FINAL - ADMINISTRATIVE DRAFT

SAN DIEGO RIVER
RUFFIN CANYON TRAIL & URBAN WALK

Initial Study / Mitigated Negative Declaration

Prepared for
San Diego River Conservancy

May 2013

ESA

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San Diego River Ruffin Canyon Trail & Urban Walk Final Initial Study / Mitigated Negative Declaration

CHAPTER 1
Introduction

1.1 Background

The San Diego River Conservancy (SDRC) and the State Coastal Conservancy (SCC), in cooperation with the City of San Diego (City) and local community groups, are proposing to create a trail system within the canyons located in the Serra Mesa, Mission Valley, and Normal Heights communities, all of which fall within the boundaries of the City of San Diego. The Ruffin Canyon Trail would be approximately 1.25 miles long and gently traverse the west ridge of the canyon, descending from Grammercy Drive toward Mission Valley. A portion of existing informal trail segments would be improved at the north end and at the confluence with Sandrock Canyon but the trail would be primarily new; designed and constructed for sustainability, ease of maintenance and the user experience. The urban walk portion of the trail would connect to the Ruffin Canyon trail at Pompeii Lane and run south to the San Diego River Trail.

Restoration areas would be identified in Ruffin Canyon for the purposes of impact mitigation and biological resources restoration. Restoration opportunities exist in the form of disturbed, ornamental and non-native grassland areas, invasive species within riparian habitats, and a system of informal trails to be decommissioned.

Section 15004 of the *CEQA Guidelines* states that before the approval of any project subject to CEQA, the lead agency must consider the final environmental document, which in this case is this Final Initial Study/Mitigated Negative Declaration (Final IS/MND).

This Final IS/MND has been prepared pursuant to the requirements of CEQA. This Final IS/MND incorporates comments from public agencies and contains appropriate responses by the lead agency to those comments.

1.2 Use of the Final IS/MND and the CEQA Process

This Final IS/MND allows the public an opportunity to review revisions to the Draft IS/MND. As required by Section 15073(a) of the *CEQA Guidelines*, the Draft IS/MND was available for a 30-day public review and comment period from March 22, 2013 through April 22, 2013. The Final IS/MND contains all comments received during the public review period on the contents of the Draft IS/MND, the lead agency's response to those comments, and subsequent revisions and/or corrections to the Draft IS/MND resulting from these comments in strikeout/underline text, prior to approval of the project. The Final IS/MND serves as the environmental document to support approval of the proposed project, either in whole or in part, if the project is approved. After completing the Final IS/MND, and before approving the project, the decisionmaking body of the lead agency must make the following considerations, as required by Section 15074(b) of the *CEQA Guidelines*:

> *"Prior to approving the projects, the decisionmaking body of the lead agency shall consider the proposed negative declaration or mitigated negative declaration together with any comments received during the public review process. The decisionmaking body shall adopt the proposed negative declaration or mitigated negative declaration only if it finds on the basis of the whole record before it (including the initial study and any comments received), that there is no substantial evidence that the project will have a significant effect on the environment and that the negative declaration or mitigated negative declaration reflects the lead agency's independent judgment and analysis."*

1.3 Method of Organization

This Final IS/MND for the proposed project contains information in response to concerns raised by written comments sent to the San Diego River Conservancy (lead agency). The Final IS/MND is organized into the following chapters:

- Chapter 1, *Introduction*, consists of a summary of the background for the proposed project, information about the certification of the Final IS/MND, and a brief discussion of the intended uses of the Final IS/MND.
- Chapter 2, *Draft IS/MND with Strikethrough Revisions*, provides a copy of the Draft IS/MND with strikeout (deleted text) and underlined (added text) changes implemented in response to comments received on the proposed project.
- Chapter 3, *Final Mitigation Monitoring and Reporting Program*, provides a reporting plan that identifies each mitigation measure; when the mitigation measure would be required to be implemented; and which agency would be responsible for monitoring implementation of the mitigation measure.
- Chapter4, *Response to Comments*, contains a list of agencies, organizations, and individuals that submitted written comments on the Draft IS/MND. It also includes a copy of each written comment letter, and a written response to each comment.

1.4 Focus of Comments

Section 15200 of the *CEQA Guidelines* establishes the purpose of public review of a draft environmental document:

> *"The purposes of review of EIRs and negative declarations include:*
>
> *(a) Sharing expertise;*
>
> *(b) Disclosing agency analyses;*
>
> *(c) Checking for accuracy;*
>
> *(d) Detecting omissions;*
>
> *(e) Discovering public concerns;*
>
> *(f) Soliciting counter proposals"*

Sections 15204(a) and (c) of the *CEQA Guidelines* further state:

> *"(b) In reviewing negative declarations [or mitigated negative declarations], persons and public agencies should focus of the proposed finding that the project will not have a significant effect on the environment. If persons and public agencies believe that the project may have a significant effect, they should:*
>
> *(1) Identify the specific effect,*
>
> *(2) Explain why they believe the effect would occur, and*
>
> *(3) Explain why they think the effect would be significant."*
>
> *"(c) Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence."*

1.5 Certification of the Final IS/MND

The Final IS/MND will be available for public review at the following locations:

San Diego River Conservancy (SDRC)
Mr. Kevin McKernan, Executive Officer
1350 Front Street, Suite 3024
San Diego, CA 92101
Phone: (619) 645-3183

SDRC Internet Site: http://sdrc.ca.gov

CHAPTER 2

Draft IS/MND with Strikethrough Revisions

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March 2015

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SECTION 1
Project Description

1.1 Introduction

The San Diego River Conservancy (SDRC) and State Coastal Conservancy (SCC), in cooperation with the City of San Diego (City) and local community groups, are proposing to create a trail system within the canyons located in the Serra Mesa, Mission Valley, and Normal Heights communities, all of which fall within the boundaries of the City of San Diego. The trail, which includes existing sidewalks that would be identified and signed as "urban walks", is planned to eventually provide a path for pedestrians and bicyclists to travel from Serra Mesa to Normal Heights via a trail system that intersects with the developing San Diego River Trail in Mission Valley. The entire trail system that would provide upland neighborhood connections to the San Diego River is classified as a 'destination trail' under City of San Diego trail definitions and is referred to as the San Diego River Tributary Canyons Project; however, at this time, only planning for the Serra Mesa-to-Mission Valley portion is proceeding. It is referred to as the Ruffin Canyon Trail and Urban Walk.

This mitigated negative declaration (MND) covers only the Ruffin Canyon Trail and Urban Walk portion of the San Diego River Tributary Canyons Project. For purposes of this CEQA analysis, the Ruffin Canyon Trail and Urban Walk connecting Serra Mesa to Mission Valley is the proposed project. The proposed project has independent utility as it would serve to connect the Serra Mesa community, which includes Serra Mesa residents, the Serra Mesa Public Library, Serra Mesa Park, and the Serra Mesa Business District with Mission Valley and the Fenton Marketplace, Mission Valley Public Library, and the Fenton Parkway Trolley Station. It would serve Mission Valley residents in the Mission City neighborhood with improved access to the Ruffin Canyon Open Space and the amenities of Serra Mesa.

1.2 Project Location

The proposed project is located in the City of San Diego. The canyon trail segment and a northern urban walk segments are within the community of Serra Mesa while a southern urban walk segment is within the community of Mission Valley (**Figure 1-1)**. The canyon is located between Interstate (I) 15 to the east and I-805 to the west, and is loosely bounded by Gramercy Drive to the north, Friars Road to the south, Mission Village Drive to the east, and Murray Ridge Road to the west. **Figure 1-2** shows the complete project alignment. **Figure 1-3** provides a detail of the Ruffin Canyon Trail. Access is provided to the proposed Ruffin Canyon Trail site via Gramercy Drive to the north and Pompeii Lane/Fenton Parkway to the south via the City-approved public access easement linking the Friars Road Pedestrian Tunnel and Fenton Marketplace with the canyon open space.

1.3 Environmental Setting

The project site is set within an urban area of the Serra Mesa and Mission Valley communities. The "urban walks" would occur along existing developed City-approved public access easements and other public right-of-way facilities such as including sidewalks and pedestrian street crossings. Ruffin Canyon is surrounded primarily by single-family residential land uses. Taft Middle School is located to the northeast of Ruffin Canyon and San Diego Gas & Electric's (SDG&E) Mission Control facility is located to the southwest of Ruffin Canyon.

Ruffin Canyon consists of approximately 100 acres of relatively flat mesa tops to steep sloping canyon terrain. Elevations within the canyon range from 140 feet above sea level (asl) in the southern portions to approximately 400 feet asl in the northern portions. The canyon is characterized by low slopes along the canyon bottoms, between 3-10% in most areas, with steeply sided slopes, between 50%-100%, on the canyon walls.

Ruffin Canyon is part of the City's Multi-Habitat Planning Area (MHPA). Vegetation within the canyon includes Diegan Coastal Sage Scrub, native grasslands, southern willow scrub, and riparian vegetation. There is also a dominant presence of non-native ornamental vegetation in proximity to the residential land uses. (See Section 3.4, under *Biological Resources*, for more information on the existing habitats and plant and wildlife species.)

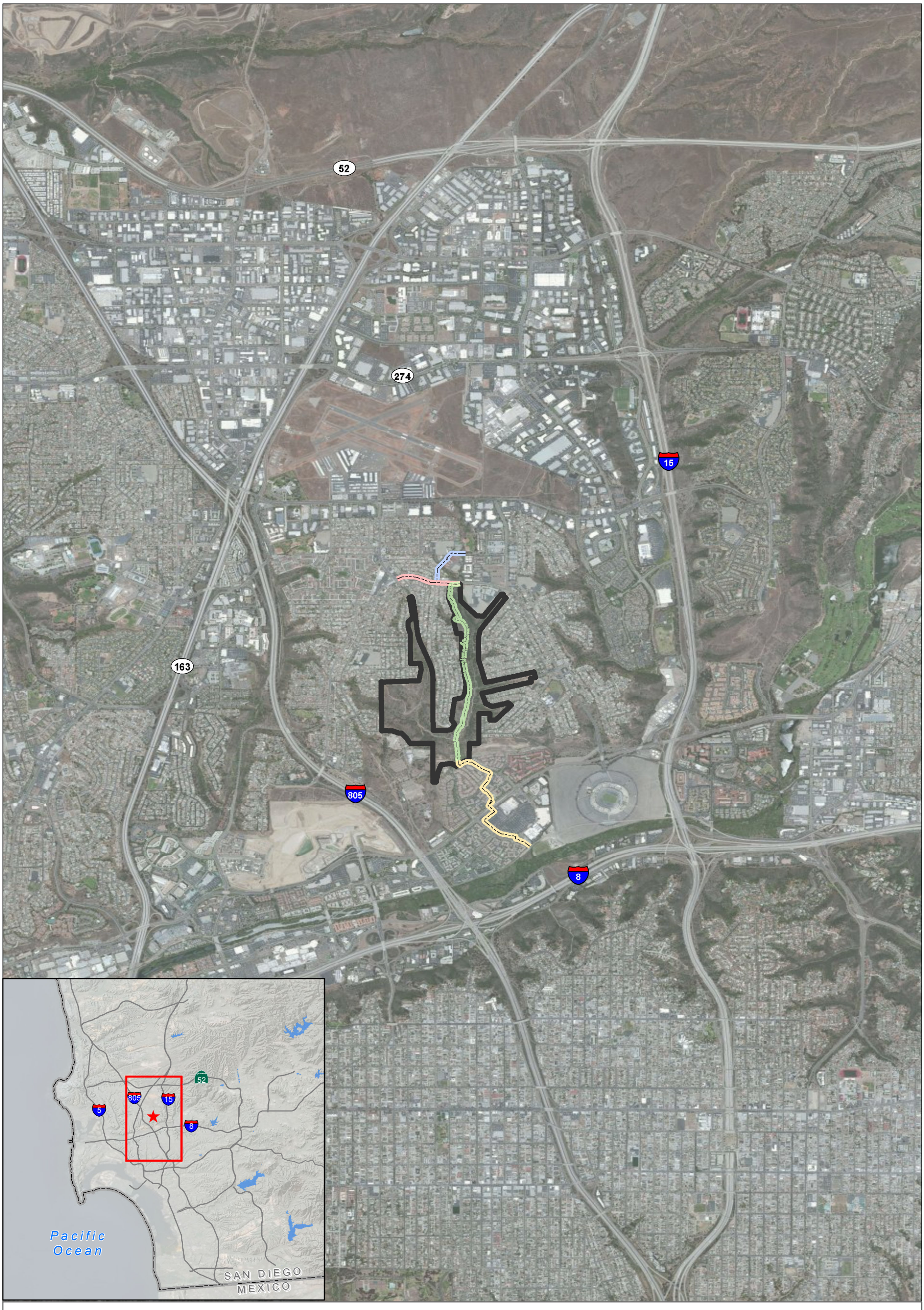
Drainage within the canyon follows a north-to-south route. A dry wash along the bottom of the canyon carries stormwater runoff from the project site to the San Diego River. Evidence of substantial erosion is present along the canyon walls and in higher use areas adjacent to the drainage in the upper canyon near Gramercy Drive.

Informal trails currently exist within Ruffin Canyon, which are use on occasion by pedestrians exploring or traversing the canyon. The use of these informal trails contributes to the erosion and degradation of the stream environment in the open space areas of the proposed project.

Resource-specific environmental settings are described in Section 3 of this IS/MND.

1.4 Project Evolution

Early in the environmental analysis and design process, the proposed trail system connecting Serra Mesa with Mission Valley consisted of two trails: the Ruffin Canyon Trail and the Sandrock Canyon Trail. The two trails would have met at the junction of the two canyon drainages. During this the early phase of this evaluation phase, however, severe constraints were identified with the Sandrock Canyon Trail. These constraints included steep terrain with unstable slopes, dense brush, and significant areas of dry wash that formed a barrier at the southern end of the canyon. Several options were considered, including avoiding the dry wash to limit encroachment into sensitive jurisdictional areas. Ultimately, however, the interrelated constraints presented challenges that were judged to be too great at this time and the Sandrock Canyon Trail was abandoned as part of this project, leaving only the Ruffin Canyon Trail as part of the proposed project.



SOURCE: Bing Imagery

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 1-1

Project Location

SOURCE: Bing Imagery

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 1-2

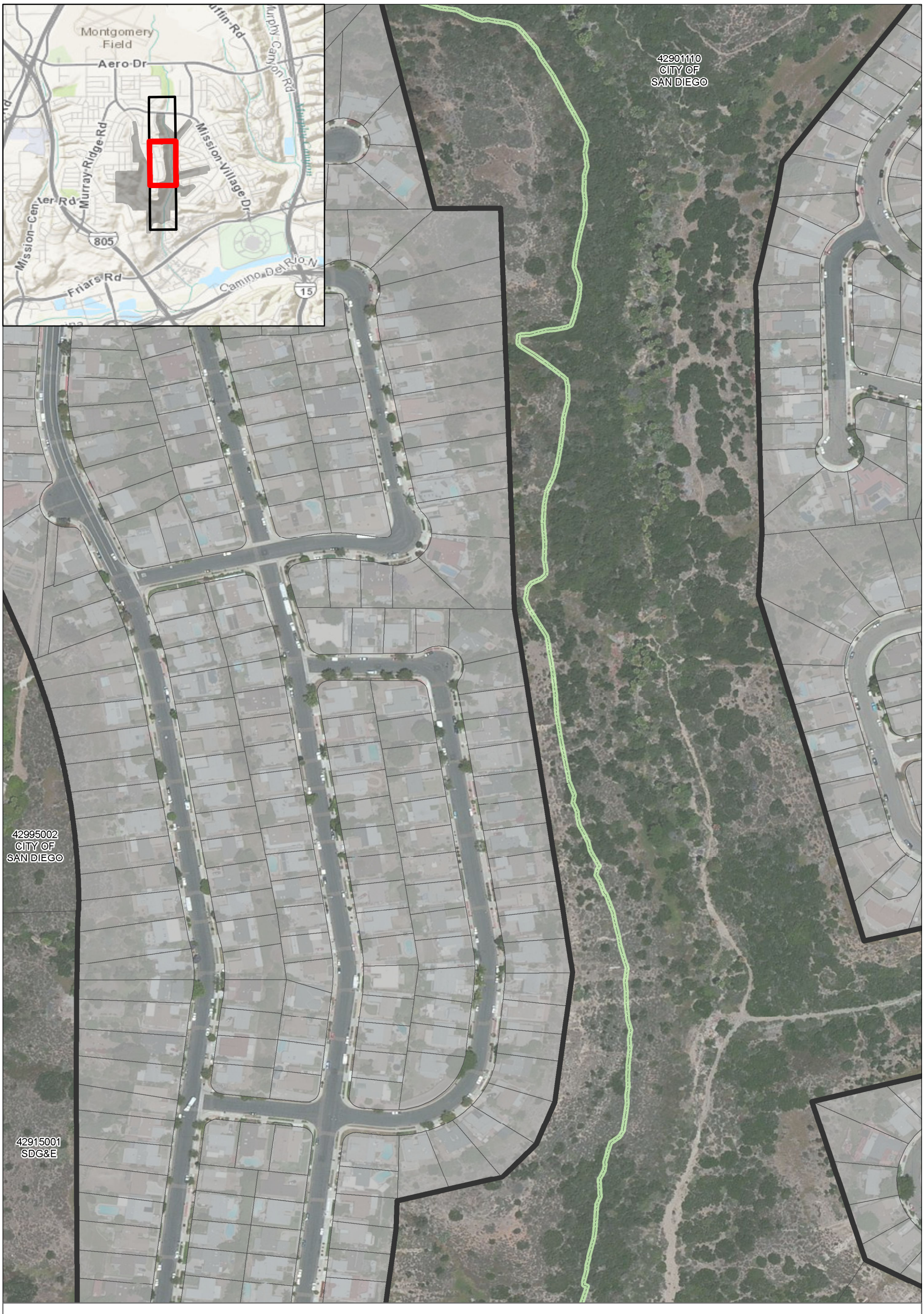
Proposed Project Alignment

SOURCE: Bing Imagery

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 1-3 A

Detailed Ruffin Canyon Alignment

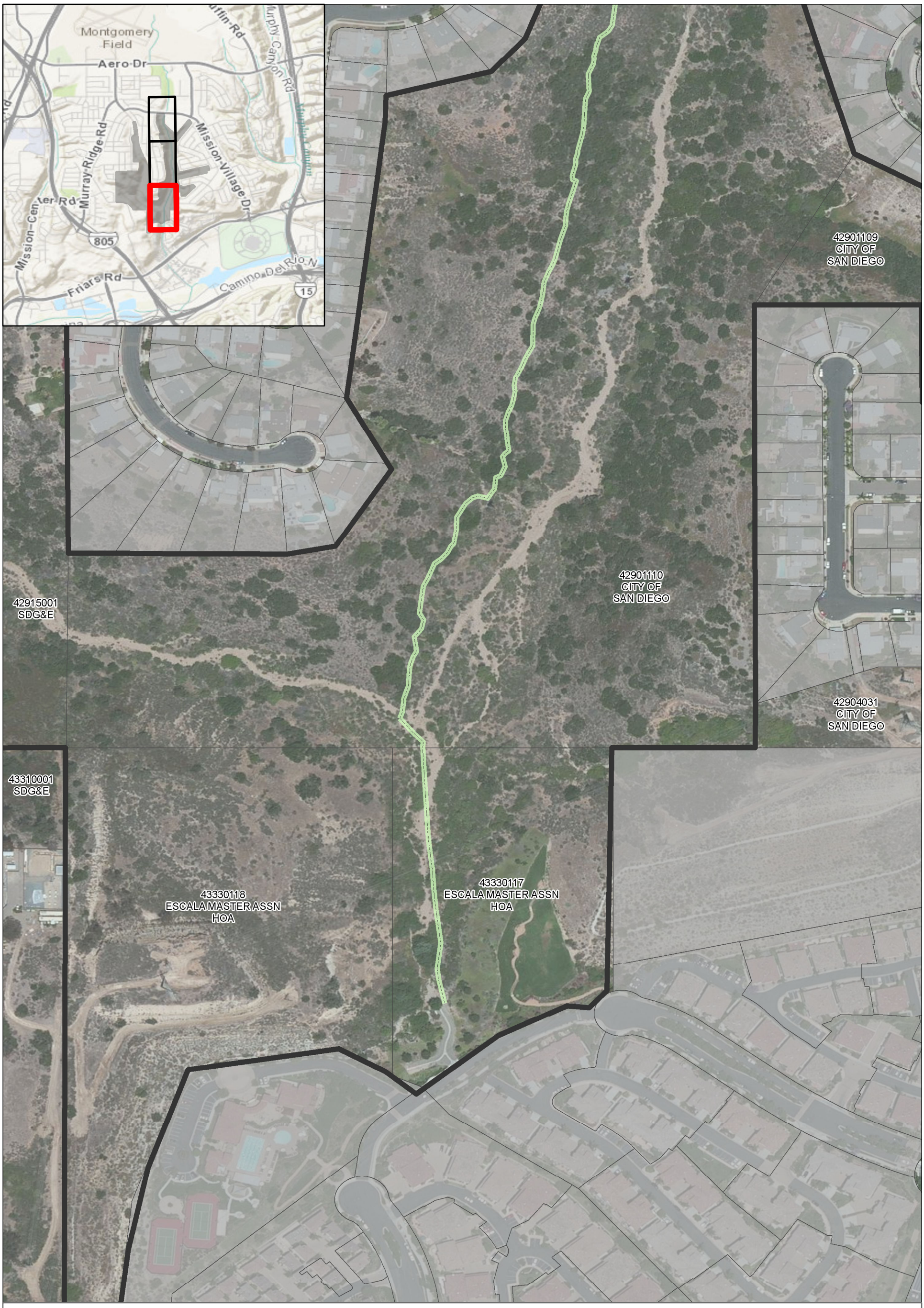


SOURCE: Bing Imagery

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 1-3 B

Detailed Ruffin Canyon Alignment



SOURCE: Bing Imagery

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 1-3 C

Detailed Ruffin Canyon Alignment

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1.5 Project Description

The proposed project extends over an approximate 2.84 miles and includes two public access improvements: construction of a multipurpose earth-surfaced canyon trail along the west ridge of Ruffin Canyon and the identification of 'urban walks' linking canyon trailheads with community centers (**Figure 1-2**).

The Ruffin Canyon Trail would be approximately 1.25 miles long and gently traverse the west ridge of the canyon, descending from Gramercy Drive toward Mission Valley (**Figure 1-3**). The trail is designed and would be constructed to City trail standards, including consistency with the City's MHPA trail requirements. An overlook accessible to persons with disabilities would be located 500 feet south of the north trailhead. A portion of existing informal trail segments would be improved at the north end and at the confluence with Sandrock Canyon but the trail would be new primarily, designed and constructed for sustainability, ease of maintenance and the user experience. A 630-foot segment of primitive trail remains at the southern trailhead in the dynamic environment of the lower canyon wash.

Urban Walks would be established by installing simple directional signage consisting of concrete-embedded bronze discs in existing sidewalks and pedestrian crossings, in City right-of-way areas and along City-approved public access easements.

The Serra Mesa Business District Urban Walk and the Serra Mesa Park Urban Walk would link two key community centers with the north canyon trailhead. The Mission City Urban Walk would link the south trailhead to the Fenton Parkway trolley station and the developing San Diego River Trail.

1.5.1 Ruffin Canyon Trail

The Ruffin Canyon Trail would be approximately 1.25 miles long with a minimum trail base width of 48 inches. This width is consistent with trails located within the MHPA. The trail would include a minimum vertical clearance of 80 inches for hikers and bicyclists and would generally maintain a linear grade of 1%-8%. Where possible the trail would follow a curvilinear alignment and traverse slopes nearly parallel to the contour lines.

Trail tread would be constructed by removing large gravel and rocks from the native material and then re-compacting the native material. Rock armored swale crossings are proposed where natural dips occur in the trail corridor to raise the elevation to match the trail. In addition, retaining wall soldier pile with timber lagging is proposed for two locations: one to support a more gradual slope at Gramercy Drive adjacent to Taft Middle School to make the first 100 feet of the trail accessible and consistent with Americans with Disabilities Act (ADA) and a second location, approximately 500 feet south of Gramercy Drive, where an overlook accessible to persons with disabilities would be located.

Access to the north trailhead of the Ruffin Canyon Trail would be from the public right-of-way (i.e. on the south side of Gramercy Drive). Access to the south trailhead would be from existing

City-approved public access easements linking Pompeii Way with Fenton Marketplace. The north trailhead would provide access for all public users whereas the south trailhead connects to a primitive trail segment not accessible to persons with disabilities. Additionally, there is no public vehicular access to the south trailhead.

From the northern trailhead and entrance, the trail would follow and incorporate an existing trail alignment from the Gramercy Drive sidewalk to the bottom of the first switchback, whereupon it would proceed west several feet, turn south paralleling the residential parcels that line the ridge, then traverse a native slope in a gentle descent. The trail reaches the canyon bottom and converges with the two canyon (i.e. Ruffin and Sandrock) drainages where it traverses a small ravine.

Continuing in a southerly direction, the trail would enter the streambed which is located within a public access easement on property owned by the Escala Homeowner's Association. To maintain the integrity of the dynamic wash, the streambed would be left in its natural state and the trail user would be required to make their way through a linear field of rock cobble for the southernmost 630 feet of the trail corridor. The only improvement would consist of periodic hand pruning of vegetation, hand grooming of the streambed cobble to enhance its stability and the placement of several two-to-four feet high wooden markers, which would be driven into the ground outside the streambed, but within the easement to demarcate the trail through the cobble streambed area. At its terminus, the trail would leave the streambed and connect to an existing asphalt ramp linking the canyon bottom to Pompeii Lane, the Escala residential community's northernmost roadway. South trailhead directional signage would be located at the existing ramp and at the north trailhead on Gramercy Drive in developed areas. No additional improvements are proposed for the south trailhead.

The proposed trail would stay within public property boundaries along the west side of Ruffin Canyon and within the city-approved public easement in the south of the canyon. Moreover, the majority of the trail would traverse the canyon slope at a level nearly parallel to the contour lines. **Figure 1-3** provides a detailed view of the Ruffin Canyon Trail alignment.

1.5.2 Urban Walks

In addition to the canyon trail, there are three segments of the project that are already existing pedestrian sidewalks or pathways that would be identified and signed "urban walks" as part of the trail system. In the northwest, an urban walk trail segment would begin at the edge of the Serra Mesa business district at the southeast corner of Gramercy Drive and Sandrock Road. The Serra Mesa Business District Urban Walk proceeds along the Gramercy Drive south sidewalk to the proposed trailhead adjacent to Taft Middle School. In the north, the Serra Mesa Park Urban Walk trail would begin at the Serra Mesa Park, proceed west on Village Glen Drive, veer southwest onto Glencolum Drive where it would connect to Gramercy Drive, joining the Serra Mesa Business District Urban Walk two blocks west of the canyon's north trailhead.

From the canyon's south trailhead the Mission City Urban Walk would begin at the southern end of the Ruffin Canyon trail along an existing City-approved public access easement extending

from the asphalt ramp at the canyon trailhead to the south along Pompeii Lane and Northside Drive, continuing southwest through the Portofino residential community to the Friar's Road pedestrian tunnel. Here the Mission City Urban Walk would pass through the tunnel beneath Friar's Road, continue past the west side of Fenton Marketplace to the Mission Valley Library where it would intersect with a short segment of the developing San Diego River Trail at the north platform of the Fenton Parkway Trolley Station and terminate. **Figure 1-2** provides an illustrated view of the urban walk at both the northern and southern portions of the project site.

1.6 Project Construction

The Ruffin Canyon Trail improvements would be constructed to California State Parks and City of San Diego trail standards. New trails would be constructed to widths of approximately 48 inches, consistent with the requirements of the trails within the MHPA. Certain locations along the trail would require up to 0.75:1 cut slopes. Approximately 1.3 acres of area within the canyon would be disturbed, of which approximately half would be temporary disturbance and would be restored to an improved condition. The remaining half would be permanent and contain the actual trail improvement. Total grading volume would be approximately 2,100 cubic yards (cy), of which approximately 250 cy would be used to restore the slope below Gramercy Drive and to remove the existing informal trail. The remaining material would be used as backfill at the proposed retaining walls, fill for erosion gullies, topsoil for restoration areas (see below), and broadcast and spread in disturbed areas at depths between two and three inches. No material will be spread within 25 feet of minor drainages or 50 feet of the main dry wash. No soil would be imported or exported. **Figure 1-4** provides the location of construction activities.

Trail tread would be constructed by removing large gravel and rocks from the native material and then re-compacting the native material. Rock armored swale crossings are proposed where trail elevation would need to be raised to match the trail. Retaining wall soldier pile with timber laggings are proposed in two locations to allow for a more gradual descent and to allow ADA accessibility for a portion of the trail.

As a project feature, restoration in the Tributary Canyons would include removal of large populations of invasive plant species, which benefits the ecology of the San Diego River. Restoration areas would be identified for the purpose of impact mitigation and for the purpose of biological resources restoration ~~enhancement~~ (See **Figure 1-5**). Restoration opportunities exist within Ruffin~~ and Sandrock~~ Canyon~~s~~ in the form of disturbed, ornamental and non-native grassland areas, and invasive species within riparian habitats. The distribution of excess soil from trail grading into disturbed and ornamental areas would provide a seedbed for native habitat restoration. The topsoil distribution areas would be seeded with a native upland seed mix (e.g., coastal sage scrub) and a restoration plan would be prepared pursuant to City of San Diego guidelines.

