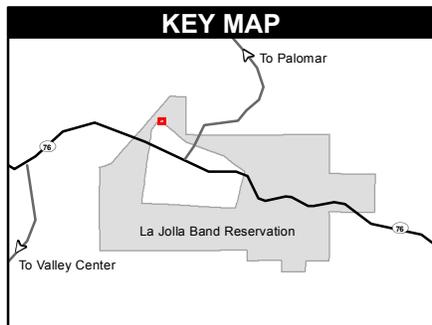


Figure 17
Project 43
Harolds Road Well House



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

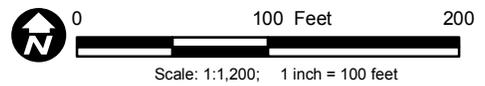
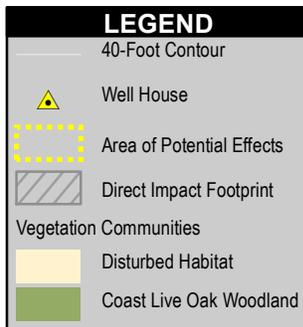
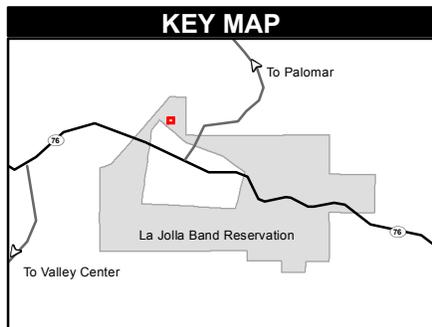


Figure 18
Project 43
Western Well House



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

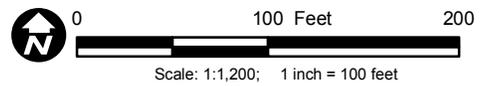
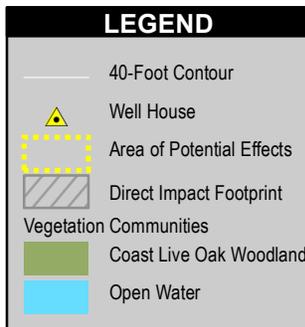
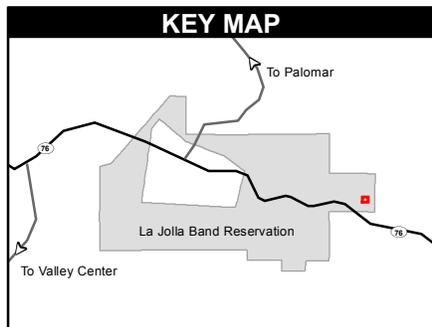


Figure 19
Project 43
Eastern Well House

during heavy rain events. The location of this element is shown in Figure 2 and depicted in detail in an aerial photograph in Figures 20 and 21. The existing Eastern Water Tank Road provides access to three existing water tanks that are located at the top of a hill located in the central portion of the Reservation. The dirt road sits on sharp switchbacks that are graded into the side of a steep hillside. Recent storm flows have left large sections of the road deeply rutted, resulting in difficult driving conditions on the road.

This aspect of the proposed project would cover the existing dirt road with road base and asphalt concrete (AC) pavement to a width of approximately 12 feet. The total length of road paving would be approximately 2,000 feet. Minor grading of the road surface in certain locations would be performed to establish a flat area to lay the base and pavement, but the road would not be widened or realigned.

Drainage improvements include brow ditches, weirs, and corrugated metal pipe. Brow ditches would be excavated on the upslope side of the road and covered with AC pavement. The brow ditches would be approximately 1 foot deep. Rock-filled wire baskets (gabion structures) would be installed in the brow ditches at 50- or 150-foot intervals to provide a velocity check for storm flows. At the two sharp curves in the road, the proposed project would install gabion weirs to check off-site storm flows. Additional drainage improvements include installing 30-foot-long sections of corrugated metal pipe beneath the road at two locations, with shallow rock-filled wire baskets (Reno mattresses) installed at the end of the pipe on the downslope side of the road. Underground water mains that intersect the road would be located during final design and avoided during construction.

3.2.4 Staging Area

Staging for all activities related to the proposed project would be conducted at an existing disturbed area south of SR-76, as shown in Figure 22. The proposed staging area is near the former site of the La Jolla Band's water park and currently houses trailers for several Tribal governmental departments and outdoor storage for Tribal governmental use. The staging area is approximately 2.2 acres.



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

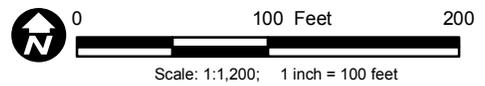
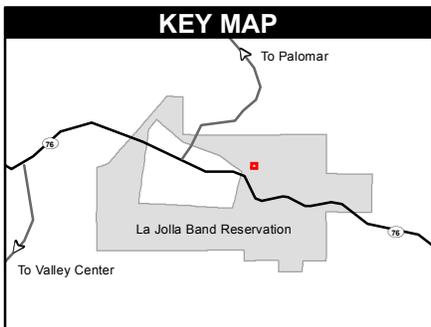
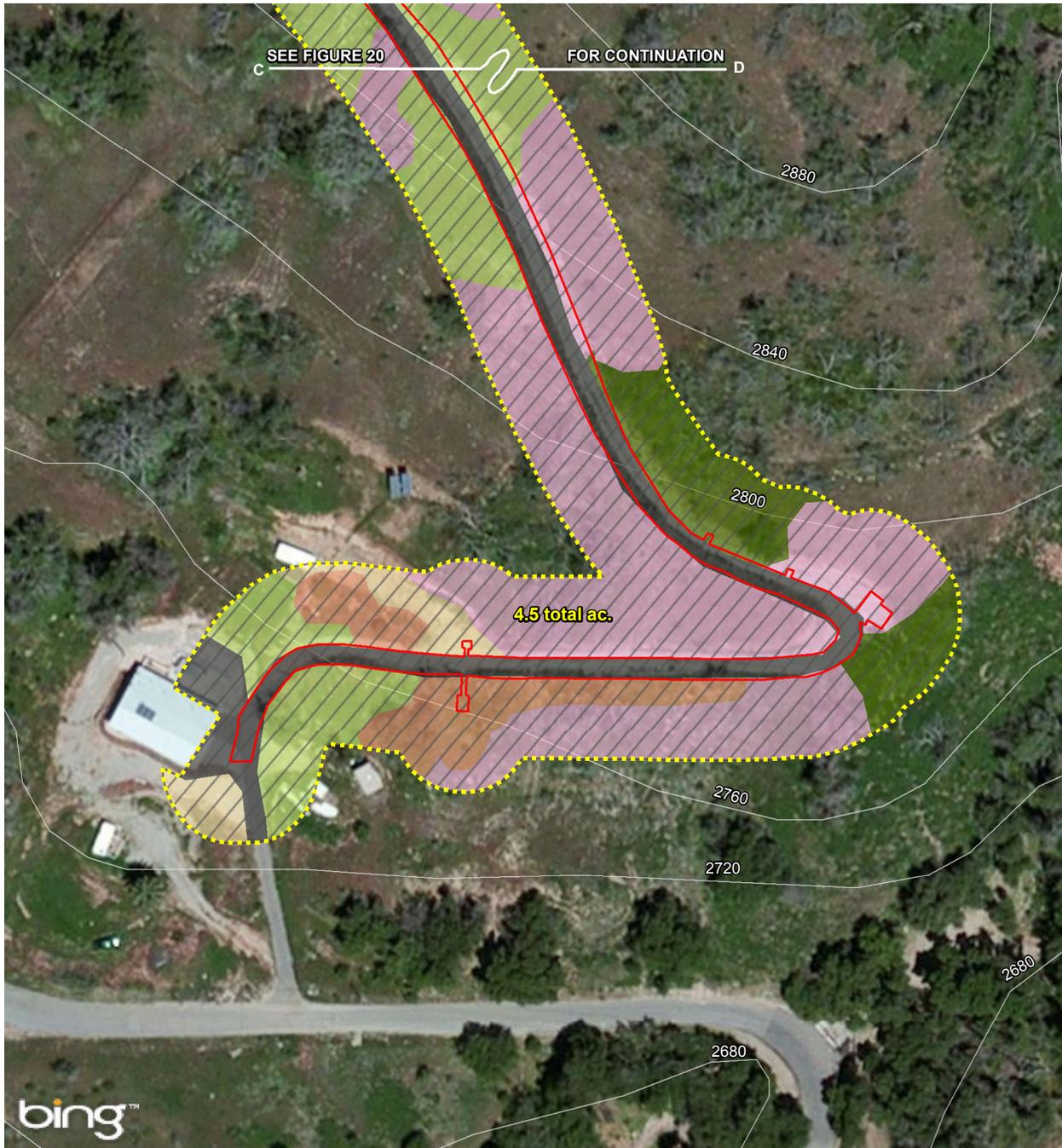


Figure 20
Project 47: Eastern Water Tank Road
North Segment



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

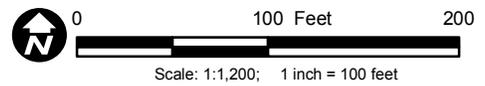
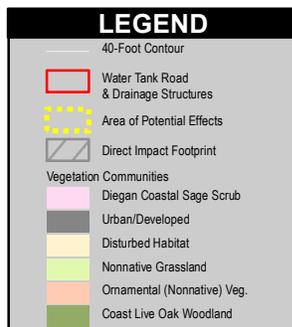
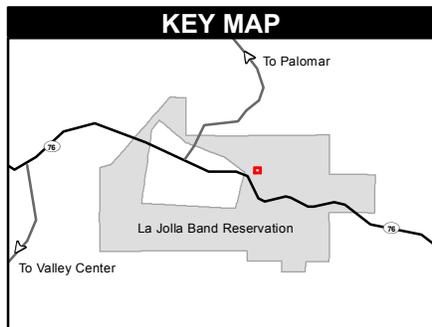


Figure 21
Project 47: Eastern Water Tank Road
South Segment



Source: SANGIS 2010; ESRI 2011; Bing Maps Aerial 2012; AECOM

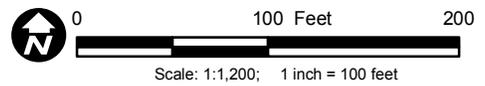
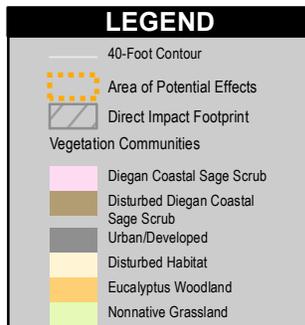
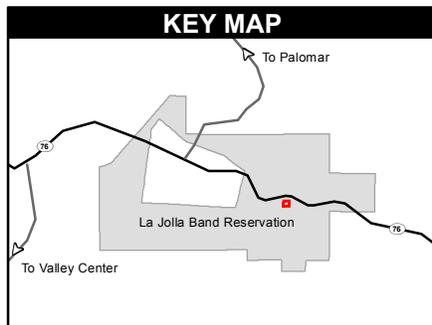


Figure 22
Project Staging Area

4.0 Affected Environment and Environmental Consequences

The various project locations are scattered throughout the northern and central portions of the Reservation. The Reservation is located in north-central San Diego County on the lower southwestern slopes of Palomar Mountain, with a portion located on flatter land of the San Luis Rey River Valley below the mountain. Land cover throughout the proposed project areas includes a mosaic of native and nonnative vegetation communities, interspersed with pockets of residential, institutional, and commercial development. Major land uses within and adjacent to the proposed project areas include SR-76, on- and off-Reservation residential development, tribal office/commercial buildings, agriculture, and natural open space.

The assessment of the proposed project consists of a description of existing conditions in the proposed project area; discussions of how the two alternatives, including the potential of each to result in direct and indirect impacts on the environment; and, if necessary, a description of mitigation measures that would be employed to avoid or minimize these impacts. The assessment focuses on the environmental resources for which some level of effect may result: geology and soils; water resources; biological resources; air quality; socioeconomic conditions and environmental justice; historic properties; noise; transportation; and hazards and hazardous materials.

Several topics of environmental review, based on the topics listed in FEMA's guidance for HMPG EAs, are not included in this EA because they would not be impacted by the proposed project or impact the proposed project sites. Table 1 provides an explanation of why these topics were omitted from the EA.

Table 1: Environmental Topics Omitted from Detailed Discussion

Environmental Topic	Reason for Omitting from EA
Wild and Scenic Rivers	No federally designated Wild and Scenic River are located in the area of the proposed project.
Coastal Resources	The Reservation is located approximately 25 miles inland.
Land Use and Zoning	The proposed project entails minor modifications to existing facilities that would not alter any land use or zoning or present conflicts with existing land use or zoning.
Important Farmland	There are no agricultural uses in the vicinity of the proposed project sites. The entire Reservation is mapped as "Other Land" in the California Department of Conservation's Farmland Mapping and Monitoring Program maps. U.S. Department of Agriculture's Resource Conservation Service mapping data show the Reservation as "Not Prime Farmland."
Seismic Safety of Federally Assisted Building Construction	The proposed project does not entail construction of new buildings or lease of existing buildings for federal purposes.

4.1 Geology and Soils

The Reservation is located on the southwestern slopes of Palomar Mountain, with a portion located on flatter land of the San Luis Rey River Valley. The respective proposed project sites vary in their topography, with some dwelling sites located in areas of gently rolling hills at lower elevations and some set amidst steeper slopes at the foot of Palomar Mountain. Under existing conditions, the residence protection sites and the Eastern Water Tank Road are subject to severe erosion and debris flow during heavy storms, partially as a result of denuded landscape following the 2007 wildfire that swept through the Reservation. These represent hazards that endanger property and public safety and, at the Eastern Water Tank Road site, prevent continued access to the Reservation's water infrastructure.

Alternative 1: No Action

Under the No Action Alternative, geologic conditions on the proposed project sites would remain the same as under existing conditions, and dwelling sites and the Eastern Water Tank Road would continue to be subject to hazardous erosive conditions.

Alternative 2: Proposed Project

The proposed project would alleviate the erosive and hazardous conditions existing at the residence protection sites by constructing retaining walls and brow ditches to prevent heavy flows from inundating the residences. Final engineering design of the walls and other improvements will incorporate standard design features to limit off-site erosion to the greatest extent practicable. See Appendix B of this EA for conceptual engineering drawings. At the

Eastern Water Tank Road, the proposed project would alleviate erosion of the road and the resulting dangerous driving conditions by paving the road and constructing drainage improvements. Therefore, the proposed project would result in a long-term beneficial effect with respect to these erosive and hazardous conditions.

Grading and other earth disturbance at the residence protection sites and Eastern Water Tank Road would result in the potential for leaving the proposed project sites susceptible to water and wind erosion on a temporary basis during construction. Vegetation clearing at the well houses would create similar conditions by leaving bare soil around the facilities. This would be a short-term impact that would be minor because of the limited areas that would be exposed to these conditions. To minimize potential erosion caused by construction activities, the La Jolla Band will require the contractors to prepare and adhere to an erosion control plan. The plan will require that all material excavated from the proposed project area be covered and surrounded by a sediment barrier to prevent sediment loss, as well as other site-specific mitigation measures necessary to prevent temporary erosion. Permanent mitigation measures, such as installing sandbags or placing small blocks or riprap may be required at the well house sites to prevent long-term erosion conditions. Specific measures, if necessary, would be identified in the erosion control plan. Compliance with the erosion control plan at the respective sites would ensure that the proposed project would not result in adverse effects related to erosion.

4.2 Water Resources

4.2.1 Groundwater

The La Jolla Band relies on groundwater resources for its drinking water, operating wells that feed a treatment and distribution system. The three well house improvement projects are located at the sites of water wells and directly above the La Jolla Band's active groundwater resources.