Construction of the proposed project would be conducted primarily with the use of hand tools (powered and unpowered) such as digging and transfer shovels, pick mattocks, loopers, rakes, and wheel barrels. Small construction equipment, suitable for narrow and steep surroundings may

be used for some soil movement; however, construction vehicles would primarily be limited to workers' commute vehicles, which would consist primarily of passenger automobiles and/or light trucks, and small equipment such as a compact excavator and loader. Construction would take place between the hours of 7 A.M. and 7 P.M. and would comply with the City's noise ordinance. Construction is anticipated to start in the third quarter of 2014 with a total construction time of one to two months.

1.7 Project Operation

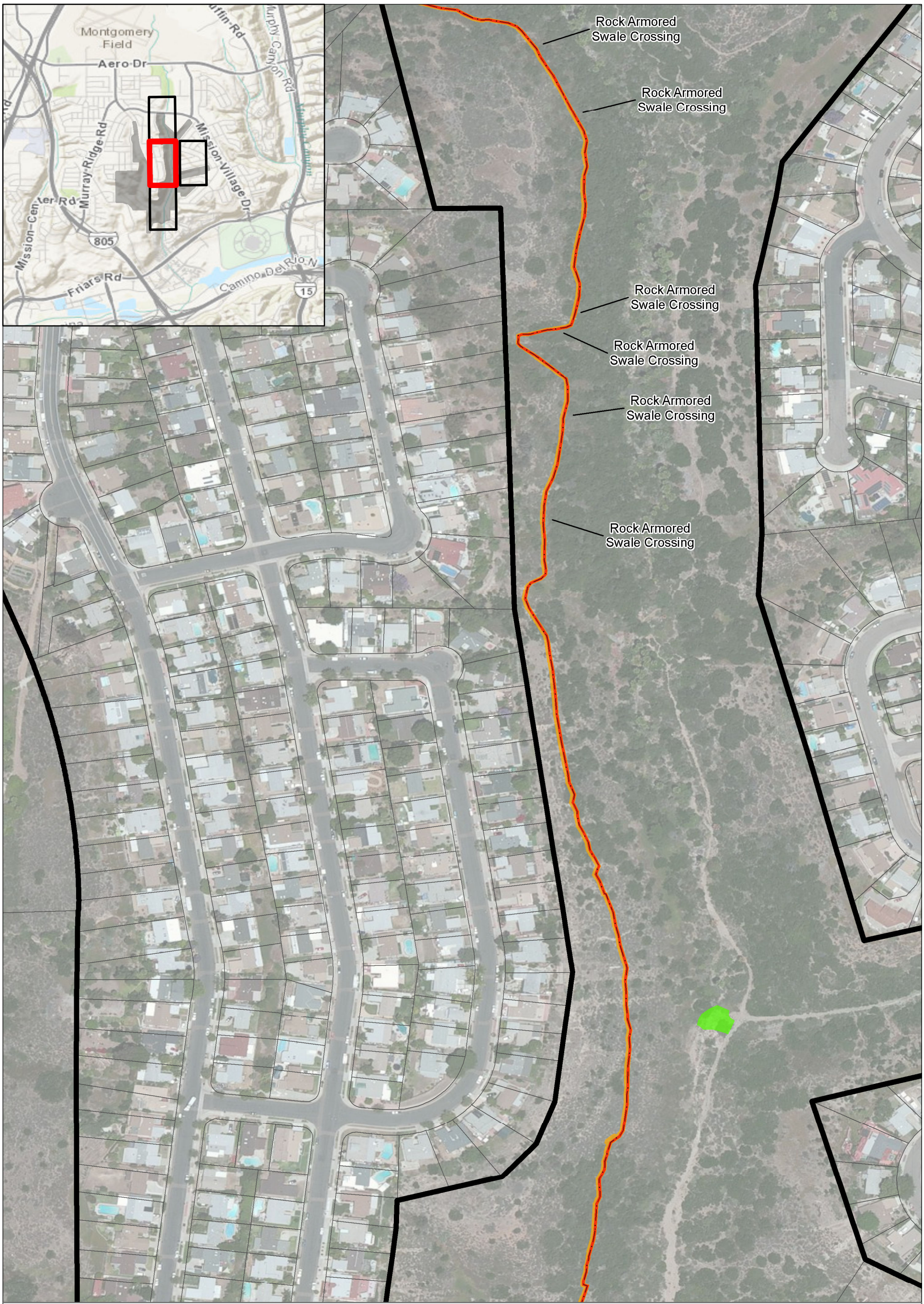
Operation and maintenance activities for the proposed trail project would consist of periodic inspections of the canyon trail and light work with hand tools to ensure proper establishment of the trail and its vegetated corridor, with particular attention to identifying and treating areas of erosion. Vegetation would be pruned from time to time to keep the trail free of obstructions, consistent with the City's trail requirements. Trail footing would be inspected to ensure the trail remains safe for users. This operation and maintenance activity would occasionally require a negligible number of automobile commute trips to the project site and some use of hand tools; however, no heavy construction vehicles would access the site for operation and maintenance. It is expected that the trail would be maintained by a 501(c)(3) not-for-profit conservation organization in coordination with the Parks Department Open Space Division under agreement with the City and the San Diego River Conservancy.

SOURCE: Bing Imagery

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 1-4 A

Proposed Construction Locations

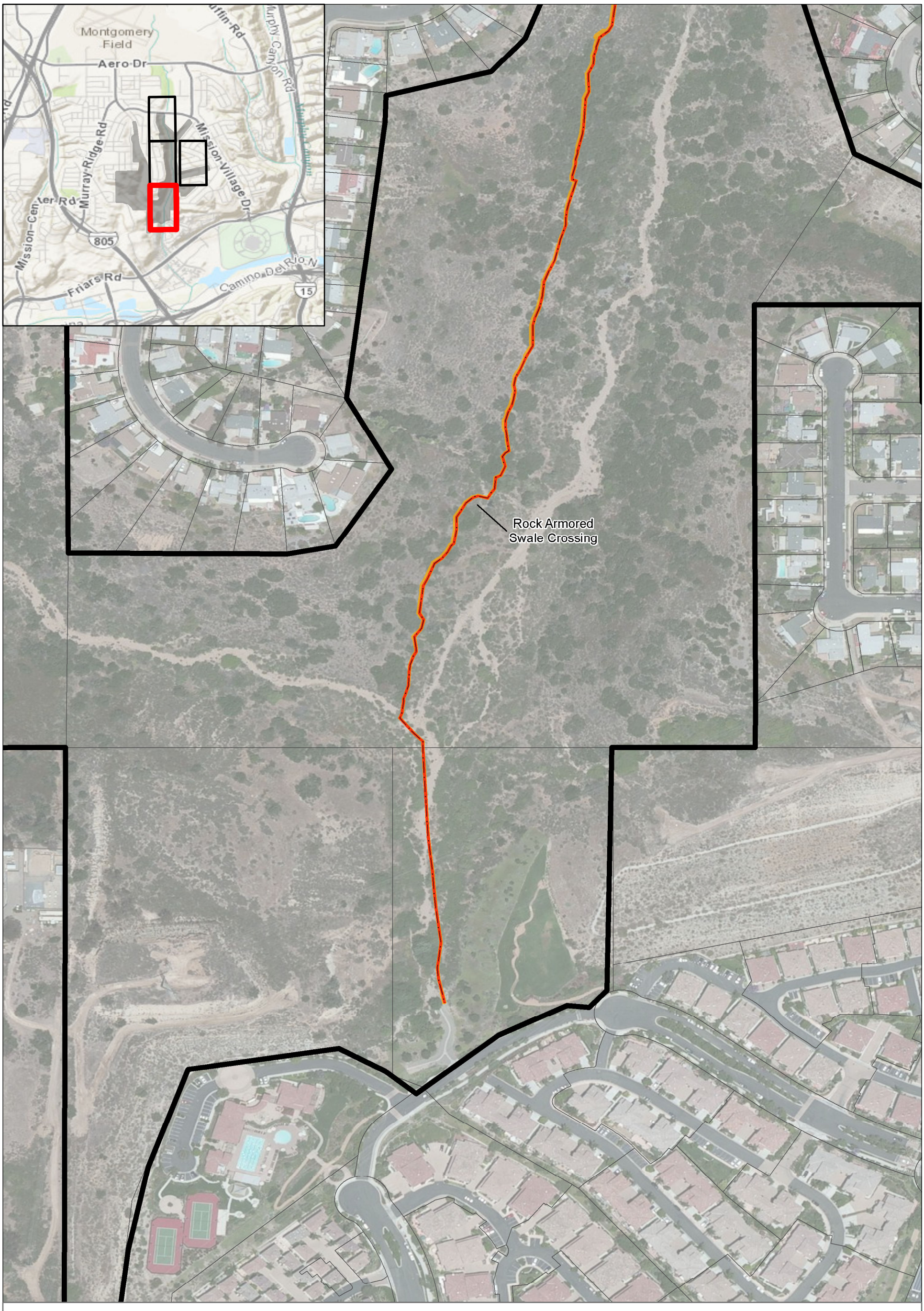


SOURCE: Bing Imagery

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 1-4 B

Proposed Construction Locations



SOURCE: Bing Imagery

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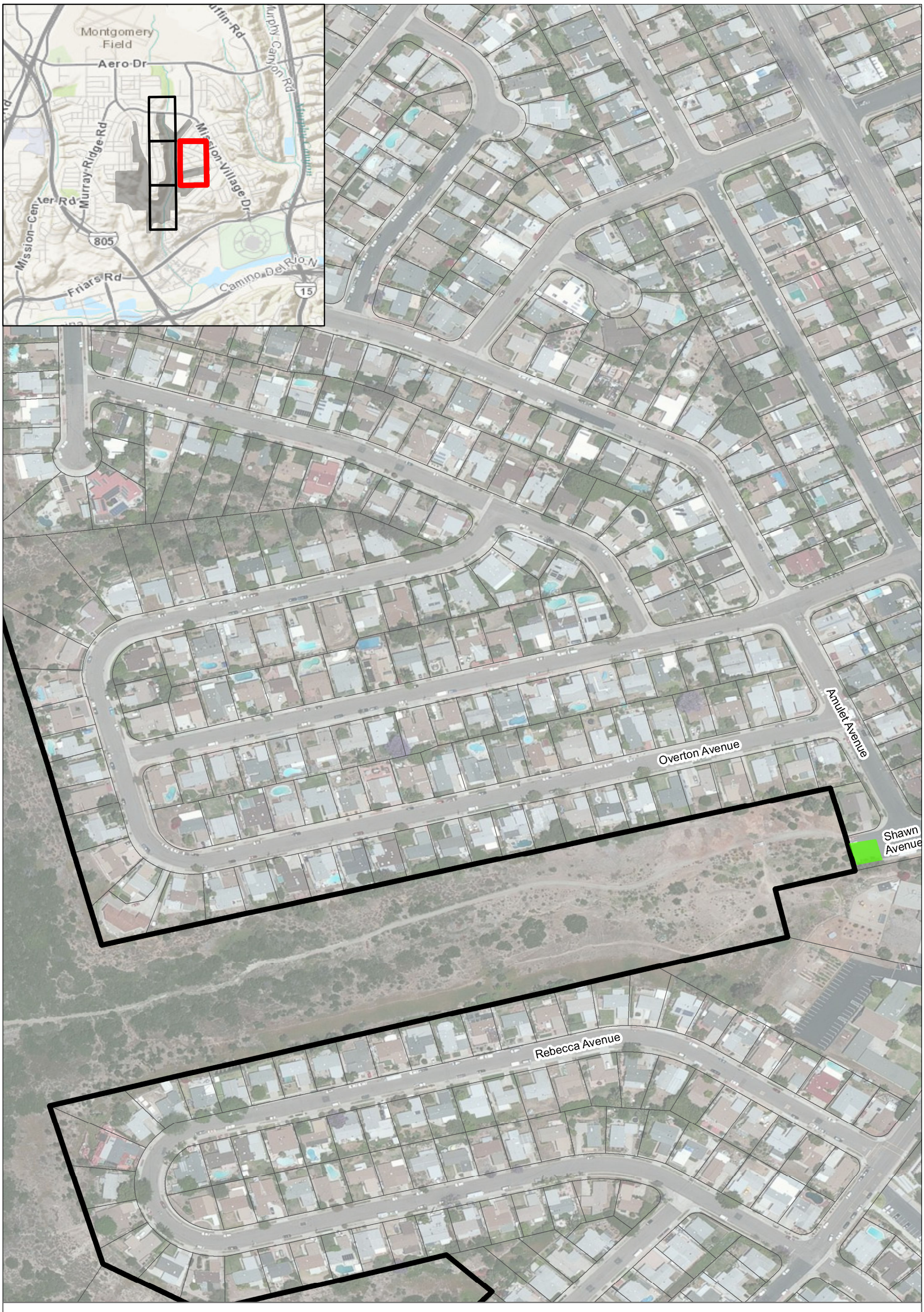
Figure 1-4 C

Proposed Construction Locations



SOURCE: Bing Imagery

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Figure 1-4 D

Proposed Construction Locations

SOURCE: CADRE Environmental

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Figure 1-5

Restoration Opportunity Map

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1.8 Project Mitigation Monitoring and Reporting Program Summary

As discussed in Section 3, *Environmental Impact Analysis*, the project would have the potential to result in significant impacts on biological resources and geology/soils. Mitigation is required to reduce impacts on these resources to less-than-significant levels. The following table provides a summary of the mitigation monitoring and reporting program requirements. The detailed mitigation is provided in Section 3 of this MND and within the full project MMRP.

Mitigation Measure	Method Summary	Timing	Responsible Party	Significance After Mitigation
Mitigation Measure (MM)-BIO-1	Avoidance of the gnatcatcher breeding season from March 1 to August 15 or conduct a preconstruction clearance survey for active nests no more than 3 days prior to the initiation of project activities to ensure active nests are not impacted	No more than 3 days prior to initiation of construction	Construction manager, general contractor, and San Diego River Conservancy	Less than Significant
MM-BIO-2	Avoid San Diego barrel cactus and San Diego viguiera; restore and transplant if avoidance cannot be fully achieved	During construction	Construction manager, general contractor, and San Diego River Conservancy	Less than Significant
MM-BIO-3	Avoid coastal cactus wren habitat; restore and transplant if avoidance cannot be fully achieved	During construction	Construction manager, general contractor, and San Diego River Conservancy	Less than Significant
MM-BIO-4	No disturbances to native and non-native vegetation, structures, and substrates during avian breeding season which runs from March 1st - August 15th; if avoidance is not feasible, conduct a preconstruction clearance survey for active nests	No more than 3 days prior to the initiation of construction	Construction manager, general contractor, and San Diego River Conservancy	Less than Significant
MM-BIO-5	Mitigate for permanent impacts to Tier II, Tier IIIA and Tier IIIB vegetation communities with onsite habitat restoration within the existing disturbed and ornamental areas; prepare a revegetation/restoration plan consistent with LDC Biology Guidelines	Prior to start of construction	Construction manager, general contractor, and San Diego River Conservancy	Less than Significant
MM-BIO-6	Avoid wetlands and mitigate at 2:1 ratio if avoidance is not fully achieved; incorporate into revegetation/restoration plan required by MM-BIO-5	Prior to start of construction	Construction manager, general contractor, and San Diego River Conservancy	Less than Significant
MM-GEO-1	Retain a qualified engineering geologist or geotechnical engineer to evaluate the project's construction schematics and design.	Prior to any earthwork activities and after preliminary construction	The San Diego River Conservancy or the SDRC's designee	Less than Significant

Mitigation Measure	Method Summary	Timing	Responsible Party	Significance After Mitigation
	Formulate alignment-specific engineering recommendations to ensure the trail alignment does not experience slope failure or excess erosion.	schematics have been prepared		

1.9 CEQA Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the project-related significant effects on the environment.

1.10 Project Review and Approvals

The San Diego River Conservancy (SDRC) has taken on the role of lead agency because SDRC would be the public agency with the greatest responsibility for supervising or approving the project as a whole. The State Coastal Conservancy (SCC) has assumed a role as responsible agency because it would provide the financial support to carry out the project. Moreover, a City of San Diego (City) site development permit is required due to the proposed project being located on City-defined environmentally sensitive lands (ESL) and therefore the City is a responsible agency. In addition, the proposed project would potentially cross one or more streambeds as defined by the California Department of Fish and Wildlife (CDFW), waters of the U.S, and discharge into a 303(d) listed water body. Therefore, CDFW is a trustee agency; and the U.S. Army Corps and RWQCB are reviewing/permitting agencies.

The following permits and approvals would be required to construct the proposed project:

- San Diego River Conservancy (Lead Agency)
  - Approval of the Project
  - Approval of the MND
  - Adoption of the MMRP
  - Implementation of the proposed project
  - Implementation of the MMRP
- State Coastal Conservancy (Responsible Agency)
  - Approval of the Project
  - Approval of the MND
  - Adoption of the MMRP
  - Release of Funding to SDRC
- City of San Diego (Responsible Agency)
  - Approval of the MND

  - Adoption of the MMRP
  - Approval of a Site Development Permit and Findings
  - Approval of a Wetland Deviation (Potential)
- United States Army Corps of Engineers (Federal Reviewing Agency)
  - Project Review/possible 404 Permit Issuance
- Regional Water Quality Control Board (State Reviewing Agency)
  - Project Review/Possible 401 CWA Approval
  - Project Review/possible NPDES Construction General Permit Issuance
- California Department of Fish and Wildlife (State Reviewing Agency)
  - Project Review/Possible Section 1600 Streambed Alteration Agreement

SECTION 2
Environmental Checklist

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines to determine if the proposed project may have a significant effect on the environment.

2.1 CEQA Initial Study Form

Project Title	San Diego River – Ruffin Canyon Trail and Urban Walk Project
Lead Agency Name	San Diego River Conservancy (SDRC)
Lead Agency Address	1350 Front St. Suite 3024 San Diego, CA 92101
Contact Person	Kevin McKernan, Executive Officer
Contact Phone Number	(619) 645-3183
Project Sponsor	San Diego River Conservancy with funding from State Coastal Conservancy
Project Location	Within the communities of Serra Mesa and Mission Valley, San Diego
General Plan Designation	Park, Open Space, and Recreation
Zoning	Open Space – Conservation (OC)
Description of Project	Please refer to Section 1, Project Description.
Surrounding Land Uses and Setting	Please refer to Section 1, Project Description.
Responsible/Trustee Agencies	State Coastal Conservancy (SCC); City of San Diego (City); California Department of Fish and Wildlife (CDFW)
Reviewing Agencies	Army Corps of Engineers; United States Fish and Wildlife Service; Regional Water Quality Control Board

2.2 Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology, Soils and Seismicity
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Land Use Planning	☐ Mineral Resources	☐ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☐ Transportation and Traffic	☐ Utilities and Service Systems	☐ Mandatory Findings of Significance

2.3 Determination: (To be completed by Lead Agency)

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Kevin McKernan, Executive Officer
San Diego River Conservancy

March 21, 2013
Date

SECTION 3
Environmental Impact Analysis

3.1 Aesthetics

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
1.	**AESTHETICS — Would the project:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☒

Environmental Setting

The proposed project is located in the City of San Diego and is within the communities of Serra Mesa and Mission Valley. The canyon is located between Interstate (I)-15 to the east and I-805 to the west, and is loosely bounded on the north by Gramercy Drive, on the south by Friars Road, on the east by Mission Village Drive, and on the west by Murray Ridge Road. The project site's urban canyon setting is surrounded primarily by single-family residential land uses. In addition, Taft Middle School is located to the northeast and San Diego Gas & Electric's (SDG&E) Mission Control facility is located at the site's southwest. See **Figure 1-1** for the project location.

The Serra Mesa Community Plan does not reference scenic vistas and consequently no formally recognized scenic vistas are present within or immediately surrounding the project site. The City's General Plan Transportation Element identifies official scenic highways (State) and scenic routes (City); however, the project is not in the vicinity of a designated scenic highway or route. Moreover, there are no designated scenic trees, rock outcroppings, and historic buildings onsite. Lighting is not present within the canyon, but sidewalk and commercial lighting is present within the proposed Urban Walk areas.

Discussion

a) Have a substantial adverse effect on a scenic vista?

No Impact. The project area consists of relatively flat mesas with single-family residential atop to steep sloping canyon terrain that drops to a narrow wash at the canyon floor. The proposed trail would construct low-lying retaining and erosion control structures such as rock armored swale crossings and two retaining wall soldier piles with timber lagging. No project features would have the potential to block existing views. Furthermore, as discussed in the environmental setting above, no formally recognized scenic vistas are identified on site. Moreover, no changes related to urban walk portion of the project would occur with the exception of a few low-profile way-finding signs at strategic locations, all of which would be designed to City standards. Therefore, the proposed project would not adversely impact, block, or alter views of any scenic vistas. As a result, no impact related to scenic vistas would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The nearest highways to the project site are I-15 to the east, I-805 to the west, and I-8 to the south. The portions of these highways nearest the project site are not designated as scenic. Moreover, the project site is not readily visible from any of these highways.

The project site does contain scenic resources such as natural habitat, steep topography, and wildlife habitat. The project's objective is to make the existing trails more sustainable and improve the habitat function of the project site. Thus, the proposed project would not substantially damage scenic resources.

Therefore, because the project site is not visible from a scenic highway and the proposed project would not substantially damage a scenic resource, no impact related to damaging scenic resources within the viewshed of a state scenic highway would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than Significant Impact. The existing visual character of the project area consists of relatively flat mesas with single-family homes atop and steeply sloped, vegetated canyon terrain that drops to a narrow wash at the canyon floor. The proposed project would construct a segment of new trail and enhance segments of existing trails in a manner that would enhance the visual character of the canyon and provide the public with a greatly improved opportunity to experience it. The new trail would be more sustainable and protect the existing habitat and visual character from degradation due to public use. Construction activities would be minimally invasive and would employ mainly hand tools (powered and unpowered) by a small number of individuals as well as small, nimble construction equipment suitable for narrow trails and steep elevations. No large

construction equipment such as cranes would be used that might cause a temporary visual impact. The remainder of the project would formally identify "urban walks" along existing pedestrian walkways and paths located at the intersection of Sandrock Road and Gramercy Drive to Taft Middle School in the northwest, from Serra Mesa Park to Gramercy Drive to Taft Middle School in the north, and from Pompeii Street to the Fenton Parkway Trolley Station in the south. No changes would occur to the existing urban walkways with the exception of unobtrusive directional signage to assist pedestrians and bicyclists in following the trail. Therefore, impacts on the existing visual character of the site and its surroundings would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?

No Impact. In accordance with the City's municipal code, Section 59.5.0404, construction activities would only be permitted during the hours between 7:00 A.M. and 7:00 P.M. No nighttime construction would be performed and consequently the use of external night lighting would not be required. Operational inspection and maintenance activities would be conducted at regular intervals, but would be infrequent and during daylight hours. No security lighting would be installed by the proposed project and no project features would contribute to glare in the project vicinity. The portion of the trail referred to as the "urban walk" would simply use existing sidewalks that are already illuminated with street lights. Therefore, implementation of the proposed project would not result in a substantial new source of light or glare that could affect nighttime views in the area. No impact would occur.

3.2 Agricultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
2. AGRICULTURAL AND FOREST RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:**				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which due to their location or nature, could result in conversion of Farmland, to non-agriculture use?	☐	☐	☐	☒

Environmental Setting

Under the California Land Conservation Act of 1975 (Williamson Act) and the Farmland Mapping and Monitoring Program (FMMP), farmlands are mapped by the State of California Department of Conservation (CDC) in order to provide data for decision makers to use in planning for current and future uses of the state's agricultural lands. The project area contains relatively flat mesa tops and steep sloping canyon terrain and is zoned as Open Space-Conservation (OC). There are no parcels within the project vicinity that are considered Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance and the project site does not contain any Williamson Act contracts (CDC 2012).

Discussion

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project site has a land use designation of Park, Open Space, and Recreation and is zoned as OC, both of which are designed to protect natural and cultural resources and environmentally sensitive lands (**Figure 3-1**). The adjoining areas are also designated Park, Open Space, and Recreation and zoned OC as well as Open Space-Parks (OP). The project area is an urban canyon site with an existing unofficial and non-maintained trail. According to the FMMP, there is no Prime Farmland, Unique Farmland,

SOURCE: SANGIS

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 3-1
Zoning

or Farmland of Statewide Important within or adjacent to the project site.[1] Therefore, the proposed project would not convert designated farmland to a non-agricultural use; no impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The proposed project would not conflict with existing zoning for agriculture since it would be located on land that is currently disturbed and designated as non-irrigated farmland and nonagricultural or natural vegetation under the FMMP (CDC 2012). Additionally, the project site is not enrolled in a Williamson Act contract, and the proposed trail would be consistent with existing OC zoning. Therefore, there would be no conflicts with existing agricultural zoning or Williamson Act contracts. No impacts would occur.

c) Involve other changes in the existing environment which due to their location or nature, could result in conversion of Farmland, to non-agriculture use?

No Impact. The proposed project would be located on land that is currently zoned for open space and conservation. There is no Farmland within the project site and any changes made to the existing environment would not result in the conversion of Farmland to non-agricultural use. Therefore, there would be no conversion of existing Farmland and no impact would occur.

[1] Source: Farmland Mapping and Monitoring Program, http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx. Accessed 1/10/2013.

3.3 Air Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
3. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Environmental Setting

The proposed project is located in the San Diego Air Basin (SDAB), the boundaries of which are coincident with San Diego County. The agency responsible for administering state and federal air quality laws and regulating sources of air pollution in the county is the San Diego Air Pollution Control District (SDAPCD).

As required by the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (USEPA) established federal standards for air pollutants, known as the National Ambient Air Quality Standards (NAAQS). The State of California sets and maintains California Ambient Air Quality Standards (CAAQS) that are equal to or more restrictive than the NAAQS and include pollutants not included in the NAAQS.

Areas are classified as either "attainment" or "nonattainment" areas for each pollutant based on whether the NAAQS and CAAQS have been achieved. The SDAB is currently designated as a nonattainment area for the state and federal ozone standards, as well as the state standards for particulate matter with an aerodynamic diameter of 10 micrometers or less (PM10) and particulate matter with an aerodynamic diameter of 2.5 micrometers or less (PM2.5). Portions of the SDAB are designated as a maintenance area for the federal carbon monoxide (CO) standards.

The clean air strategy of SDAPCD includes preparing plans and programs for the attainment of the NAAQS and CAAQS, adopting and enforcing rules and regulations, and issuing permits for stationary sources. SDAPCD also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and

regulations required by the CAA, Federal Clean Air Act Amendments (CAAA), and the California Clean Air Act (CCAA).

All projects are subject to SDAPCD rules and regulations in effect at the time of construction. Specific rules applicable to the proposed project include:

- Rule 51, *Nuisance*, states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health or safety of any such persons or the public; or which cause or have a natural tendency to cause injury or damage to business or property.
- Rule 55, *Fugitive Dust*, establishes standards for visible dust emissions and visible road dust from construction or demolition activities.

The applicable air quality plan for the SDAB is the Regional Air Quality Strategy (RAQS), which is prepared by SDAPCD. The RAQS establishes the plans and control measures designed to attain the state air quality standards for ozone. The RAQS is part of the California State Implementation Plan (SIP) for attaining the NAAQS for ozone. There are no air quality plans for particulate matter.

The RAQS contain pollutant emission budgets that are based upon existing and planned development in the region. Projects that conflict with the RAQS are those that would change land uses or undertake actions resulting in pollutant emissions that are greater than anticipated in the RAQS/SIP.

Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The proposed project would not change any land uses nor would it lead to any growth-related impacts. Long-term operation of the proposed project (i.e., use and maintenance of the proposed trails) would not result in the use of any new stationary or area sources of emissions in the project area. Once construction activities are complete, onsite operational activities would be similar to existing air quality conditions. Therefore, the project is not anticipated to lead to a substantial increase in traffic. The proposed project would construct a new multi-purpose trail and upgrade existing multipurpose trail segments that connect the communities of Serra Mesa and Mission Valley. The trail would enhance pedestrian and cyclist accessibility and connectivity and would encourage use of these alternate modes of transportation. The project would not lead to an increase in long term emissions in the SDAB. Therefore the proposed project would not conflict with the RAQS, and the impact would be less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact. The proposed project would include short-term, limited construction activities to construct new trail, improve or replace existing trail segments, and utilize existing public right-of-way facilities (i.e. sidewalks, designated crossings) as Urban Walks. The principal sources of pollutant emissions during construction are fugitive dust and construction equipment engine exhaust. Due to the minimal amount of soil movement and the steep elevations, construction of the proposed project would be conducted primarily with the use of hand tools such as digging and transfer shovels, pick mattocks, loopers, and rakes; small powered hand equipment; and possibly small construction equipment suitable for narrow, steep areas such as a compact excavator and loader. The construction work does not include extensive grading of undeveloped land or significant vehicle travel on unpaved roads. Use of large heavy-duty construction equipment would not occur onsite. In addition, construction traffic would be limited and any increase in trips and associated emissions would be temporary. Therefore, the quantity of particulate pollutant emissions would be negligible. Similarly, the relative size of the construction site would limit both construction equipment and the duration of its use; therefore, the quantity of ozone-forming emissions would also be negligible.