Alternative 1: No Action

The No Action Alternative would not result in any ground disturbance at any of the project sites; therefore, there would be no effect on water quality in nearby groundwater resources due to project-related construction activity. With respect to long-term effects, the No Action Alternative has the potential to result in future groundwater contamination, as the storm waters that currently flow through the dwelling unit sites have the potential to pick up pollutants in these developed areas and carry them downstream and into the Reservation's water table. Therefore, the No Action Alternative would have the potential to result in an adverse long-term effect.

Alternative 2: Proposed Project

None of the permanent facilities that would be built would result in adverse effects on the availability of the La Jolla Band's groundwater resources. The Eastern Water Tank Road proposed project would result in a very minor increase in impervious surface with the addition of pavement to the access road. This increased impervious surface would not affect groundwater recharge due to the limited scale of the pavement and its location on steep slopes. None of the other proposed projects would result in impervious surface. The small scale of all project construction activities would limit the potential for temporary impacts on groundwater. Therefore, no adverse effect on the availability of groundwater would occur.

The proposed project would result in a beneficial long-term effect on groundwater quality by minimizing the potential for pollution of storm water that flows through the dwelling unit sites and eventually seeps into the groundwater table.

4.2.2 Surface Water and Wetlands

Executive Order (EO) 11990 requires federal agencies to take action to minimize the destruction or modification of wetlands by considering both direct and indirect impacts to wetlands that may result from federally funded actions. FEMA's regulations for complying with EO 11990 are found in 44 CFR Part 9, Floodplain Management and Protection of Wetlands.

A preliminary review of the National Wetlands Inventory did not identify any previously recorded wetlands within the proposed project area. One wetland feature was observed during pedestrian surveys of the proposed project sites, a small spring flowing down the steep canyon adjacent to the Eastern Well House. This feature, which is a tributary of the San Luis Rey River, is considered a wetland and water of the U.S., subject to the jurisdiction of the U.S. Army Corps of Engineers. The potential for project-related effects on this feature are discussed below. No wetlands or waters were observed in the vicinity of the dwelling sites, the Harolds Road Well House site, the Western Well House site, or the Eastern Water Tank Road site during pedestrian surveys of the proposed project sites.

The San Luis Rey River flows through the Reservation, but the nearest proposed project site to this feature is residence protection site 41-14, which is approximately 700 feet north of and substantially upslope from the river. Storm waters that currently flow through this site and other dwelling unit sites have the potential to pick up pollutants at the developed sites and carry them downstream into the San Luis Rey River or other surface waters.

Alternative 1: No Action

Under the No Action Alternative, no ground-disturbing activities would occur; therefore, no construction-related impacts to wetlands would occur. The dwelling unit sites would continue to be inundated by surface water storm flows during heavy storms, resulting in an ongoing adverse effect that the proposed project is intended to alleviate. Because these storm waters flow through developed and inhabited areas, the No Action Alternative would result in the potential to maintain conditions where debris, petroleum products, and other household pollutants would be carried off site and into downstream surface waters, including the San Luis Rey River. The No Action Alternative would also maintain erosive conditions at the Eastern Water Tank Road site that could affect the quality of downstream surface waters. Therefore, the No Action Alternative would result in a potentially adverse effect on surface water quality.

Alternative 2: Proposed Project

None of the dwelling unit improvement sites are located in the vicinity of wetlands, so this component of the proposed project would not have an effect on wetlands. With respect to surface water storm flows, the proposed project would minimize the potential for storm flows through developed sites to result in off-site pollution of surface waters. Therefore, the proposed project would result in a long-term beneficial effect.

The Harolds Road Well House and Western Well House are not located in the vicinity of wetlands or surface waters; therefore, project-related improvements at these sites would not result in adverse effects on surface water quality. The Eastern Well House is located adjacent to a spring that is a jurisdictional wetland and water of the U.S. None of the proposed project's other project components are located adjacent to surface water bodies or wetlands. The Eastern Well House project does not propose direct encroachment on this jurisdictional resource and tributary of the San Luis Rey River, but could result in indirect effects due to the potential for construction-related erosion and pollutants to enter the stream. Due to the small scale of construction and the negligible earth disturbance proposed at this site, which would be limited to excavating small holes for the installation of the new chain-link fence, the potential for this adverse effect is very limited. To further minimize the potential for erosion and other pollutants from entering this spring, the La Jolla Band would require the contractor to prepare and adhere to an erosion control plan and a spill response plan. These plans would be submitted to the La Jolla Band's Environmental Protection Agency and FEMA for review and approval prior to commencing construction.

There are no wetlands or surface waters adjacent to the Eastern Water Tank Road site. Therefore, this aspect of the proposed project would not result in direct adverse effects on surface waters. Drainage improvements proposed for the Eastern Water Tank Road would

result in beneficial impacts on downstream surface waters by eliminating erosion from the road that occurs during heavy storm events, improving surface water quality.

4.2.3 Floodplains

EO 11988, Floodplain Management, requires federal agencies to avoid, to the extent possible, the short- and long-term adverse effects associated with the occupancy and modification of floodplains. FEMA's regulations for complying with EO 11988 are found in 44 CFR Part 9, Floodplain Management and Protection of Wetlands. FEMA applies an eight-step decision-making process to ensure that funded projects are consistent with EO 11988. FEMA has initiated this decision-making process for the proposed project by commencing the NEPA compliance process.

None of the proposed projects are within FEMA designated floodplains. One of the sites is on FEMA Flood Insurance Rate Maps. Residence protection site 41-14 is the nearest project feature to the San Luis Rey River, but this proposed project site is approximately 700 feet to the north of and substantially upslope from the river and outside of the river's delineated floodplain, and there would be no flooding concern for project 41-14.

Alternative 1: No Action

The No Action Alternative involves no construction work and would not make any changes to the land that would affect floodplains. Therefore, no flood hazard effects would occur. Because none of the proposed project sites are located in a FEMA-designated floodplain, none of the existing facilities would be affected by flooding under the No Action Alternative. (For a discussion of hazards related to erosion and debris flow during heavy storms, please see Section 4.9.)

Alternative 2: Proposed Project

None of the proposed project sites are located in a FEMA-designated floodplain. Therefore, the proposed project would not have any adverse effects on floodplains, and the proposed project would not construct facilities within floodplains. (For a discussion of hazards related to erosion and debris flow during heavy storms, please see Section 4.9.)

4.3 Biological Resources

This chapter contains a discussion of the biotic natural resources within the areas of potential disturbance of all the sites that compose the proposed project area. The project area lies within a region of northern San Diego County that can be characterized as a portion of the San Luis Rey (SLR) River Valley, and the lower slopes of adjacent mountains, including Palomar Mountain. Land cover includes a mosaic of native and nonnative vegetation communities,

interspersed with pockets of development. Major land uses within and adjacent to the proposed project area include local and regional transportation corridors (e.g., SR-76), residential development, tribal office/commercial buildings, agriculture, and natural open space.

4.3.1 Threatened and Endangered Species

Section 7 of the Endangered Species Act of 1973 (ESA) (16 U.S.C. § 1536(a)(2)) requires federal agencies to determine whether actions they propose to authorize, fund, or carry out have any potential to affect species listed or proposed for listing as threatened or endangered or designated critical habitat.

FEMA obtained a list of species that are listed as endangered, threatened, or proposed for listing as endangered or threatened under the ESA that may occur in the project vicinity. The sources of the information are from the U.S. Fish and Wildlife Service (USFWS) (USFWS 2013a, 2013b), and the California Natural Diversity Database (CDFW 2013). A literature review was conducted to identify habitat requirements and distribution of these species.

Based on the data compilation, FEMA and AECOM as a consultant to FEMA, conducted biological investigations of the proposed project area. As a result of the field and background review, FEMA made the initial determination that the proposed project area is in proximity to habitats suitable to support two federally listed wildlife species. These species are the federally listed endangered southwestern willow flycatcher (*Empidonax traillii extimus*) and the federally listed threatened coastal California gnatcatcher (*Poliioptila californica californica*).

Southwestern Willow Flycatcher: The southwestern willow flycatcher was federally listed as endangered in 1995 and state listed as endangered in 1990. Federally designated critical habitat exists for the species.

This subspecies of willow flycatcher is a summer breeding resident in riparian habitats in southern California, southern Nevada, southern Utah, Arizona, New Mexico, western Texas, southwestern Colorado, and northwestern Mexico (USFWS 1995). In San Diego County, only two substantial breeding populations are known to remain along the Santa Margarita River and the upper SLR River.

The southwestern willow flycatcher is restricted to dense riparian woodlands of willow, cottonwood, and other deciduous shrubs and trees, as well as in coast live oak along the SLR River Valley (Griffith Wildlife Biology 1995). In general, the riparian habitat of this species tends to be rare, isolated, small, and/or in linear patches, separated by vast expanses of arid lands.

Spring migration of the endangered southwestern willow flycatcher is relatively late, beginning in early May and extending through June (Unitt 2004). Another subspecies that breeds to the north in the northern Sierra Nevada and the Cascade Range (*E. t. brewsteri*) migrates through the San Diego region between mid-May and mid-June. There is a period of overlapping occurrence in San Diego County riparian habitats for these two very similar looking subspecies during spring and fall migration. Fall migration of both subspecies occurs rather early, from August through mid-October. Egg laying by the endangered southwestern willow flycatcher occurs in San Diego County from the end of May through the end of June. Dense willow thickets are required for nesting, and nests are often near standing water. Willow flycatchers hunt for insects from low exposed perches, flying out to catch the insects in midair. Federally designated critical habitat for the southwestern willow flycatcher was excluded from the Reservation on January 3, 2013, under Section 4(b) (2) of the ESA (USFWS 2013c). Therefore, no critical habitat occurs in association with any of the proposed project sites.

Coastal California Gnatcatcher: The coastal California gnatcatcher was listed as federally threatened in 1993 and is a state species of special concern. Federally designated critical habitat exists for the species. The coastal California gnatcatcher is declining proportionately with the continued loss of coastal sage scrub habitat in the six southern California counties (San Bernardino, Ventura, Los Angeles, Orange, San Diego, and Riverside) located within the coastal plain.

Habitat preferences in San Diego County consist of Diegan coastal sage scrub dominated by California sagebrush and flat-topped buckwheat, which are the primary plants used by coastal California gnatcatchers when foraging for insects (RECON 1987; ERCE 1990). The species inhabits coastal sage scrub vegetation below 2,500 feet in elevation in inland areas and generally below 1,000 feet in elevation along the coastal slope; it generally avoids steep slopes above 25 percent and dense, tall vegetation for nesting.

The species is a local and uncommon year-round resident of southern California, with a breeding season that extends from late February through July. The territory size requirements of the coastal California gnatcatcher vary with habitat quality. Documented home ranges have varied from 6 to 45 acres in San Diego County (RECON 1987; ERCE 1990). No federally designated critical habitat for the coastal California gnatcatcher occurs within the proposed project area.

Alternative 1: No Action

Under the No Action Alternative, no activities would occur and therefore no effects would occur to species that are federally listed, proposed for listing, or candidates for federal listing under the ESA.

Alternative 2: Proposed Project

No focused, protocol-level surveys for the southwestern willow flycatcher were conducted in the suitable coast live oak woodland habitat within the proposed project area. However, since the subspecies has been documented as a nesting species within similar vegetation in other portions of the SLR River Valley, the southwestern willow flycatcher has the potential to occur as a nesting species within the proposed project area during the breeding season.

The proposed vegetation removal, including trimming of oak tree branches and removal of scrub vegetation adjacent to the coast live oak woodlands, has the potential to impact the southwestern willow flycatcher if the activities occur during the subspecies' breeding season. To avoid potential impacts to the southwestern willow flycatcher, FEMA will require that the La Jolla Band conduct all project-related ground disturbance and vegetation removal outside of the southwestern willow flycatcher breeding season (i.e., avoid activities during the period from May through August, in association with sites that support either large stands of coast live oak woodland, or patches of coast live oak adjacent to larger stands. These sites include the following: Sites 41-4, 41-5, 41-6, 41-7, 41-8, 41-11, 41-14, 41-16, 41-17, 41-18, 41-19, 41-20, 43 (Well Sites), and 47 (Eastern Water Tank Road). By avoiding the breeding season of the southwestern willow flycatcher, the proposed project would avoid any potential impacts to nesting individuals of the subspecies. Therefore, since potentially suitable nesting/breeding habitat occurs within the study area, the proposed project may affect the species, but with the avoidance of all activities during the breeding season, the proposed project is not likely to adversely affect the southwestern willow flycatcher.

No focused, protocol-level surveys for the coastal California gnatcatcher were conducted in the suitable coastal sage scrub habitat within the proposed project area. However, since the gnatcatcher has been documented as a nesting species within the SLR River Valley, and the sage scrub vegetation within the project area below 2,500-foot elevation is within the species' distributional range, the coastal California gnatcatcher has the potential to occur as a resident within the proposed project area in association with Sites 41-12 through 41-15, which are at an elevation range of approximately 2,260 to 2,370 feet. Sites 41-16 and 41-17 have a lower potential to support the coastal California gnatcatcher, since those sites (2,500- and 2,520-foot elevation) are at the known distributional range in elevation for the species.

The proposed removal of coastal sage scrub habitat associated with widening of the tank road, construction of the retaining walls, and work at the well houses has the potential to impact the coastal California gnatcatcher if the activities occurred during its breeding season. To avoid potential impacts to the coastal California gnatcatcher, FEMA will require that the La Jolla Band conduct all project-related ground disturbance and vegetation removal, outside of the coastal California gnatcatcher breeding season (i.e., avoid activities during the period from February through July. By avoiding the breeding season of the coastal California gnatcatcher and its habitat during the breeding season, the proposed project would avoid impacts on the species. Therefore, since potentially suitable nesting/breeding habitat occurs within the study area, the proposed project may affect the species, but with the avoidance of all activities during the breeding season, the proposed project is not likely to adversely affect the coastal California gnatcatcher.

FEMA conducted an informal consultation with USFWS pursuant to Section 7 of the Endangered Species Act. As documented in correspondence provided in Appendix E of this EA, USFWS concurred with FEMA's determination that the proposed project is not likely to adversely affect the southwestern willow flycatcher or the coastal California gnatcatcher.

4.3.2 Migratory Birds

The Migratory Bird Treaty Act (MBTA) restricts the killing, collection, selling, or purchasing of migratory bird species, as defined by listed bird taxonomic families, or their parts, nests, or eggs. Certain gamebird species are allowed to be hunted for specific periods determined by federal regulations. The intent of the MBTA is to eliminate any commercial market for migratory birds, feathers, or bird parts, especially for eagles and other birds of prey. Although no permit is issued under the MBTA, USFWS requires that surveys be conducted to locate nests within a project area if vegetation removal is to occur during the breeding season for raptors and migratory birds.

Alternative 1: No Action

Under the No Action Alternative, no ground-disturbing activities would occur; therefore, no impact to MBTA-covered species in the proposed project area would occur.

Alternative 2: Proposed Project

General wildlife surveys of the proposed project area documented the presence of numerous birds protected under the MBTA, such as red-tailed hawk, acorn woodpecker, and spotted towhee. Bird species protected under the MBTA use a wide variety of habitats for nesting, including woodlands, scrub, and grassland vegetation communities. As such, any vegetated

area within the proposed project area has the potential to support nesting by MBTA-covered species.

The MBTA restricts the killing of migratory birds or destruction of active migratory bird nests and/or eggs. Therefore, vegetation clearing should occur outside of the typical breeding season for raptors and migratory birds (February 1 through July 31) in order to comply with the MBTA. If this is not possible, then FEMA will require that the La Jolla Band retain a qualified biologist to conduct a nesting survey within 1 week of commencing construction at any given site to determine the presence or absence of nests in the riparian habitat, and the potential need for additional mitigation measures. Additional measures may include establishing buffers around active nests where activities would be avoided until nesting has been completed. Adherence to these measures would ensure the proposed project would not result in a violation of the MBTA and that the proposed project's short-term effects would be avoided.