Operation of the trails is not anticipated to differ substantially from existing conditions. The project would construct new trail and improve existing trail segments to make it more accessible to users. The project would not lead to an increase in operational emissions compared to existing conditions. Therefore, construction and operation of the proposed project would not contribute substantially to an existing or projected air quality violation and the impact would be less than significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact. As discussed in b) above, project-generated construction- and operational activities would not lead to a substantial increase in criteria air pollutant or precursor emissions. The project would comply with all applicable SDAPCD rules to minimize air emissions. Thus, project-generated emissions would not result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The impact would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Portions of the proposed trails are located in proximity to residential uses that are considered sensitive to air emissions. As discussed in b) above, project-generated construction and operational activities would not lead to a substantial

increase in criteria air pollutant or precursor emissions. The project would comply with all applicable SDAPCD rules to minimize air emissions. Moreover, construction activities would be temporary and would primarily utilize hand tools (powered and non-powered) with minimal-to-no running emissions and small construction equipment suitable for narrow trails and steep slopes. Construction activities would not occur in proximity to any sensitive receptors for an extended period and project operation would not lead to an increase in emissions over existing conditions. Thus, project generated emissions of criteria air pollutants and precursors would not expose sensitive receptors to substantial pollutant concentrations. The impact would be less than significant.

e) Create objectionable odors affecting a substantial number of people?

Less than Significant Impact. The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

Land uses potentially affected by odors include residences located adjacent to portions of the proposed trails. The proposed project would result in limited diesel exhaust emissions from onsite construction equipment. The diesel exhaust emissions would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. Construction would be conducted primarily through use of hand tools (powered and non-powered) and possibly a compact excavator and loader with limited associated odor emissions. In addition the project would not include the long term operation of any new sources of odor. Thus, the proposed project would not create objectionable odors affecting a substantial number of people. The impact would be less than significant.

3.4 Biological Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
4. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

Environmental Setting

The biological resources study area is defined as the areas within Ruffin, Sandrock, and Shawn Canyons within the City of San Diego's Multiple Species Conservation Plan (MSCP) Subarea (City of San Diego MSCP Subarea Plan) and within the MSCP Preserve—the Multi~~-ple~~ Habitat Planning Area (MHPA). The study area lies between Gramercy Drive to the north and the SDG&E Mission Control Center facility to the south and is shown in Figure 1-2. With the exception of signage installed within the existing developed areas, no changes would occur within the urban walk portion of the project from Sandrock Road to Gramercy Drive in the northwest, Village Glen Drive to Gramercy Drive in the north, and from Pompeii Lane to the Fenton Parkway trolley station in the south. Consequently, the urban walk portion of the project would have no impact to biological resources and is not part of the biological technical report.

The study area supports relatively flat mesa tops to steep sloping canyon terrain ranging in elevation from approximately 140 feet (43 m) in the southernmost portion of the property to approximately 400 feet (122 m) above sea level in the northern portion. The three prominent canyons that surround the property, Ruffin, Sandrock, and Shawn Canyons, are characterized by low slopes along the canyon bottoms (3-10 percent in most areas) surrounded by steep-sided

slopes (50-100 percent) on the canyon walls (Foothill Associates 2010). The primary habitat communities include chaparral, grassland, and coastal sage scrub communities which provide habitat for a variety of native and non-native plants and animals.

Existing Habitats

Although the study area is situated within an urban environment, and is often highly disturbed, Ruffin, Sandrock, and Shawn Canyons support native plant communities that include coastal sage scrub, chaparral, native grasslands, riparian scrub, and marsh vegetation and approximately 200 native plant species (Appendix A).

A total of thirteen (13) vegetation communities are depicted in **Figure 3-2**. A general description of each community is discussed below. **Table 3-1** lists each community or habitat and the acreage mapped within the study area.

TABLE 3-1
SUMMARY OF STUDY AREA VEGETATION COMMUNITIES

MSCP Status	City of San Diego Habitat Types	Acres within Study Area
UPLAND HABITATS		
Tier I	Native Grassland (NG)	1.39
Tier II	Coastal Sage Scrub (CSS)	88.74
Tier IIIA	Mixed Chaparral (MS)	51.43
	Chamise Chaparral (CC)	1.10
Tier IIIB	Non-Native Grassland (NNG)	5.94
Tier IV	Ornamental (OR)	20.59
	Disturbed (DS)	7.20
	Developed (DV)	0.53
WETLAND HABITATS [Tiers only listed for upland habitats]		
Riparian	Riparian Scrub (RS)	5.7
	Riparian Woodland (RW)	0.38
Marsh	Freshwater Marsh (FM)	0.33
	Alkali Marsh (AM)	0.27
Unvegetated Freshwater	Non-Vegetated Channel (NC)	1.81
GRAND TOTAL		**185.41**

Native Grassland [Tier I] – Native grasslands are uncommon is the study area and are limited to small patches on the north-facing slopes of the lower reaches of Sandrock Canyon, totaling 1.39 acres. The species composition of the native grassland onsite resembles that of Southern Coastal Needlegrass Grassland described in Holland (1986). Species in this habitat type include purple needlegrass (*Stipa pulchra*), splendid mariposa lily (*Calochortus splendens*), Fremont's death camus (*Zigadenus fremontii*), common goldenstar (*Bloomeria crocea*), and other native

SOURCE: CADRE Environmental

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 3-2

Vegetation Communities Map

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herbs such as sanicle (*Sanicula* spp.), scapose checker bloom (*Sidalcea malvaeflora*), California blue-eyed grass (*Sisyrinchium bellum*), California poppy (*Eschscholzia californica*), and coastal goldfields (*Lasthenia* gracilis). Non-native wild oat (*Avena* spp.), brome grasses (*Bromus hordeaceus, B. madritensis* subsp. *rubens*) and forbs such as tocolote (*Centaurea melitensis*) and red-stem filaree (*Erodium cicutarium*) are also common.

Coastal Sage Scrub *[Tier II]* - Coastal sage scrub is a drought-deciduous community comprised of aromatic shrubs and subshrubs that has a diverse understory of annual and perennial herbs, and perennial and annual native and non-native grasses. Coastal sage scrub occurs primarily on dry slopes and hillsides. It is widespread throughout the study area totaling 88.74 acres. Characteristic species include coastal sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasiculatum*), laurel sumac (*Malosma laurina*), red bush monkeyflower (*Mimulus puniceus*), coastal goldenbush (*Isocoma menziesii* var. *vernonioides*), California everlasting (*Pseudognaphalium californicum*), common sand-aster (*Corethrogyne filaginifolia*), foothill needlegrass (*Stipa lepida*), ashy spike-moss (*Selaginella cinerascens*), and many other species.

San Diego viguiera (*Bahiopsis laciniata*) is common and often is a locally dominant component of coastal sage scrub on site. Several species of native cacti are also often locally common in the study area, including coastal cholla (*Cylindropuntia prolifera*), coastal and chaparral prickly-pear (*Opuntia littoralis, Opunita oricola*), San Diego barrel cactus (*Ferocactus viridescens*), and fish-hook cactus (*Mammillaria dioica*).

Coastal sage scrub can also be found along the stream terraces on the canyon bottoms where it is dominated by dense broom baccharis (*Baccharis sarothroides*). Other characteristic species along the canyon bottoms include coastal sagebrush, California buckwheat, coast goldenbush, and black sage (*Salvia mellifera*).

Mixed Chaparral *[Tier III A]* - This community is widespread throughout the study area, totaling 51.43 acres, and is comprised mostly of broad-leaved sclerophyll shrubs. Characteristic species within the study area include holly-leaved cherry (*Prunus ilicifolia*), San Diego mountain mahogany (*Cercocarpus minutiflorus*), toyon (*Heteromeles arbutifolia*), fushia-flowered gooseberry (*Ribes speciosum*), spiny redberry (*Rhamnus crocea*), and lemonadeberry (*Rhus integrifolia*). Many native forbs also grow in this habitat, including wild cucumber (*Marah macrocarpus*), southern honeysuckle (*Lonicera subspicata* var. *denudata*), and San Diego sweet pea (*Lathyrus vestitus* subsp. *alefeldii*).

Chamise Chaparral *[Tier III A]* - Chamise chaparral is dominated by dense to open stands of chamise (*Adenostoma fasciculatum* var. *fasciculatum*). Scattered to dense patches of other shrubs, including mission manzanita (*Xylococcus bicolor*), deerweed (*Acmispon glaber*), and California buckwheat are also present. A diverse but generally sparse understory of annual and perennial herbs, and perennial and annual native and non-native grasses are present, including early onion (*Allium praecox*), coastal goldenbush, brome grasses, pygmy sandcrop (*Crassula connata*), and many others. A total of 1.10 acres of chamise chaparral occurs within the study area, which occur only in the northern stretch of Sandrock Canyon.

Non-Native Grassland *[Tier III B]* - Non-native grasslands contain annual exotic grass species, including bromes, wild oat, ryegrass (*Lolium* spp.), and fescues (*Vulpia* spp.). Typically, non-native grasslands supports at least 50 percent cover of exotic grasses in the herbaceous layer, although other plant species (native or non-native) may be present. Other native and non-native forbs are frequently associated with non-native grasslands including castor bean (*Ricinus communis*), garland chrysanthemum (*Chrysanthemum coronarium*), pineappleweed (*Chamomilla suaveolens*), Australian saltbush (*Atriplex semibaccata*), sow-thistle (*Sonchus* spp.), tree tobacco (*Nicotiana glauca*), southern thistle (*Salsola autralis*), black mustard (*Brassica nigra*), tocolote, knotweeds (*Polygonum* spp.), burclover (*Medicago polymorpha*), sweet fennel (*Foeniculum vulgare*), filaree (*Erodium* spp.), California poppy (*Eschscholzia californica*), and dove weed (*Eremocarpus setigerus*). In San Diego County the presence of wild oat, brome grasses, filaree and mustard are common indicators of this habitat. A total of 5.94 acres of non-native grassland occur throughout the Study Area.

Ornamental Vegetation *[Tier IV]* - Owing to the close proximity to residential housing development, street landscape plantings and home gardens, escaped non-native ornamental vegetation comprises a significant portion of the study area. Several species of ice plants (*Aptenia cordifolia, Caprobrotus edulis*, and *Malephora* crocea.), cacti and succulents are common, including species such as Canary Island aeonium (*Aeonium arboretum*), aloe (*Aloe* spp.), pig ear (*Cotyledon* spp.), jade plant (*Crassula* argentea), Chinese pine (*Crassula tetragona*), spiny nopal (*Opuntia dejecta*), Indian fig (*Opuntia ficus-indica*), wheel cactus (*Opuntia robusta*) and greater Mexican stonecrop (*Sedum praealtum*). Non-native ornamental grasses, such as African fountain grass (*Pennisetum setaceum*), are also highly invasive on the canyon slopes. Several non-native plants were identified during the Project surveys that have not been reported previously for San Diego County (Rebman& Simpson 2006; CCH 2012), which include, carob tree (*Ceratonia siliqua*), Preaux's sea lavender (*Limonium preauxii*), peduncled oak (*Quercus robur*), spiny nopal and greater Mexican stonecrop.

Ornamental vegetation makes up 20.59 acres of the study area and is mainly concentrated near the top of the slopes where the ecotone between the urban development areas and the native habitats within the canyon exists.

Developed/Disturbed *[Tier IV]* - Developed land on the property consists of paved roads and areas where adjacent residential development has encroached into the study area. Very little developed land exists within the study area. Approximately 0.53 acre occurs in the northern portion of Ruffin Canyon and is associated with the adjacent residential development.

Disturbed areas represent cleared areas that may support a sparse vegetation cover of non-native species that germinate and persist following routine maintenance activities. Disturbed areas occur throughout the study area, totaling 7.2 acres, and are mainly concentrated near the top of the slopes and canyon entrances where anthropogenic activities are greatest.

Riparian Scrub *[Tiers only listed for upland habitats]* - Riparian scrub within the study area is dominated by dense thickets of mule fat (*Baccharis salicifolia*), willows (*Salix* spp.), and scattered trees and saplings of cottonwood (*Populus fremontii*) and western sycamore (*Platanus*

racemosa). Some areas of riparian scrub along the canyon bottoms, which receive year-round urban water runoff, are also highly invaded habitats. Many native wetland and riparian species in these areas have been displaced by a number of aggressive non-native tree species, including Canary Island and Mexican palms (*Phoenix canariensis*, *Washingtonia robusta*), Brazilian pepper tree (*Schinus terebinthifolius*), and Shamel ash (*Fraxinus uhdei*), and many grass and sedge species, including kikuyu grass (*Pennisetum clandestinum*) and African umbrella sedge (*Cyperus involucratus*). Because of the dense thickets, only a few hardy native plants survive here. Most stands of riparian scrub onsite are too dense to allow much understory development; however, a few willow saplings and facultative wetland forbs can also be found in this habitat. Riparian scrub within the study area totals 5.7 acres.

Riparian Woodland *[Tiers only listed for upland habitats]* - This community is developed along the stream terraces of the canyon bottoms in the southern portion of the study area, totaling 0.38 acre. The community is dominated by blue elderberry (*Sambucus nigra* subsp. *caerulea*); formerly known as Mexican elderberry (*Sambucus mexicana*) (Baldwin et al. 2012) with a few saplings of mule fat and broom baccharis mixed into the understory.

Freshwater Marsh *[Tiers only listed for upland habitats]* - Freshwater dominant species, including southern cattail (*Typha domingensis*) and tule (*Schoenoplectus acutus*), occur scattered throughout the reaches of the canyon bottoms where perennial flows support this vegetation community. The total area of freshwater marsh within the study area is 0.33 acre.

Alkali Marsh *[Tiers only listed for upland habitats]* - In the study area, alkali marsh supports saltgrass (*Distichlis spicata*), African umbrella sedge, tule, annual beard grass (*Polypogon monspeliensis*), heliotrope (*Heliotropium curassavicum*), western ragweed (*Ambrosia psilostachya*), marsh fleabane (*Plucheaodorata*), southern cattail, common celery (*Apium graveolens*), and rushes (*Juncus* spp.). Only a small patch (0.27 acre) of alkali marsh occurs within the study area and can be found in the northernmost portion of Ruffin Canyon.

Non-Vegetated Channel *[Tiers only listed for upland habitats]* - This habitat supports sandy, gravelly, or cobbly ephemeral streambeds or channels, which generally are unvegetated. Variable water flows inhibit the growth of vegetation, although some weedy species of grasses including purple false brome (*Brachypodium distachyon*) may grow along the outer edges of the wash. Other species that grow here, usually less than 10 percent cover, include cocklebur (*Xanthium strumarium*) and California brickellbush (*Brickellia californica*).

Non-Sensitive Wildlife

The study area is composed of primarily chaparral, grassland, and coastal sage scrub communities which provide habitat for a variety of native and non-native plants and animals. Wildlife species include resident and migratory birds such as the American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), western scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), wrentit (*Chamaea fasciata*), northern mockingbird (*Mimus polyglottos*), California thrasher (*Toxostoma redivivum*), yellow-rumped warbler (*Dendroica coronata*), California towhee (*Pipilo crissalis*), spotted towhee (*Pipilo maculatus*), white-crowned sparrow (*Zonotrichia leucophrys*), house finch (*Carpodacus mexicanus*), and

lesser goldfinch (*Carduelis psaltria*). The vegetation communities within the study area are also considered important by the MSCP because they provide valuable raptor foraging habitat for species such as red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo lineatus*). Non-native grasslands are sometimes referred to as a naturalized community, and their sensitivity varies depending upon location, wildlife use, and composition. Grasslands serve as habitat for small mammals such as the pocket gopher (Geomyidae), California vole (*Microtus californicus*), and California ground squirrel (*Spermophilus beecheyi*) that in turn provide a prey base for foraging raptors.

Special-Status Species

A complete list of common and sensitive wildlife species documented during all focused survey efforts is included in Appendix A. The study area does not occur within or adjacent to a USFWS critical habitat designation for federally listed plants or wildlife species. Furthermore, no species adopted by the City of San Diego as narrow endemic have been recorded within the study area.

Wildlife

Following the literature review for MSCP-covered/special-status plant and wildlife species that have historically occurred within and adjacent to the study area (**Figure 3-2**), a habitat assessment was conducted by Cadre Environmental throughout the study area during the spring of 2012 to characterize potential resources for these species.

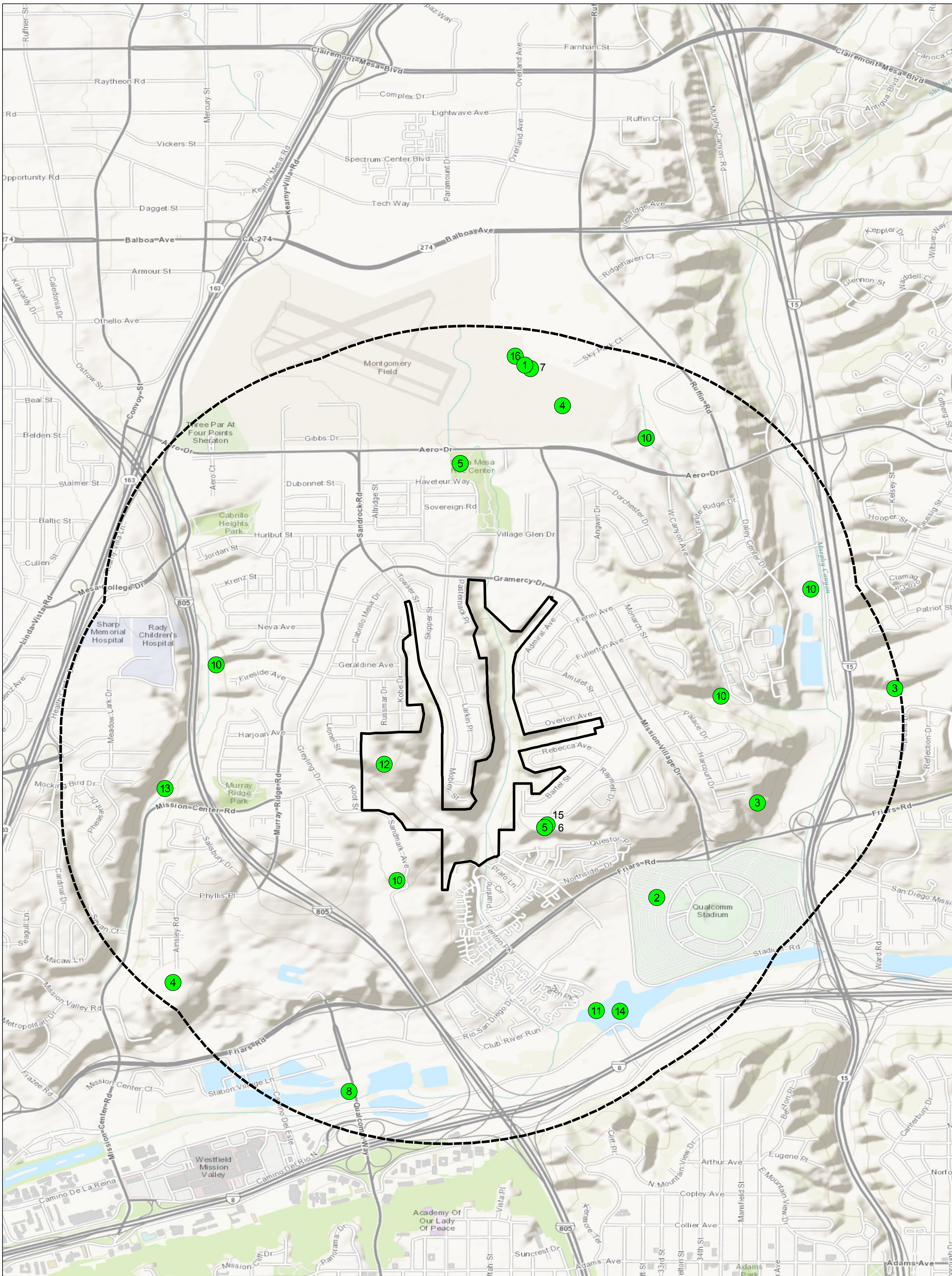
Suitable habitat was documented within the study area for the following listed/MSCP-covered wildlife species:

- Coastal California Gnatcatcher (federally threatened; MSCP-covered).

Based on a lack of suitable habitat, the following species are not expected to occur within or adjacent to the study area and focused surveys are not warranted:

- Least Bell's Vireo (federally and state endangered; MSCP-covered) – minimal low quality riparian habitat occurs within the study area;
- Southwestern Willow Flycatcher (federally and state endangered; MSCP-covered) – no suitable riparian breeding habitat occurs within the study area;
- San Diego Fairy Shrimp (federally endangered; MSCP-covered) – No vernal pools or seasonally-ponded depressions were documented within the study area; and
- Arroyo Toad (federally endangered; MSCP-covered) – No suitable breeding habitat documented within or adjacent to the study area.

According to the CNDDB (2012), one MSCP-covered species and state Species of Special Concern, orange-throated whiptail (*Cnemidorphorus hyperythrus* ssp.*beldingi*), has been documented historically within the study area (**Figure 3-3**). Orange throated whiptails inhabit semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral from sea level to approximately 2,000 feet in elevation. No orange-throated whiptails were observed during the biological surveys.



1 Orcutt's brodiaea (*Brodiaea orcuttii*)
2 San Diego ambrosia (*Ambrosia pumila*)
3 San Diego barrel cactus (*Ferocactus viridescens*)
4 San Diego button-celery (*Eryngium aristulatum var. parishii*)
5 San Diego fairy shrimp (*Branchinecta sandiegonensis*)
6 San Diego goldenstar (*Bloomeria clevelandii*)
7 San Diego mesa mint (*Pogogyne abramsii*)
8 Yuma myotis (*Myotis yumanensis*)
9 burrowing owl (*Athene cunicularia*)
10 coastal California gnatcatcher (*Polioptila californica californica*)
11 least Bell's vireo (*Vireo bellii pusillus*)
12 orangethroat whiptail (*Aspidoscelis hyperythra*)
13 purple stemodia (*Stemodia durantifolia*)
14 western mastiff bat (*Eumops perotis californicus*)
15 western spadefoot (*Spea hammondii*)
16 San Diego Mesa Hardpan Vernal Poo

Study Area
1 Mile Assessment Area

0 2,000
Feet

SOURCE: California Natural Diversity Database

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 3-3

California Natural Diversity Database Results

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Coastal California Gnatcatcher. A total of five (5) pair of coastal California gnatcatchers and a single (1) male were detected during the focused and monitoring surveys conducted within the study area during the spring of 2012. Two (2) of these pairs occur within proximity to the proposed Project alignment. A status of "Pair" was cited when both a female and male individual were documented in close proximity (less than 50 ft). The delineated habitat utilization distribution areas are shown in Appendix A, Figure 13 and should be interpreted as the minimum extent of habitat used for foraging and movement observed during the 2012 survey efforts. All suitable coastal sage scrub vegetation communities documented within the study area are expected to be utilized for foraging, breeding and movement by the coastal California gnatcatcher as annual populations and habitat utilization naturally fluctuate. All remaining habitats are expected to occasionally be utilized for foraging and movement primarily based on the isolated condition of the study area and limitations on dispersal opportunities to suitable habitats within the region.

Plants

Special-status species are plants and animals that are legally protected under the City of San Diego's MSCP Subarea Plan, CESA/FESA, or other regulations and species that are considered sufficiently rare or sensitive by the scientific community to qualify for such listing. A list of sixty-eight (68) target special-status plant species was created to evaluate potential occurrence in the study area prior to conducting fieldwork, and to aid documentation of presence or absence of each plant during the project surveys. This target list contains species that have some potential to occur in the study area based on published literature and available information, CNDDB (2012; see **Figure 3-3**), CNPS (2012), CCH (2012), other record searches, and field experiences in San Diego County.

Focused surveys and floristic inventories were conducted by Cadre Environmental from February – October 2012 to determine presence/absence for the target listed/MSCP-covered or special-status plant species. No FESA/CESA endangered or threatened plants were detected within the study area. However, of the sixty-eight (68) special-status plants species, thirteen (13) were observed within the study area. Of the 13 sensitive plants observed, only two (2) were detected along or adjacent to the proposed Project alignment in Ruffin Canyon – San Diego barrel cactus, which is also a MSCP-covered species, and San Diego viguiera. Sensitive plant species observed in the study area are shown in Appendix A, Figure 9. For a complete table of all 68 species and their presence within the study area, please refer to Appendix A.

San Diego barrel cactus (*Ferocactus viridescens*) [CRPR 2.1] – The San Diego or coast barrel cactus is a perennial succulent (*Cactaceae*) that blooms May through June. It is a Non-Listed/MSCP Covered special-status species and is known only from San Diego County and Baja California, Mexico, and grows in chaparral, coastal scrub, grasslands, and around vernal pools. San Diego barrel cactus is most frequent on dry, often south-facing hillsides on cobbly soils or ridge crests in open coastal sage scrub communities. San Diego barrel cactus is widespread in Ruffin, Sandrock, and Shawn Canyons in open, cobbly scrub habitats as shown in Appendix A, Figure 9. This was one of two special-status plants that were observed on or near the proposed Project alignment in Ruffin Canyon.

San Diego viguiera (*Bahiopsis laciniata*) [CRPR 4.2] – San Diego viguiera (formerly known as *Viguiera laciniata*; Baldwin et al. 2012) is a perennial shrub in the *Asteraceae* and is a Non-Listed/Non-MSCP Covered special-status species. It ranges from Ventura County south into Baja California, Mexico; it likely has been introduced in the northern parts of its range. San Diego viguiera is frequently common in San Diego County and may be locally dominant, especially in the southern part of the county. San Diego viguiera occupies chaparral and coastal scrub habitats generally away from the immediate coast, but below 2500 feet in elevation. It blooms February through August. San Diego viguiera is common and often is a locally dominant component of arid coastal scrub habitats throughout the study area as shown in Appendix A, Figure 9. This was the second of two special-status plants that were observed on or near the proposed Project alignment in Ruffin Canyon.

Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated.

Listed/MSCP-Covered Species

Wildlife

As discussed in the environmental setting, coastal California gnatcatcher is present within the study area and is a federally threatened/MSCP-Covered Species. The coastal California gnatcatcher could potentially be directly and permanently impacted through mortality, nest abandonment/failure, and habitat reduction as a result of removal of 0.368 acre of coastal sage scrub habitat. Because the Project is within the MHPA, all impacts to coastal California gnatcatcher and its habitat are considered significant. In addition, for occupied California gnatcatcher habitat within the MHPA, construction or operational noise levels exceeding 60 dB(A) (or exceeding the existing ambient noise level if already above 60 dB(A)) during the breeding season (March 1st to August 15th) is considered significant. Consultation with the USFWS under Section 7 of the ESA is not required for costal California gnatcatcher as the proposed project shall be subject to the MSCP.

Implementation of Mitigation Measures MM-BIO-1, MM-BIO-4, and MM-BIO-5 would reduce direct impacts to coastal California gnatcatcher to less than significant. See the discussions under Section 3.4(b) below, for more details regarding impacts to sensitive natural communities.

Indirect impacts to the federally threatened coastal California gnatcatcher can include construction noise, and other phenomena which are the result of Project construction which can alter the breeding and behavior patterns of the gnatcatcher. Any potential indirect impacts to the federally threatened coastal California gnatcatcher within the MHPA lands would be less than significant with the implementation of Mitigation

Measures MM-BIO-1, MM-BIO-4, and MM-BIO-5 and preparation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the Site Development Permit and the State Water Resources Control Board (SWRCB). The SWPPP will list and implement Best Management Practices (BMPs) in order to minimize water quality impacts during construction, which will also consist of fugitive dust control and erosion prevention measures, thereby also reducing impacts to adjacent biological resources.

Post construction, indirect impacts may include increased anthropogenic disturbances from trail use such as noise; however, use of the trail, while potentially greater than under existing conditions, will not be constant and will be pedestrian in nature. No motorized vehicles will be permitted to access the trail; therefore it is highly unlikely that ambient noise levels will exceed 60 dB(A). Furthermore, public access, pedestrian hiking trails (passive recreation) are a compatible land use in the MHPA and gnatcatchers are known to habituate to slight incremental increases in noise associated with intermittent pedestrian traffic. No indirect impacts from post construction operation of the trail are anticipated to occur to coastal California gnatcatcher.

Plants

No listed/MSCP-covered plant species were observed onsite and within the project alignment.

Non-Listed/MSCP-Covered Species

Wildlife

Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) is considered a Species of Special Concern (SSC) by the state and also covered under the MSCP and protected by the MBTA. Although the species was not detected or observed during the biological surveys within the study area, there is still potential for the species to utilize the large patches of cacti found within the Project alignment for nesting. Direct impacts to coastal cactus wren can include loss of nesting habitat, including the large cactus stands throughout the coastal sage scrub, mixed chaparral, and ornamental vegetation; and take of nests due to Project implementation; both of which are considered a significant impact. Implementation of Mitigation Measures MM-BIO-3, MM-BIO-4, and MM-BIO-5 would reduce direct impacts to coastal cactus wren to less than significant.

Indirect impacts to coastal cactus wren can include noise as a result of construction activities, and ambient noise as a result of trail use, both of which may disrupt breeding and behavior patterns. Indirect impacts to this species, located within the MHPA lands, would be less than significant with the implementation of Mitigation Measures MM-BIO-3 and MM-BIO-4, and preparation of a SWPPP.

Western bluebird (*Sialia mexicana*) was detected within the study area. Direct impacts to western bluebird can include loss of nesting habitat, including 0.368 acre of coastal sage scrub, 0.521 acre of mixed chaparral, 0.048 acre of riparian scrub habitat within the proposed alignment, and take of nests due to project implementation. Implementation of

Mitigation Measures MM-BIO-4 and MM-BIO-5 would reduce these impacts to less than significant.

Indirect impacts to the MSCP-covered western bluebird can include noise as a result of construction activities and Project implementation, which may disrupt breeding and behavior patterns. Implementation of Mitigation Measure MM-BIO-4 and preparation of a SWPPP would reduce this impact to less than significant.

Although orange-throated whiptail has been historically documented within the study area, the species was not observed during the biological surveys and is not anticipated to be impacted by project activities.

Plants

San Diego barrel cactus, a non-listed/MSCP-covered species, was found in proximity to the proposed project alignment in Ruffin Canyon and may be directly and permanently impacted by project implementation. Direct impacts would include trampling, crushing, grubbing, trimming or completely removing the plants during project construction; all of which are considered significant impacts. Implementation of Mitigation Measures MM-BIO-2, MM-BIO-3, and MM-BIO-5 would reduce direct impacts to San Diego barrel cactus to less than significant.

Indirect Impacts to San Diego barrel cactus can include spatial competition, which may occur from the introduction of invasive plant species through construction activities or trail use. Indirect impacts to San Diego barrel cactus, located within the MHPA lands, would be less than significant with the implementation of Mitigation Measure MM-BIO-2 and preparation of a SWPPP.

Non-Listed/Non-MSCP Covered Special-Status Species

Wildlife

Direct impacts to non-listed special-status wildlife species include those impacts to migratory birds covered by the MBTA. A total of 59 raptor and passerine bird species protected under the MBTA were detected or observed within the study area (see Appendix A). Direct impacts to migratory birds can include loss of nesting habitat and take of nests due to Project implementation; both of which are considered a significant impact. Implementation of Mitigation Measures MM-BIO-1 through MM-BIO-5 would reduce these impacts to less than significant.

Plants

Twelve (12) non-listed/non-MSCP covered special-status plant species were observed in the study area, including desert fragrance, Coulter's saltbush, San Diego viguiera, small-flowered morning-glory, Palmer's grapplinghook, graceful tarplant, southwestern spiny rush, Robinson's peppergrass, small-flowered microseris, Nuttall's scrub oak , Munz's sage, and ashy spike-moss. Of those 12, only San Diego viguiera [CRPR 4.2] occurs within the proposed Project alignment and could be potentially impacted by Project implementation (see Appendix A, Figure 9). Direct impacts would include trampling,

crushing, grubbing, trimming or completely removing the plants during Project construction; all of which are considered significant impacts. Implementation of Mitigation Measures MM-BIO-2, MM-BIO-3, and MM-BIO-5 would reduce direct impacts to sensitive plants to less than significant.

Indirect impacts to non-listed special-status plant species such as San Diego viguiera can include spatial competition, which may occur from the introduction of invasive plant species through construction activities or trail use. Indirect impacts to non-listed special-status wildlife species including migratory birds and raptors can include noise as a result of construction activities which may disrupt breeding and behavior patterns. Indirect impacts to these special-status species located within the MHPA lands would be less than significant with the implementation of Mitigation Measures MM-BIO-2 and MM-BIO-4, and preparation of a SWPPP.

Mitigation Measures

Mitigation Measure MM-BIO-1: Prior to the issuance of any grading or construction permit and/or prior to the preconstruction meeting, the City shall verify that the Multi-Habitat Planning Area (MHPA) boundaries and the following Project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

- In order to avoid "take" of coastal California gnatcatcher, no clearing, grubbing, grading or other noise-generating construction activities shall occur between March 1st and August 15th. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist.

- If avoidance of the breeding season is not feasible a permitted biologist approved by USFWS to conduct breeding bird surveys for coastal California gnatcatcher shall conduct a preconstruction clearance survey for active nests no more than 3 days prior to the initiation of Project activities. If an active nest is found, the Project proponent shall delay all Project activities within 300 feet of on- and off-site suitable nesting habitat until August 15th. Alternatively, if an active nest is located the biologist can monitor the nest and any Project activities within 300 feet of the nest or as determined by a qualified biological monitor, shall be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, and/or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet between the Project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. A biological monitor must be present during all vegetation clearing and noise-generating construction activities during the breeding season in order to prevent take of active nests and to ensure that noise levels are not exceeding 60dB(A). If noise levels at the edge of occupied gnatcatcher habitat exceed 60dB(A), noise attenuation methods shall be installed and monitored.

~~In order to avoid impacts to the coastal California gnatcatcher, all vegetation clearing, grubbing or grading shall take place outside of the nesting season, which spans from March 1st to August 15th. If avoidance of the breeding season is not feasible, a permitted biologist approved by USFWS to conduct breeding bird surveys for coastal California gnatcatcher shall conduct a preconstruction clearance survey for active nests no more than 3 days prior to the initiation of project activities. If an active nest is found, the project proponent shall delay all project activities within 300 feet of on- and off-site suitable nesting habitat until August 15th. Alternatively, if an active nest is located the biologist can monitor the nest and any Project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, shall be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, and/or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet between the Project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. A biological monitor must be present during all vegetation clearing during the breeding season in order to prevent adverse impacts to active nests and to ensure that noise levels do not exceed 60dB(A).~~

Mitigation Measure MM-BIO-2: San Diego barrel cactus and San Diego viguiera shall be avoided. A biological monitor shall be present during all vegetation clearing to ensure impacts stay within the proposed Project footprint and to ensure impacts to these two species are avoided. If complete avoidance of these special-status plants is not feasible, then the following measures shall be implemented:

- Viguiera shall be restored by including seed of this species in coastal upland restoration seed mixes, per the Biology Guidelines of the Land Development Code (see Mitigation Measure MM BIO-5 below). Prior to removal of viguiera, duff and soil from the base of the plant that contains seeds shall be collected and used for restoration and revegetation.

- San Diego barrel cactus will be salvaged and transplanted within the identified upland restoration areas on the Project site, subject to approval by the City (see Mitigation Measure MM-BIO-3 below).

Mitigation Measure MM-BIO-3: Within the MHPA, impacts to coastal cactus wren habitat must be avoided. If avoidance of cactus wren habitat is not feasible, then prior to the issuance of the grading permit, all listed species below actually present onsite (as appropriate) shall be described in a salvage plan (included in the restoration plan) to the satisfaction of the City.

Scientific Name	**Common Name**
Cylindropuntia californica var. *californica*	snake cholla
**Cylindropuntia prolifera*	coast cholla
**Dudleya edulis*	ladies'-fingers
**Dudleya lanceolata*	coastal dudleya
**Dudleya pulverulenta*	chalky live-forever

Euphorbia misera	cliff spurge
**Ferocactus viridescens*	San Diego barrel cactus
**Mammillaria dioica*	fish-hook cactus
**Opuntia littoralis*	coastal prickly pear
**Opuntia oricola*	chaparral prickly pear
**Yucca whipplei*	our Lord's candle
**Yucca schidigera*	Mojave yucca

*****Species present onsite based on site specific biology reports & City staff input – this list is also subject to future refinements at the discretion of the City and Wildlife Agencies.

The salvage plan is required to provide appropriate species for use within City sanctioned coastal cactus wren mitigation sites. These sites are currently as follows: Northern- Lake Hodges and Wild Animal Park; Southern – Rancho Jamul/San Diego National Wildlife Refuge Sites.

Prior to construction, the following measures shall be implemented:

- Prior to the first preconstruction meeting, the applicant shall provide a letter of verification to the City stating that a qualified Biologist, as defined in the City of San Diego Biological Resource Guidelines, has been retained to implement the salvage plan.

- At least 30 days prior to the preconstruction meeting, the qualified Biologist shall verify that a coastal cactus wren plant salvage/relocation plan (including species, locations, numbers, timing and handling, etc.) has been completed and approved by the City and the appropriate contact from the receiving site (the City can aid notification by phone and/or email).

Post construction, the following measure shall be implemented:

- Prior to the release of the grading bond, the project biologist shall submit a letter report to the Environmental Review Manager that assesses any project impacts resulting from construction. Any actions taken related to coastal cactus wren protection, including salvage of species, shall also be included in this letter. This letter report shall be submitted to City Staff.

~~Within the MHPA, impacts to coastal cactus wren habitat must be avoided. This includes areas containing coast cholla *(Cylindropuntia prolifera*), ladies' fingers *(Dudleya edulis)*, coastal dudleya *(D. lanceolata)*, chalky live-forever *(D. pulverulenta)*, San Diego barrel cactus, fish-hook cactus *(Mammillaria dioica*), coastal prickly pear *(Opuntia littoralis*), chaparral prickly pear *(Opuntia oricola*), our Lord's candle *(Yucca whipplei*), and Mojave yucca *(Yucca schidigera*). If avoidance of cactus wren habitat is not feasible, then restoration of impacted habitat shall include salvage and transplantation of the aforementioned species within the Project site, subject to approval by the City.~~

Mitigation Measure MM-BIO-4: Proposed project activities (including, but not limited to, staging and disturbances to native and non-native vegetation, structures, and substrates) should not occur during the avian breeding season which runs from ~~March~~February 1st - ~~August~~September 15th to avoid impacts to birds or their eggs.

If avoidance of the avian breeding season is not feasible a qualified biologist with experience conducting breeding bird surveys shall conduct a preconstruction clearance survey for active nests no more than 3 days prior to the initiation of project activities. If a protected native bird is found, the project proponent shall delay all project activities within 300 feet of on- and off-site suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until ~~August~~September 15th. Alternatively, if an active nest is observed, the biologist can monitor the nest and any project activities within 300 feet of the nest (within 500 feet for raptor nests), or as determined by a qualified biological monitor, shall be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, and/or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the Project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area.

If the biological monitor determines that a narrower buffer between the project activities and observed active nests is warranted, he/she shall submit a written explanation (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the project activities and the nest and foraging areas) to the City. Based on the submitted information, the City will determine whether to allow a narrower buffer.

The biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor shall send weekly monitoring reports to the City during the grubbing and clearing of vegetation, and shall notify the City immediately if project activities damage active avian nests.

The weekly reports shall also include, if necessary, additional mitigation in conformance with the City's Biology Guidelines and applicable State and Federal Law (i.e., appropriate follow up surveys, monitoring schedules, construction/noise barriers, and specific buffer widths [see below], etc.) to the satisfaction of the City.

In addition to the previous requirements, any development inside the MHPA which identifies the occurrence of the following species must include an impact avoidance area as follows:

- 300 feet from any nesting site of Cooper's hawk (*Accipiter cooperii*)
- 900 feet from any nesting sites of northern harriers (*Circus cyaneus*)

- 4,000 feet from any nesting sites of golden eagles (*Aquila chrysaetos*)
- 300 feet from any occupied burrow of burrowing owls (*Athene cunicularia*)

These conditions are requirements of the Incidental Take Authorization in order to consider these species adequately conserved under the MSCP. Although these species were not observed during the biological surveys, incidental observations during construction may warrant specific avoidance and minimization measures described in the Biology Guidelines of the Land Development Code.

Mitigation Measure MM-BIO-5: Mitigation for permanent and temporary impacts to Tier II, Tier IIIA and Tier IIIB vegetation communities will occur through onsite habitat restoration within the existing disturbed and ornamental areas of the study area (see **Figure 1-5**). A Revegetation / Restoration Plan shall be prepared consistent with Attachment B of the Land Development Code 2012 Biology Guidelines. ~~In addition, habitat enhancement shall be implemented through removal of exotic, invasive and ornamental species in areas identified for mitigation.~~ No mitigation shall occur within the 100-foot brush management zone below adjoining residential parcels as any onsite mitigation efforts shall need to remain in perpetuity without the risk of clearing or removal. In addition, all sensitive vegetation communities temporarily disturbed during Project implementation shall be restored to their original condition post construction. Per the Biology Guidelines of the Land Development Code:

- Impacts to 0.368 acre of coastal sage scrub and 0.521 acre of mixed chaparral will be mitigated at a 1:1 ratio inside the MHPA and at a 2:1 ratio outside the MHPA~~1:1 ratio~~ through creation of ~~1.05~~1.5 acres of coastal sage scrub habitat along the unauthorized trails and ~~within the MHPA,~~ within the existing disturbed areas at the north end of Ruffin Canyon and the far eastern end of Shawn Canyon (see **Figure 1-5**).
- A conceptual restoration plan pursuant to City guidelines will be prepared that includes the restoration of coastal sage scrub in disturbed habitats inside and outside the MHPA, and restoration of the unauthorized trail system in Ruffin and Sandrock Canyons.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated. Impacts to vegetation communities as a result of Project implementation include on-site impacts to coastal sage scrub, chaparral, non-native grassland, disturbed/ornamental, and riparian/wetland habitats. A total of 0.604 acre of vegetation communities would be permanently impacted, and 0.647 acre would be temporarily impacted as a result of Project implementation. It should be noted that the City only recognizes "impacts" on a general scale and does not decipher between temporary and permanent impacts. While temporary impacts (defined as areas where the root systems of upland vegetation are maintained and

vegetation may reestablish on its own) are anticipated to occur from project implementation, all impacts, whether temporary or permanent shall be mitigated as if they were "permanent" according to the City's Biology Guidelines. Project impacts to vegetation communities are summarized in **Table 3-2**.

TABLE 3-2
PROJECT VEGETATION COMMUNITY IMPACTS

Community	Tier	Permanent Impacts (acres)	Temporary Impacts (acres)	Total Impact (acres)
Upland Habitat				
Coastal Sage Scrub	II	0.173	0.195	0.368
Mixed Chaparral	IIIA	0.255	0.266	0.521
Non-Native Grassland	IIIB	0.003	0.004	0.007
Disturbed/Ornamental	IV	0.127	0.165	0.292
Wetland Habitat				
Riparian Scrub	N/A	0.035	0.013	0.048
Non-Vegetated Channel	N/A	0.011	0.004	0.015
Total Combined Project Impacts		**0.604**	**0.647**	**1.251**

Coastal Sage Scrub

The permanent Project impact to coastal sage scrub (Tier II) from the construction of the trail is 0.173 acre. The temporary Project impact to coastal sage scrub from construction staging alongside the trail and staging areas is 0.195 acre. Total impacts to coastal sage scrub as a result of Project implementation is 0.368 acre. Impacts to coastal sage scrub are considered significant according to the City's CEQA Significance Determination Thresholds and~~, if mitigation occurs inside the MHPA, must~~ shall be mitigated at a 1:1 ratio inside the MHPA and at a 2:1 ratio outside the MHPA~~1:1 ratio~~. Implementation of mitigation measure MM-BIO-5 would reduce impacts to coastal sage scrub to below a level of significance.

Mixed Chaparral

The permanent Project impact to mixed chaparral (Tier IIIA) is 0.255 acre. The temporary Project impact to mixed chaparral is 0.266 acres. Total impacts to mixed chaparral as a result of Project implementation is 0.521 acre. Impacts to chaparral are considered significant according to the City's CEQA Significance Determination Thresholds and ~~must~~ shall be mitigated at a 1:1 ratio inside the MHPA and at a 2:1 ratio outside the MHPA~~1:1 ratio if mitigation occurs inside the MHPA~~. Implementation of mitigation measure MM-BIO-5 would reduce impacts to chaparral to below a level of significance.

Non-Native Grassland

The permanent Project impact to non-native grassland (Tier IIIB) is 0.003 acre. The temporary Project impact to non-native grassland is 0.004 acre. Total impacts to non-

native grassland as a result of Project implementation is 0.007 acre. Impacts to non-native grassland are considered insignificant according to the City's CEQA Significance Determination Thresholds (impacts are less than 1 acre), therefore no mitigation is required.

Disturbed/Ornamental

The permanent Project impact to disturbed/ornamental habitat (Tier IV) is 0.127 acre. The temporary Project impact to disturbed/ornamental habitat is 0.165 acres. Total impacts to disturbed/ornamental habitat as a result of Project implementation is 0.292 acre. The City's MSCP does not require mitigation for disturbed/ornamental habitat.

Impacts to waters of the U.S., including wetlands under the jurisdiction of CDFW, RWQCB, and City would occur from the project as indicated in **Table 3-3**.

TABLE 3-3
SUMMARY OF JURISDICTIONAL IMPACTS

Agency	Acres
USACE	0.063
CDFW	0.063
RWQCB	0.063
City	0.063

The build-out of the Project would directly impact approximately 686 linear feet (at 4 feet in width; totaling 0.063 acre) of non-wetland ephemeral streambed with riparian scrub vegetation (waters of the U.S./State/RWQCB/City) located in the southern stretch of the alignment just north of the Escala community and a single tributary crossing near the northern end of the alignment **(Figure 3-4**).

USACE Jurisdiction

The USACE Wetland Delineation Manual (Environmental Laboratory, 1987) was used as the basis to delineate waters of the U.S., including wetlands within the proposed impact footprint (including Sandrock Canyon). Potential USACE and CDFW jurisdictional areas were also mapped within the entire Study Area; however, mapping was conducted using visual indicators of riparian plant boundaries and Ordinary High Water Mark (OHWM)/streambank; delineation pits were not excavated in any areas that were not proposed for trail improvements. The existing ephemeral stream was determined to be connected to the Pacific Ocean via San Diego River through a culvert in the southern portion of the Project area (**Figure 3-4**), and is assumed to be under the jurisdiction of the USACE. Approximately 0.063 acre of non-wetland waters under the jurisdiction of the USACE occur within the proposed project alignment. This includes the 0.015 acre of unvegetated channel and 0.048 acre of riparian scrub that falls within the OHWM. No federal wetlands occur on, within, or adjacent to the proposed project alignment.

CDFW Jurisdiction

Based on the presence of a distinguishable channel with bed and bank, 0.063 acre was mapped as CDFW-jurisdictional unvegetated streambeds and riparian habitats within the proposed Project alignment. This includes 0.015 acre of non-vegetated channel and 0.048 acre of riparian scrub. Areas identified in the jurisdictional delineation report that area within CDFW jurisdiction are regulated pursuant to Section 1600 et seq. of the Fish and Game Code.

RWQCB Jurisdiction

All areas mapped as USACE-jurisdictional waters and CDFW-jurisdictional habitats fall with the Section 401 authorities of the RWQCB.

City Jurisdiction

All areas mapped as USACE-jurisdictional waters and CDFW-jurisdictional habitats fall under the jurisdiction of the City.

Impacts to non-wetland waters of the U.S./State and City wetlands are considered significant. Per the City Regulations, impacts to wetlands must be avoided. If there are no feasible measures to avoid the wetlands then mitigation is required at a 2:1 ratio. Implementation of Mitigation Measure MM-BIO-6 would reduce impacts to non-wetland waters to below a level of significance.

Indirect Impact

The project falls within the City's MHPA lands. As such, indirect impacts to preserved habitat, including impacts from edge effects such as wildfire, invasive species introduction, planting with ornamentals and introduction of pesticides and fertilizers from neighboring residences, could potentially result in a significant impact to sensitive habitats and species within the MHPA. Implementation of Mitigation Measure MM-BIO-5 and preparation of a SWPPP would reduce potential indirect impacts to less than significant. The buildout of the project would not have any indirect impacts on any jurisdictional resources.

Summary of Impacts

Sensitive Vegetation Communities

The Project would result in significant impacts to the following sensitive vegetation communities: coastal sage scrub, chaparral and non-native grassland; and could have a significant effect on adjacent habitats and species within the MHPA. Implementation of Mitigation Measures MM-BIO-5 through MM-BIO-6 would reduce these impacts to below a level of significance.

Figure Legend

- USACE (Corps) Significant Nexus
- Wetland Sample Location
- Culvert Location
- USACE (Corps) Jurisdiction
- CDFW Jurisdiction

*Note: Jurisdictional boundaries outside of the proposed impact footprint are visual estimates and not based on a formal delineation.

- Trail Allignment
- Construction Staging Area

0 500 Feet

SOURCE: ESA

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 3-4

Jurisdictional Resources Map

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Wetland Habitats

The Project would permanently and temporarily impact non-wetland waters of the U.S. and waters of the State associated with the on-site unvegetated ephemeral streambeds. Permanent impacts are mainly the result of routing the trail along the streambed within the narrow public use easement in the southern portion of Study Area within the Escala community. Temporary impacts are the result of trail construction staging alongside the trail. Impacts to these habitats are considered significant according to the City's CEQA Significance Determination Thresholds and would be mitigated at a ratio of 2:1 through the construction of an unvegetated ephemeral channel. In addition, the riparian scrub to be impacted by the Project is considered jurisdictional by CDFW, RWQCB, and the City. Permanent direct impacts to these jurisdictional resources are considered significant and must be mitigated at a 2:1 ratio per the City guidelines.

Compliance with the City's ESL Regulations (Section 143.0141) requires that a 100-foot buffer be maintained around riparian scrub as appropriate to protect the functions and values of the habitat. The southern portion of the trailhead near the Escala Community will permanently impact 0.048 acre of riparian scrub and 0.015 acre of non-vegetated channel. This alignment represents the most feasible alternative with the least amount of potential impacts to wetlands; however, the required 100-foot buffer cannot be fully maintained. It should be noted that implementation of the designated trail would benefit the surrounding wetland habitat through dissuasion of the public from sensitive wetland areas, thereby allowing the wetland habitat to flourish; however, because the Project would impact City wetlands and wetland buffers, a deviation to the ESL Regulations would need to be granted by the City, as part of the Site Development Permit process. According to the City Land Use and Community Planning Element of the City's General Plan, and the Land Use Considerations in the MSCP, passive recreation (including linear hiking trails) is a compatible land use in the MHPA and City-designated Open Spaces. The project qualifies as an Essential Public Service Project according to the City Wetland Deviations as it will service the community at large and not just a single property. The 100-foot buffer shall be observed with respect to the created mitigation habitat. Implementation of Mitigation Measure MM-BIO-6 would reduce impacts to below a level of significance.

Mitigation Measures

Implement **Mitigation Measures MM-BIO-5**.

Mitigation Measure MM-BIO-6: Prior to the issuance of any construction permits for the project, the project proponent shall obtain a Section 404 Clean Water Act Nationwide Permit (NWP #42) from the USACE, Section 401 Water Quality Certification from the RWQCB, and Section 1602 Streambed Alteration Agreement from CDFW to address impacts to 0.063 acre of non-wetland waters of the U.S. and waters of the State.

As part of the Section 404 process, the results from the recent formal delineation of potential wetlands and other waters of the U.S. located within the project area shall be

submitted to the USACE for verification. State and federal regulations require that the Project applicant avoid or minimize impacts to wetlands and waters and develop appropriate protection for wetlands. Wetlands that cannot be avoided must be compensated to result in "no net loss" of wetlands to ensure that the Project would maintain the current functions and values of on-site wetland habitats. Impacts to non-wetland waters of the U.S. and State within the Project boundary shall be mitigated for at a 2:1 ratio through the on-site creation of riparian scrub habitats and an ephemeral channel. The ephemeral channel shall be designed with a clear bed and bank such that an Ordinary High Water Mark (OHWM) shall establish itself over time.

A Revegetation / Restoration Plan, also consistent with USACE guidelines for Habitat Mitigation and Monitoring Plans (HMMP), will be prepared consistent with Attachment B of the Land Development Code 2012 Biology Guidelines. Mitigation for the 0.063-acre impact to jurisdictional resources would occur onsite (see **Figure 3-4**), within the MHPA at a 2:1 ratio. The required mitigation would be fulfilled through the conversion of 0.2 acre of disturbed habitat along the canyon floor in the northern stretch of Ruffin Canyon into functioning native wetland habitat comprised of riparian scrub and non-vegetated channel.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The proposed project is not located within or in the vicinity of federally protected wetlands. Therefore, no impact would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact. The canyon provides a north-south wildlife movement corridor through urban development as well as a point of refuge for several migrating species. The existing trails and unvegetated ephemeral streambeds provide easily traversable routes for wildlife to disperse within the canyon. The areas surrounding the canyon are composed of residential and urban development. No designated wildlife corridor exists in the immediate vicinity of the project site. As this project does not include the construction of obstacles to wildlife movement or designated wildlife corridors and may actually enhance wildlife movement within the canyon, it is in compliance with the area-specific management directives of the City's MSCP Subarea Plan. Impacts would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant with Mitigation Incorporated. The Project is within the City's MSCP Subarea Plan and on Environmentally Sensitive Lands (ESL), as defined in the Land Development Code (LDC). The Project site is subject to the policies, guidelines, and regulations of the City's MSCP Subarea Plan, the ESL regulations (Chapter 14, Division 1, San Diego Municipal Code), and the Biology Guidelines and Biology Survey Guidelines (~~2002~~2012). The Project has been designed to minimize, to the extent feasible, impacts to ESL through avoidance~~, enhancement,~~ and creation of habitat. The ESL Regulations do not allow impacts to wetlands unless a deviation is requested and granted. The Project would impact wetlands (unvegetated channel), and a deviation to the ESL Regulations would need to be granted by the City, as part of the Site Development Permit process.

The Project also complies with the requirement that mitigation for impacts associated with a deviation achieves the goal of no-net-loss and retains the in-kind function. The owner/operator would be provided with a permit/authorization/agreement from the USACE, RWQCB, and CDFW for impacts to non-wetland waters of the U.S. and waters of the State as part of the required project approval.

Implementation of Mitigation Measures MM-BIO-1 through MM-BIO-6 would ensure that the Project is in compliance with local policies and ordinances protecting biological resources.

Mitigation Measures

Implement **Mitigation Measures MM-BIO-1** through **MM-BIO-6**.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than Significant with Mitigation Incorporated. The project site is located within the City of San Diego MSCP Subarea Plan and would be subject to meeting the terms and conditions of the MSCP and associated regulations. The MSCP is a regional plan that seeks to ensure the long-term survival of special-status plant and animal species and protects the native vegetation found throughout the City of San Diego. The MSCP addresses the potential impacts of urban growth, natural habitat loss, and species endangerment and creates a plan to mitigate for the potential loss of special-status species and their habitats. The MSCP Subarea Plan has been approved by CDFW and USFWS. With implementation of Mitigation Measures MM-BIO-1 through MM-BIO-6, the Project would not be in conflict with the terms, conditions, and provisions of the MSCP.

The Project occurs within the City's designated MHPA; however passive recreation such as public hiking trails is a compatible land use within the MHPA (MSCP 1997).

Existing conditions of the project alignment within the MHPA include disturbed areas, exotic ornamental vegetation, and non-native grassland subject to disturbance during

construction of the trail. As a result, there is the potential for introduction of invasive plant species from these areas into adjacent native habitat patches. In addition, increased human activity may indirectly affect MSCP-covered species utilizing the MHPA lands. Implementation of Mitigation Measures MM-BIO-1 through MM-BIO-6 would reduce these impacts to less than significant.

Construction of the proposed project would be conducted primarily with the use of hand tools (powered and unpowered) such as digging and transfer shovels, pick mattocks, loopers, rakes, and wheel barrels. Small construction equipment, suitable for narrow and steep surroundings may be used for some soil movement; however, construction vehicles would primarily be limited to workers' commute vehicles, which would consist primarily of passenger automobiles and/or light trucks, and small equipment such as a compact excavator and loader. The proposed Project would prepare a SWPPP in accordance with the Site Development Permit and SWRCB. The SWPPP will list and implement BMPs in order to minimize water quality impacts during construction. Once operational, the trail would be more sustainable than the existing trail and would improve existing runoff patterns and reduce erosion along the alignment, thereby reducing sediment runoff into downstream water bodies. Potential adjacency impacts to MSCP-covered habitats and species inside the MHPA would be reduced to a less-than-significant level.

Mitigation Measures

Implement **Mitigation Measures MM-BIO-1** through **MM-BIO-6**.

3.5 Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
5. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Environmental Setting

The project site is an urban canyon setting that is surrounded primarily by single-family residential land uses. The project site also includes an "urban walk" as indicated on **Figure 1-2**. The project site consists of relatively flat mesa tops to steep sloping canyon terrain leading down to a wash at the bottom of the canyon. Based on previous cultural studies and records search, no existing prehistoric or historical structures or sites are located within the project site (See Appendix B).

Previous Cultural Studies

A total of 32 cultural resource studies have been completed within one quarter-mile radius of the APE. Two of the previous studies have included portions of the area of potential effect (APE). The existing trail systems in the Ruffin Canyon and northern Sandrock Canyon were surveyed in 2007 and the southern portion of Sandrock Canyon was surveyed in 2002. No artifacts were discovered during either survey. (ASM 2012)

Records Search

A records search was conducted at the South Coastal Information Center (SCIC) of the California Historical Resources Information System (CHRIS) at San Diego State University on December 2, 2011 (ASM 2011). The record search area, which occurred over a one quarter-mile buffer zone around the APE, included all relevant site records on file with the SCIC, the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and local registries.

The records search identified two cultural resources, consisting of a prehistoric lithic scatter site and a prehistoric isolate, that have been recorded within a one quarter-mile radius of the APE. Neither resource occurs in the proposed APE.

In addition to the SCIC search, a sacred lands records search was requested from Native American Heritage Commission (NAHC) on December 6, 2011. NAHC's response indicated that there were no Native American resources in the project area.