4.3.3 Other Biotic Communities

The proposed project's areas support a variety of upland and disturbed habitats, including coast live oak woodland, Diegan coastal sage scrub, nonnative grassland, disturbed habitat, eucalyptus woodland, field/pasture, nonnative vegetation (ornamental), and urban/developed. Descriptions of the habitat types found in the proposed project area are provided in Appendix C of this EA. Many upland vegetation communities provide valuable nesting, breeding, and/or foraging habitat for many special-status wildlife species. In addition, many upland vegetation communities such as coast live oak woodland and Diegan coastal sage scrub are rapidly in decline due to development. Unlike riparian corridors, which are linear (in association with riverine systems), upland habitats typically form a large matrix and provide a broad variety of species structure and composition. Dense sage scrub vegetation or dense-canopied woodlands provide useful habitat and movement corridors for wildlife, while open grasslands provide foraging habitat for predators and can also contain a unique diversity of plant species depending on the soil composition. No federally regulated vegetation communities or habitat associations are within the proposed project area.

EO 13112 was signed on February 3, 1999, which calls for federal agencies to work to prevent and control the introduction and spread of invasive species. Under the EO, federal agencies cannot authorize, fund, or carry out actions that they believe are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered, and that all feasible and prudent measures to minimize harm caused by invasive species would be implemented in conjunction with the action(s). Complying with the EO means that federal-aid funds cannot be used for construction, revegetation, or landscaping activities that purposely

include the use of known invasive plant species, or do not actively minimize the spread of invasive species to the extent practicable. Until an approved national list of invasive plant species is defined by the National Invasive Species Council, “known invasive plants” are defined as those listed on the official noxious weed list of the state in which the activity occurs.

Alternative 1: No Action

Under the No Action Alternative, no ground-disturbing activities would occur; therefore, no direct or indirect impacts would occur to wildlife species or vegetation communities, and no introduction or spread of invasive species would occur within the proposed project area. Natural cycles of fire, flood, and erosion would result in the temporary loss of habitats used by wildlife for shelter and forage, but the associated natural recovery by native and nonnative plants and animals would continue under the No Action Alternative. The occurrences of natural disasters associated with periodic fire and flood events are highly unpredictable, and are influenced by local and regional weather patterns, as well as anthropogenic (human-caused) activities. Under the No Action Alternative, the potential for wildfires and flooding would not affect the weather cycles that instigate these types of natural disasters. However, without the implementation of these projects, any future flooding and wildfire damage is likely to be heightened due to the lack of proper flood and erosion deterrents, and the severity of wildfire damage would likely be increased under the No Action Alternative, due to the unimproved access to water sources to combat wildfires.

Alternative 2: Proposed Project

The proposed project would result in impacts to vegetation communities that support various plant and wildlife species on-site. Approximate acreages of impacts at the respective project sites are shown in Table 2. These acreages are based on a worst-case scenario that the entire survey buffer (with the exception of stream/water, which will be completely avoided) could potentially be impacted, since complete construction engineering designs were not available for analysis. Potential impacts include a reduction in the acreage of native vegetation and wildlife habitats, as well as a potential for the introduction or increase of invasive plant species in the project area. The reduction in wildlife habitats would result in the commensurate reduction in nesting/breeding habitat, shelter, and foraging areas, and an increase in the edge effect impacts where native habitats are exposed to greater access to predators and anthropogenic influences. The proposed project would disturb wildlife in the vicinity by trenching, grading, and removing vegetation associated with the proposed construction activities. Small mammals, reptiles, amphibians, and insects may suffer injury or mortality during construction from clearing and grubbing of vegetation, and earthwork associated with construction activities. Ground disturbance during construction would also result in associated loss of vegetation across all

Table 2: Vegetation Communities within Site Study Areas

Project Element	Vegetation Community	Within Study Area (acres)	Direct Impacts (acres)
Entire Project (Retaining Walls, Well Houses, Tank Road, and Staging Area)			
	Coastal Sage Scrub	4.77	2.91
	Disturbed Coastal Sage Scrub	0.17	0.04
	Oak Woodland	4.70	2.24
	Eucalyptus Woodland	0.02	0.02
	Nonnative Grassland	4.11	2.87
	Water/Stream	0.02	0.02
	Ornamental Planting	0.59	0.20
	Disturbed Habitat	0.52	0.52
	Farmed/Planted Crops	0.17	0.00
	Developed	3.79	2.42
Entire Project Total		18.86	11.24
Retaining Walls			
	Coastal Sage Scrub	3.25	1.38
	Disturbed Coastal Sage Scrub	0.16	0.03
	Oak Woodland	2.82	0.36
	Nonnative Grassland	1.47	0.21
	Ornamental Planting	0.40	0.01
	Farmed/Planted Crops	0.17	0.03
	Developed	1.74	0.37
Retaining Walls Total		10.01	2.39
Well Houses			
	Coastal Sage Scrub	0.14	0.14
	Oak Woodland	1.49	1.49
	Nonnative Grassland	0.21	0.21
	Water/Stream	0.02	0.02
	Disturbed Habitat	0.29	0.29
Well Houses Total		2.15	2.15
Tank Road			
	Coastal Sage Scrub	1.37	1.37
	Disturbed Coastal Sage Scrub	0.01	0.01
	Oak Woodland	0.38	0.38
	Nonnative Grassland	1.80	1.80
	Ornamental Planting	0.19	0.19
	Disturbed Habitat	0.10	0.10
	Developed	0.65	0.65
Tank Road Total		4.50	4.50
Staging Area			
	Coastal Sage Scrub	0.01	0.01
	Disturbed Coastal Sage Scrub	0.01	0.01
	Eucalyptus Woodland	0.02	0.02
	Nonnative Grassland	0.65	0.65
	Disturbed Habitat	0.11	0.11
	Developed	1.40	1.40
Staging Area Total		2.20	2.20

sites, which may be suitable habitat for these species. During construction, animal species in the vicinity would experience both permanent and short-term loss of habitat. Permanent loss of habitat would be associated with activities that would permanently remove vegetation. Temporary impacts would be associated with the harassment of wildlife species from noise and dust generated by equipment use.

Since the loss of wildlife and vegetation is relatively minor (approximately 11.24 acres distributed across the direct impact footprint for the entire proposed project area), and the La Jolla Band will comply with the MBTA and will avoid the breeding seasons of the federally listed southwestern willow flycatcher and coastal California gnatcatcher, the impacts associated to wildlife species would be considered less than significant.

Permanent indirect impacts from construction could include the introduction and increased spread of invasive plant species into areas of natural vegetation. Invasive plant species germinate sooner, and grow and mature faster, than native scrub and woodland species, providing invasive species the ability to easily outcompete native plants. As such, once nonnative species are introduced into recently disturbed impact areas, there is a potential for invasive species to convert areas of native vegetation into nonnative habitats. Thus, mitigation of impacts would likely include an invasive plant species control component. This section provides a description of the natural biotic environment and the regulatory background on invasive plant species, as well as a list of invasive plant species within the proposed project area. Precautions would be taken where invasive species are found in or adjacent to the construction areas to avoid the inadvertent spread of invasive species. Such precautions may include the inspection and cleaning of construction equipment and use of eradication strategies.

Transfer of invasive species from equipment used on site, and transport of invasive plant species off-site via sedimentation and erosion runoff are the most common pathways for invasive species to become either introduced, or increased in coverage, as a result of construction projects. Invasive species can also be transported by construction equipment and in imported fill. To minimize the introduction or spread of invasive plant species within the project area, all equipment would be staged on previously developed and/or disturbed areas associated with the proposed staging area immediately south of the former water park site, and the La Jolla Band's tribal offices (Figure 22). The La Jolla Band will take measures to prevent the introduction of invasive weeds at the construction sites, including cleaning all equipment before accessing the site and using only certified, weed-free erosion control materials. Additionally, the La Jolla Band will implement standard BMPs into the project design and construction drawings, including implementation of erosion control measures to prevent construction-related soil spoils from migrating into off-site areas. On completion of construction,

any temporarily cleared areas (with the exception of areas cleared for defensible fire buffers) will be revegetated with appropriate native species, thus decreasing the amount of invasive species in the project area. The La Jolla Band will certify that construction materials and imported fill are free of invasive species.

With the implementation of the proposed mitigation measures outlined above, the potential for the proposed project to contribute to the spread of invasive species is minimal, and this alternative would comply with EO 13112. Therefore, the proposed project is anticipated to result in negligible short-term direct and indirect impacts.

4.4 Air Quality

The federal Clean Air Act (CAA) of 1970 was enacted to regulate air emissions from area, stationary, and mobile sources. The CAA authorized the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. Six major pollutants of concern or “criteria pollutants” are identified by USEPA: carbon monoxide (CO), lead, nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), and particulate matter (PM). PM is subdivided as matter less than 10 micrometers (PM₁₀) and matter less than 2.5 micrometers (PM_{2.5}).

Specific geographic areas or air basins are designated by USEPA as either in “attainment” if they are within, or “nonattainment” if they exceed, allowable NAAQS for each criteria pollutant, based on air quality monitoring data submitted to USEPA and the number of days in which standards were exceeded. The CAA requires each state or territory to develop a State Implementation Plan for areas in nonattainment of NAAQS. The Reservation is within the geographical boundaries of the San Diego Air Basin (SDAB), which is listed as a nonattainment area for O₃ (8-hour) federal standards. In March 2009, the La Jolla Band petitioned USEPA for the Reservation to be listed as “unclassifiable.” This request was denied and USEPA considers the Reservation a part of the SDAB nonattainment area. (USEPA 2012)

In addition to criteria air pollutants of direct concern for human health, other air emissions are the result of natural processes and human activities, including greenhouse gases (GHGs), which trap heat in the atmosphere, regulating the earth’s temperature. Water vapor is a naturally occurring GHG that accounts for the largest percentage of the greenhouse effect. Other common GHGs emitted from natural processes and human activities include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Climate change associated with global warming is predicted to produce negative environmental, economic, and social consequences across the globe.

Alternative 1: No Action

The No Action Alternative involves no construction work and no project-related pollutant emissions. Therefore, the No Action Alternative would have no effect on air quality or GHG emissions.

Alternative 2: Proposed Project

The proposed project would not construct or operate any facilities that would result in long-term emissions of air pollutants or GHGs or generate vehicle trips on a permanent basis. The proposed project would result in emissions of a minor amount of pollutants and GHGs on a temporary basis due to operation of construction-related equipment at the various project sites. Emissions-related impacts would include temporary increases in fugitive dust (PM₁₀ and PM_{2.5}) and direct emissions related to fossil fuel combustion (CO, NO₂, PM₁₀, PM_{2.5}, SO₂, and volatile organic compounds) powering construction equipment and vehicles. Construction would occur at the project sites consecutively, and site work is not likely to overlap, further reducing the total daily emissions resulting from the proposed project.

Due to the short duration of the proposed construction and its limited amount of equipment use and worker trips, pollutant emissions would not be of a concentration that would create health concerns, affect air quality, or cause a conflict with the SDAB's State Implementation Plan for O₃ (8-hour). To further minimize temporary air quality effects, the La Jolla Band will require the contractors to employ the following standard BMPs to limit fugitive dust, exhaust, and other emissions:

- maintain and cover spoils piles,
- cover the load of haul vehicles,
- keep construction equipment properly tuned, and
- limit idling time for construction vehicles.

The proposed project does not include any considerable source of direct permanent pollutant emissions, and effects would be limited to the temporary emissions during the small-scale construction project. Therefore, the proposed project would not result in permanent increases in pollutant emissions, and there would be no long-term effect.

Similarly, the proposed project would result in a minor amount of temporary GHG emissions during construction. The potential effects of proposed GHG emissions are, by nature, global and cumulative effects, as individual projects or sources of GHG emissions are not large enough to have an appreciable effect on climate change. Thus, an appreciable effect on global climate

change would only be significantly measurable if proposed GHG emissions were considered together with all other GHG emissions from human activities across the globe.

To date, there are no formally adopted or published NEPA thresholds of significance for GHG emissions. The *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas* issued by CEQ (CEQ 2010) suggests a threshold of 25,000 metric tons of GHG emissions per year as an indicator for GHG impact assessment. The proposed project's GHG emissions would be negligible short-term emissions due to construction activity far below the CEQ threshold. Consequently, the proposed project would not contribute substantially to cumulative impacts associated with global climate change. The proposed project would result in minor temporary effects related to GHG emissions.

4.5 Environmental Justice

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires federal agencies to make achieving environmental justice part of their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.

The 2010 U.S. Census demographic data show 476 residents on the Reservation. Of these residents, 353 (74 percent) were identified as American Indian, indicating that the Reservation population is relatively ethnically homogeneous, with a high percentage of minority residents. The current American Community Survey estimates show approximately 22 percent of individuals on the Reservation live below the federal poverty level (U.S. Census Bureau 2013). Based on the Reservation's ethnic composition, this is a community that is at risk for environmental justice issues.

Alternative 1: No Action

Under the No Action Alternative, existing hazards that affect the proposed project sites would persist. Residents of the dwellings proposed for retaining wall protection would remain in danger of property damage or physical harm due to erosion and debris flow during heavy storms. The entire Reservation would be affected by the potential damage to their water infrastructure. These hazards would continue to affect the Reservation, which has a high percentage of minority residents and is an at-risk environmental justice community. Therefore, the No Action Alternative would result in an adverse effect with respect to environmental justice.

Alternative 2: Proposed Project

The proposed project would mitigate the existing hazards at the various residence sites, well house sites, and Eastern Water Tank Road, representing improved public safety conditions for this community. For residents of the dwellings proposed for retaining wall protection, the proposed project would reduce the danger of property damage and physical harm due to erosion and debris flow during heavy storms. The entire Reservation would benefit from eliminating potential fire damage to their water infrastructure. Because the Reservation has a high percentage of minority residents and is an at-risk environmental justice community, the elimination of these hazards as a result of the proposed project would be a long-term beneficial effect with respect to environmental justice.

4.6 Historic Properties

Consideration of a proposed project's effects on historic properties is mandated under NEPA and Section 106 of the National Historic Preservation Act. Requirements include identifying historic properties that may be affected by the federal undertaking and mitigating adverse effects to those properties.

FEMA identified the APE for historic properties as a cumulative 18.7-acre area subject to ground disturbance at the proposed project locations. The APE includes the footprint of the proposed retaining walls and brow ditch surrounded by a 50-foot buffer at the residence protection sites, the footprint of the well houses surrounded by a 100-foot buffer for vegetation clearing, the current footprint of the Eastern Water Tank Road, and the proposed staging area. AECOM, as a consultant to FEMA, performed a literature review of the APE and an archaeological survey was conducted on March 18 and 20, 2013. The results of the research and survey are detailed in the Historic Properties Inventory Report (FEMA 2013) for the proposed project, which is referenced in Appendix D of this EA.

The literature review identified seven previously recorded archaeological resources within the APE, including milling sites, artifact isolates, and a series of retaining walls for storm flow diversion. Three of the previously recorded resources were not identified again in the field and were determined to be incorrectly mapped. Two of the resources were not identified again within the APE due to severe ground disturbance at their mapped location. One remaining previously recorded site was relocated outside the APE and another was relocated within the APE but outside of the proposed ground disturbing footprint.

The survey identified four previously unrecorded archaeological resources. These sites include a deposit/scatter of historic artifacts located within the APE for residence protection site 41-7, but outside the direct impact footprint; a bedrock milling feature located near the 20555 Oak

Lane residence protection site; a large, partially disturbed milling site with multiple features located near residence protection site 41-19/20; and an existing retaining wall near residence protection site 41-18. The Historic Properties Inventory Report (FEMA 2013) concludes that none of the sites observed during the field survey are eligible for listing in the National Register of Historic Places (NRHP).

Alternative 1: No Action

Under the No Action Alternative, no construction would occur; therefore, the No Action Alternative would not result in effects to historic properties.

Alternative 2: Proposed Project

Previously unrecorded archaeological resources were identified at residence protection sites 41-7, 41-18, 41-19/20, and 20555 Oak Lane. None of these archaeological resources within the project footprint at these dwellings were determined to be eligible for listing in the NRHP. At four of the dwellings (41-9, 41-11, 41-19, and 41-20) the Historic Properties Inventory Report (FEMA 2013) indicates that the portions of the resources inside the project footprint were not eligible for listing, but that implementation of protective construction barricades would be necessary to avoid impacts on portions of the resources that extend outside the project's ground-disturbance area and APE. FEMA concluded that the proposed project, including the erection of protective barricades, would result No Historic Properties Affected.