Paleontological City of San Diego CEQA Significance Determination Thresholds

The City's Significance Determination Thresholds (City of San Diego, 2011) determines paleontological impacts to be significant if the project would require over 1,000 cubic yards *and* 10 feet or more deep of excavation in a high resource potential geologic deposit/formation/rock unit, and/or require over 2,000 cubic yards *and* 10 feet or more deep of excavation in a moderate resource potential geologic deposit formation or rock unit. The project site lies within the Mission Valley Formation which is known to have a high potential of containing paleontological resources.

Discussion

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. CEQA Guidelines §15064.5 provides guidance on defining when an existing structure may be a historical resource. As noted in the environmental setting, no structures are located within the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in the CEQA Guidelines §15064.5. No impact would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant Impact. CEQA Guidelines §15064.5 defines an archaeological resource as artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that the resource:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

As noted in the environmental setting, past archaeological surveys have not discovered archaeological resources within the project site. Moreover, the proposed project would only have soil disturbance related to improving existing trails and, in certain areas, constructing a new, more sustainable alignment for the trail. Consequently, given the lack of archaeological resources in the project site and the limited area of soil disturbance, an archaeological monitor is not recommended. Impacts related to the project causing a

substantial adverse chance in the significance of an archaeological resource pursuant to §15064.5 would be less than significant and no mitigation is required.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact. The project would not directly destroy a unique paleontological resource, site, or unique geologic feature. As stated in the environmental setting, the project is within the Mission Valley Formation, a formation considered to have a high potential of containing paleontological resources. The project's related soil cut, while greater than 1,000 cubic yards, would be limited to a depth of four feet or less, and most of which would occur within previous fill soils from surrounding development. Therefore, impacts related to paleontological resources would be less than significant and no mitigation is required.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. The proposed project would improve existing trails and create new trails on steep slopes. Records searches and review of past surveys have not uncovered any evidence of prehistoric activities in the project APE. Based on the limited soil cut and the lack of resources in the project area, it is highly unlikely that human remains would be encountered during construction of the proposed project. Moreover, in the unlikely event that human remains are discovered, the San Diego River Conservancy and the project construction manager are required to comply with Health and Safety Code Section 7050.5 and Public Resources Code (PRC) Section 5097.

Health and Safety Code 7050.5 addresses the protection of human remains discovered in any location other than a dedicated cemetery and makes it a misdemeanor for any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law, except as provided in PRC Section 5097.99. It states further that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in PRC Section 5097.98. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

PRC Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on non-federal public lands. PRC Section 5097.5 considers it a misdemeanor to knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands. The disposition of Native American burials falls within the jurisdiction of the NAHC, which prohibits willfully damaging any historic, archaeological, or vertebrate paleontological site or feature on public lands (PRC Section 5097.9). PRC Section 5097.98 stipulates that whenever the NAHC receives notification of a discovery of Native American human remains from the county corner, it shall immediate notify those people it believes to be the most likely descendant of the deceased Native American. The descendants may inspect the site of discovery and make recommendations on the removal or reburial of the remains.

Therefore, given the low likelihood of discovering human remains onsite as well as the existing laws in place that govern the handling of human remains encountered during excavation work, impacts related to the disturbance of human remains would be less than significant.

3.6 Geology, Soils, and Seismicity

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
6. GEOLOGY, SOILS, AND SEISMICITY — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Environmental Setting

A geologic reconnaissance study was prepared for the proposed project by Ninyo & Moore on January 28, 2013 (Appendix C). The study provides preliminary conclusions and recommendations regarding the geologic aspects of the proposed project.

The project is located within the existing open space area of Ruffin Canyon. The canyon drainage flows south into Mission Valley and the San Diego River. Site elevations range from approximately 400 feet above mean sea level (MSL) in the northern portions of the site near Gramercy Drive, to approximately 125 feet MSL at the southern end of the site, near the mouth of Ruffin Canyon.

In general, hazards associated with faulting and seismic activity include ground surface rupture, strong ground motion, and liquefaction. The project site is considered to be in a seismically active area; however, the project site is not within a State of California Earthquake Fault Zone (formally

known as Alquist-Priolo Special Studies Zone). The nearest active faults to the project site are Rose Canyon Fault Zone (RCFZ) which is located approximately four miles west of the site.

Earth units within the project site consist of fill, topsoil/colluviums, alluvium and formation earth materials of very old paralic deposits (formerly designated the Lindavista Formation), the Mission Valley Formation, and Stadium Conglomerate. Fill soils are expected to underlie portions of the site due to construction of trails, adjacent housing development, and buried utility lines. The fill soil is expected to be shallow and generally composed of locally derived, reworked sand, silt, and gravel. Topsoil consists of reddish brown and brown, silty fine to medium sand and gravel and is located across the proposed site over most of the canyon slopes.

Currently, the existing informal trail is subject to extensive erosion and further contributes to the erosional process. Continued use of the existing trail is not sustainable.

Discussion

a.i) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)

No Impact. The project site is not located within a State of California Earthquake Zone. The project site is not underlain by known or active or potentially active faults (i.e., faults that exhibit evidence of ground displacement in the last 11,000 years and 2,000,000 years respectively). The closest active fault is the RCFZ, located approximately 4 miles west of the site, but since surface ground rupture along faults is generally limited to linear zone a few feet wide, fault ground rupture at the project site is highly unlikely. Therefore, no impacts would occur, and no mitigation is required.

a.ii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

Less than Significant Impact. As stated above in 3.6(a)(i), the proposed project is not located within an established State of California Earthquake Fault Zone. However, the project site is within a seismically active region and earthquakes in the region could produce strong ground shaking on the project site. Since habitable structures would not be built as part of the proposed project, and onsite activities would be limited to construction and infrequent maintenance of the trail, exposure to substantial adverse effects including the risk of loss, injury, or death involving seismic ground shaking would be highly unlikely. Impacts would be less than significant.

a.iii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Majority of the project site, which includes the side walls of the main canyons and side ravines, is underlain by dense formational materials and therefore not susceptible to liquefaction. Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Soil liquefaction is generally limited to relatively loose, unconsolidated granular soils located below the water table that are subjected to large ground accelerations form earthquake activity. The bottoms of the canyons are underlain by sandy alluvial soils with a shallow groundwater table and may be subject to liquefaction. However, the potential for liquefaction or seismically induced settlement is considered low at the base of the Ruffin Canyon and in the southern portion of the site. Moreover, the only structures proposed within the canyon are proposed to help address erosion and increase trail stability and sustainability. Therefore, the project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure. Impacts would be less than significant.

a.iv) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

Less than Significant with Mitigation Incorporated. Based on the geologic reconnaissance study, indications of deep-seated land sliding have not been mapped or identified underlying the project site. There are several existing shallow surface failures and areas of excessive erosion. Due to the steep terrain along portions of the proposed trail alignment, similar shallow surficial failures are anticipated and such failures may impact portions of the proposed trail. Mitigation is required to address potential shallow surface slope failures and excess erosion. Impacts associated with landslides would be less than significant with mitigation incorporated.

Mitigation Measures

Mitigation Measure MM-GEO-1: Prior to any earthwork activities and after preliminary construction schematics have been prepared, the San Diego Conservancy or the SDRC's designee shall retain a qualified engineering geologist or geotechnical engineer to evaluate the project's construction schematics and design. Depending on the professional recommendation of the qualified engineering geologist or geotechnical engineer, the geotechnical evaluation may require subsurface exploration and laboratory testing to formulate alignment-specific engineering recommendations to ensure the trail alignment does not experience slope failure or excess erosion. Incorporation of the geotechnical recommendations will ensure impacts related to geology and soils would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Construction of the proposed project would require compliance with the Construction General Permit and would require preparation of a Storm Water Pollution Prevention Plan (SWPPP) for the construction phase of the proposed project in accordance with the National Pollutant Discharge Elimination System

(NPDES) General Permit for Storm Water Discharges associated with Construction and Land Disturbance Activities. The SWPPP would list practicable and applicable BMPs in order to prevent erosion during construction. Compliance with the NPDES standards would ensure that no substantial adverse construction related erosion impacts would occur, and impacts would be less than significant. As described below in Section 3.9, *Hydrology and Water Quality*, the proposed project would implement best management practices (BMPs) to minimize the occurrence of soil erosion or loss of topsoil. Therefore, impacts related to soil erosion or the loss of topsoil would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant with Mitigation Incorporated. Refer to discussions in responses 3.6(a)(i) through 32.6(a)(iv). The project site is not located within an area that is subject to liquefaction, although there is evidence of canyon wall erosion and surficial slope failure. Thus, there may be impacts related to surficial surface stability that would require mitigation (See **MM-GEO-1**).

Subsidence occurs when a void is located or created underneath the ground surface causing the surface to collapse. Causes can include, tunnels, wells, covered quarries, and caves beneath a surface. No such conditions exist within the project site.

When operational, the trail would be more sustainable than the existing trail and would improve existing runoff patterns and reduce erosion along the alignment. The proposed project would not expose people to a geologic unit or soil that is unstable, or that would become unstable as a result of the project.

With incorporation of **MM-GEO-1**, impacts would be less than significant.

Mitigation Measures

Incorporate Mitigation Measure **MM-GEO-1**.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than Significant Impact. Soils mapped within the project area and surrounding vicinity include topsoil/colluvium, alluvium, and very old paralic deposits. The geotechnical reconnaissance for the proposed project did not identify any expansive soils on the project site. Therefore, there would be no impact from expansive soils, as defined in Table 119-B of the Uniform Building Code, during development of the proposed project, and mitigation is not required. Impacts would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The project does not propose the use of septic tanks or any alternative wastewater disposal systems. No impact would occur.

3.7 Greenhouse Gas Emissions

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Environmental Setting

Various gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining its surface temperature. Solar radiation enters earth's atmosphere from space, and a portion of the radiation is absorbed by the earth's surface. Earth re-radiates this energy back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. Instead of escaping back into space, this radiation is now retained in the atmosphere, and results in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), chlorofluorocarbons (CFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Much of the scientific literature on GHGs suggests that human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of earth's climate, known as global climate change or global warming. While there is some debate regarding this issue, it is unlikely that global climate change of the past 50 years can be explained without the contribution from human activities.

In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished by enforcing a statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs the California Air Resources Board (ARB) to develop and implement regulations to reduce statewide GHG emissions.

Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. As discussed in Section 3.3, construction and operation of the proposed project would not lead to a substantial increase in emissions. Due to the steep terrain and limited access, construction will be accomplished primarily through the use of hand tools (powered and un-powered) and small construction equipment, minimizing exhaust emissions of GHGs. Construction-generated exhaust emissions, if any, would be temporary and short-term in that they would only occur during the construction period; they would not continue on an ongoing basis year after year throughout the operational life of the project, as is the case with large stationary-source facilities or for the operation of most land use developments. Operation of the trail would not differ much from existing conditions, which already supports an unofficial trail system; therefore, there would be minimal increase in operational emissions. The trails would improve accessibility and connectivity for the residential communities and would encourage the use of alternate modes of transportation such as walking and biking. Therefore, the project's impact related to generation of GHG emissions would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The proposed project would not lead to a substantial increase in GHG emissions and is not anticipated to conflict with applicable GHG plans, policies, or regulations. State Assembly Bill 32 (AB 32) requires that CARB, in coordination with state agencies, adopt regulations to require the reporting and verification of statewide GHG emissions and monitor and enforce compliance with the program. State Senate Bill 375 (SB 375) requires the reduction of GHG emissions by discouraging sprawl development and dependence on car travel. SB 375 assists in the implementation of AB 32 by integrating land use, regional transportation, and housing planning. Operation of the trails would not differ from existing conditions; therefore, there would be minimal increase in operational emissions. The proposed project would upgrade existing multi-purpose trails that connect the communities of Serra Mesa and Mission Valley. The trails would enhance pedestrian and bicyclist accessibility and connectivity and would encourage use of these alternate modes of transportation. In addition, the proposed project would not generate GHG emissions that would significantly impact the environment. The proposed project would not conflict with AB 32 and no impacts would occur.

3.8 Hazards and Hazardous Materials

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
8. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Environmental Setting

A review of the State Water Resources Control Board (SWRCB) Geotracker database was conducted on January 10, 2013 to determine if existing hazardous materials sites were present within 0.5 mile of the project site. Two hazardous material sites were identified approximately 500 feet to the northeast of the project area and are discussed below:

1. Gramercy Unocal located on 9294 Gramercy Drive is currently listed as an open site with a Leaking Underground Storage Tank (LUST). Potential contaminates of concern include, diesel, MTBE, TBA, other fuel oxygenates, and gasoline. The site contains 15 monitoring wells that are analyzed quarterly.

2. Tom Russel Chevron located on 3222 Mission Village Drive is currently listed as an open site with a LUST. The single potential contaminate is gasoline. Soil contamination was detected during the removal of a gasoline underground storage tanks and dispense islands

on June 10, 2004. There are currently 14 monitoring wells at the site. Quarterly monitoring was initiated in March 2007. Semi-annual groundwater monitoring began in 2009.

In addition, a review of the Department of Toxic Substances Control (DTSC) Envirostor database was conducted on January 10, 2013. The Envirostor web site contains a database of all DTSC regulated properties that have undergone or will undergo investigation and/or cleanup actions. No sites were found within the vicinity of the proposed project (0.5 mile from project site).

Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. Construction of the proposed trail would be accomplished mainly with the use of hand tools (powered and unpowered) and only limited quantities of fuel for small construction equipment. Thus, the proposed project's use of hazardous materials would minimal and typical of small gasoline/diesel motor operation, would be over a short period of time, and would be within a limited area. Additionally, the use of hazardous materials and substances during construction would be subject to federal, state, and local health and safety requirements for handling, storage, and disposal.

Operation of the trail would be similar to existing conditions and would not require the use of chemicals that could create a hazard through routine transport, use, or disposal of hazardous materials.

Because the use of hazardous materials would be minimal and temporary, hazards posed to the public or the environment related to the transport, use, or disposal of hazardous materials would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. As discussed above in 3.8(a), the use of hazardous materials would be minimal during construction activities that would last approximately one to two months. There would be an insufficient quantity of hazardous materials on-site to pose a risk to the environment if accidently spilled. Furthermore, use of any hazardous materials during construction would be subject to federal, state, and local health and safety requirements for handling, storage, and disposal. Furthermore, vehicles would not be fueled or maintained on site. Therefore, impacts related to upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. The proposed project site is located in an urban canyon setting and includes an urban walk that would be designated at already existing sidewalks and pedestrian crossings (see **Figure 1-2**). Taft Middle school is located immediately adjacent to the northeastern boundary of the project site. As discussed in Section 3.8(a) and (b), only very small amounts of fuel for small handheld construction equipment and possibly small construction vehicles such as Bobcats would be used. There is no potential for the project to emit significant hazardous emissions, handle hazardous or acutely hazardous materials, substances, or wastes within 0.25 mile of a school. Furthermore, the construction manager would be required to ensure compliance with applicable local, state, and federal regulations and standards related to emissions or handling of hazardous materials. Therefore, hazards and hazardous material impacts on schools would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

No Impact. The project site is not listed as a hazardous materials site as defined by Government Code Section 65962.5 and review of the hazardous materials databases maintained by SWRCB and DTSC did not identify any hazardous materials sites within the project site. Therefore, the proposed project would not create a significant hazard to the public or the environment. No impacts would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Less than Significant Impact. The nearest public airport is Montgomery Field, located approximately 1 mile north of the project area. Additionally, the proposed project is within the designated Montgomery Field Airport Land Use Compatibility Plan (ALUCP) Review Area 1 as a location where noise and safety concerns may necessitate limitations on the types of land use actions. However, because the proposed project would not cause a significant gathering of people and would not build habitable structures, people residing or working in the area would not be exposed to a safety hazard as a result of the proposed project. Therefore, the project is consistent with the ALUCP. Impacts would be less than significant.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed project is not located within the vicinity of a private airstrip. The nearest private airstrip is Marine Corps Air Station Miramar (MCAS Miramar), formerly Naval Air Station (NAS) located approximately five miles north of the project site. Moreover, the project site is no located within the military's flight path. No airstrip-related hazard impacts would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed project would be located in an existing urban canyon and no adopted emergency response plan or emergency evacuation plan directly applies to the project site. Furthermore, the proposed project would not interfere with emergency response or evacuation since emergency evacuation since the project would enhance accessibility to the surrounding area by improving connections between Serra Mesa and Mission Valley. Therefore, no impacts related to an emergency response or evacuation plan would occur.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than Significant Impact. The development of the proposed project would not increase the potential for wildland fires or expose people or structures to a significant risk of loss, injury, or death involving wildland fires. According to the California Department of Forestry and Fire Protection (CalFire), San Diego County Fire Hazards Severity Zone Maps for the State and Local Responsible Areas, the proposed project site is "unzoned" and is not considered to be located in a fire hazard zone. The project site is open space and conservation area but is surrounded by single-family residential land uses on all sides. Moreover, the proposed project would not substantially change the existing use, but would realign and improve the trail to make it more sustainable and improve accessibility. Nothing specific to the proposed project would increase the risk of wildfires. Therefore, the proposed project would not expose people or structure to a significant risk of loss, injury, or death involving wildland fires. As such, impacts would be less than significant.

3.9 Hydrology and Water Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
9. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Environmental Setting

The project site is an urban canyon and urban walk setting that is surrounded primarily by single-family residential land uses with commercial uses along the southern boundary (i.e. Fenton Marketplace) (see **Figure 1-1** and **1-2**). The canyon portion of the project site consists of relatively flat mesa tops to steep sloping canyon terrain that slopes down to a narrow canyon bottom. Elevations within the canyon range from 140 feet above sea level (asl) in the southern portions to approximately 400 feet asl in the northern portions. The canyon is characterized by low slopes along the canyon bottoms, between 3-10% in most areas, with steep-sided slopes,

between 50-100% on the canyon walls. The runoff flows south into Mission Valley and San Diego River drainage.

The project area is located within the San Diego River watershed. The watershed has a land area of approximately 440 square miles and includes portions of the cities of San Diego, El Cajon, La Mesa, Poway, and Santee, as well as several unincorporated jurisdictions, making it the second largest watershed in San Diego County. The San Diego River (lower) is an impaired water body under the Section 303 (d) of the Clean Water Act on the project site (RWQCB, 2010). According to the San Diego River Watershed Urban Runoff Management Program Annual Report, prepared by the City of San Diego, priority pollutants of the San Diego River watershed include bacteria indicators, phosphorus, total dissolved liquids (TDS), Low Dissolved Oxygen (DO), and Turbidity.

Discussion

a) Violate any water quality standards or waste discharge requirements?

Less than Significant Impact. The proposed project would not violate any water quality standards or waste discharge requirements. Construction-related soil activities would include some earthwork and use of hand tools and small construction equipment to construct a multi-use trail. The proposed project would disturb up to 1.3 acres of soil (approximately half of which would be temporary) and consequently would prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. The SWPPP would list and implement erosion control, sediment control, materials management, and waste management BMPs in order to minimize water quality impacts during construction. Typical BMPs contained in SWPPPs are designed to minimize all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and to ensure all other activities associated with construction activity are controlled.

Erosion and sediment controls are required by the Construction General Permit to provide effective reduction or elimination of sediment related pollutants in stormwater discharges and authorized non-stormwater discharges from the proposed project. Erosion control, also referred to as soil stabilization, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Erosion control BMPs protects the soil surface by covering and/or binding soil particles. Sediment controls are temporary or permanent structural measures that are intended to complement the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. Erosion and sediment controls BMPs shall be implemented as part of the SWPPP to minimize stormwater contact with soils; and to prevent soils from being discharged off-site.

Materials management control practices consist of implementing procedural and structural BMPs for handling, storing, and using construction materials to prevent the release of those materials into stormwater discharges. The materials may be used continuously, such as fuel for vehicles and equipment, or the materials may be used for a discrete period, such as soil binders for temporary stabilization. Waste management consist of implementing procedural and structural BMPs for handling, storing, and ensuring proper disposal of wastes to prevent the release of those wastes into stormwater discharges. Materials and waste management pollution control BMPs shall be implemented as part of the SWPPP to minimize stormwater contact with construction materials, wastes and service areas; and to prevent materials and wastes from being discharged off-site.

Once operational, the trail would be more sustainable than the existing trail and would improve existing runoff patterns and reduce erosion along the alignment, thereby reducing sediment runoff into downstream water bodies. Consequently, impacts would be less than significant.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

No impact. Groundwater supplies and groundwater recharge would be unaffected with construction and operation of the proposed project. Therefore, there would be no impact.

c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?

Less than Significant Impact. Implementation of the proposed project would not substantially alter the existing drainage pattern of the site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site. No permanent streams or rivers are located within the project site. The proposed project would improve the existing drainage pattern of the site by creating a new trail in certain areas of the proposed alignment and improving the existing trail in other areas. The new trail and improvements to the existing trail segments would be more sustainable than the existing trail by being located along the canyon rim as opposed to down at the canyon bottom where extended trail reaches occur within areas of the canyon wash and erosive stream banks. Materials that would be used in constructing the trail would allow stormwater to drain while not eroding the trail, while the amount of impervious surface area would be similar to existing conditions. On- or offsite erosion during construction would be minimized by implementing BMPs in compliance with the Construction General Permit. Therefore, impacts would be less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

No Impact. Implementation of the proposed project would not substantially alter the existing drainage pattern of the site or area through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. The project area is an urban canyon setting that contains relatively flat mesa tops to steep sloping canyon terrain that end at a narrow canyon floor. No permanent streams or rivers are located within the project site boundaries. As described in response 3.9(c), the proposed project includes improving the existing drainage by creating sustainable trails and helping to reduce the current level of erosion. The amount of impervious surface area would be similar to existing conditions. The proposed project would have a beneficial effect on the rate and amount of surface runoff, and the proposed project would not result in on- or off-site flooding. The proposed project would have no adverse impacts related to flooding hazards.

e) **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Less than Significant Impact. The proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. There are no functioning stormwater drainage systems in the project vicinity. As described in responses 3.9(c) and 3.9(d), the proposed project would not increase impervious surfaces, would not generate additional runoff, and would not change the course of stormwater runoff. Construction activities would include some soil cut and compaction using primarily hand tools and small construction equipment. The proposed project would adhere to all regulations and implement BMPs pursuant to the SWPPP to ensure that construction does not result in sources of pollution in runoff. As a result, the proposed project would not create nor contribute to polluted runoff water or runoff that would exceed the existing drainage capacity of the project area, and impacts would be less than significant.

f) **Otherwise substantially degrade water quality?**

Less than Significant Impact. As discussed in 3.9(a) through 3.9(e), the proposed project would involve short-term construction and minimal maintenance activities that would not substantially degrade water quality due to the implementation of a SWPPP that would implement BMPs. Moreover, once operational, the proposed project would have no adverse effect on existing water quality. Therefore, impacts related to the degradation of water quality would be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. The proposed project is not located within a 100-year flood hazard area as mapped on the Federal Emergency Management Agency (FEMA) 100-year Flood Insurance Rate Map. In addition, the proposed project does not include housing or other habitable structures. Therefore, no impact would occur.

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

No Impact. The proposed project would not place a structure within a 100-year flood hazard area that would impede or redirect flood flows. The proposed project is not located within a 100-year flood hazard area and would not include the construction of structures that would impede or redirect flood flows. Therefore, no impact would occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. The proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. There are no nearby levees or dams and for reasons mentioned in 3.9(g) and 3.9(h), there is no risk of exposing people or structures to a significant risk of loss, injury or death involving flooding. Therefore, there would be no impact.

j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?

No Impact. The proposed project would not expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow. Due to the project site's distance from the Pacific Ocean (approximately 7 miles) and other large bodies, there is no risk of inundation by seiche or tsunami. Furthermore, while portions of the project alignment would be located along the canyon rim, the trail would be designed to avoid any potential for mudflow conditions. This would be achieved by soil compaction and use of rock armored swale crossings designed to stabilize the trail and minimize the potential for mudflow. Therefore, there would be no impact.

3.10 Land Use and Land Use Planning

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
10. LAND USE AND LAND USE PLANNING — Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐

Environmental Setting

The project site is an urban canyon and urban walk setting that is surrounded primarily by single-family residential, open space, and commercial land uses. Taft Middle School is located to the northeast and the Escala residential community and Fenton Marketplace are located to the south. The proposed project would improve or replace existing unofficial trails that are currently in use within the City of San Diego open space areas.

The proposed project is governed by the Serra Mesa Community Plan, part of the City of San Diego's General Plan Land Use Element. The proposed project has the General Plan Land Use designation of Parks, Recreation, and Open Space and identified by the City of San Diego's OC (Open Space and Conservation) zone. The adjoining areas to the project site are designated Park, Open Space, and Recreation and zoned OC and OP (Open Space – Parks). Furthermore, the proposed project site is located within the Multiple Species Conservation Plan (MSCP) Urban Multi-Habitat Planning Area (MHPA). Finally, the project site is located within City-defined Environmentally Sensitive Lands (ESL). The applicable elements of each plan or regulation are explained in detail below.

Local

City of San Diego General Plan, Land Use Element

The City of San Diego land use designation for the proposed project is Park, Open Space, and Recreation. The Park, Open Space, and Recreation designation is described in the Land Use and Community Planning Element as providing for the preservation of the land that has distinctive scenic, natural or cultural features; that contributes to community character and form; or that contains environmentally sensitive resources, applies to land or water areas that are undeveloped, free from development, or developed with very low intensity uses that respect natural environment characteristics and are compatible with the open space use. Open Space may have utility for passive park and recreation use; conservation of land, water, or other natural resources; historic or scenic purposes, visual relief; or landform preservation.

Serra Mesa Community Plan, Environmental Management Element

Community plans represent a significant and vital component of the San Diego General Plan Land Use Element since they contain more detailed land use designations and site-specific policy recommendations than is possible at the City level. The proposed project boundaries fall within the Serra Mesa Community Plan area, and the community plan element that specifically applies to the project site is the Environmental Management Element. The Environmental Management Element sets forth the guidelines dealing with the environment, consistent with managing the physical, biotic and socio-economic environment of the community in the context of the San Diego region to assure improved quality of life, respect environmental constraints and preserve community resources for all residents and succeeding generations.

San Diego Land Development Code (LDC)

The project site is zoned OC according to the City of San Diego's Land Development Code. The purpose of the Open Space zone in the City of San Diego is to protect lands for outdoor recreation, education, and scenic and visual enjoyment; to control urban form and design; and to facilitate the preservation of environmentally sensitive lands. It is intended that the uses permitted in this zone will be limited to aiding the preservation of the natural character of the land.

MSCP Subarea Plan / MHPA

The City of San Diego MSCP is a regional program for the protection of covered special-status plant and wildlife species. Preservation of habitat, as a part of the MSCP, was designed to offset impacts within these areas to any covered plant and animal species. The MSCP Subarea Plan covers 206,124 acres in the MSCP study area under the jurisdiction of the City of San Diego and was adopted by the City Council in March 1997. The Subarea Plan and Implementation Agreement established the conditions under which the City, for the benefit of itself and of private and public landowners and other land development proponents, received incidental take authorization of 85 covered species.

The MHPA stands for Multi-Habitat Planning Area (MHPA), which is the City's planned habitat preserve within the MSCP Subarea. The City's planned MHPA totals 56, 831 acres, with 52,012 acres (90%) targeted for preservation (approximately 30% of the planned regional preserve). Public access is allowed in many areas of the MHPA consistent with species protection and habitat management. Trails (biking, hiking, and/or equestrian uses), passive recreation, bird watching, scientific research, and nature walks are examples of allowable uses in the MHPA that provide opportunities for the public to access and enjoy the MHPA. The City of San Diego provides specific guidance on trail design within the MHPA.

ESL Regulations

The project site is subject to the policies, guidelines, and regulations of the City's MSCP Subarea Plan, the ESL regulations. The purpose of ESL Regulations (Chapter 14, Article 3, Division 1, San Diego Municipal Code) is to protect, preserve and where damaged restore, the environmentally sensitive lands of San Diego and the viability of the species supported by those lands. These regulations are intended to ensure that development occurs in a manner that protects the overall quality of the resources and the natural topographic character of the area, encourages a sensitive form of development, and retains biodiversity and interconnected habitats.

Consultant's Guide to Park Design & Development, Appendix K: Trail Policies and Standards (2010)

This guide provides specific design requirements for trails within City lands and/or that will have oversight by the City's Park and Recreation staff. The guidelines contain instructions on trail criteria such as definitions and classifications as well as detailed trail construction guidance.

Discussion

a) Physically divide an established community?

No Impact. The proposed project is designed with the purpose of linking established communities (i.e. Serra Mesa and Mission Valley). It would be compatible with surrounding land uses and would not divide an established community. No structures or barriers would be developed and construction would be limited to trail and erosion/stability improvements. Therefore, the project would not result in the physical division of an established community and no impact would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. The project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. As discussed under the environmental setting, the project site has a land use designation of Park, Recreation, and Open Space and is zoned as OC. The adjoining areas are designated Park, Open Space, and Recreation and zoned OC and OP (Open Space – Parks).

The proposed project would be consistent with the OC zone because the project would protect and promote the site for outdoor recreation, education, and scenic and visual enjoyment and would facilitate the preservation of environmentally sensitive lands as set forth in the LDC. Additionally, as stated in the environmental setting, the project occurs within the City's designated MHPA; however passive recreation such as public hiking trails is a compatible land use within the MHPA (MSCP, 1997). Moreover, the trail is being designed in accordance with trail construction within the MHPA (e.g. trail widths of up to 48 inches).