Implementation of the proposed project would result in ground disturbance at each of the respective project locations, and the Historic Properties Inventory Report (FEMA 2013) concluded that, although the potential is low, unexpected subsurface historic properties could be discovered during ground-disturbing activities. The La Jolla Band (including its contractors and agents) is responsible for halting work in the event of an unanticipated discovery during construction, and notifying FEMA as soon as practicable. If FEMA determines that the discovery has the potential to be a significant historical property, FEMA will require that the La Jolla Band stop all construction in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the property until FEMA concludes consultation with the State Historic Preservation Officer (SHPO), pursuant to 36 CFR Part 800.13(b). Adherence to these measures would ensure the proposed project would avoid long-term effects on historic properties.

FEMA concluded that implementation of the proposed project would result in a finding of "No Historic Properties Affected" under 36 CFR 800.4(d). As documented in the correspondence in Appendix E of this EA, FEMA consulted with SHPO regarding this historic properties finding and SHPO concurred with FEMA's No Historic Properties Affected determination for the proposed project.

4.7 Noise

The proposed project sites are located in the northern and central portions of the Reservation, which feature scattered residential and institutional development amidst large expanses of undeveloped land. The most considerable noise source in the project area is traffic noise from SR-76, in addition to minor noise sources such as residences. The noise-sensitive uses in the vicinity of the various project sites include scattered residences, including some that are proposed for residence protection and some that are not. The one exception is the Eastern Well House, which is located in a remote and steep ravine and is not located near any noise receptors.

Alternative 1: No Action

Under the No Action Alternative, no construction would occur and noise would remain at current levels; therefore, no impacts would occur to existing noise-sensitive receptors.

Alternative 2: Proposed Project

Implementation of the proposed project would result in a minor amount of temporary construction noise at each of the respective project sites. Noise would be generated by diesel-powered engines and other equipment, in addition to trucks and worker vehicles traveling SR-76 and between the project sites and staging area. Noise would be generated in the vicinity of residences and would be received by residences for the short duration of the proposed work. Noise levels would return to preconstruction levels after construction of each of the projects is complete. There would be no long-term noise generation associated with the proposed project.

To reduce the temporary impacts from construction-related noise, the La Jolla Band will require the contractors to implement the following measures to reduce noise levels to the extent practicable:

- Construction operations will not occur between 5:00 p.m. and 7:00 a.m. Monday through Friday. Construction operations will not take place on Saturday, Sunday, or holidays. All components of construction, including maintenance activities and transportation of materials, will be restricted to the periods and days listed.
- All noise-producing project equipment and vehicles using internal combustion engines (including haul trucks) will be fitted with mufflers; air-inlet silencers, where appropriate; and any other appropriate shrouds, shields, or other noise-reducing features. These devices will be maintained in good operating condition to meet or exceed original factory specifications. Mobile or fixed “package” equipment (e.g., arc welders or air compressors)

will be equipped with the shrouds and noise control features that are readily available for that type of equipment.

- All mobile or fixed noise-producing equipment used on the project site that is regulated for noise output by a local, territorial, or federal agency will comply with such regulation while used in the course of project activity.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only.

In addition to these contractor-implemented measures, the La Jolla Band will provide written notification to property owners and residents within 500 feet of proposed construction areas. The written notification would explain the extent and purpose of the work, provide detail on anticipated schedule, and identify a local contact person with the La Jolla Band. Implementation of these measures would ensure that construction noise would be reduced to the greatest extent feasible and that the public would be kept informed of the proposed project's noise-related issues. With implementation of these measures, the proposed project's short-term noise effects would be less than significant.

4.8 Transportation

The Reservation is bisected by SR-76, a two-lane undivided highway operated by the California Department of Transportation. Most of the proposed project sites are located north of SR-76 and some are close to the roadway, with direct access via minor paved roads or dirt roads maintained by the La Jolla Band. In the vicinity of the proposed project sites, SR-76 features several sharp curves with limited visibility that can be dangerous to motorists. Of particular concern is the Eastern Well House site, the access for which is located just west of a blind curve that has been the cause of fatal accidents in the past.

The Eastern Water Tank Road is a steep and winding dirt road providing access from SR-76 to the La Jolla Band's water tanks. Under existing conditions, the road is eroded and subject to dangerous driving conditions during heavy storms, limiting access to these critical components of the La Jolla Band's infrastructure.

Alternative 1: No Action

The No Action Alternative would not entail any project-related construction and would not result in construction traffic traveling SR-76 or Tribal roadways; therefore, the No Action Alternative would not result in adverse temporary effects on transportation. As for long-term effects, the No Action Alternative would not improve conditions at the Eastern Water Tank Road. Erosion of the road would likely continue, maintaining and worsening dangerous traffic conditions. Therefore,

the No Action Alternative could result in a significant adverse long-term effect on the Eastern Water Tank Road.

Alternative 2: Proposed Project

The proposed project comprises several small-scale construction activities that would involve construction traffic driving on SR-76 and Tribal roadways. Traffic would include equipment and material deliveries and worker vehicles. This activity would be heaviest at the proposed staging area, which is located just south of SR-76 in the eastern portion of the Reservation. This construction traffic could pose a hazard to drivers on SR-76, with project-related vehicles entering and exiting the roadway amidst fast-moving traffic. Due to the scale and location of the individual projects and the staging area, it is not anticipated that the proposed project would require any temporary lane closures on SR-76 or other roads.

To minimize potential adverse impacts to traffic and circulation during construction, the La Jolla Band will require the contractor to prepare and implement a traffic control plan during all project work, including equipment delivery to the project sites and material hauling. The traffic control plan will identify signage, flaggers, and other appropriate methods for notifying drivers of the presence of construction vehicles. Proper traffic control would ensure continued safety on SR-76 and any adjacent roads that may be affected by project traffic. The traffic control plan will be submitted to FEMA and the La Jolla Band for review and approval prior to commencing work. In addition to requiring the traffic control plan, the La Jolla Band will provide advance written notice of the construction schedule to all residents within 500 feet of proposed construction areas. The written notification would explain the extent and purpose of the work, provide detail on anticipated schedule, and identify a local contact person with the La Jolla Band. Implementation of these measures would ensure the proposed project would not result in adverse temporary effects with respect to traffic.

The proposed project would pave and install drainage improvements on the Eastern Water Tank Road, which would result in improved driving conditions and continued access on that road. Therefore, the proposed project would result in a long-term beneficial effect on transportation.

4.9 Hazards and Hazardous Materials

Under existing conditions, the various proposed project sites are subject to hazardous conditions that were exacerbated by the 2007 wildfire that swept through the Reservation. The dwelling sites identified for residence protection are exposed to dangerous erosion and debris flow that has damaged property and posed a public safety threat. The well house sites are critical pieces of the Reservation's water infrastructure that are subject to further damage from

future wildfires. The Eastern Water Tank Road is exposed to erosion during heavy storms that makes the road dangerous to travel on, affecting access to the La Jolla Band's water tanks.

No known hazardous materials issues exist at any of the proposed project sites. A review of the California Department of Toxic Substances Control Envirostor Database website (<http://www.envirostor.dtsc.ca.gov>) did not identify any listed hazardous materials storage, release, or incident sites on the Reservation.

Alternative 1: No Action

Under the No Action Alternative, existing hazards that affect the proposed project sites would persist. Residents of the dwellings proposed for residence protection would remain in danger of property damage or physical harm due to erosion and debris flow during heavy storms. The entire Reservation would be affected by the potential damage to their water infrastructure, which could lead to service interruptions. Therefore, Alternative 1 would result in an adverse effect with respect to hazards.

Alternative 2: Proposed Project

The proposed project would mitigate the existing hazards at the various residence sites, well house sites, and Eastern Water Tank Road, representing reduction in exposure to hazards and improved public safety conditions on the Reservation. Therefore, the proposed project would result in a beneficial effect with respect to environmental justice and would comply with EO 12898.

The proposed project comprises several small-scale construction activities that would involve the limited transportation, storage, usage, and disposal of hazardous materials on a temporary basis. Small quantities of hazardous materials, such as gasoline and diesel fuel, would be used to power equipment during construction and maintenance activities. All construction activities involving the transportation, usage, and disposal of hazardous materials will be subject to federal and local health and safety requirements. The La Jolla Band will require the construction contractors to prepare a Minor Spill Response Plan that presents the procedures and protocols utilized in the event of a spill resulting from construction activities. Adherence to this plan would ensure that the proposed project would not result in an adverse public safety effect due to hazardous materials used during construction.

This page intentionally left blank.

5.0 Cumulative Impacts

CEQ defines a cumulative impact as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions...” (40 CFR Part 1508.7).

The Reservation is located in a remote area approximately 1 mile east of rural development on the eastern side of the San Diego County community of Pauma Valley, and approximately 4 miles east of that community’s residential and commercial center. Past cumulative development in unincorporated areas near the Reservation has resulted in a gradual conversion of open space and agricultural land to residential and commercial uses and an associated increase in the local population, though the community largely maintains its rural character.

Cumulative project research was conducted on the County’s permit information database on the County website: <https://publicservices.sdcountry.ca.gov/CitizenAccess/>. This research identified several pending permit applications in the community of Pauma Valley, most of which were for minor additions to or modification of existing single-family residences, individual mobile home projects, and modifications of cellular tower sites. One tentative map for a residential subdivision was listed in the database; aerial photographs show that this subdivision has been constructed approximately 3 miles west of the Reservation’s western boundary. The database research did not identify any major future projects in the unincorporated County area in the vicinity of the Reservation.

Cumulative projects on the Reservation typically include infrastructure improvements, single-family residential dwelling construction and improvements. The proposed project would not contribute to any cumulative trend toward development on and off the Reservation because the proposed project is comprised of small-scale improvement projects located at previously developed sites.

Temporary construction activity of other on- and off-Reservation construction projects may occur concurrently with activities of the proposed project. Additionally, temporary construction activities of the individual improvements of the proposed project itself may occur concurrently at different locations on the Reservation. This would entail some potential localized increase in construction-related noise, air pollutants, and traffic throughout the duration of project construction.

However, cumulative noise and air pollutant emissions would not be an issue because of the wide dispersal and small scale of the proposed project's individual construction activities and other cumulative projects, which would limit the cumulative noise levels received by any receptors and the cumulative amount of air pollutants that would be emitted by project-related activities. Cumulative transportation effects would be prevented by the La Jolla Band's coordination of the traffic control plans that would be required by the respective contractors.

6.0 Public Involvement and Agency Consultation

The La Jolla Band, with support from FEMA, published a Notice of Availability (NOA) of the Draft EA in the *Valley Roadrunner* on October 10 and October 17, 2013. The NOA indicated a public review period of 30 days, ending November 4, 2013. A copy of the proof of publication of the NOA is provided in Appendix F. The NOA was also made available on the FEMA website to involved or interested representatives of the Federal Government, the State Government, and the private sector. The La Jolla Band had a hard copy of the Draft EA document available for review at 22000 Hwy 76, Pauma Valley, CA 92061. An electronic version of the Draft EA, compliant with Section 508 of the Rehabilitation Act (29 U.S.C. 794d) as amended in 1988, was made available on FEMA's website at:

<http://www.fema.gov/media-library/assets/documents/83506>.

During the review period, FEMA accepted written comments on the Draft EA from agencies and interested members of the public. Comments were to be addressed to:

Donna M. Meyer
Deputy Regional Environmental Officer
1111 Broadway, Suite 1200
Oakland, California 94607

FEMA did not receive any comment letters during the public review and comment period for the Draft EA. Consultation letters with USFWS and SHPO regarding the proposed project are provided in Appendix E of this EA.

This Final EA will be made available on the FEMA website at

<http://www.fema.gov/media-library/assets/documents/>.

This page intentionally left blank.

7.0 Relationship Between Short-Term Uses of the Environment and Long-Term Productivity

The proposed project entails minor improvements to existing dwelling sites and Reservation infrastructure to enhance public safety and ensure continued access to and integrity of critical facilities. The proposed project does not represent a short-term use of the environment because it entails long-term infrastructure solutions and does not entail extraction or use of resources, or other temporary uses of the project sites. There are no environmental resources in the vicinity of the site whose productivity would be affected by the proposed project.

This page intentionally left blank.

8.0 Irreversible or Irretrievable Commitments of Resources

The proposed project entails minor improvements to existing dwelling sites and Reservation infrastructure. These small-scale improvements would not result in a significant commitment of resources. Building materials such as masonry blocks, concrete, and asphalt would be used to construct the various improvements, and fossil fuels would be expended to power the equipment. Though some of the building materials would be recyclable, most of this project-related use would represent an irretrievable commitment of these items. Due to the small scale of the projects that compose the proposed project, this is not a significant issue.

This page intentionally left blank.

9.0 Responsible Federal Official and List of Preparers

9.1 Federal Emergency Management Agency

Ann Winterman, Regional IX Assistant General Counsel, Office of General Counsel

Donna M. Meyer, CEM, HPS, Region IX Deputy Regional Environmental Officer

9.2 AECOM Mitigation Services

Douglas Bailey, Project Manager

Alex Hardy, Lead Environmental Planner

Patrick McGinnis, RPA, Lead Archeologist

Lyndon Quon, Lead Biologist

Rachael Droessler, Archaeologist and GIS Specialist

Robin Rice, Word Processor and Section 508 Compliance Specialist

This page intentionally left blank.

10.0 References

California Department of Fish and Wildlife (CDFW). 2013. California Natural Diversity Database – Rarefind. Database Search for Boucher Hill, Palomar Observatory, Warner Springs, Rodriguez Mountain, Mesa Grande, and Warner’s Ranch Quads.

California Invasive Plant Council (Cal-IPC). 2006. California Invasive Plant Inventory. Cal-IPC Publication 2006-02. California Invasive Plant Council: Berkeley, California. Accessed April 11, 2013. Available at Cal-IPC website: <http://www.cal-ipc.org/paf/>.

Cornell University. 2008. Department of Animal Science, Plants Poisonous to Livestock. Accessed April 11, 2013. Available at Cornell University website: <http://www.ansci.cornell.edu/plants/toxicagents/coumarin.html>.

Council on Environmental Quality (CEQ). 2010. *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gases*. February.

ERC Environmental and Energy Services Co. (ERCE). 1990. *Phase 1 Report Amber Ridge California Gnatcatcher Study*. Prepared for Weingarten, Siegel, Fletcher Group, Inc. April. 30 pp.

Federal Emergency Management Agency (FEMA). 2013. *Historic Resources Inventory Report, Retaining Walls Construction, Well Houses Fireproofing, & Road Hardening Project, FEMA-1731-DR-CA, HMGP #1003-41, 1006-43, & 1013-47R*. Prepared by AECOM. August.

Griffith Wildlife Biology. 1995. *The Status of the Southwestern Willow Flycatcher at the Upper San Luis Rey River, San Diego County, California, in 1994*. Report for USDA Forest Service, Palomar Ranger District, Ramona, California. 19 pp.

RECON. 1987. *Home Range, Nest Site, and Territory Parameters of the Black-tailed Gnatcatcher Population on the Rancho Santa Fe Highlands Study Area*. September. Unpublished report submitted to County of San Diego.

Unitt, P. 2004. *San Diego County Bird Atlas*. No. 30 Proceedings of the San Diego Society of Natural History. San Diego Natural History Museum and Ibis Publishing Company.

U.S. Census Bureau. 2013. American Fact Finder: Ratio of Income to Poverty in the Past 12 Months, La Jolla Reservation, CA; and Hispanic or Latino, and Not Hispanic or Latino by Race, La Jolla Reservation, CA.

U.S. Environmental Protection Agency (USEPA). 2012. Technical Support Document for 2008 Ozone NAAQS Designations. Available at USEPA website: http://www.epa.gov/region9/air/ozone/pdf/R9_CA_SanDiego_FINAL.pdf. Accessed April 2013.

U.S. Fish and Wildlife Service (USFWS). 1995. *Endangered and Threatened Wildlife and Plants; Final Rule Determining Endangered Status for the Southwestern Willow Flycatcher*. 60 FR 10694.

U.S. Fish and Wildlife Service (USFWS). 2013a. Endangered and Threatened Wildlife and Plants; § 17.11 Endangered and Threatened Wildlife. Available at CFR website: <http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=186cb0f38a1b1b6770e432a7eba20553&rgn=div8&view=text&node=50:2.0.1.1.1.2.1.1&idno=50>. Accessed April 11, 2013.

U.S. Fish and Wildlife Service (USFWS). 2013b. Endangered and Threatened Wildlife and Plants; § 17.11 Endangered and Threatened Plants. Available at CFR website: <http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=186cb0f38a1b1b6770e432a7eba20553&rgn=div8&view=text&node=50:2.0.1.1.1.2.1.2&idno=50>. Accessed April 11, 2013.

U.S. Fish and Wildlife Service (USFWS). 2013c. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Southwestern Willow Flycatcher; Final Rule. 78 FR 344.

Appendices

Appendix A: Site Photos

This page intentionally left blank.



Plate 1: Project site at dwellings 41-1 through 41-5.



Plate 2: Project site at dwelling 41-6.



Plate 3: Project site at dwelling 41-7.



Plate 4: Project site at dwelling 41-8.



Plate 5: Project site at dwelling 41-9.



Plate 6: Project site at dwelling 41-12.



Plate 7: Project site at dwelling 41-13.



Plate 8: Project site at dwelling 41-14.



Plate 9: Project site at dwelling 41-15.



Plate 10: Project site at dwelling 41-16.



Plate 11: Project site at dwelling 41-17.



Plate 12: Project site at dwelling 41-18.



Plate 13: Project site at dwellings 41-19 and 41-20.



Plate 14: Project site at dwelling at 20555 Oak Lane.



Plate 15: Project site at Harold's Well.



Plate 16: Project site at Western Well.



Plate 17: Project site at Eastern Well.

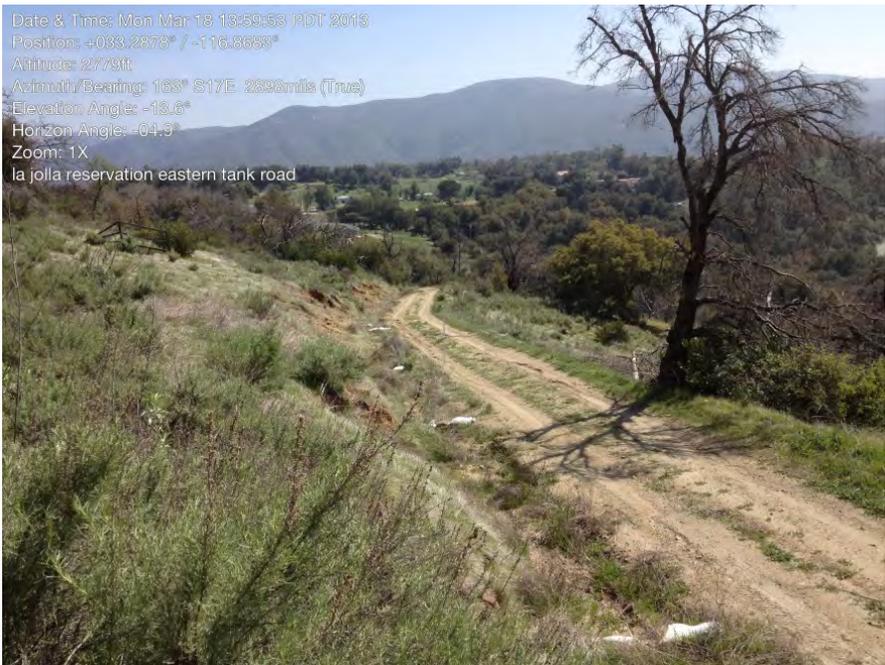


Plate 18: Project site at Water Tank Road.



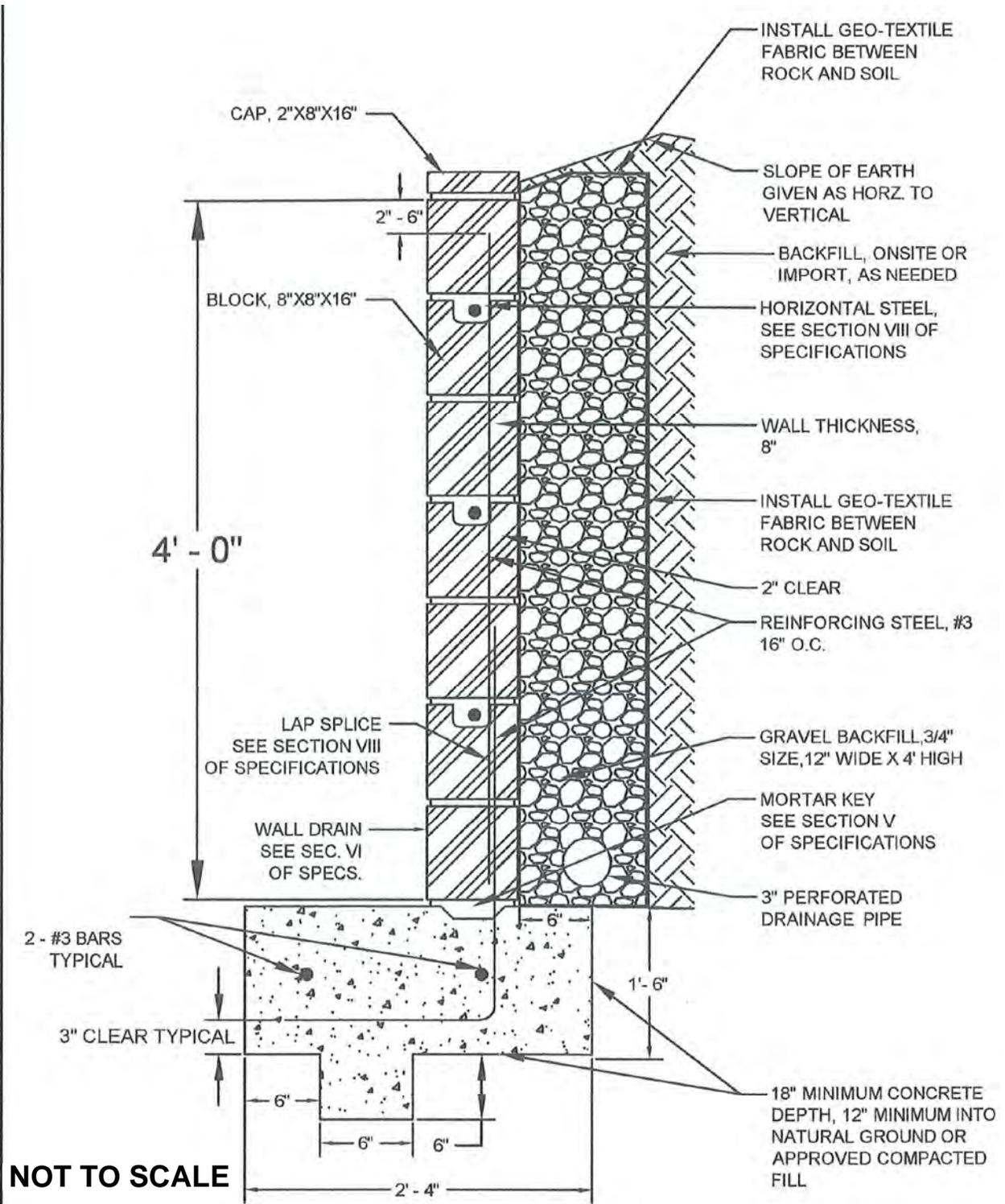
Plate 19: Project site at Water Tank Road.



Plate 20: Staging area for all project sites.

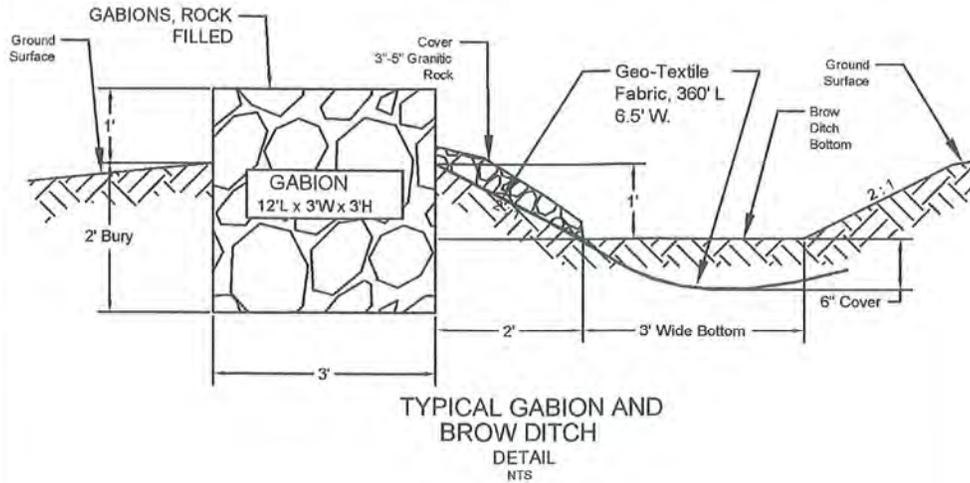
Appendix B: Conceptual Engineering Drawings

This page intentionally left blank.



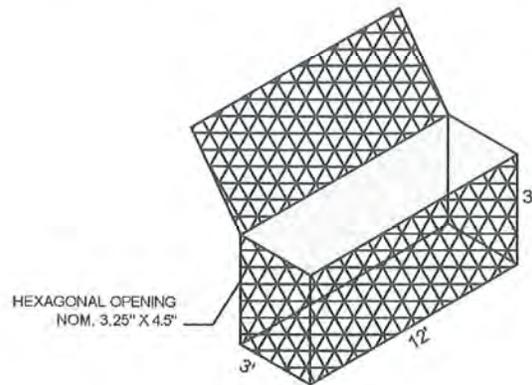
Source: Suarez Engineering Inc. 8-21-2011

Figure A
Project 41
Typical Retaining Wall with Gravel Backfill Detail



NOTES

1. GABIONS SHALL BE MANUFACTURED BY GABION, INC. OR EQUAL.
2. EIGHTY (80) GABIONS, 3'W X 3'H X 12'L SHALL BE INSTALLED FOR A TOTAL DISTANCE OF 960 FEET AS SHOWN IN DRAWINGS.
3. GABIONS SHALL BE OF SIZE SPECIFIED. MESH SHALL BE WOVEN DOUBLE TWISTED FABRIC WITH HEXAGONAL OPENINGS, SIZE 3.25" X 4.5", CONFORMING TO ASTM A975-97. FABRIC SHALL BE PVC COATED WITH A MINIMUM THICKNESS OF NOT LESS THAN 0.015".
4. NETTING WIRE SHALL BE 0.0866" NOMINAL DIA., WITH 0.02165" PVC COATING.
5. BINDING WIRE SHALL BE 0.0866" NOMINAL DIA., WITH 0.02165" PVC COATING.
6. ROCK SHALL BE SCREENED CLASS B, 4" - 8" DIAMETER GRANITE FOR GABIONS AND 3" - 5" DIAMETER GRANITE ROCK FOR BROW DITCH COVER.
7. GEO-TEXTILE FABRIC SHALL BE NON-WOVEN, 4OZ, US FABRICS 115NW OR EQUAL.