The proposed canyon trail would also be consistent with the Serra Mesa Community Plan because it would improve and make official public access trails that would serve the Serra Mesa community. The project has been designed to respect the site's environmental constraints and preserve community resources for all residents and future generations.

Finally, the trail design is based on the City's Consultant's Guide to Park Design & Development, Appendix K: Trail Policies and Standards. The requirements listed in this document have been used to inform the trail design.

Therefore, the project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect and the project's related impact would be less than significant.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Less than Significant Impact. The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. As discussed in the environmental setting, the project area is located within the MHPA, part of the MSCP.

The project is being designed to be fully compliant with the MHPA, including the Land Use Adjacency Guidelines set forth in Section 1.4.3 of the MSCP SAP; the Area Specific Management Directives in Table 3-5 of the MSCP SAP; the City's ESL designation; and City trails specifications. The proposed trail would improve or replace existing informal trails segments with a more sustainable trail to create less environmentally damaging access through Ruffin Canyon and to improve the public's ability to access the canyon. The proposed project adheres to the specific management polices and directives under MSCP Urban Habitat Lands, specifically guideline B16 which discusses the restoration of native vegetation along the San Diego River corridor. Section 3.4, Biological Resources, discusses in detail the potential biological resources impacts.

Therefore, the project would not conflict with any applicable habitat conservation or natural community conservation plan. The project's impacts would be less than significant.

3.11 Mineral Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
11. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Setting

In 1975, the Department of Conservation's California Geological Survey created a program to assist in the protection and development of mineral resources through the land use planning process. This program is mandated by the Surface Mining Reclamation Act of 1975 (SMARA). Local agencies are required to use mineral land classification maps and reports when developing land use plans and when making land use decisions (State of California, 2007). The proposed project is located in the Mineral Resource Zone 2 (MRZ-2) zone. The MRZ-2 are areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. In addition, according to the State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, no oil wells exist on the project site.

Discussion

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The proposed project would improve or replace existing unofficial public access trails and is consistent the Open Space-Conservation zoning designation. Development of the trail would not interfere with the future exploration or extraction of minerals in this area, which could still occur if desired and allowed by current regulations. Furthermore, the proposed project would not affect the condition of minerals on-site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource and no impact would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. Please see 3.11a above. In addition, improving or replacing existing trails would not result in the loss of availability of any locally important mineral resources. The Conservation Element of the City's General Plan identifies San Diego's important mineral resources to include salt, sand, and gravel, all of which have been produced in San Diego for decades. The proposed project is in an area that is designated for the managed production of those mineral resources and State law requires cities to plan for

the beneficial management of these valuable mineral resources; construction and operation of the trail would not preclude the ability to mine the site at a future date. No impacts on locally or important mineral resources are anticipated from project construction or implementation.

3.12 Noise

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
12. NOISE — Would the project:				
a) Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☒
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Setting

Noise is defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level), which is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. Pressure waves traveling through air exert a force registered by the human ear as sound.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA).

Noise sensitive land uses in the vicinity of the proposed project site include single family residential developments surrounding the area. The existing noise environment in the urban canyon portion of the project area is primarily from roadway noise along Gramercy Road, with occasional or limited noise produced by residential land uses and wildlife from the surrounding open space habitat. The proposed project would be governed by the City of San Diego Noise Element, regulations set forth in the City of San Diego Noise Abatement and Control Ordinance,

the City of San Diego's CEQA Significance Thresholds, and the Montgomery Airfield Airport Land Use Compatibility Plan. Each of these documents is further described in detail below.

City of San Diego Noise Element

The City of San Diego addresses noise in the Noise Element of its General Plan and in the City's Municipal Code. The Noise Element of the City of San Diego General Plan states that the CNEL is the predominant rating scale for land use compatibility. The Noise Element limits future residential uses within an airport influence area (AIA) to areas exposed to aircraft noise levels of 65 dBA CNEL and lower. Within the Noise Element, the City incorporates the goal of minimal exposure to residential and other noise-sensitive land uses to excessive construction, refuse vehicles, sweeper-related noise and public noise. One of the City's noise policies is to implement limits on the hours of operation for non-emergency construction and refuse vehicle and parking lot sweeper activity in residential areas and areas abutting residential areas and limits on excessive public noises that a person could reasonably consider disturbing and or annoying in residential areas and areas abutting residential areas (City of San Diego, 2008).

City of San Diego Noise Abatement and Control Ordinance

Chapter 5 Article 9.5 of the City of San Diego Municipal Code addresses Noise Abatement and Control. The controls identified in the code relate to lot-line noise associated with noise produced on a property and noise associated with motor vehicles, watercraft, construction noise, refuse vehicles and parking lot sweepers. Noise from aircraft is not regulated by the City of San Diego. The City of San Diego Municipal Code noise regulations establish general sound level standards for specific land uses/zoning (Section 59.5.0401). Table 5.13-2 summarizes the City Noise Ordinance.

City of San Diego CEQA Significance Thresholds

The City has developed CEQA Significance Thresholds (updated January 2011) for determining the compatibility of land uses based on noise levels. These noise compatibility factors are shown in Table K-4 of the CEQA Significance Thresholds. The project site is most similar to nature preserves, which identifies compatible land use noises up to 60 dBA CNEL.

Montgomery Field Airport Land Use Compatibility Plan

The San Diego County Regional Airport Authority (SDCRAA) Board is the designated Airport Land Use Commission (ALUC) for San Diego County. The SDCRAA Board adopted an airport land use compatibility plan (ALUCP) for Montgomery Field in January 2010. Table III-1 of the Montgomery Field ALUCP specify that 75 dB CNEL (with conditions) is the maximum acceptable level of aircraft noise for nature preserves. As shown in Exhibit III-1 of the Montgomery Field ALUCP , the project site is not within the noise contour map of 60 dBA CNEL or greater (i.e. noise from aircraft is less than 60 dBA CNEL at the project site).

Discussion

a) Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. The proposed project would not result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. According to the City's Noise Abatement and Control Ordinance, construction activities near existing noise sensitive uses located in the City of San Diego are limited to the hours of 7:00 A.M. to 7:00 P.M., Monday through Saturday.

Due to the limited amount of soil movement and steep elevations, construction of the proposed project would be conducted primarily with the use of hand tools such as digging and transfer shovels, pick mattocks, loopers, and rakes as well as small, engine-operated construction equipment. Noise from heavy trucks (e.g. haul trucks) or other heavy machinery would not occur as there would be no need for such equipment. It is reasonable to assume that trail use would see a rise, but noise related to occasional hikers or bicyclists would be minimal and infrequent. As a result, the proposed project would not generate noise levels in excess of adopted standards such as the City's Land Use Compatibility Guidelines from the Noise Element of the General Plan and the City's Noise Abatement and Control Ordinance. Consequently, noise impacts would be less than significant.

b) **Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?**

Less than Significant Impact. Proposed project construction would not include the use of construction equipment that would generate excessive groundborne vibration or groundborne noise levels. Due to the minimal amount of soil movement and steep elevations, construction of the proposed project would primarily include the use of hand tools such as digging and transfer shovels, pick mattocks, loopers, and rakes as well as small, engine-operated construction equipment. The small construction and accessory vehicles would not generate substantial groundborne vibration from activities on the soil surface of the project area. Due to minimal construction efforts, the sensitive receptors within the proximity of the project area, the single family residences, would not be significantly impacted. Furthermore, operation of the existing nature trail would not generate groundborne vibrations or groundborne noise levels. Therefore, impacts related to groundborne vibration and noise would be less than significant.

c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. Construction noise would be short-term (less than 2 months), temporary, and would not result in a permanent increase in ambient noise levels. At the end of

construction, the trail would require only occasional onsite maintenance, which would be done using hand tools, and would not create a permanent increase in ambient noise levels. Therefore, no impact related to permanent increases in noise from the proposed project would occur.

d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. Noise impacts associated with the proposed project construction would not result in substantial temporary or periodic increases in ambient noise levels. Construction noise would result in a minimal increase over the existing noise environment and noise would dissipate rapidly with distance from the canyon source. The primary use of hand tools and small, engine-operated equipment in the trail improvements and construction would mean noise levels would not increase substantially over the existing condition. Furthermore, construction would be limited to the hours between 7A.M. and 7P.M, ensuring construction noise would not occur during the more noise sensitive evening, night, and early morning hours. Therefore, construction related noise would be less than significant.

e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?

No Impact. As stated in the Environmental Setting above, the proposed project is within the designated Montgomery Field Airport Land Use Compatibility Plan Review Area 1 as a location where noise and safety concerns may necessitate limitations on the types of land use actions. However, because the proposed project would not cause a significant gathering of people and would not build habitable structures, people residing or working in the area would not be exposed to excessive noise levels as a result of this project. No impact would occur.

f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project is not located within the vicinity of a private airstrip. As previously mentioned in the Environmental Setting, the proposed operational activities would be similar to those that currently exist onsite and would not impact air traffic patterns. No impact would occur.

3.13 Population and Housing

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
13. POPULATION AND HOUSING — Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental Setting

The proposed project area is located within the Serra Mesa Community planning area. Between 1955 and 1970 the planning area experienced a growth in population from 3,835 to 27,269 residents. However, from 1970 to 1998, the population in the planning area leveled off and slightly declined from 25,182 to 24,400 residents. The majority of the Serra Mesa Community is single-family residential uses. The Community Plan identifies 21 acres of land, majority located adjacent to environmentally sensitive lands suitable for new housing (Serra Mesa Community Plan, 2000). The proposed project site would be located on ESL located adjacent to single-family residential uses.

Discussion

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. The proposed project does not include housing or commercial development that would directly affect the number of residents or employees in the area and would not contribute to the creation of additional housing or jobs in the Serra Mesa Community Plan. Instead, the proposed project would provide an improved trail for residents and visitors to San Diego. Consequently, the proposed project would not directly or indirectly induce growth or remove an obstacle to growth as the proposed project would be implemented to meet demands of the existing population that would occur based on the City's approved build-out and growth control policies. The impact related to the proposed project's potential to induce population growth is less than significant.

b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?

No Impact. The project area is an existing urban canyon. The proposed project does not involve the construction or demolition of housing. Therefore, the proposed project would not displace people or housing, and there would be no impact.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would not displace a substantial number of people as no residents are located on the project site. Therefore, no impact would occur.

3.14 Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Environmental Setting

Public services available at or within the vicinity of the project site include fire and police protection, schools, and parks.

The City's fire protection services are provided by the San Diego Fire-Rescue Department, which operates out of 47 stations (San Diego Fire-Rescue Department, 2013a). The nearest station to the project site is Station 45, which is located in the Qualcomm Stadium Parking Lot, at 9449 Friars Road, and has a response time of 6:40 minutes (San Diego Fire-Rescue Department, 2013b).

Police services in the project vicinity are currently provided by the City of San Diego Police Department Eastern Division which serves the neighborhoods of Serra Mesa, Mission Valley east, and Qualcomm, as well as several other surrounding neighborhoods. The Eastern division is served by one police station, located at 9225 Aero Drive (San Diego Police Department, 2013). The response time for the San Diego Police Department varies depending on the severity of the emergency; a priority E call has an average response time of 6:24 minutes, a priority 1 call has an average response time of 11:36 minutes, a priority 2 call has an average response time of 24:06 minutes, a priority 3 call has an average response time of 63:54 minutes, and a priority 4 call has an average response time of 68:06 minutes (City of San Diego, 2013).

The planning area's public schools area provided by the San Diego Unified School District (SDUSD). SDUSD serves 118 elementary schools, 24 middle schools, and 26 high schools in the City of San Diego (SDUSD, 2013). For information and additional analysis on the City's parks and recreational facilities, please see Section 3.15.

Discussion

a.i) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: Fire protection?

No Impact. The proposed project would improve existing informal public access trail segments and develop new public trail, requiring a short period between 1-2 months of light construction. The construction would be completed by a small crew and will not require road closures or oversized equipment. Therefore, the construction activities, personnel, and equipment would not pose a fire threat or impede emergency response times in the area. Additionally, the proposed project would not introduce new facilities or features that would make the site more susceptible to fire danger. The project would construct a trail within Ruffin Canyon that is as sustainable as possible, and takes into consideration in its design both fire prevention activities and enhanced emergency access to the canyon reducing the potential for future fire. The project would not affect need to construct new or expanded fire facilities, the construction of which could result in environmental impacts. Thus, no impact would result from implementation of the proposed project.

a.ii) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: Police protection?

No Impact. As described above, the construction activities would be light and would not impede emergency response to the site or surrounding areas. Since the project would be an upgrade project that improves the accessibility of the existing public access system, it would not introduce new features that make the area more susceptible to crime. On the contrary, the improved trail, with greater visibility (i.e. brush would be trimmed over the trail alignment), the anticipation of slightly greater use, and regular maintenance would help to discourage any potential for crime. No new or expanded police facilities would be needed to service the project. As a result, implementation of the proposed project would not construct new or expanded police facilities, the construction of which would have an impact on the environment. No impact related to police services would occur.

a.iii) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: Schools?

No Impact. The proposed project involves upgrading an existing public access trail system and would not introduce additional residents to the project area that would require the service of additional schools, the construction of which could have an impact on the environment. No impacts would occur.

a.iv) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: Parks?

No Impact. Please see Section 3.15. The proposed project involves upgrading an existing public access trail system, allowing greater access to open space for residents and visitors to the area. The trails would be regularly maintained to ensure the trail remains safe and brush is sufficiently trimmed from the path. Therefore, the project would not create a demand on existing parks that could result in a physical impact. No adverse impacts to parks would occur.

a.v) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: Other public facilities?

No Impact. The proposed project involves upgrading an existing public access trail system and would not introduce inhabitants to the project area that would require additional public facilities. No impacts would occur.

3.15 Recreation

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
15. RECREATION — Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☒	☐	☒

Environmental Setting

The Serra Mesa Community Plan Parks and Recreation Element identifies neighborhood and regional parks as well as other recreational facilities for public enjoyment. There are two developed neighborhood parks, one partially developed Community Park and three joint-use school/park sites in the Serra Mesa community. Cabrillo Heights Neighborhood Park is on a 13.68-acre site located adjacent to Angier Elementary School and Murray Ridge Neighborhood Park is on an 11.09-acre site located northwest of Murray Ridge Road and Mission Center Road. The partially developed Serra Mesa Community Park is on a 22.55-acre site stretching south from Aero Drive to Village Glen Drive; Wedgeforth Elementary School is located immediately to the west. The 7.40-acre and 5.20-acre joint-use facilities at Fletcher Elementary and Juarez Element Schools address additional park needs for the community.

Discussion

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?

No Impact. The proposed project involves improving an existing informal trail system that is currently used in the open space areas in Ruffin Canyon and would be positioned next to adjoining single family residential uses. The project would help to offset use of existing parks and recreational facilities as it would provide another option for potential users. Other than the open space that the project area lies within and the regulated facilities at Taft Middle School, there are no known recreation facilities within the immediate vicinity of the project area. Consequently, the proposed project would not result in physical deterioration of the open space area or any recreation facilities, and no impact would occur.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less than Significant Impact with Mitigation Incorporated. The proposed project is a proposal to improve an existing recreational amenity (i.e. canyon trail) that would use portions of the current alignment of the existing canyon trail and create a new alignment along the canyon rim away from the canyon bottom. Impacts from the construction and operation of the trail are discussed within this environmental analysis. Mitigable impacts would occur on biological resources and geology/soils, as noted in Sections 3.4 and 3.6 above. Therefore, with the mitigation identified in Section 3.4 and 3.6, the project would have a less than significant impact.

3.16 Transportation and Traffic

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
16. TRANSPORTATION AND TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Environmental Setting

The proposed project area is an urban canyon and urban residential and commercial setting that is located north of I-8 between I-805 and I-15. The proposed project consists of a trail network that would be improved and made more easily accessible to the public. A canyon trail would begin at Gramercy Road and continue south through Ruffin Canyon Open Space Preserve where it would end at the Escala community. In addition, the canyon trail would be connected to urban walks (See Figure 1-2). The urban walks would connect the Serra Mesa community to the Mission Valley community, including Fenton Marketplace, the Mission Valley Library, and the Fenton Parkway trolley station.

A traffic impact study was not prepared for the project because the proposed trail route would not create any new road crossings, vehicle use during construction would be limited and would not impact traffic flow or impede traffic, and the trail upgrade would not change the long-term onsite activities from what currently exists.

Discussion

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all

modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less than Significant Impact. The proposed project would require the use of vehicles during construction to transport a small number of workers to and from the site. Once parked at the site, all of the work onsite would be within the trails and trailheads, away from local roads and would not impact traffic conditions. Once the short-term construction is complete, the onsite operational activities would begin and are expected to be similar to existing conditions. Therefore, the proposed project will not negatively impact the level of service (LOS) or volume-to-capacity (v/c) ratios for the roads in the vicinity of the project site.

Parking, while no longer considered by the CEQA guidelines, can be of concern to communities. This project is designed to improve access between two existing communities. Use of the trail would be primarily for pedestrian and bicycle travel between the communities, local access to shopping, and local access to regional transit in Mission Valley (i.e. the Fenton Parkway Trolley Station). It is highly unlikely that a substantial increase in vehicle trips, and thereby vehicles parking near the site would increase in any substantial manner. It is very likely that parking conditions under the proposed project would be similar to or have slightly more demand than under existing parking conditions. However, there is exenstive on-street parking along Gramercy Drive and at public parking areas around the Fenton Marketplace/Fenton Parkway Trolley Station.

As such, a less-than-significant impact would occur.

b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than Significant Impact. As described above, the proposed project would not substantially impact local traffic conditions; therefore, the project would not conflict with any local congestion management plans or impact the LOS for the roads in the vicinity of the project site. A less-than-significant impact would occur.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project is not located in the immediate vicinity of an airport or private airstrip. The nearest public airport the Montgomery Field Airport located approximately 1.0 mile north of the project site. Project construction would be on the ground and would not alter the existing air traffic patterns, levels, or locations that result

in safety risks. As previously mentioned, the proposed operational activities would be similar to those that currently exist onsite and would not impact air traffic patterns beyond existing conditions. No impact would occur.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. The proposed project would construct new trail alignment and improve part of the existing canyon trail alignment, neither of which is within the immediate vicinity of any surrounding public roadways. Moreover, the portion of the project that is referred to as an "urban walk" is simply a designation of existing pedestrian walkways. No modifications would occur to the urban walk portion of the project with the exception of the introduction of way-finding signage to direct users to the urban canyon trail. The proposed project would not alter existing roadways nor include any hazardous design features such as sharp curves or dangerous intersections. No incompatible uses such as farm equipment or construction equipment are proposed to be onsite permanently. As such, a less than significant impact would occur.

e) Result in inadequate emergency access?

No Impact. Construction activities would be contained within the project site, outside of public roadways, and are not anticipated to interfere with traffic flow or emergency response access to the project area. As previously mentioned, operational activities are expected to be similar to current onsite activities and would not impact emergency access beyond existing conditions. No impact would occur.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less than Significant Impact. The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation. Rather, these trails would enhance pedestrian and cyclist accessibility to the two communities during operation. While the long-term purpose of the project would be beneficial to pedestrians and cyclists, portions of the trails may be closed for short periods during construction. The trail closures would temporarily affect pedestrians and bikers who currently use the trail, but would be short-term (less than 2 months) and the overall impact would be less than significant.

3.17 Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
17. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Environmental Setting

The project site is in an urban canyon setting, surrounded by commercial and residential development which has an established utility infrastructure; however, no utility service (gas, electricity, sewer, water, or solid waste pickup) is currently offered within the canyon. Moreover, no functioning storm drain system or erosion control is provided within the project site.

The City of San Diego, including development surrounding the site, receives gas and electricity services from San Diego Gas & Electric (SDG&E); water and wastewater services from the San Diego Public Utilities Department; and solid waste is provided by the City of San Diego and sent to the Miramar Landfill. This landfill is operated by the City of San Diego and is located approximately 3 miles north of the project site at 5180 Convoy Street. Approximately 3,900 tons of waste is accepted on weekdays (lesser amounts on weekends) and the landfill is expected to operate until 2022. The landfill had a remaining capacity of 16,473,000 cy as of July 30, 2007 (CAlRecycle, 2011c). The estimated closure date is 2022 (Metropolitan Airport Draft EIR, 2012).

Discussion

a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. None of the construction activities onsite would generate wastewater that would conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB). Construction workers would have access to portable toilets that would be taken off site and the wastewater disposed of in at an approved facility. Moreover, because of the small amount of earthwork and the use of hand tools and small construction equipment to move the soil, watering of the soil would be minimal. Furthermore, in accordance with City and RWQCB requirements, the project would prepare a Water Pollution Control Plan to ensure all runoff created during construction would be handled in accordance with City and RWQCB specifications.

Similarly, operation and maintenance of the Proposed Project would not generate wastewater. With the exception of the occasional trail maintenance, no full time operations and maintenance staff would be present onsite. Neither the project's unmanned operations, nor the maintenance crew repair visits are expected to generate wastewater or require the use of wastewater treatment facilities. Consequently, the project would not conflict with wastewater treatment requirements of the San Diego RWQCB and no impact would occur.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. As stated above, the project would not require wastewater treatment during the construction and operation phases of the project; therefore, the project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. As such, no impacts would occur.

c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. The project site is undeveloped with existing unofficial hiking trails with no functioning stormwater drainage infrastructure. The existing trails would be improved to better handle stormwater runoff by using compacted soil and rock armored swale crossings. A retaining wall soldier pile with timber lagging would be installed near the upper portion of the canyon trail to provide an Americans with Disabilities Act (ADA) accessible overlook. Only a minimal amount of soil movement will be required during construction, and wherever possible, the trails would follow a curvilinear alignment and traverse slopes nearly parallel to the contour lines. By following the natural terrain of the land and minimizing the soil movement, the proposed project would not adversely alter the site's existing stormwater drainage conditions, but would be an improvement over existing conditions. The construction of these improvements would be limited to hand tools and small construction vehicles suitable for narrow and steep terrain. Impacts to biological resources associated with these improvements are discussed under the Section 3.4, *Biological Resources*, above. No

significant and unavoidable impacts would be created by the construction and implementation of the proposed erosion control features. Therefore, the proposed project would result in less than significant impacts related to new or expanded drainage facilities.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. Only small amounts of water would be provided onsite during construction of the proposed project for worker consumption and possibly for some construction uses. No water would be used during project operation. Therefore, no additional water would be withdrawn from existing entitlements or resources as a result of the project, and the site would maintain current conditions. No impact would occur.

e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. As described previously under the responses to questions 3.17a and 3.17b, construction and operation of the Proposed Project would not generate wastewater. Therefore, the Proposed Project would not affect wastewater treatment capacity.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than Significant Impact. The project's solid waste disposal needs would be provided by the Miramar landfill in San Diego. During construction, trash would only be created by worker lunches, and workers would collect their trash and dispose of it in an offsite receptacle. During operation, waste cans would be available at the trail heads, and trash would be collected by the City of San Diego. The trash created by workers and visitors on site would be minimal and solid waste generated during project operation would be similar to the amount currently generated. The Miramar landfill would be able to accommodate the solid waste from the site without having to expand the facility. Impacts from the proposed project would be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. Construction and operation of the proposed project would result in minimal solid waste that would consist mainly of consumer food and beverage packaging generated by construction workers and trail users. Waste receptacles would be provided at the trail heads, emptied regularly, and hauled offsite to the Miramar landfill. Therefore, the project would be in compliance with federal, state, and local statues related to solid waste. No impact would occur.

3.18 Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
18. MANDATORY FINDINGS OF SIGNIFICANCE — Would the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) **Less than Significant Impact with Mitigation Incorporated.** As discussed in the Biological Resources section above, the proposed project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in the Cultural Resources section above, the proposed project would not eliminate important examples of the major periods of California history or prehistory. The proposed project would incorporate mitigation measures related to biological resource as described in Section 3.4 to reduce impacts related to the proposed project. Therefore, impacts would be less than significant with the incorporation of mitigation measures.

b) **Less than Significant Impact.** The potential project specific impacts of the proposed project (as described throughout this IS/MND) would occur during project construction, which is anticipated to last approximately one to two months. The City of San Diego was contacted in an effort to identify all known projects near the proposed project and within the Serra Mesa community. No current or future projects were identified (Pers. Comm. Sysmanski, 2013). Therefore, there are no other known construction projects planned for the project vicinity that could result in significant cumulative impacts during construction. The project's incremental contribution to cumulative impacts would be less than considerable and less than significant.

c) **Less Than Significant with Mitigation Incorporated.** Based on the analysis above, the proposed project would have potentially significant environmental effects on biological

resources and geology/soils that could cause substantial adverse effects on human beings, either directly or indirectly. However, implementation of mitigation measures as provided within each of these resource topic sections of this environmental checklist would reduce project-related significant impacts to less-than-significant levels. Therefore, after implementation of mitigation measures, the proposed project would result in a less-than-significant environmental impact to human beings.

SECTION 4
References, Acronyms, and Report Preparers

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4.2 Acronyms

MSL	mean sea level
AIA	Airport influence area
ALUC	Airport Land Use Commission
APE	Area of potential effect
dBA	A-weighted decibels
BMPs	Best management practices

CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CDMG	California Division of Mines and Geology
CEQA	California Environmental Quality Act
CNPS	California Native Plant Society
CRHR	California Register of Historical Resources
CO2	Carbon dioxide
CO	Carbon monoxide
CFCs	ChlorofluoroCarbons
City	City of San Diego
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
dB	Decibels
DTSC	Department of Toxic Substances Control
ESL	Environmentally Sensitive Lands
FMMP	Farmland Mapping and Monitoring Program
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
GHGs	Greenhouse gases
HFCs	Hydrofluorocarbons
LUST	Leaking Underground Storage Tank
LOS	Level of service
DO	Low Dissolved Oxygen
MCAS Miramar	Marine Corps Air Station Miramar
CH4	Methane
MRZ-2	Mineral Resource Zone 2
MHPA	Multi-Habitat Planning Area

MSCP	Multiple Species Conservation Plan
NAAQS	National Ambient Air Quality Standards
NRHP	National Register of Historic Places
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Program
CNDDB	Natural Diversity Database
NAS	Naval Air Station
N2O	Nitrous oxide
OC	Open Space – Conservation
OP	Open Space – Parks
PM10	Particulate matter with an aerodynamic diameter of 10 micrometers or less
PM2.5	Particulate matter with an aerodynamic diameter of 2.5 micrometers or less
PFCs	Perfluorocarbons
RAQS	Regional Air Quality Strategy
RWQCB	Regional Water Quality Control Board
RCFZ	Rose Canyon Fault Zone
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDCRAA	San Diego County Regional Airport Authority
SDG&E	San Diego Gas & Electric's
SDMC	San Diego Municipal Code
SDRC	San Diego River Conservancy
SDUSD	San Diego Unified School District
SCIC	South Coastal Information Center
SCIC	South Coastal Information Center
AB32	State Assembly Bill 32
SIP	State Implementation Plan

SWRCB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
CDC	State of California Department of Conservation
SB 375	State Senate Bill 375
SF6	Sulfur hexafluoride
SMARA	Surface Mining Reclamation Act
CalFire	the California Department of Forestry and Fire Protection
SCC	The State Coastal Conservancy
TDS	Total dissolved liquids
v/c	Volume-to-capacity

4.3 Report Preparers

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APPENDIX A
Biological Technical Report

ESA

Draft

SAN DIEGO RIVER
RUFFIN CANYON TRAIL & URBAN WALK PROJECT

2013 Biology Survey Report

Prepared for
San Diego River Conservancy

March 2013

ESA

Draft

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EXECUTIVE SUMMARY

San Diego River Ruffin Canyon Trail & Urban Walk Project

2013 Biology Survey Report

This report presents the methodology and findings of an in-depth sensitive species habitat assessment and focused survey effort conducted for the San Diego River Tributary Canyons Project (Study Area) located in the City of San Diego, San Diego County, California. The existing conditions in the report focus on documenting biological resources present or potentially present Study Area subject to Federal and/or State regulation, and local laws, rules, and regulations, including the California Environmental Quality Act (CEQA). Impacts to these resources are only evaluated in this report for the proposed multi-use trail alignment in Ruffin Canyon (Project).

In addition to characterizing the baseline natural resource conditions of the Study Area, initial habitat assessments for eighteen (18) Federal/State-listed floral and faunal species was conducted. No Federal or State-listed threatened or endangered plant species were observed within the Study Area; however, thirteen (13) plant species of interest to the California Native Plant Society (CNPS) were detected. Of those 13 species, only two (2) were observed near the proposed Project alignment: San Diego viguiera (*Bahiopsis laciniata*) and San Diego barrel cactus (*Ferocactus viridescens*).

Marginal to low quality habitat for the least Bell's vireo was detected in the Study Area within the riparian scrub, but no suitable breeding habitat for the southwestern willow flycatcher was documented. Therefore, focused surveys for the least Bell's vireo and southwestern willow flycatcher were not conducted.

Suitable high quality habitat for the coastal California gnatcatcher was detected in the Study Area within the coastal sage scrub. Therefore, focused United States Fish and Wildlife Service (USFWS) protocol coastal California gnatcatcher surveys were conducted throughout the Study Area within all suitable habitats. Five (5) pairs and a single (1) male were detected during the spring 2012 focused survey/monitoring efforts. Two (2) of those pairs were detected near the proposed Project alignment. All suitable habitats are expected to be utilized for foraging, breeding, and movement within the Study Area.

In addition to conducting focused surveys for federal/state listed species, all special-status plants/wildlife, and raptor nests were recorded and mapped during the Project surveys. Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) is considered a Species of Special Concern (SSC) by the state (and also covered under the Multiple Species Conservation Program [MSCP] and protected by the federal Migratory Bird Treaty Act [MBTA]), and although the species was not observed during the biological surveys within the Study Area, there is still potential for the species to utilize the large patches of cacti found within the Project alignment for nesting.

The Study Area contains several interconnected, unvegetated braided drainages. The Jurisdictional Determination and Wetland Delineation conducted within the Study Area revealed the presence of 0.063 acre of state and federal jurisdictional resources within the Project footprint. Of the 0.063 acre, all was determined to be non-wetland waters of the U.S. under the jurisdiction of USACE, and riparian habitats under the jurisdiction of the CDFW, RWQCB, and the City. No federal wetlands were determined to be present within the Project footprint. Impacts will be mitigated through onsite habitat creation/restoration at a 2:1 ratio, within the MHPA, and regulatory permits will be obtained from the resource agencies.

The proposed Project will impact 0.368 acre of coastal sage scrub (Tier II), 0.521 acre of mixed chaparral (Tier IIIA), 0.007 acre of non-native grassland (Tier IIIB), and 0.292 acre of disturbed land and ornamental vegetation (Tier IV). Impacts to the MSCP Tier II-IIIB habitats will be mitigated at a 1:1 ratio ~~through onsite habitat creation and restoration,~~ within the MHPA~~,~~ and at a 2:1 ratio outside of the MHPA through onsite habitat creation/restoration, with the exception of non-native grassland as the impact acreage is less than the 1-acre threshold described by the City Biology Guidelines.

The proposed project will potentially impact costal California gnatcatcher, San Diego barrel cactus, San Diego viguiera, costal cactus wren, western bluebird and several other nesting birds and raptors protected by the MBTA and covered under the MSCP. Mitigation will occur onsite at a 1:1 ratio within the MHPA and at a 2:1 ratio outside the MHPA through habitat creation~~restoration at a 1:1 ratio~~. The mitigation measures presented in this report will reduce impacts these species to a less than significant level.

SAN DIEGO RIVER TRIBUTARY CANYONS PROJECT

2013 Biology Survey Report

1. Introduction

This report presents the methodology and findings of a biological resource study and focused survey efforts conducted for the San Diego River Tributary Canyons project site in the City of San Diego, San Diego County California. For the purposes of this report, the "Study Area" is defined as Ruffin, Sandrock, and Shawn Canyons, because the original trail alignment was planned to traverse these canyon. After further evaluation, however, the Sandrock Canyon trail alignment was removed from the study. Although biological resources are described for the entire Study Area in this report, impacts to these resources are only evaluated for the proposed multi-use trail alignment in Ruffin Canyon (Project).

This Biological Survey Report documents the biological resources present, potentially present, or absent within the Study Area based on the results of focused protocol surveys or lack of suitable habitat observed on site that are subject to Federal and/or State regulation, and local laws, rules, and regulations, including the California Environmental Quality Act (CEQA) and the Natural Communities Conservation Program (NCCP) Act. The report also assesses impacts to these resources and identifies mitigation consistent with the City of San Diego's standards and guidelines.

1.1 Purpose

The scope of the initial sensitive species habitat assessment and focused survey efforts encompasses the comprehensive documentation of existing biological resources within the Study Area in order to assist in project planning and permitting. It incorporates the findings of an extensive literature review, and the results of a series of field investigations conducted throughout the spring and fall of 2012 by biologists having expertise in botany, plant ecology, and invertebrate and vertebrate biology, including mammalogy, ornithology, and herpetology. This documentation conforms to accepted scientific and technical standards, and meets the requirements of United States Fish and Wildlife Service (USFWS) protocols for specific listed species. In accordance with the proposed goals of determining potential direct/indirect impacts to biological resources as a result of the proposed Project activities, the primary focus of this assessment is on those resources considered to be sensitive or regulated by the resource agencies, including the USFWS, U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW) and the Regional Water Quality Control Board (RWQCB).

1.2 Project Location

The approximately 185–acre Study Area is located in the Community of Serra Mesa, City of San Diego, San Diego County, California, which is mapped on the United States Geological Survey (USGS) La Jolla 7.5' quadrangle map. The Study Area consists primarily of Ruffin, Sandrock, and Shawn Canyons within the City of San Diego's Multiple Species Conservation Plan (MSCP) Subarea (City of San Diego MSCP Subarea Plan) and with the MSCP Preserve, the Multi-~~ple~~ Habitat Planning Area (MHPA). The Study Area lies between Gramercy Drive to the north and the SDG&E Mission Control Center facility to the south, which is shown in Figure 1, *Regional Location Map*, and Figure 2, *Study Area Map*.

1.3 Project Description

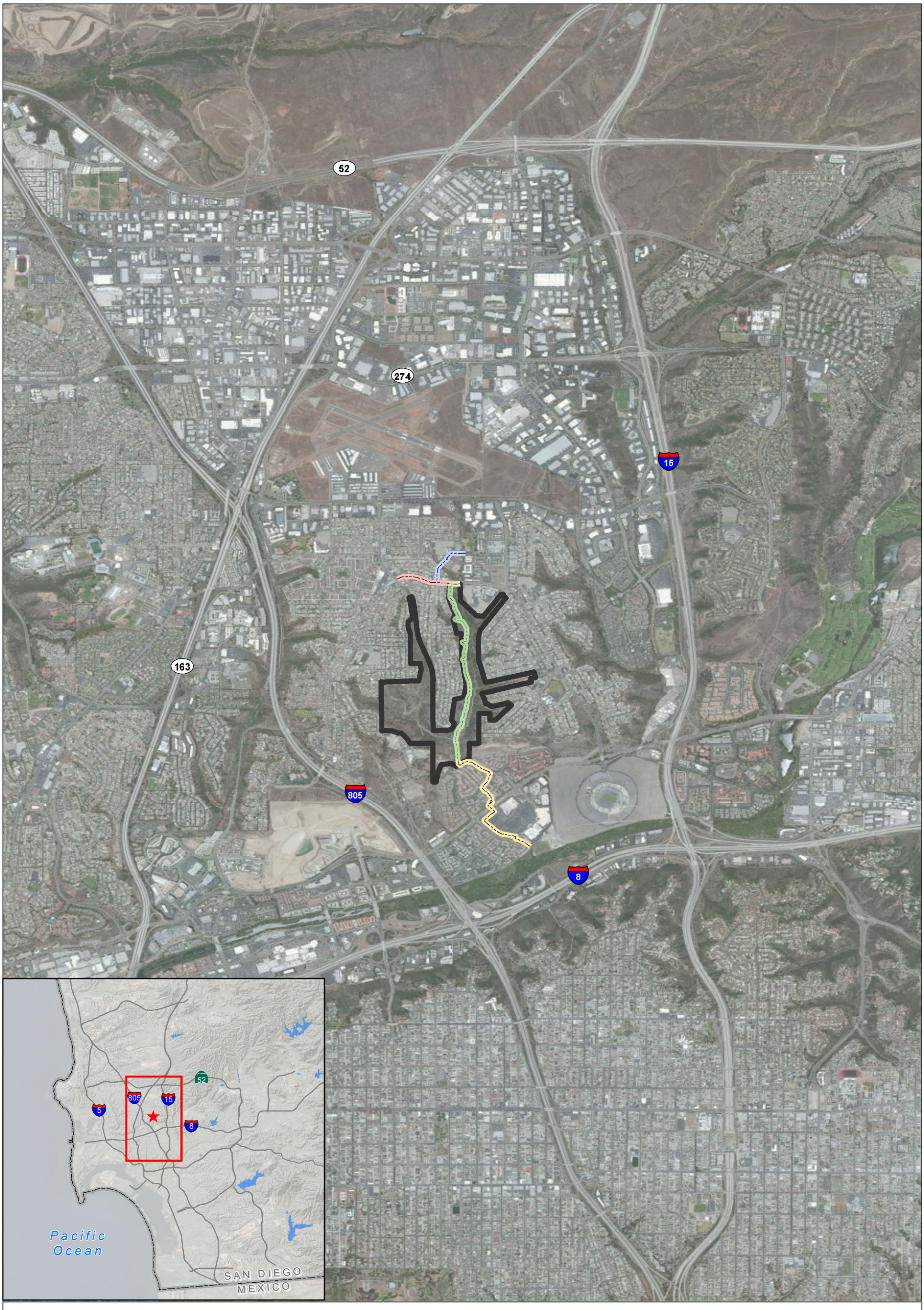
The proposed project would create and improve approximately 1.25 miles (6,600 linear feet) of new, non-motorized public access multi-use trail. The trail is to be constructed to California State Parks and City of San Diego trail standards. It would generally maintain a linear grade of 1%-8%. Where possible the trail would follow a curvilinear alignment and traverse slopes nearly parallel to the contour lines. Trail width would generally be approximately four feet (48 inches) and would consist of a compacted natural earthen surface. Rock armored swale crossings are proposed where trail elevation would need to be raised to match the earthen trail. Retaining wall soldier pile with timber lagging is proposed for two locations: one to support a more gradual slope at Gramercy adjacent to Taft Middle School to make the trail accessible and consistent with Americans with Disabilities Act (ADA) and a second position to construct an accessible overlook that would be positioned approximately 500 feet from the north trailhead located adjacent to Gramercy.

Trailheads (i.e. trail access) would be located at two points, both of which are currently used as access points to the existing trails. Directional information would be located at the Gramercy Drive and Escala canyon entrances in developed areas.

Ruffin Canyon Trail

The northern trailhead and entrance to the Ruffin Canyon Trail would be located along a portion of Gramercy Road immediately west of Taft Middle School. The trail would follow and incorporate an existing trail alignment from the Gramercy Drive sidewalk to the bottom of the first switchback, whereupon it would proceed west several feet, turn south paralleling the residential parcels that line the ridge, traverse a native slope in a gentle descent. The trail reaches the canyon bottom and converges with the two canyon (i.e. Ruffin and Sandrock) drainages where it traverses a small ravine.

The proposed trail would stay within public property boundaries along the west side of Ruffin Canyon and would generally maintain linear grades between 1% and 8%. Moreover, the majority of the trail would traverse the canyon slope at a level nearly parallel to the contour lines. The total length of the Ruffin Canyon Trail would be approximately 6,600 linear feet. Figure 2 provides a detailed view of the Ruffin Canyon Trail alignment.



SOURCE: Bing Imagery

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 1

Project Location

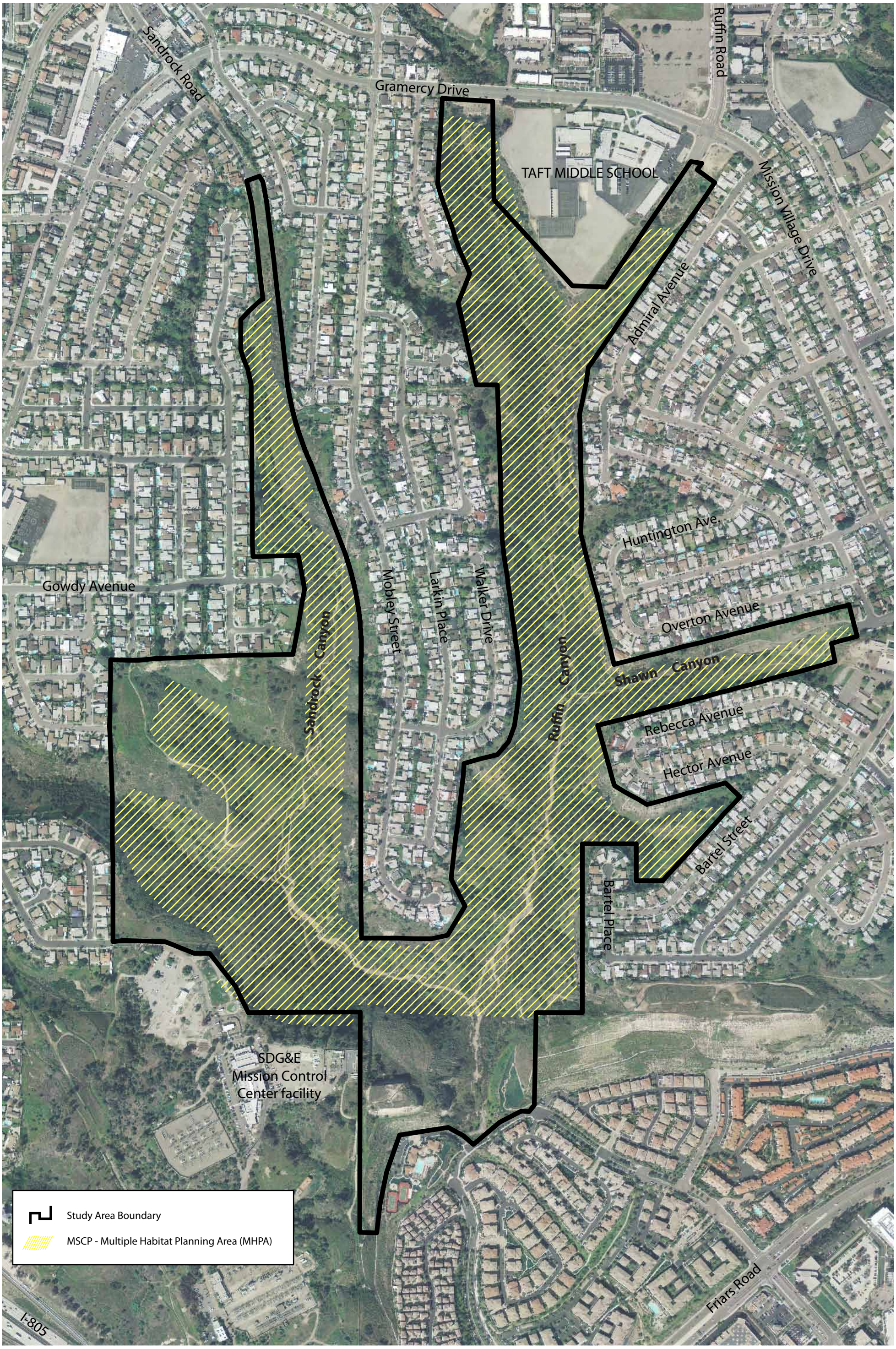


Figure 2 - Study Area Map

San Diego River Tributary Canyons Project
Focused Sensitive Species Surveys

CADRE Environmental

1 inch = 500 feet

Continuing in a southerly direction, the trail would enter the streambed which is located within a public access easement on property owned by the Escala Homeowner's Association. Several two-to-four feet high wooden markers would be driven into the ground outside the streambed to demarcate the trail. At this point, the trail would connect to an existing asphalt ramp linking the canyon bottom to Pompeii Street, Escala's northernmost roadway. Improvements consist of installing directional signage at the existing ramp.

Existing Urban Walk

In addition to the canyon trail, there are two main portions of the trail that are already existing pedestrian pathways, but that would be officially designated "urban walks" as part of the trail system. In the north, the trail begins at the southeast corner of Gramercy Road and Sandrock Drive. The urban walk proceeds along the south sidewalk to the proposed trailhead adjacent to Taft Middle School. The southern urban walk would continue from the asphalt ramp at the southernmost portion of the Ruffin Canyon Trail to the south along an existing City easement within the Escala/Portofino residential community and on to Friar's Road. The urban walk would cross Friar's Road, continue past the west side of Fenton Marketplace to the Mission Valley Library, past the Fenton Parkway Trolley Station, and on to the San Diego Riverfront where it would terminate.

Project Construction

As described above, the Ruffin Canyon Trail improvements would be constructed to California State Parks and City of San Diego trail standards. New trails would be constructed to widths of approximately 48 inches, consistent with the requirements for trails within the MHPA. Certain locations along the trail would require up to 0.75:1 cut slopes. Total grading volume would be approximately 2,100 cubic yards (cy), of which approximately 250 cy would be used to restore the slope below Gramercy Drive and to remove the existing informal trail. The remaining material would be used as backfill at the proposed retaining walls, fill for erosion gullies, topsoil for restoration areas, and broadcast and spread in disturbed areas, or areas dominated by ornamental vegetation such as iceplant, at depths up to three inches. No material will be spread within 25 feet of minor drainages or 50 feet of the main dry wash with the exception of where soil is used for habitat restoration. No soil would be imported or exported.

The City and San Diego Canyonlands are working together in an effort to enhance the biological resources within Ruffin and Shawn Canyons, as funds allow, including invasive removal and restoration which benefits the ecology of the San Diego River downstream of the Tributary Canyons system. Within these previously identified areas, project-related ~~R~~restoration in the Tributary Canyons would include ~~removal of large populations of invasive plant species,~~ restoration of unauthorized trails and disturbed areas associated with these trails. ~~which benefits the ecology of the San Diego River.~~ Restoration areas will be identified for the purpose of impact mitigation and for the purpose of biological resources enhancement. Restoration opportunities exist within Ruffin and Sandrock Canyons in form of disturbed, ornamental and non-native grassland areas, and invasive species within riparian habitats. The distribution of excess soil from trail grading into disturbed and ornamental areas will provide a seedbed for native habitat restoration. The topsoil distribution areas will be seeded with a native upland seed mix (e.g.,

coastal sage scrub) and a restoration plan will be prepared pursuant to City of San Diego guidelines. The trail and restoration areas will be managed and maintained by a 501(c)(3) not-for-profit conservation organization in coordination with the Parks Department Open Space Division under agreement with the City and the San Diego River Conservancy..

Trail tread would be constructed by removing large gravel and rocks from the native material and then re-compacting the native material. Rock armored swale crossings are proposed where trail elevation would need to be raised to match the trail. Retaining wall soldier pile with timber laggings are proposed in two locations to allow for a more gradual descent and to allow ADA accessibility for a portion of the trail.

Construction of the proposed project would be conducted primarily with the use of hand tools (powered and unpowered) such as digging and transfer shovels, pick mattocks, loopers, rakes, and wheel barrels. Small construction equipment, suitable for narrow and steep surroundings may be used for some soil movement; however, construction vehicles would primarily be limited to workers' commute vehicles, which would consist primarily of passenger automobiles and/or light trucks, and small equipment such as a compact excavator and loader. Construction would take place between the hours of 7AM and 7PM and would comply with the City's noise ordinance. Construction is anticipated to start in the third quarter of 2014 with a total construction time of one to two months.

Project Operation

Operation and maintenance activities for the proposed trail project would be minimal. Regular maintenance would be performed on the proposed project to ensure the trail remains intact and does not result in additional erosion. Brush may be maintained to keep the trail free of obstructions. Trail footing would be inspected to ensure the trail remains safe for users. This operation and maintenance activity would occasionally require a negligible number of automobile commute trips to the project site; however, no heavy construction vehicles would access the site for operation and maintenance.

2. Methods and Survey Limitations

2.1 Background Information

Comprehensive biological assessments and focused botanical and wildlife surveys were performed in the Study Area during the spring and fall of 2012 and documented by Cadre Environmental (Cadre Environmental 2012). All determinations regarding the presence or absence of sensitive biological resources on site reflect Cadre Environmental's surveys and conclusions and those consultants (team members) retained by Cadre Environmental for auxiliary surveys on the property. The Cadre Environmental team consists of:

Ruben Ramirez (Cadre Environmental) – Faunal Resources, U.S. Fish and Wildlife Service Endangered Species Permits 10(a)1(A) TE780566-11 and California Department of Fish and Game, State Resident Scientific Collecting Permit, SC No. 002243.

Rick Riefner (Rick Riefner & Associates) – Floral Resources, U.S. Fish and Wildlife Service Endangered Species Permits 10(a)1(A) TE827494-4 and 10(a)1(A) TE009018-4, and the California Department of Fish and Game, State Resident Scientific Collecting Permit, SC No. 003552.

Habitat assessments and/or focused protocol surveys were conducted for eighteen (18) MSCP-covered, and Federal/State-listed, floral and faunal species on site. The list below includes each of these species and their listing status with regards to the MSCP, Federal/State Endangered Species Acts (FESA/CESA), and California Native Plant Society (CNPS)'s California Rare Plant Rank (CRPR) system:

- San Diego thornmint (*Acanthomintha ilicifolia*) – MSCP-Covered, Federal/State endangered, CRPR 1B.1;
- San Diego ambrosia (*Ambrosia pumila*) – MSCP-Covered, Federal endangered, CRPR 1B.1;
- Del Mar manzanita (*Arctostaphylos glandulosa* subsp. *crassifolia*) – MSCP-Covered, Federal endangered, CRPR 1B.1;
- Encinitas baccharis (*Baccharis vanessae*) – MSCP-Covered, Federal threatened/State endangered, CRPR 1B.1;
- thread-leaved brodiaea (*Brodiaea filifolia*) – MSCP-Covered, Federal threatened/State endangered, CRPR 1B.1;
- Orcutt's spineflower (*Chorizanthe orcuttiana*) – MSCP-Covered, Federal/State endangered, CRPR 1B.1;
- short-leaved dudleya (*Dudleya brevifolia*) – MSCP-Covered, State endangered, CRPR 1B.1;
- San Diego buttoncelery (*Eryngium aristulatum* var. *parishii*) – MSCP-Covered, Federal/State endangered, CRPR 1B.1;

- willowy monardella (*Monardella viminea*) – MSCP-Covered, Federal/State endangered, CRPR 1B.1;
- California Orcutt grass (*Orcuttia californica*) – MSCP-Covered, Federal/State endangered, CRPR 1B.1;
- San Diego mesa mint (*Pogogyne abramsii*) – MSCP-Covered, Federal/State endangered, CRPR 1B.1;
- Otay mesa mint (*Pogogyne nudiuscula*) – MSCP-Covered, Federal/State endangered, CRPR 1B.1;
- spreading navarretia (*Navarretia fossalis*) – MSCP-Covered, Federal threatened, CRPR 1B.1;
- San Diego fairy shrimp (*Branchinecta sandiegonensis*) – MSCP-Covered, Federal endangered;
- arroyo toad (*Anaxyrus californicus*) – MSCP-Covered, Federal endangered, State species of special concern;
- southwestern willow flycatcher (*Empidonax traillii extimus*) – MSCP-Covered, Federal/State endangered;
- least Bell's vireo (*Vireo bellii pusillus*) – MSCP-Covered, Federal/State endangered; and
- coastal California gnatcatcher (*Polioptila californica californica*) – MSCP-Covered, Federal threatened/State species of special concern.

ESA used the biological information provided by Cadre to assess the biological resources in the Study Area consistent with City of San Diego Biology Guidelines (City of San Diego ~~2009~~2012) and the City of San Diego MSCP Subarea Plan.

2.2 Literature Search

Existing biological resources within and adjacent to the Study Area were initially investigated through review of pertinent scientific literature. Federal register listings, in conjunction with anticipated Federal listings, protocols, and data provided by the USFWS were reviewed for species potentially occurring within or adjacent to the Study Area. The Natural Diversity Database (CNDDB), a CDFW Natural Heritage Division species account database, was also reviewed regarding the locations of known occurrences of sensitive species and communities found in the vicinity of the property. In addition, numerous regional floral and faunal field guides were utilized in the identification of species and suitable habitats. These and other references are listed in the References Section. Combined, the sources reviewed provided an excellent baseline from which to inventory the biological resources potentially occurring in the area. Other sources of information included consultations with qualified experts in relevant fields, examination of herbarium specimens, and unpublished biological resource letter reports and assessments.

The CNDDB, the State's authoritative inventory of the locations of sensitive species and vegetation communities was consulted regarding potential sensitive resources that could occur on

or in the vicinity of the Study Area (CNDDB 2012). Other CDFW reports and publications consulted include the following:

- Federal/State-Listed Endangered and Threatened Animals of California, January 2011;
- Special Animals, January 2011;
- Endangered, Threatened, and Rare Plants of California, October 2012; and
- Special Vascular Plants and Bryophytes List, October 2012.

2.3 Sensitive Species Habitat Assessments

Initial habitat suitability assessments for eighteen (18) MSCP-covered, and Federal/State-listed, species as outlined in the previous section was conducted during the spring of 2012. During these initial habitat assessment surveys, biologists characterized soils, habitat quality and regional occurrences of sensitive species. Site-specific focused survey programs were also implemented (as noted below) to document the presence/absence of species that have potential to occur on site. General wildlife species, sensitive resources incidentally observed, including listed and other special-status plants/wildlife, and raptor nests were also documented and mapped during all on site survey efforts.

Protocol and survey guidelines utilized to assess habitat suitability for target species, determine presence/absence of sensitive species, and define habitat utilization throughout the Study Area are outlined in the following sections. Accordingly, this study is consistent with accepted scientific and technical standards, and species-specific guideline requirements issued by USFWS, CDFW, the Southern California Coastal Sage Scrub Scientific Review Panel, and CNPS.

Vegetation mapping of the Study Area was conducted by Cadre Environmental. Vegetation community classification is based primarily upon the Holland system (Holland 1986) as adapted to San Diego County by Oberbauer et al. (2008) or otherwise specifically adopted by the San Diego MSCP (City of San Diego 2012).

Plant communities were mapped in the field with the aid of a color aerial photograph in order to accurately define the community types and boundaries. A list of the dominant and associate species of each community was also recorded in the field notes. A complete list of all plants observed on site by Cadre Environmental and Rick Riefner & Associates is provided in Appendix A, *Floral Compendium*. Selected voucher specimens are deposited at the Rancho Santa Ana Botanic Garden herbarium (RSA).

2.4 Special-Status Plant Surveys

A site-specific survey program was developed in order to map and characterize the vegetation communities, prepare a floral compendium, conduct focused surveys to establish presence/absence for special-status plants, and prepare botanical resource maps depicting the sensitive communities and plant species locations observed in the approximately 185-acre Study

Area. The information sources, literature cited, and other pertinent references are listed in References and Literature Cited.

Prior to visiting the site, existing biological resources within and adjacent to the Study Area were investigated through a review of the scientific literature and other pertinent resources available online. Federal register listings, protocols, biological survey guidelines, and databases were reviewed for pertinent information regarding the locations of current and historic occurrences of special-status species in the vicinity of the Study Area, including the City of San Diego MSCP (MSCP 1996) and continuing reports, the CNDDB (CNDDB 2012), CNPS 8th Edition inventory online (CNPS 2012), the Consortium of California Herbaria (CCH 2012), and the San Diego County Plant Atlas (2012). Numerous regional and local floras, soil, and vegetation mapping references were also utilized to identify known species locations and potential habitat types that might support rare plant species (Bowman 1973; Beauchamp 1986; Roberts 1995; Bauder & McMillan 1998; Reiser 2001; Rebman & Simpson 2006; Oberbauer et al. (2008); Roberts & Balk 2008, 2012; MCAS Miramar INRMP 2011; Sproul et al. 2011).

Accordingly, a preliminary list of sixty-eight (68) target special-status species was developed prior to implementing the site-specific survey program, which includes all plant species listed by the CNDDB (2012) for the La Jolla and La Mesa USGS quadrangle maps. However, any special-status plant observed on site, but not included on this list, would also be carefully documented as part of the Project surveys.

After reviewing the available information, Rick Riefner & Associates conducted focused surveys for special-status plants that have potential to occur on site. The Study Area was surveyed on February 13th, 14th, March 26th, April 8th, 9th, May 20th, June 18th, July 29th, and October 10th, 2012, which included complete coverage of the site by walking slowly and methodically across or adjacent to each accessible habitat type. Surveys followed the guidelines adopted by CNPS (2001) and CDFW (2009), but were also performed in a manner consistent with the Guidelines for Conducting Biology Surveys in San Diego County (City of San Diego ~~2002~~2012). These reports and other references are listed in at the end of this report.

Plant communities and rare plant locations were mapped in the field directly on a 200-scale (1"=200') color aerial photograph using visible landmarks and other unique landscape features. A Garmin GPSmap60 hand-held unit was also used to record locations of plants and plant community boundaries.

Field notes were taken that recorded the date, location, all plant species observed, and general habitat characteristics of the area visited each day. All sensitive plant species encountered were mapped on the aerial photograph and/or the GPS locations recorded using the hand-held Garmin unit, and a visual estimation of their population size was documented during the field studies. These data were compiled in Excel spreadsheets using unique identification codes and delivered to Cadre Environmental for preparation of the botanical resource maps.

Plant taxonomy and use of common names in this report generally follows Rebman and Simpson (2006) or recent generic treatments published by The Jepson Manual, Second Edition (Baldwin et al. 2012).

2.5 Coastal California Gnatcatcher Surveys

Following an initial habitat assessment to determine the presence/absence of suitable habitat for the coastal California gnatcatcher, focused USFWS protocol surveys were initiated during the spring of 2012. All surveys were conducted in accordance with the 1997 USFWS guidelines, which stipulate that during the breeding season, a minimum of three (3) surveys shall be conducted with at least seven (7) days between surveys in jurisdictions participating in an NCCP. As outlined in the protocol guidelines, no more than 100 acres were surveyed per day and all surveys were conducted during the morning hours before 12:00 P.M. Surveys were not conducted during extreme weather conditions (i.e., winds exceeding 15 miles per hour, rain, or temperatures in excess of 95ºF). All areas of suitable habitat within the Study Area were surveyed on foot by walking slowly and methodically. Presence of coastal California gnatcatchers were determined by identification of birds by sight and call, using a combination of taped vocalization and "pishing" sounds. The use of taped vocalizations was utilized to elicit a response from birds potentially present on site.