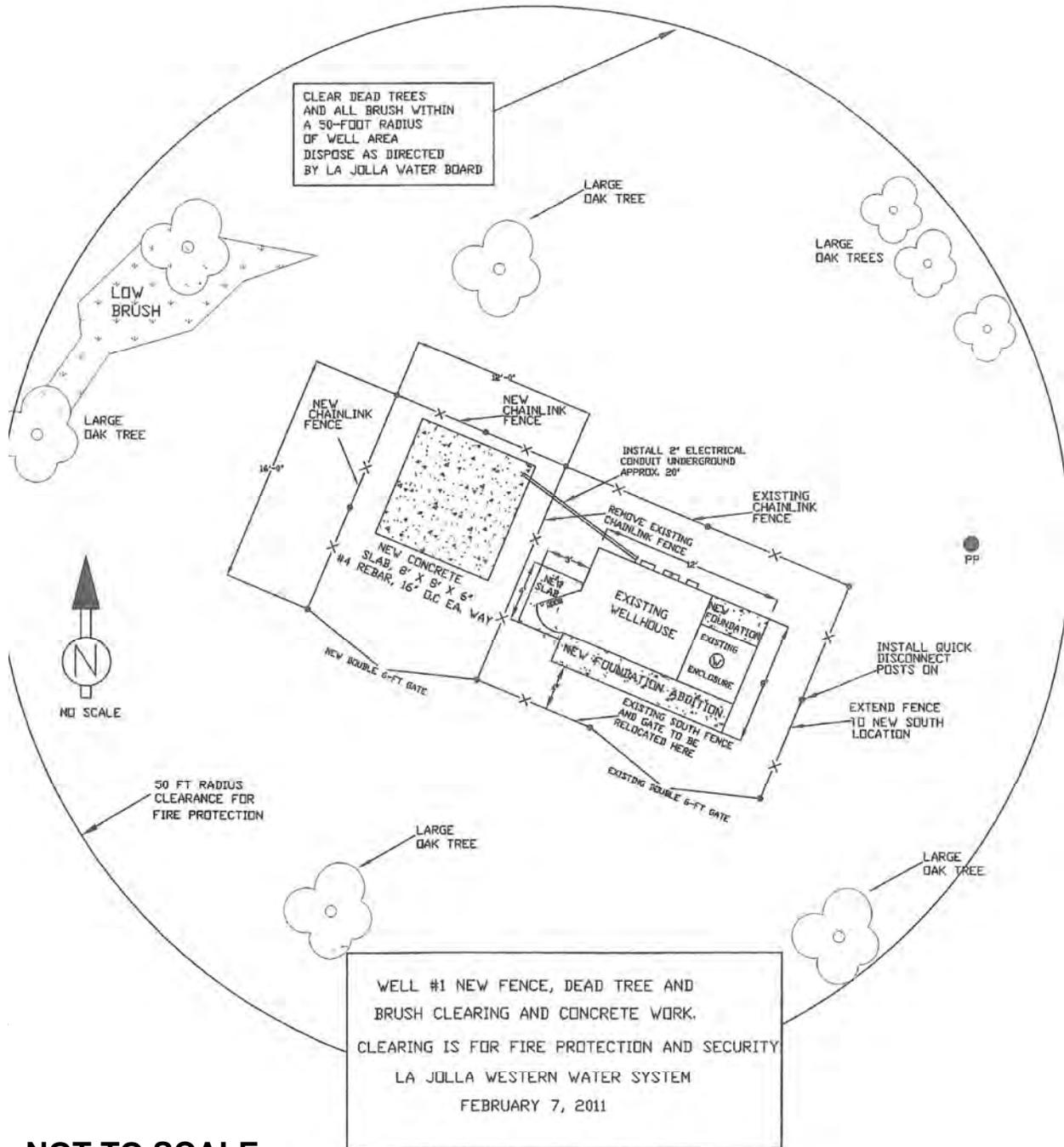
1. GABION BASKETS SHALL BE FILLED WITH 4" - 8" DIAMETER CLASS B GRANITE ROCK

NOT TO SCALE

DETAIL
**GABION BASKET
NTS**

Source: Suarez Engineering Inc. 8-21-2011

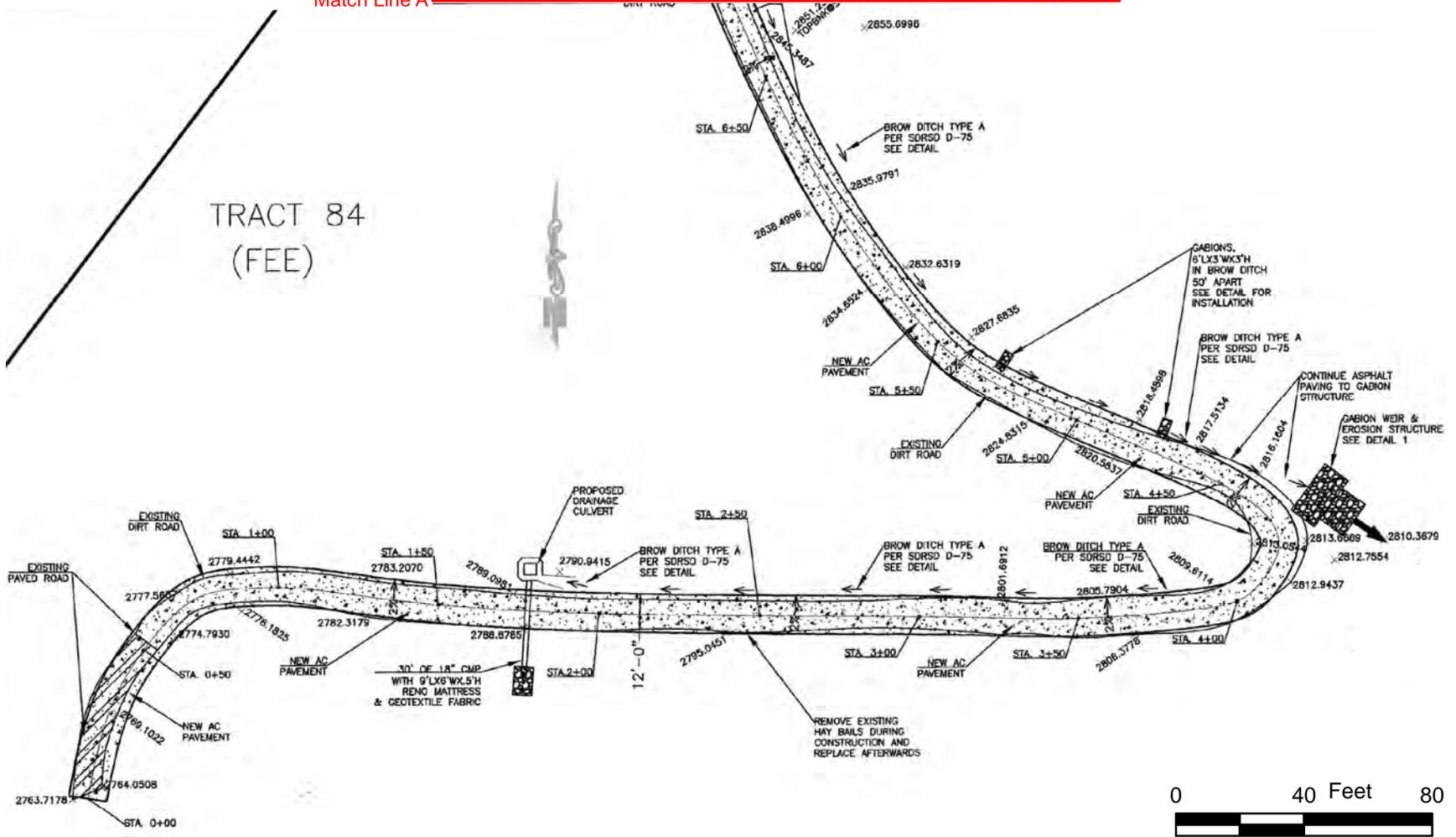
**Figure C
Project 41
Typical Gabion and Brow Ditch**



Source: Suarez Engineering Inc. 2-7-2011

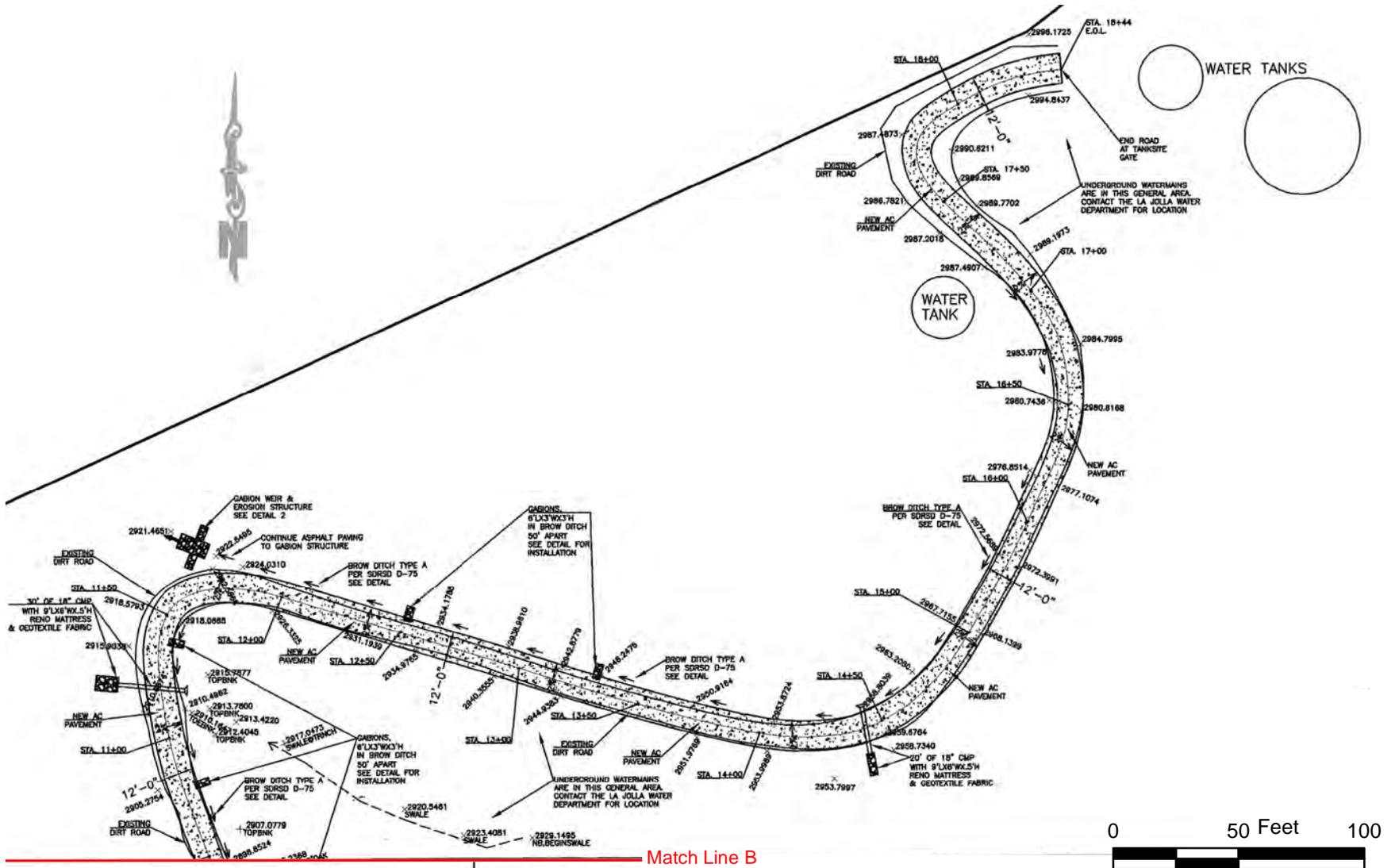
Figure D
Project 43
Proposed Improvements for Harold's Road Well House

Match Line A ————— See Figure F for Continuation



Source: Suarez Engineering Inc. 9-27-2011

Figure E
Project 47
Proposed Improvements for Water Tank Road



See Figure F for Continuation

Match Line B



Source: Suarez Engineering Inc. 9-27-2011

Figure G
Project 47
Proposed Improvements for Water Tank Road

Appendix C: Habitat Types in the Proposed Project Area

This page intentionally left blank.

Appendix C

Habitat Types in the Proposed Project Area

Coast Live Oak Woodland (Holland Code 71160)

This vegetation community is woodland, dominated by the coast live oak (*Quercus agrifolia*). There may be a shrubby understory composed of toyon (*Heteromeles arbutifolia*), laurel sumac (*Malosma laurina*), or blue elderberry (*Sambucus mexicana*). A continuous herb layer exists, usually dominated by nonnative grasses. This vegetation community occurs primarily away from the floodplain of the SLR River. Coast live oak dominates the tree stratum, with an understory dominated by brome grasses, milk thistle, and knot hedge-parsley (*Torilis nodosa*). Coast live oak woodland is associated with nearly all of the sites within the Project Area, ranging from dense stands to a few scattered trees. Wildlife species associated with coast live oak woodland include the oak titmouse (*Baeolophus inornatus*), cedar waxwing (*Bombycilla cedrorum*), western tanager (*Piranga ludoviciana*), pacific-slope flycatcher (*Empidonax difficilis*), northern rough-winged swallow (*Stelgidopteryx serripennis*), striped skunk, dusky-footed woodrat (*Neotoma fuscipes*), and bobcat. Invasive plant species within this vegetation community include brome grasses, milk thistle, and knot hedge-parsley. According to the Cal-IPC California Invasive Plant Inventory Database, all are List B (moderate) invasive plant species (Cal-IPC 2006).

Diegan Coastal Sage Scrub (Holland Code 32510)

This vegetation community is composed of low subshrubs, which can be facultatively drought deciduous. The coastal form is typically found below 1,000 feet, but has been documented at elevations of up to 4,200 feet in the Coastal Ranges, and is dominated by California sagebrush (*Artemisia californica*). Other abundant species include California buckwheat (*Eriogonum fasciculatum*), laurel sumac, and lemonadeberry (*Rhus integrifolia*). Diegan coastal sage scrub occurs primarily along the relatively arid slopes of the Project Area, away from the floodplain of the SLR River. Diegan coastal sage scrub occurs on the less disturbed north- and south-facing slopes, as well as in association with disturbed areas of lower relief such as nonnative grassland and disturbed habitat. Coastal sage scrub occurs throughout the Project Area, typically as a mosaic with coast live oak woodland or with nonnative grasslands. Dominant plant species include California buckwheat, California sagebrush, white sage (*Salvia apiana*), coast monkeyflower (*Mimulus aurantiacus* var. *puniceus*), and brome grasses. Various butterfly species are detected in coastal sage scrub habitats, including the west coast lady (*Vanessa anabella*), painted lady (*Vanessa cardui*), Behr's metalmark (*Apodemia virgulti*), and western

pygmy blue (*Brephidium exile*). Common sage scrub amphibians and reptiles found in coastal sage scrub habitats include the western toad, San Diego coast horned lizard (*Phrynosoma coronatum blainvillii*), western fence lizard, side-blotched lizard (*Uta stansburiana*), Coronado skink (*Eumeces skiltonianus interparietalis*), California striped racer (*Masticophis lateralis lateralis*), San Diego gophersnake (*Pituophis catenifer annectens*), California kingsnake (*Lampropeltis getula californiae*), and southern Pacific rattlesnake (*Crotalus viridis helleri*). Common sage scrub bird species include the California quail (*Callipepla californica*), red-tailed hawk (*Buteo jamaicensis*), greater roadrunner (*Geococcyx californianus*), lesser nighthawk (*Chordeiles acutipennis*), common poorwill (*Phalaenoptilus nuttallii*), Anna's hummingbird, western scrub-jay (*Aphelocoma californica*), bushtit, Bewick's wren, wrentit (*Chamaea fasciata*), California thrasher (*Toxostoma redivivum*), house finch (*Carpodacus mexicanus*), yellow-rumped warbler, spotted towhee, California towhee (*Pipilo crissalis*), and white-crowned sparrow (*Zonotrichia leucophrys*). In addition, the federally listed threatened coastal California gnatcatcher is known to occur in this vegetation community within the greater region. Common small mammals of the sage scrub include pocket mice (*Chaetodipus* sp.), California vole (*Microtus californicus*), house mouse, brush mouse, and deer mouse. Both brush rabbit (*Sylvilagus bachmani*) and desert cottontail may occur, with the latter being a more common occurrence. Coyote, fox, and skunk forage within the sage scrub. The more disturbed portions of Diegan coastal sage scrub contained an abundance of brome grasses. According to the Cal-IPC California Invasive Plant Inventory Database, brome grasses are List B (moderate) invasive plant species (Cal-IPC 2006).

Nonnative Grassland (Holland Code 42200)

This nonnative vegetation community consists of annual grassland composed primarily of nonnative grasses with some native annual forbs. The common dominant species include wild oats (*Avena* spp.), brome grasses, filaree, and mustards (*Brassica* spp.). This vegetation community occurs throughout much of the Project Area, interspersed between existing development and natural woodland and scrub vegetation. Dominant plant species include slender wild oat (*Avena barbata*), brome grasses, filaree, Bermuda grass (*Cynodon dactylon*), and short-pod mustard. Wildlife species detected within nonnative grassland habitats include the western whiptail (*Cnemidophorus tigris*), southern Pacific rattlesnake, red-tailed hawk, white-tailed kite, western meadowlark (*Sturnella neglecta*), grasshopper sparrow (*Ammodramus savanarum*), western kingbird (*Tyrannus verticalis*), deer mouse, coyote, and desert cottontail. Invasive plant species within this vegetation community include all of the dominants mentioned above. According to the Cal-IPC California Invasive Plant Inventory Database, all are List B

(moderate) invasive plant species except filaree species, which are List C (limited) invasive plant species (Cal-IPC 2006).

Other Cover Types

Other cover types include developed and disturbed areas. These areas may contain native and nonnative vegetation, but typically the nonnative component overwhelms the native plant species and there is generally a large amount of bare ground and/or pavement. While these cover types may provide habitat for certain plant and wildlife species, these habitats are of limited use to most special-status plant and wildlife species and are likely to be dominated by invasive and/or ornamental plant species.

Disturbed Habitat (Holland Code 11300)

This cover type can be described as an area that has been physically disturbed through human activities such as grading, clearing, grubbing, off-road vehicle trails, etc., but that still has a soil substrate (i.e., not paved). The former vegetation community can no longer be discerned and the area is dominated usually by nonnative species: thistles (*Centaurea*, *Carduus*, *Cynara*, *Sonchus* spp.), mustard, and brome grasses. This cover type occurs throughout the entire Project Area, interspersed between developed areas and natural habitats, but is concentrated on the southern and western portions of the proposed Staging Area. The primary dominant species observed is short-pod mustard, with a less abundant mix of several other invasive species. Use of disturbed habitat varies depending upon the level of disturbance and the size and location of this cover type. There are no common species typically associated with disturbed habitat, but it is used by common lizards, such as the western fence lizard or side-blotched lizard, for basking. Birds such as killdeer or California horned lark may even nest within disturbed habitat. Additionally, urban-adapted species such as the American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), and house finch were detected in association with this cover type. Invasive plant species within disturbed habitat include tocalote (*Centaurea melitensis*), Bermuda grass, short-pod mustard, prickly lettuce, and sow-thistle (*Sonchus* spp.). All of these species are List B (moderate) invasive plant species according to the Cal-IPC California Invasive Plant Inventory Database (Cal-IPC 2006).

Eucalyptus Woodland (Holland Code 79100)

This nonnative vegetation community is dominated by one or more eucalyptus species (*Eucalyptus* spp.). Most of the time, a dense stand is formed with little understory due to the shading and chemical inhibition of the leaf and bark litter, which is copiously produced. These stands can be found near water sources, or planted along roadsides or property boundaries as

windbreaks or visual screens. This community is generally distributed within the Project Area in association with residences, where it has been planted for use as shade trees and/or for privacy screening. By definition, the dominant plant species within this community are of the genus *Eucalyptus*. In many cases, this community occurs as monotypic stands of various eucalyptus species, with little to no shrub or herbaceous strata below. Wildlife species associated with eucalyptus woodland include the western fence lizard, red-shouldered hawk (*Buteo lineatus*), bushtit, yellow-rumped warbler, house finch, Bullock's oriole, and song sparrow. Species within the genus *Eucalyptus* are List B (moderate) invasive plant species according to the California Invasive Plant Inventory Database (Cal-IPC 2006).

Field/Pasture (Holland Code 18310)

This cover type includes irrigated planted fields of crops and nonnative grass pastures for livestock. Within the Project Area, this cover type was assigned to fallowed fields now used more for grazing than for planted crops. Dominant plant species observed include Indian sweet clover and brome grasses. Site 41-7 includes a semi-fallow California walnut grove, with an open pasture. Wildlife species that typically use fields/pastures within the Project Area include the western kingbird, killdeer, and western bluebird. Invasive plant species within this vegetation community include Indian sweet clover and brome grasses. Both species are List B (moderate) invasive plant species according to the Cal-IPC California Invasive Plant Inventory Database (Cal-IPC 2006). Since this area is used for grazing, the dominance of sweet clover is worth noting as a toxin to livestock. *Melilotus* spp. contain coumarin, which is metabolized into a potent hemotoxin that prevents internal clotting of the blood, induces hemorrhaging, and may be responsible for livestock mortality when consumed in large quantities during grazing (Cornell University 2008).

Nonnative Vegetation (Ornamental) (Holland Code 11000)

This cover type is composed of ornamental nonnative vegetation planted and/or maintained by humans and occurs throughout the Project Area in small patches associated with the interface between developed and undeveloped areas. Most of the sites associated with residential dwellings have a component of ornamental vegetation. Due to the presence of human cultivation and maintenance, a discussion of dominant plant species is not applicable. Nonnative vegetation generally has low wildlife value. However, depending on the species composition and level of irrigation, this vegetation community may support Pacific chorus frog, western fence lizard, San Diego alligator lizard, black phoebe, northern mockingbird (*Mimus polyglottos*), house finch, and house sparrow (*Passer domesticus*). Nonnative vegetation may also support urban-adapted wildlife species such as the mourning dove, American crow, and

common raven. Invasive plant species within this vegetation community include brome grasses, Bermuda grass, and filaree. Bermuda grass and brome grasses are listed in the Cal-IPC California Invasive Plant Inventory Database as List B (moderate) invasive plant species. Several filaree species are List C (limited) invasive plant species (Cal-IPC 2006).

Urban/Developed (Holland Code 12000)

This cover type describes areas that have been paved or built upon and no longer support native vegetation. This includes permanent or semipermanent structures, pavement, and landscaped areas. This cover type occurs throughout the Project Area in association with paved and unpaved roads, as well as structures (e.g., homes, well houses, etc.) and associated land clearing (e.g., parking lots, the proposed Staging Area, etc.). There are no dominant plant species to discuss in association with this cover type. While some wildlife species are more tolerant of development and human presence, few are commonly associated with it. Truly common urban wildlife is generally limited to rock pigeon (*Columba livia*), mourning dove, northern mockingbird, black phoebe, house finch, house sparrow, and house mouse. There are no invasive plant species to discuss for this cover type.

This page intentionally left blank.

Appendix D: Historic Properties Inventory Report

Historic Properties Inventory Report Bound Separately (RESTRICTED DISTRIBUTION)

This page intentionally left blank.

Historic Resources Inventory Report

Retaining Walls Construction, Well Houses Fireproofing, & Road Hardening Project

Pauma Valley, California

FEMA-1731-DR-CA, HMGP #1003-41, 1006-43, & 1013-47R

August 2013

CONFIDENTIAL INFORMATION – RESTRICTED DISTRIBUTION



Federal Emergency Management Agency
Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, California 94607

THIS DOCUMENT WAS PREPARED FOR



FEDERAL EMERGENCY MANAGEMENT AGENCY, REGION IX
DEPARTMENT OF HOMELAND SECURITY
1111 BROADWAY, SUITE 1200
OAKLAND, CA 94607

THIS DOCUMENT WAS PREPARED BY



1420 KETTNER BOULEVARD, SUITE 500
SAN DIEGO, CA 92101

FEMA-1731-DR-CA, HMPG 1003-41, 1006-43, AND 1013-47R
CONTRACT NO. HSFEHQ-09-D-1127
TASK ORDER HSFE80-12-J-0016
AECOM # 60280185

KEYWORDS: *BOUCHER HILL USGS 7.5' QUADRANGLE, PALOMAR OBSERVATORY USGS 7.5' QUADRANGLE, 18.7-ACRE, INTENSIVE PEDESTRIAN ARCHAEOLOGICAL SURVEY, LA JOLLA BAND OF LUISEÑO INDIANS RESERVATION*

PHOTO: THE LA JOLLA BAND OF LUISEÑO INDIANS RESERVATION



Appendix E: Agency Consultation

This page intentionally left blank.



FEMA

September 19, 2013

Mr. Jim A. Bartel
Field Supervisor
U.S. Fish and Wildlife Service
Carlsbad Field Office
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

RE: FEMA-1731-DR-CA, HMGP #1003-41; 1006-43; 1013-47R
Subapplicant: La Jolla Band of Luiseno Indians

Dear Mr. Bartel:

The La Jolla Band of Luiseño Indians has applied to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) for funding of the Retaining Walls Construction, Well Houses Fireproofing, and Road Hardening Project, in Pauma Valley, California, on the La Jolla Band of Luiseño Indians Reservation. The proposed project would provide erosion protection to 19 residences, wildfire protection to three well sites, and erosion protection to a roadway. FEMA is proposing to fund the project through the Hazard Mitigation Grant Program (HMGP) under presidential disaster declaration FEMA-1731-DR-CA pursuant to Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (42 U.S. Code [U.S.C.] § 5170c) and FEMA's implementing regulations Title 44 Code of Federal Regulations § 206.

All federal agencies are required under Section 7(a) (2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA), to consult with the U.S. Fish and Wildlife Service (Service) to ensure that any action authorized, funded or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species under the Service's jurisdiction, or result in the destruction or adverse modification of legally designated critical habitat. This letter, supported by the enclosed draft Environmental Assessment, serves as FEMA's request to initiate informal consultation with the Service under Section 7(a) (2) of the ESA.

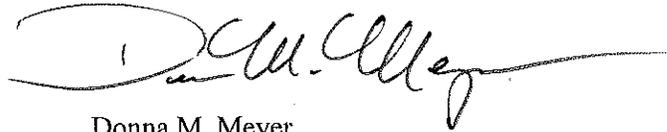
As described in the enclosed draft Environmental Assessment, FEMA has determined that the proposed action may affect, but is not likely to adversely affect, the following ESA-listed terrestrial species: coastal California gnatcatcher (*Poliioptila californica californica*) and southwestern willow flycatcher (*Empidonax traillii extimus*). There is no designated critical habitat in the project area. FEMA requests your concurrence with the "not likely to adversely affect" determination pursuant to Section 7 and 50 CFR Part 402.

Mr. Jim A. Bartel
September 19, 2013
Page 2

FEMA understands that the proposed project site is located in the Pacific Flyway and that several species of migratory birds pass through or use areas within the proposed project action area. FEMA will through the grant conditions, notify the Grantee of their responsibilities pursuant to the Migratory Bird Treaty Act and require the Grantee to consult with the Service regarding the proposed project's potential to impact migratory birds. The grant will be conditioned such that no construction activities occur between February and July and that a qualified biologist be retained by the Tribe to conduct a nesting survey for migratory birds within one (1) week of commencing construction at any of the project sites.

If you have any questions or require any additional information please do not hesitate to contact me at donna.meyer@fema.dhs.gov or at (510) 627-7728.

Sincerely,

A handwritten signature in black ink, appearing to read "Donna M. Meyer", with a long horizontal flourish extending to the right.

Donna M. Meyer
Deputy Regional Environmental Officer

Enclosure



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008



In Reply Refer To:
FWS-SDG-14B0041-1410056

NOV 26 2013

Ms. Donna M. Meyer
Deputy Regional Environmental Officer
U.S. Department of Homeland Security
Region IX
11 Broadway, Suite 1200
Oakland, California 94607-4052

Subject: Informal Section 7 Consultation for the La Jolla Band of Luiseño Indians Retaining Walls Construction, Well Houses Fireproofing, and Road Hardening Project (FEMA-1731-DR-CA), San Diego County, California.

Dear Ms. Meyer:

This is in response to your correspondence, dated September 19, 2013, requesting our concurrence with your determination that the proposed La Jolla Band of Luiseño Indians Retaining Walls Construction, Well Houses Fireproofing, and Road Hardening project is not likely to adversely affect the federally threatened coastal California gnatcatcher (*Poliophtila californica californica*; gnatcatcher) and federally endangered southwestern willow flycatcher (*Empidonax trailli extimus*; flycatcher), in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

The Federal Emergency Management Agency (FEMA) proposes to provide financial assistance through the Hazard Mitigation Grant Program to the La Jolla Band of Luiseño Indians. The purpose of the funds is for infrastructure improvements to address hazards related to wildfire including erosion control and protection of critical infrastructure. The proposed action includes: 1) dwelling unit erosion protection improvements; 2) well house improvements; and 3) water tank road improvements. The 24 proposed project sites occur at various locations within the La Jolla Band of Luiseño Indian Reservation (Reservation). All project-related ground disturbance and vegetation removal will be conducted outside of the flycatcher and gnatcatcher breeding season.

The dwelling unit erosion protection improvements involve constructing improvements to protect 20 residences from erosion and debris flow. The proposed improvements will include brow ditches, retaining walls and drainage piping. Grading and other earth disturbance will be required to install these project features. Of the 20 project sites, 14 will be improved by removing the existing temporary K-rails, where present, and constructing a retaining wall to

divert water flow. At five of the project sites a single linear brow ditch will be constructed along the contour of the residences' northern edge and gabion structures will be installed adjacent to the ditch for erosion control. Retaining walls are not proposed at these locations. At the remaining project site, an existing retaining wall will be augmented by installing a drainage pipe. The pipe's outlet will require trenching through the existing residential driveway.

The proposed well house improvements include vegetation clearing around three existing water well houses (Harolds Road well house, western well house, eastern well house) to enhance fire safety. Vegetation clearing will be performed, as needed, within an approximately 100-foot radius from the wells where grass and low-lying shrubs will be completely removed and tree branches trimmed. No trees will be removed. Additional improvements will be made to the eastern well house that includes replacing the wooden roof with a concrete roof and installing a new chain-link fence to replace the existing fence.

The proposed eastern water tank road improvements include paving the existing dirt access road to the Reservation's water tanks and constructing storm water drainage facilities in the road to direct storm flows and prevent erosion during heavy rain events. Minor grading of the road surface in certain locations will be performed to establish a flat area to lay the road base and pavement, but the road will not be widened or re-aligned. Drainage improvements include brow ditches, weirs, and corrugated metal pipe. Brow ditches, approximately one-foot deep, will be excavated on the upslope side of the road and covered with pavement. Rock-filled wire baskets will be installed in the brow ditches at 50- or 100-foot intervals to provide a velocity check for storm flows. Additional drainage improvements include installing 30-foot long sections of corrugated metal pipe beneath the road at two locations, with shallow rock-filled wire baskets installed at the end of the pipe on the down flow side of the road.

Vegetation communities within the proposed project area include coastal sage scrub, disturbed coastal sage scrub, oak woodland, eucalyptus woodland, non-native grassland, water/stream, ornamental planting, disturbed, developed, and farmed/planted crops. Potential habitat for the flycatcher (oak woodland) and gnatcatcher (coastal sage scrub) occurs within project area.

No flycatchers or gnatcatchers have been documented within the project area; however, protocol-level surveys for these species have not been conducted. Although the project area contains oak woodlands that could be potential flycatcher nesting habitat, the habitat within the project area is considered low quality for flycatchers as the sites are all upland sites (i.e. the oak woodlands are not in association with any stream course) and are immediately adjacent to previously disturbed/developed areas including occupied residential areas. Impacts to oak woodland habitat will total 2.24 acres; however, these impacts will occur across the 24 sites.

Although the project area contains coastal sage scrub/disturbed coastal sage scrub vegetation, the habitat within the project area is considered low quality for gnatcatchers given that it occurs in very small patches and some of the project sites are located either at or above the known distributional range in elevation for the species. Impacts to potential gnatcatcher habitat will

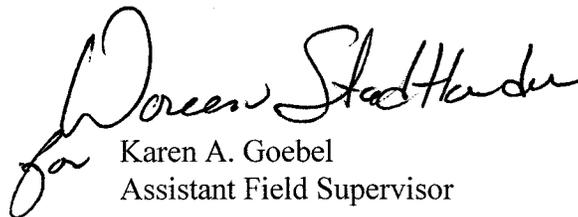
total 2.95 acres; however, these impacts will occur across the 24 proposed sites and are in areas that are immediately adjacent to previously disturbed/developed areas including occupied residential areas.

Based on the quality of the onsite flycatcher and gnatcatcher habitat, the small acreage of impact that will occur to potential flycatcher and/or gnatcatcher habitat at any one site, and because all construction activities will occur outside of the flycatcher and gnatcatcher breeding seasons, the effects of the proposed action is expected to be discountable. Thus, we concur with your determination that the proposed action is not likely to adversely affect the flycatcher and gnatcatcher.

Interagency consultation requirements of section 7 of the Act have been satisfied for the proposed action. Although our concurrence ends informal consultation, obligations under section 7 of the Act shall be reconsidered if new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not previously considered or this action is subsequently modified in a manner that was not considered in this assessment.

Thank you for your coordination on this project. If you have any questions regarding this letter, please contact Michelle Moreno of this office at 760- 431-9440, extension356.

Sincerely,

A handwritten signature in black ink, appearing to read "Karen A. Goebel". The signature is written in a cursive style with a large initial "K".

Karen A. Goebel
Assistant Field Supervisor



FEMA

September 23, 2013

Dr. Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
ATTN: Ms. Susan Stratton

Re: FEMA HMGP #1731-1003-41, #1731-1006-43, and #1731-1013-47R
Retaining Walls Construction, Well Houses Fireproofing, and Road Hardening Project

Dear Dr. Roland-Nawi:

The La Jolla Band of Luiseño Indians (La Jolla Band) has applied to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) for funding of the Retaining Walls Construction, Well Houses Fireproofing, and Road Hardening Project, in Pauma Valley, California, on the La Jolla Band of Luiseño Indians Reservation. The La Jolla Band's proposed project consists of three components to protect infrastructure from future hazards: the construction of retaining walls, brow ditches, and/or drainage piping near 20 residences to protect the dwellings from erosion and debris flow during heavy rains, the clearing of vegetation around three potable water well houses and the construction of roof and fence improvements around one of the same water wells, as well as the installation of drainage structures and paving on an existing access road leading to some water tanks.

FEMA is proposing to provide financial assistance through the Hazard Mitigation Grant Program (HMGP) under presidential disaster declaration FEMA-1731-DR-CA pursuant to Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (42 U.S. Code § 5170c) and FEMA's implementing regulations Title 44 Code of Federal Regulations (CFR) § 206. The provision of federal assistance meets the definition of an "Undertaking," per 36 CFR 800.16(y). As such, documentation and consultation under Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, and its implementing regulations (36 CFR Part 800) is required.

A historic properties investigation of the Grantee's proposed project, including background and archival research and an archaeological survey, was conducted to identify and evaluate historic properties. As detailed in the enclosed Retaining Walls Construction, Well Houses Fireproofing, and Road Hardening Project Historic Properties Inventory Report, FEMA has determined that the Grantee's proposed project and FEMA's Undertaking would result in no historic properties affected pursuant to 36 CFR §800.4(d)(1).

The retaining wall component of the proposed project includes improvements to protect 20 dwellings referred to as dwellings 41-1 through 41-9, and dwellings 41-11 through 41-20, with an additional dwelling referred to by its address, dwelling at 20555 Oak Lane. The majority of these dwellings would be protected by removing existing portable concrete barrier systems (K-rails) and erecting 4-foot-high

retaining walls made of masonry blocks filled with concrete and reinforced by steel. The walls would be 6 feet in total height, including 4-feet above ground and a 2-foot concrete footing below ground to anchor the walls in place. Drain pipes would be installed at the foot of the walls to allow water to drain around the walls. A total of 12 new walls would be constructed, with some walls protecting multiple dwellings. One existing wall would be extended on both ends. The walls to be constructed would total approximately 9,600 feet in length.

In addition to the proposed work described above, at dwellings 41-1 through 41-5, the proposed project would entail digging a single linear brow ditch along the contour on the dwellings' northern edge and installing gabion structures adjacent to the ditch for erosion control. The total length of the ditch and gabion installation would be approximately 960 feet. At dwelling 41-9, an existing retaining wall would be augmented by installing a drainage pipe. The pipe's outlet would require trenching through the existing residential driveway. An existing retaining wall at dwelling 41-14 would be augmented with additional walls placed at angles at either end of the existing wall and installation of a drainage pipe.

For the well house component of the proposed project, vegetation clearing would be needed around three existing water well houses to provide defensible space around these structures that house water pumping equipment. Also, a new roof and fence would be needed at one of the three well houses to replace the roof and fence that were destroyed when a large tree fell from the steep slope above the well house as a result of the disaster.

For the roadway component of the proposed project, the existing dirt road leading to the Reservation's Eastern Water Tank would need to be improved with hard surface pavement and associated storm water management structures to repair damage caused by heavy erosion that occurred due to post-fire storm water flows and to ensure its function of providing permanent continuous access to the critical water tank facility under all conditions.

The enclosed Historic Properties Inventory Report includes a scale map of the project area (Figure 2) that delineates the area of potential effects (APE). FEMA has made a determination that the APE is approximately 18.7 acres in area. In addition, the Historic Properties Inventory Report summarizes the results of the cultural resources surveys conducted by AECOM Mitigation Services, as a consultant to FEMA, on March 18, and March 20, 2013. Based on the current survey, seven archaeological resources were identified in the APE including three previously recorded and four newly identified resources. Two of the previously recorded sites, CA-SDI-623 and CA-SDI-15614, are disturbed within the project APE, and the portions outside the APE are unevaluated. The remaining previously recorded site, P-37-19117, is not eligible for listing to the National Register of Historic Places (NRHP). One of the newly identified sites, LJ-PM-003, is completely disturbed within the project APE, and the portions outside the APE are unevaluated. The other three newly identified sites, LJ-PM-001, LJ-PM-002, and LJ-PM-004, are not eligible properties. A previously recorded isolate, P-37-018583, is not an eligible property and was not relocated.

During the current survey, two other previously recorded sites (CA-SDI-7674 and CA-SDI-7675) were found to be incorrectly mapped based on a comparison of the GIS information from the SCIC, accompanying sketch maps from the respective site records and visual inspection during the current survey. These sites were not relocated and are likely outside the APE. Another previously documented site, CA-SDI-15617, was relocated during the current survey, but found to be outside the APE.

The portions of CA-SDI-623 and CA-SDI-15614 within the APE are so disturbed that the area no longer retains any integrity and the portion of the sites within the APE is considered destroyed. However, it i

Dr. Carol Roland-Nawi, Ph.D.

September 23, 2013

Page 3

possible that intact deposits with important prehistoric information are located within site boundaries outside the APE. Therefore, protective barricades would be put in place during construction to avoid effects to portions of these sites that are outside of the APE. This would result in no historic properties affected from the implementation of the proposed project components associated with dwelling 41-9 and dwelling 41-11.

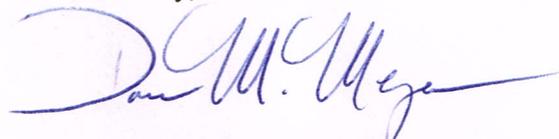
One of the newly recorded sites, LJ-PM-003, was identified within the APE, but no artifacts or features were located within the proposed project footprint where ground disturbance would take place. Site LJ-PM-003 is disturbed and lacks integrity within the direct disturbance footprint. The portion within the disturbance footprint has been cut, graded and padded at least twice and has up to 5 feet of fill material deposited as part of construction for the two homes that have been built here. However, the site may retain intact deposits outside the proposed ground disturbing area, which may have potential for important information regarding prehistory. Therefore, protective barricades would be put in place during construction to avoid effects to portions of the site that are outside of the direct disturbance footprint. This would result in no historic properties affected from the implementation of proposed project activities associates with dwelling 41-19 and dwelling 41-20.

Protective barricades are required at three locations for site avoidance where properties are located within the APE, but are outside the proposed area of ground disturbance and would be avoided. With these avoidance measures, there is a finding of no historic properties affected for the proposed project components at dwelling 41-9, dwelling 41-11, dwelling 41-19, and dwelling 41-20.

Although the potential is low, unexpected subsurface historic properties could be discovered during ground disturbing activities. Therefore, the La Jolla Band (including its contractors and agents) will be responsible for halting work in the event of an unanticipated discovery during construction, and notifying FEMA as soon as practicable. If FEMA determines that the discovery has the potential to be a significant historical property, FEMA will require that the La Jolla Band stop all construction in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the property until FEMA concludes consultation with your office pursuant to 36 CFR Part 800.13(b).

FEMA requests your concurrence with our determination of no historic properties and have enclosed documentation in support of our finding. Unless the CASHPO objects to our determination within 45 days of receipt of our documentation, FEMA will commence with the proposed undertaking. However, in the interest of time we would appreciate a response at your earliest opportunity. Should you have any questions or require additional information please do not hesitate to contact me at (510) 627-7728 or donna.meyer@fema.dhs.gov.

Sincerely,



Donna M. Meyer, CEM/HPS
Deputy Regional Environmental Officer

Enclosure: Historic Properties Inventory Report: Retaining Walls Construction, Well Houses Fireproofing, and Road Hardening Project [FEMA HMGP #1731-1003-41, #1731-1006-43, and #1731-1013-47R]

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



October 28, 2013

In reply refer to: FEMA_2013_0926_001

Donna M. Meyer, CEM/HPS
Deputy Regional Environmental Officer
U.S. Department of Homeland Security
Region IX
111 Broadway, Suite 1200
Oakland, CA 94607-4052

Re: Section 106 Consultation for Retaining Walls Construction, Well Houses Fireproofing, and Road Hardening Project in Pauma Valley, California on the La Jolla Band of Luiseño Indians Reservation.

Dear Ms. Meyer:

Thank you for your letter dated September 23, 2013, requesting my review and comment with regard to the above named proposed undertaking on the La Jolla Band of Luiseño Indians Reservation. The Federal Emergency Management Agency (FEMA) is consulting with me Pursuant to 36 CFR Part 800 (as amended 8-05-04) regulations implementing Section 106 of the National Historic Preservation Act. Along with your consultation letter, you also provided maps of the Area of Potential Effects (APE) and a document titled *Historical Resources Inventory Report Retaining Walls Construction, Well Houses Fireproofing, & Road Hardening Project Pauma Valley, California* (AECOM 2013).

FEMA is proposing to provide financial assistance through the Hazard Mitigation Grant Program (HMGP) under presidential disaster declaration FEMA-1731-DR-CA pursuant to Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (42 U.S. Code 5170c) and FEMA's implementing regulations Title 44 CFR 206. The proposed improvements would protect 20 dwellings referred to as dwellings 41-1 through 41-9, dwellings 41-11 through 41-20 and 20555 Oak Lane. These dwellings have been subject to erosional episodes following flooding and debris flow resulting from heavy rain storms in the desert. The majority of these dwellings would be protected by removing existing portable concrete barrier systems and erecting 12 new 4-foot high retaining walls. 2-foot concrete footings will anchor the walls in place below ground. Drain pipes would be installed at the foot of the walls to allow water to drain around walls. The walls would total approximately 9,600 feet in length. This work would also entail the digging of a single linear brow ditch along the contour of the dwellings' northern edge and installing gabion structures adjacent to the ditch for erosion control. The total length of the ditch and gabion would be approximately 960 feet. At dwelling 41-9, an existing retaining wall would be augmented by installing a drainage pipe that would require trenching through an existing residential driveway. Another existing retaining wall at dwelling 41-14 would be augmented with additional walls placed at angles at either end of the existing wall and installing a drainage pipe. Vegetation will be cleared from around three existing water well houses, followed by constructing roof and fence improvements. Additionally, the existing dirt road leading to the reservation's Easter Water Tank would be improved with hard surface pavement to repair damage caused by heavy erosion. FEMA has identified an APE of 18.7 acres that are potentially subject to ground disturbance for this undertaking. This includes the footprint of the proposed retaining walls, the brow ditch, drainage piping improvements, and the water tank road hardening and drainage improvements surrounded by a 50-foot buffer. It also includes the footprint of the well house improvements surrounded by a 100-foot buffer and the construction staging area.

AECOM was hired by FEMA to conduct a records search, archival research, a pedestrian survey, and Native American consultation. These efforts resulted in the identification and evaluation of seven previously recorded sites and four newly identified historic properties within the APE. During the survey, four of the previously recorded sites (CA-SDI-7674, CA-SDI-7675, CA-SDI-15617 and P-37-018583) were found to be incorrectly plotted based on a comparison of the GIS data from the South Coastal Information Center (SCIC) and accompanying sketch maps. Three of these relocated sites have been determined to lie outside of but adjacent to the APE for this undertaking, and CA-SDI-15617 has been relocated 57 meters outside of the APE.

CA-SDI-7674 and 7675 are bedrock milling features, CA-SDI-15617 is a site with three milling features and one mano, and P-37-018583 is an isolated ceramic fragment and is not eligible for listing in the NRHP. One previously recorded site and two newly recorded sites are located within the buffer zone of the APE but are outside of the direct impact zone. These sites include P-37-019117, LJ-PM-001, LJ-PM002. P-37-019117 consists of three rock and wire mesh gabion walls that are not eligible for listing on the National Register of Historic Places (NRHP), LJ-PM-001 is a historic debris scatter that is not eligible, and LJ-PM-002 is a bedrock milling feature and two manos that are also not eligible. Two previously recorded sites (CA-SDI-15614 and CA-SDI-623) and one newly recorded site (LJ-PM-003) are located within the APE, however, the areas that are within the direct impact areas of the APE have been previously disturbed by construction and erosional events resulting in a loss of integrity. However, as these sites extend outside of the APE and they may retain integrity in other areas, FEMA is proposing to place barricades at the edge of the APE to avoid any impacts to the potentially intact areas of the sites. One newly identified historic property, LJ-PM-004, may be impacted by the proposed undertaking. This property is a historic-era retaining wall made from cement and dry mortared local fieldstone sometime between the 1930's and the 1960's. Several other examples of this landscape feature can be found throughout the reservation and the region, this wall in particular is heavily vegetated and is in disrepair. Therefore, AECOM has determined that LJ-PM-004 is not eligible.

Based on the results of the archival research and survey, FEMA has determined that no historic properties will be affected by this project with the implementation of protective barricades at three locations. As this project is being conducted by the La Jolla Band of Luiseño Indians, the culturally affiliated Native American tribe has been involved in every aspect of this undertaking and will perform monitoring during all construction related activities. Should an inadvertent discovery occur during construction, the La Jolla Band will halt construction and notify FEMA as soon as possible. If FEMA archaeologists determine that the find has the potential to be a historic property, all construction in the area will stop and reasonable measures will be taken to avoid or minimize impacts to the property until FEMA concludes consultation with my office.

FEMA is asking for my concurrence on their determination of No Historic Properties Affected for this undertaking. After reviewing the documentation submitted to this office, I offer the following comments:

- Pursuant to 36 CFR 800.4(d)(1) I concur with your determination of No Historic Properties Affected with the implementation of the proposed avoidance measures.

Please be advised that under certain circumstances, FEMA may have additional future responsibilities for this undertaking under 36 CFR Part 800. Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions, please contact Jessica Tudor of my staff at (916) 445-7016 or jessica.tudor@parks.ca.gov.

Sincerely,



Carol Roland-Nawi, PhD
State Historic Preservation Officer

Appendix F: Notice of Availability of Draft Environmental Assessment

This page intentionally left blank.

FILE

1731-1003-43

RECEIVED
NOV 06 2013
BY: 



29277 Valley Center Road, Valley Center, CA 92082
P.O. Box 1529
(760) 749-1112
FAX (760) 749-1688

Proof of Publication
(2015.5 C.C.P.)

La Jolla Band of Luiseno Indians
Notice of Availability
Draft Environmental Assessment for the Retaining Walls
Construction, Well Houses Fireproofing, & Road Hardening
Project

State of California)
County of Riverside) ss.

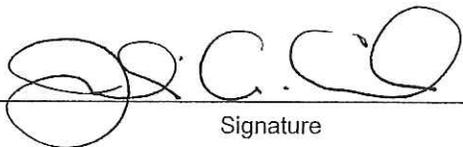
I am a citizen of the United States and a resident of the State of California; I am over the age of eighteen years, and not a party to or interested in the above matter. I am the principal clerk of the printer and publisher of The Valley Chronicle, a newspaper published in the English language in the City of Hemet, County of Riverside, and adjudicated a newspaper of general circulation as defined by the laws of the state of California by the Superior Court of the County of Riverside, under the date July 13, 2005, Case No. RIC 431158. That the notice, of which the annexed is a copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

Oct. 10 & 17, 2013

Executed on: Oct. 18, 2013

At Hemet, CA

I certify (or declare) under penalty of perjury that the foregoing is true and correct.


Signature

NOTICE OF AVAILABILITY

**DRAFT ENVIRONMENTAL ASSESSMENT FOR THE
RETAINING WALLS CONSTRUCTION, WELL HOUSES FIREPROOFING, & ROAD HAR**

La Jolla Band of Luiseño Indians, Pauma Valley, CA

FEMA-1731-DR-CA, HMGP #1003-41, 1006-43, & 1013-47R

The La Jolla Band of Luiseño Indians (La Jolla Band) has applied to the U.S. Department of Homele Emergency Management Agency (FEMA) for Hazard Mitigation Grant Program (HMGP) funds to i improvement projects at various locations on the Reservation. The proposed hazard mitigation impr Presidential Disaster declaration FEMA-1731-DR-CA, which was issued in October 2007 for widess southern California, including the Poomacha Fire that affected the La Jolla Band's Reservation in Pa improvements include the construction of retaining walls, brow ditches and/or drainage piping adjac protect the dwellings from storm water erosion and debris flow (HMGP #1731-1003-41), the clearin three water well houses and the construction of roof and fence improvements at one of these well ho (HMGP #1731-1006-43), and the paving of an existing dirt road along with the construction of assoc management structures to protect access to the La Jolla Band's Eastern Water Tank (HMGP #1731-1

FEMA's approval of funding for this project is a federal action subject to the National Environmenta (NEPA). FEMA has prepared a Draft Environmental Assessment (EA) in compliance with NEPA at regulations 44 CFR Part 10 to evaluate the potential environmental impacts of constructing and open mitigation improvements that could result should FEMA grant the financial assistance to the La Jolla proposed project.

FEMA has made an electronic version of the Draft EA, compliant with Section 508 of the Rehabilita 794d) as amended in 1988, available for public review at FEMA's website:

<http://www.fema.gov/environmental-planning-and-historic-preservation-program/environmental-notices-5> or www.fema.gov/media-library/assets/documents

A hard copy of the Draft EA is available for review at 22000 Hwy 76, Pauma Valley, CA 92061.

During the 30-day comment review period, FEMA will accept written comments on the Draft EA fr interested members of the public. Comments should be addressed to:

Donna M. Meyer
Deputy Regional Environmental Officer
1111 Broadway, Suite 1200
Oakland, California 94607

At the end of the 30-day review period, FEMA and the La Jolla Band will review all public comment them in the decision-making process before notifying the public of its final determination. To be cor making process, comments on the Draft EA must be received by 4pm on November 4, 2013.

PUBLISHED IN THE VALLEY ROADRUNNER
10/10/2013 & 10/17/2013
AF#1041