Specifically six (6) surveys were conducted by Ruben Ramirez (Federal Permit 780566-11) on March 22nd, April 4th, 11th, 18th, 25th, and May 6th 2012. The additional surveys served to passively assess the status of previously detected coastal California gnatcatchers. The passive surveys included mapping all areas where habitat utilization, territorial defense, and breeding behavior was observed.

2.6 Wetland Delineation and Jurisdictional Determination

Waters of the United States

The USACE and the Environmental Protection Agency (EPA) have issued a set of guidance documents detailing the process for determining Clean Water Act (CWA) Jurisdiction following the U.S. Supreme Court's decision in Rapanos v. U.S. and Carabell v. U.S. (Rapanos). The EPA and the USACE issued a summary memorandum of the guidance for implementing the Supreme Court's decision in Rapanos that addresses the jurisdiction over waters of the United States under the CWA. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for evaluation by the EPA and the USACE to determine CWA Jurisdiction over the Project site and to complete the "significant nexus test" as detailed in the guidelines.

The significant nexus test includes consideration of hydrologic and ecologic factors. For circumstances such as described in point (B) below, the significant nexus test would take into account physical indicators of flow (evidence of an ordinary high water mark [OHWM]), if a hydrologic connection to a Traditional Navigable Water (TNW) exists, and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a TNW. The USACE and EPA will apply the significant nexus standard to assess the flow characteristics and functions of the tributary drainage to determine if it significantly affects the chemical, physical and biological integrity of downstream TNW. Key points of the Rapanos decision include:

(A) The USACE and EPA will assert jurisdiction over the following waters:

- Traditional navigable waters (TNW).
- Wetlands adjacent to TNW.
- Non-navigable tributaries of TNW that are relatively permanent.
- Where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
- Wetlands that directly abut such tributaries.

(B)The USACE and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- Non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

(C) The USACE and EPA generally will not assert jurisdiction over the following features:

- Swales or erosion features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow).
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

Waters of the State

The State Water Resources Control Board (SWRCB) and the RWQCB (together "Boards") are the principal State agencies with primary responsibility for the coordination and control of water quality. The Boards regulates activities pursuant to Section 401(a)(1) of the federal CWA as well as the Porter Cologne Water Quality Control Act (Porter-Cologne) (Water Code Section 13260). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

In the Porter-Cologne, the Legislature declared that the "State must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the State from degradation..." (California Water Code Section 13000). Porter-Cologne grants the Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. It is important to note that enforcement of the State's water quality requirements is not solely the purview of the Boards and their staff. Other agencies (e.g., California Department of Fish and Wildlife [CDFW]) have the ability to enforce certain water quality provisions in state law.

Under the Streambed Alteration Agreements, CDFW takes jurisdiction over the stream zone which is defined as top of bank or outside extent of riparian vegetation, whichever is the greatest. Within the stream zone, waters of the State are typically delineated to include the streambed to the top of the bank and adjacent areas that would meet any one of the three wetland parameters in the USACE definition (vegetation, hydrology, and/or soils). Whereas federal jurisdiction requires meeting all three parameters, in practice meeting one parameter, or even the presence (rather than dominance) of wetland plants in an area associated with a jurisdictional streambed, would qualify an area as waters of the State. CDFW jurisdiction is not limited to navigable waters or tributaries to navigable waters, however, isolated wetlands and wetlands not associated with a streambed are not subject to CDFW jurisdiction.

City of San Diego Wetlands

Naturally occurring wetland vegetation communities are typically considered by the City to be characteristic of wetland areas. Examples of these wetland vegetation communities include salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodland, riparian scrub and vernal pools. The City focuses on the predominance of hydrophytic plant species as a common element of all wetland vegetation communities. The City considers areas lacking naturally occurring wetland vegetation communities to be wetlands when hydric soil or wetland hydrology are present and past human activities have occurred to remove the historic vegetation, or catastrophic or recurring natural events preclude the establishment of wetland vegetation. Examples of these types of areas and situations include agricultural grading in floodways, dirt roads bisecting vernal pools, channelized streambeds, areas of scour within streambeds, and coastal mudflats and salt pannes that are unvegetated due to tidal duration. Therefore, the City also includes natural flood channels in their definition of wetlands, although these can be unvegetated.

The City does not regulate areas that contain wetland vegetation, soils or hydrology created by human activities in historically non-wetland areas unless they have been delineated as wetlands by the USACE, and/or the CDFW. Examples of these exempted areas include wetland vegetation growing in brow ditches and similar drainage structures outside of natural drainage courses, wastewater treatment ponds, stock watering, desiltation and retention basins, water ponding on landfill surfaces, road ruts created by vehicles and artificially irrigated areas which would revert to uplands if the irrigation ceased.

A wetland delineation and jurisdiction determination within proposed impact areas was performed by ESA wetland biologists Dallas Pugh and Joseph Henry in the Study Area on January 17th and 24th, 2013 in preparation for this report. The purpose of this study was to identify and map the location and extent of the limits of waters of the U.S., including wetlands, with the potential to fall under the jurisdiction of the USACE pursuant to the federal CWA, Section 404 regulatory program. This wetland study also evaluated the extent of waters of the State of California (State) that may fall under the jurisdiction of CDFW pursuant to Section 1602 of the Fish and Game Code of California (Streambed Alteration Agreements), and the RWQCB under the 401 Certification Program or the Porter-Cologne Act regulating waste discharge into waters of the State. Features were also characterized in accordance with the City's wetland definitions.

The U.S. Army Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987) was used as the basis to delineate waters of the U.S., including wetlands within the proposed impact footprint (including Sandrock Canyon). Potential USACE and CDFW jurisdictional areas were also mapped within the entire Study Area; however, mapping was conducted using visual indicators of riparian plant boundaries and Ordinary High Water Mark (OHWM)/streambank; delineation pits were not excavated in any areas that were not proposed for trail improvements.

The definition of growing season and the basis of determining and recording indicators for hydrophytic vegetation, hydric soils, and wetland hydrology was based on the Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Arid West Region (Version 2.0) and A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States: A Delineation Manual (USACE, 2008ab). Both the 1987 USACE Manual and Arid West Supplements were used for the determination and evaluation of any normal circumstances, atypical situations, and problem area wetlands, as needed.

Prior to conducting the field reconnaissance, aerial imagery, as well as soils data, was used to identify potentially jurisdiction areas which required further study. A three-parameter wetland delineation, in accordance with the 1987 USACE Manual and 2008 Arid West Supplement, was conducted at four locations within the Study Area. Two of these sampling points were located where the proposed Project alignment crossed, or came in close proximity to, potentially jurisdictional features. The other two sample points are located upstream in Sandrock Canyon.

The OHWM of channels within the Study Area was determined based on observations of physical evidence of flow that included direct observations of flow, scour marks, and drift lines of debris. The top of the bank was delineated to establish the limits of waters of the State. Non-wetland waters of the U.S. were indicated if one or more USACE parameters were absent. The USACE jurisdictional status of these features was determined by establishing the hydrological connection with USACE jurisdictional waters. For the purpose of this report it is assumed that areas under the jurisdiction of the USACE and CDFW are also under the jurisdiction of the RWQCB and the City.

2.7 Survey Limitations

General biological inventories can be subject to various survey limitations including season, time of day, location, and other factors inherent to the survey site. Both common and uncommon species may not be detected due to seasonal occurrence, variable activity patterns, or other factors such as general probabilities of detection. In addition, annual variations in temperature, rainfall, and food abundance can alter the observation of species within a survey site from season to season or year to year.

For example, visual transects, while adequate to detect many species, are generally not successful in determining the abundance or complete distribution of reptiles that occur at a study site. To compensate for these survey limitations, literature and database (CNDDB and USFWS) reviews as well as previous survey reports from this Project site were conducted to develop a list of

potential special-status species that could occur within the Study Area. The results of these reviews, combined with knowledge of species-specific habitat requirements, known ranges and distributions, substantially reduce the limitations of the findings presented in this report.

Many annuals and geophytes (bulb- and corm-forming species) may fail to germinate, grow, or bloom during sub-optimal rainfall years. Other perennials and shrub species also may not bloom or flower only for short periods of time during drought, making them less conspicuous and more difficult to detect and map. Therefore, plant surveys conducted during adverse weather conditions may not accurately document the presence or absence of some special-status plant species that may occur on a site. Conversely, surveys conducted in an above-average rainfall season would provide optimal conditions for growth and blooming that would aid documentation of sensitive plants. Therefore, it is important to provide rainfall data for the time period when the focused surveys were conducted in order to demonstrate the results of the surveys were not constrained by low precipitation for a project in any given year.

In the City of San Diego (San Diego WSO Airport), approximately 10.17-inches of rainfall is considered an average rainfall year (Western Regional Climate Center; http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7740). Table 1 provides the annual rainfall totals collected from 2009–2012 at the San Diego WSO Airport location.

TABLE 1
RAINFALL DATA, SAN DIEGO WSO AIRPORT, CITY OF SAN DIEGO, CALIFORNIA

Rainfall Season	Rainfall Total (inches)
2012	3.46
2011	9.08
2010	16.26
2009	5.50

Therefore, the 2012 vegetation mapping and focused rare plant survey program was conducted when precipitation was below normal. Accordingly, because of lower than normal rainfall some plant species likely may not have been evident and some plants may not have germinated at all.

Field surveys were also constrained by steep canyon topography, locally dense, nearly impenetrable chaparral vegetation, and limited access along upper canyon slopes owing to private property and home-Project Proponent issues.

Given the extensive past and current general and focused biological resources surveys performed and documented in this report, there are no limitations on the use of these data in determination of significant impacts to biological resources as a result of this Project.

3. Existing Conditions

Exiting conditions within the Study Area include the observations of all biological resources present and a discussion of all sensitive biological resources with potential to occur within the Study Area. Observed species are listed in plant and animal compendiums as a record of species present within the Study Area at the time of the survey (Appendices A and B).

3.1 Regional Context and Surrounding Land Uses

The Study Area is located in the Community of Serra Mesa within the City of San Diego. It consists primarily of Ruffin, Sandrock, and Shawn Canyons within the 'Urban Areas' of the City of San Diego's MSCP Subarea Plan and within the MSCP Preserve, the MHPA. The MSCP was prepared pursuant to the general outline developed by the USFWS and CDFW to meet the requirements of the California NCCP Act of 1992. The Subarea Plan forms the basis for the Implementing Agreement which is the contract between the City and the wildlife agencies (i.e., USFWS and CDFW) that ensures implementation of the plan and thereby allows the City to issue take permits at the local level. The Subarea Plan is also consistent with the MSCP Plan and qualifies as a stand-alone document to implement the City's portion of the MSCP Preserve.

The City MHPA was developed by the City in cooperation with the wildlife agencies (i.e., USFWS and CDFW), property Project Proponents, developers, and environmental groups. The Preserve Design Criteria contained in the MSCP Plan and City Council adopted criteria for the creation of the MHPA were used as guides in the development of the City's MHPA. The MHPA delineates core biological resource areas and corridors targeted for conservation. Within the MHPA, limited development may occur.

The Study Area supports relatively flat mesa tops to steep sloping canyon terrain ranging in elevation from approximately 140 feet (43 m) in the southernmost portion of the property to approximately 400 feet (122 m) above sea level in the northern Study Area. The three prominent canyons that comprise the property, Ruffin, Sandrock, and Shawn Canyons, are characterized by low slopes along the canyon bottoms (3-10 percent in most areas) surrounded by steep-sided slopes (50-100 percent) on the canyon walls (Foothill Associates 2010). With the exception of Taft Middle School to the north and the SDG&E Mission Control Center facility to the south, high-density residential track-home development surrounds the Study Area as shown in Figure 2, *Study Area Map*.

Soils

The Soil Conservation Service (SCS)1 has mapped the following soil types as occurring within and in the general vicinity of the Study Area (Bowman 1973), which includes:

- Olivenhain cobbly loam, 9-30 percent slopes (OhE);
- Olivenhain cobbly loam, 30-50 percent slopes (OhF);
- Gravel Pits (GP);

[1] SCS is now known as the National Resource Conservation Service (NRCS).

- Redding gravelly loam, 2-9 percent slopes (RdC); and
- Redding-Urban land complex, 2-9 percent slopes (RhC).

The Olivenhain series consists of well drained, moderately deep to deep cobbly loams that have a very cobbly clay subsoil. The vegetation in uncultivated areas is mainly chamise, scrub oak, buckwheat, wild oats, soft chess, and cactus.

The Redding series consists of well-drained, undulating to steep gravelly loams that have a gravelly clay subsoil and a hardpan, which formed in old mixed cobbly and gravelly alluvium. The vegetation is mainly chamise, buckwheat, sumac, scrub oak and annual forbs and grasses. The Redding gravelly loam is undulating to gently rolling, and hummocky. The Redding-Urban land complex occurs on marine terraces that have been altered through cut & fill operations for building sites.

No specific description of the Gravel Pits soil mapping unit is provided in the San Diego Soil Survey (Bowman 1973); these soils are expected to be different from the surrounding native substrates due to the likelihood of imported fill that would have been necessary for the development and/or cut & fill operations that are widespread in this residential community. The soil types mapped for the Study Area by the NRCS are depicted in Figure 3, *Soil Associations Map*.

3.2 Vegetation Communities

Although the Study Area is situated within an urban environment, and often highly disturbed, Ruffin, Sandrock, and Shawn Canyons support a rich diversity of native plant communities, including coastal sage scrub, chaparral, native grasslands, riparian scrub, and marsh vegetation. Accordingly, the Study Area supports a rich and diverse flora supporting nearly 200 native plant species (Appendix A).

Although twenty-three (23) habitat types were originally mapped by Cadre Environmental within the Study Area, some of the habitat types were combined into larger tiered "Grassland," "Coastal Sage Scrub," "Chaparral," "Developed/Disturbed," "Wetland," and "Marsh" community designations for consistency with City of San Diego guidelines. As stated by Foothill Associates and indicated in Table 2, Summary of Study Area Vegetation Communities:

> "The City of San Diego's Multiple Species Conservation Plan (MSCP) classifies upland habitat as Tier I, II, IIIA, IIIB or IV. Classification is dependent on rarity and ecological importance. Tier I is the most sensitive, and Tier IV is the least sensitive. Mitigation and permitting for impacts to habitats are based on this tiered system; the higher the tier, the more difficult to permit and mitigate for impacts. The classification for each habitat within the Project area is noted in habitat descriptions provided below" (Foothill Associates 2010).

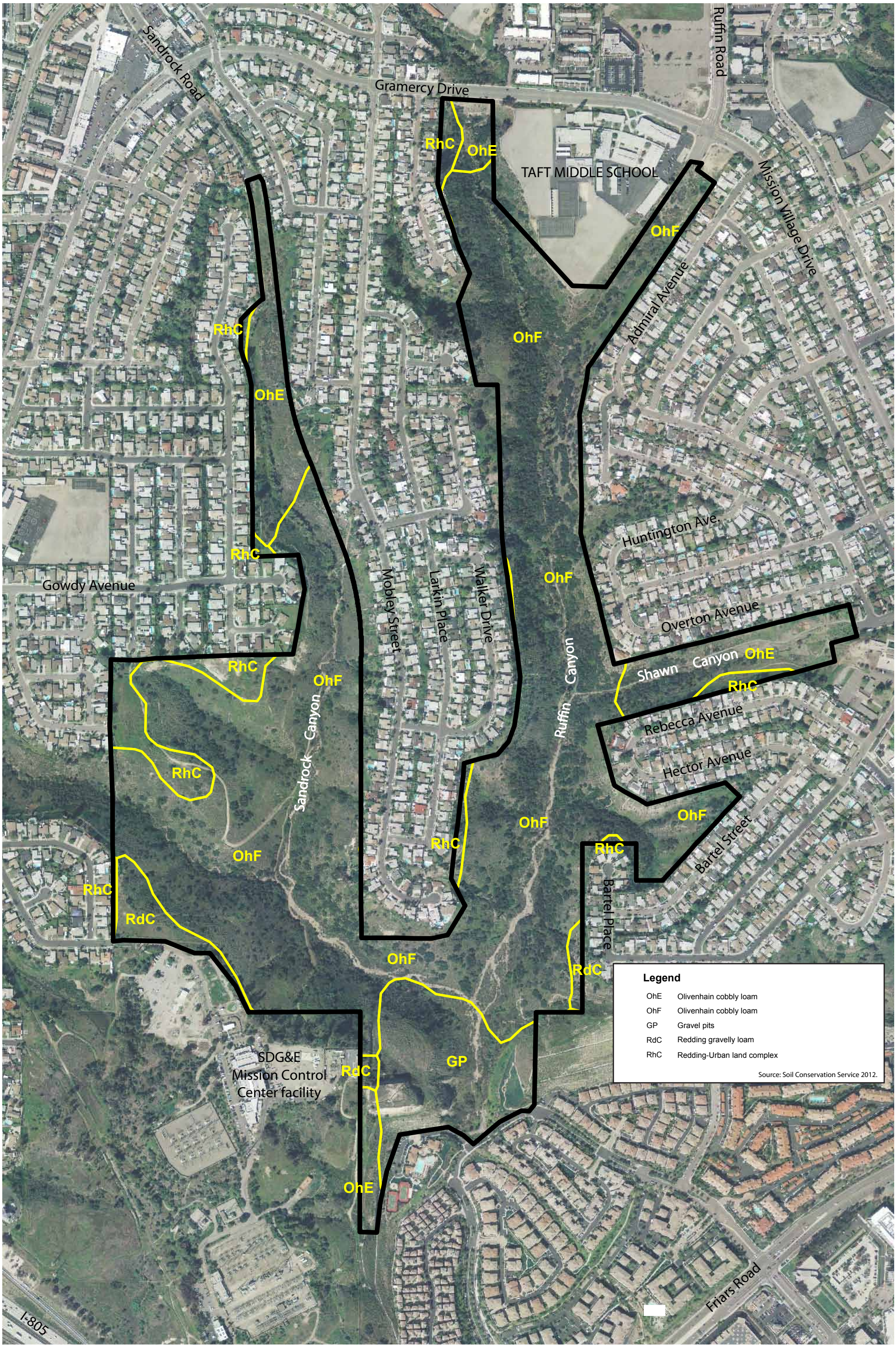


Figure 3 - Soil Associations Map
San Diego River Tributary Canyons Project
Focused Sensitive Species Surveys

CADRE Environmental

TABLE 2
SUMMARY OF STUDY AREA VEGETATION COMMUNITIES

MSCP Status	City of San Diego Habitat Types	Acres within Study Area
UPLAND HABITATS		
Tier I	Native Grassland (NG)	1.39
Tier II	Coastal Sage Scrub (CSS)	88.74
Tier IIIA	Mixed Chaparral (MS)	51.43
	Chamise Chaparral (CC)	1.10
Tier IIIB	Non-Native Grassland (NNG)	5.94
Tier IV	Ornamental (OR)	20.59
	Disturbed (DS)	7.20
	Developed (DV)	0.53
WETLAND HABITATS [Tiers only listed for upland habitats]		
Riparian	Riparian Scrub (RS)	5.7
	Riparian Woodland (RW)	0.38
Marsh	Freshwater Marsh (FM)	0.33
	Alkali Marsh (AM)	0.27
Unvegetated Freshwater	Non-Vegetated Channel (NC)	1.81
GRAND TOTAL		**185.41**

A total of thirteen (13) vegetation communities are depicted in Figure 4, *Vegetation Communities Map*. A general description of each community is discussed below and most habitats are illustrated in Figures 5-8, *Current Study Area Photographs*. Table 2 lists each community or habitat and the acreage mapped within the Study Area.

Native Grassland *[Tier I]* – Native grasslands are uncommon is the Study Area and are limited to small patches on the north-facing slopes of the lower reaches of Sandrock Canyon, totaling 1.39 acres. The species composition of the native grassland onsite resembles that of Southern Coastal Needlegrass Grassland described in Holland (1986). Species in this habitat type include purple needlegrass (*Stipa pulchra*), splendid mariposa lily (*Calochortus splendens*), Fremont's death camus (*Zigadenus fremontii*), common goldenstar (*Bloomeria crocea*), and other native herbs such as sanicle (*Sanicula* spp.), scapose checker bloom (*Sidalcea malvaeflora*), California blue-eyed grass (*Sisyrinchium bellum*), California poppy (*Eschscholzia californica*), and coastal goldfields (*Lasthenia* gracilis). Non-native wild oat (*Avena* spp.), brome grasses (*Bromus hordeaceus, B. madritensis* subsp. *rubens*) and forbs such as tocolote (*Centaurea melitensis*) and red-stem filaree (*Erodium cicutarium*) are also common.

Coastal Sage Scrub *[Tier II]* - Coastal sage scrub is a drought-deciduous community comprised of aromatic shrubs and subshrubs that has a diverse understory of annual and perennial herbs, and perennial and annual native and non-native grasses. Coastal sage scrub occurs primarily on dry slopes and hillsides. It is widespread throughout the Study Area totaling 88.74 acres.

SOURCE: CADRE Environmental

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 4

Vegetation Communities Map

Ruffin Canyon Trail Alignment Impacts

Coastal Sage Scrub along the Slopes down into the Canyon Bottom

Mixed Chaparral Slopes / Riparian Scrub Canyon Bottom

Figure 5 - Current Study Area Photographs

San Diego River Tributary Canyons Project
Focused Sensitive Species Surveys

CADRE Environmental

Disturbed Habitat, Coastal Sage Scrub, and Ornamental

Ornamental Vegetation Extending Down from residential Development into Coastal Sage Scrub Dominated Slopes.

Figure 6 - Current Study Area Photographs

San Diego River Tributary Canyons Project
Focused Sensitive Species Surveys

CADRE Environmental

Non-vegetated Channel / Mixed Chaparral Slopes

Coastal Sage Scrub / Mixed Chaparral Slopes

Figure 7 - Current Study Area Photographs

San Diego River Tributary Canyons Project
Focused Sensitive Species Surveys

CADRE Environmental

Riparian Scrub Canyon Bottom/Coastal Sage Scrub - Mixed Chaparral Slopes.

Developed Access Road to Riparian Scrub Dominated Detention Basin.

Figure 8 - Current Study Area Photographs

San Diego River Tributary Canyons Project
Focused Sensitive Species Surveys

CADRE Environmental

Characteristic species include coastal sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasiculatum*), laurel sumac (*Malosma laurina*), red bush monkeyflower (*Mimulus puniceus*), coastal goldenbush (*Isocoma menziesii* var. *vernonioides*), California everlasting (*Pseudognaphalium californicum*), common sand-aster (*Corethrogyne filaginifolia*), foothill needlegrass (*Stipa lepida*), ashy spike-moss (*Selaginella cinerascens*), and many other species.

San Diego viguiera (*Bahiopsis laciniata*) is common and often is a locally dominant component of coastal sage scrub on site. Several species of native cacti are also often locally common in the Study Area, including coastal cholla (*Cylindropuntia prolifera*), coastal and chaparral prickly-pear (*Opuntia littoralis, Opunita oricola*), San Diego barrel cactus (*Ferocactus viridescens*), and fish-hook cactus (*Mammillaria dioica*).

Coastal sage scrub can also be found along the stream terraces on the canyon bottoms where it is dominated by dense broom baccharis (*Baccharis sarothroides*). Other characteristic species along the canyon bottoms include coastal sagebrush, California buckwheat, coast goldenbush, and black sage (*Salvia mellifera*).

Mixed Chaparral *[Tier III A]* - This community is widespread throughout the Study Area, totaling 51.43 acres, and is comprised mostly of broad-leaved sclerophyll shrubs. Characteristic species within the Study Area include holly-leaved cherry (*Prunus ilicifolia*), San Diego mountain mahogany (*Cercocarpus minutiflorus*), toyon (*Heteromeles arbutifolia*), fushia-flowered gooseberry (*Ribes speciosum*), spiny redberry (*Rhamnus crocea*), and lemonadeberry (*Rhus integrifolia*). Many native forbs also grow in this habitat, including wild cucumber (*Marah macrocarpus*), southern honeysuckle (*Lonicera subspicata* var. *denudata*), and San Diego sweet pea (*Lathyrus vestitus* subsp. *alefeldii*).

Chamise Chaparral *[Tier III A]* - Chamise chaparral is dominated by dense to open stands of chamise (*Adenostoma fasciculatum* var. *fasciculatum*). Scattered to dense patches of other shrubs, including mission manzanita (*Xylococcus bicolor*), deerweed (*Acmispon glaber*), and California buckwheat are also present. A diverse but generally sparse understory of annual and perennial herbs, and perennial and annual native and non-native grasses are present, including early onion (*Allium praecox*), coastal goldenbush, brome grasses, pygmy sandcrop (*Crassula connata*), and many others. A total of 1.10 acres of chamise chaparral occurs within the Study Area, which occur only in the northern stretch of Sandrock Canyon.

Non-Native Grassland *[Tier III B]* - Non-native grasslands contain annual exotic grass species, including bromes, wild oat, ryegrass (*Lolium* spp.), and fescues (*Vulpia* spp.). Typically, non-native grasslands supports at least 50 percent cover of exotic grasses in the herbaceous layer, although other plant species (native or non-native) may be present. Other native and non-native forbs are frequently associated with non-native grasslands including castor bean (*Ricinus communis*), garland chrysanthemum (*Chrysanthemum coronarium*), pineappleweed (*Chamomilla suaveolens*), Australian saltbush (*Atriplex semibaccata*), sow-thistle (*Sonchus* spp.), tree tobacco (*Nicotiana glauca*), southern thistle (*Salsola autralis*), black mustard (*Brassica nigra*), tocolote, knotweeds (*Polygonum* spp.), burclover (*Medicago polymorpha*), sweet fennel (*Foeniculum vulgare*), filaree (*Erodium* spp.), California poppy (*Eschscholzia californica*), and dove weed

(*Eremocarpus setigerus*). In San Diego County the presence of wild oat, brome grasses, filaree and mustard are common indicators of this habitat. A total of 5.94 acres of non-native grassland occur throughout the Study Area.

Ornamental Vegetation *[Tier IV]* - Owing to the close proximity to residential housing development, street landscape plantings and home gardens, escaped non-native ornamental vegetation comprises a significant portion of the Study Area. Several species of ice plants (*Aptenia cordifolia*, *Caprobrotus edulis*, and *Malephora* crocea.), cacti and succulents are common, including species such as Canary Island aeonium (*Aeonium arboretum*), aloe (*Aloe* spp.), pig ear (*Cotyledon* spp.), jade plant (*Crassula* argentea), Chinese pine (*Crassula tetragona*), spiny nopal (*Opuntia dejecta*), Indian fig (*Opuntia ficus-indica*), wheel cactus (*Opuntia robusta*) and greater Mexican stonecrop (*Sedum praealtum*). Non-native ornamental grasses, such as African fountain grass (*Pennisetum setaceum*), are also highly invasive on the canyon slopes. Several non-native plants were identified during the Project surveys that have not been reported previously for San Diego County (Rebman& Simpson 2006; CCH 2012), which include, carob tree (*Ceratonia siliqua*), Preaux's sea lavender (*Limonium preauxii*), peduncled oak (*Quercus robur*), spiny nopal and greater Mexican stonecrop.

Ornamental vegetation makes up 20.59 acres of the Study Area and is mainly concentrated near the top of the slopes where the ecotone between the urban development areas and the native habitats within the canyon exists.

Developed/Disturbed *[Tier IV]* - Developed land on the property consists of paved roads and areas where adjacent residential development has encroached into the Study Area. Very little developed land exists within the Study Area. Approximately 0.53 acre occurs in the northern portion of Ruffin Canyon and is associated with the adjacent residential development.

Disturbed areas represent cleared areas that may support a sparse vegetation cover of non-native species that germinate and persist following routine maintenance activities. Disturbed areas occur throughout the Study Area, totaling 7.2 acres, and are mainly concentrated near the top of the slopes and canyon entrances where anthropogenic activities are greatest.

Riparian Scrub *[Tiers only listed for upland habitats]* - Riparian scrub within the Study Area is dominated by dense thickets of mule fat (*Baccharis salicifolia*), willows (*Salix* spp.), and scattered trees and saplings of cottonwood (*Populus fremontii*) and western sycamore (*Platanus racemosa*). Some areas of riparian scrub along the canyon bottoms, which receive year-round urban water runoff, are also highly invaded habitats. Many native wetland and riparian species in these areas have been displaced by a number of aggressive non-native tree species, including Canary Island and Mexican palms (*Phoenix canariensis*, *Washingtonia robusta*), Brazilian pepper tree (*Schinus terebinthifolius*), and Shamel ash (*Fraxinus uhdei*), and many grass and sedge species, including kikuyu grass (*Pennisetum clandestinum*) and African umbrella sedge (*Cyperus involucratus*). Because of the dense thickets, only a few hardy native plants survive here. Most stands of riparian scrub onsite are too dense to allow much understory development; however, a few willow saplings and facultative wetland forbs can also be found in this habitat. Riparian scrub within the Study Area totals 5.7 acres.

Riparian Woodland *[Tiers only listed for upland habitats]* - This community is developed along the stream terraces of the canyon bottoms in the southern portion of the Study Area, totaling 0.38 acre. The community is dominated by blue elderberry (*Sambucus nigra* subsp. *caerulea*); formerly known as Mexican elderberry (*Sambucus mexicana*) (Baldwin et al. 2012) with a few saplings of mule fat and broom baccharis mixed into the understory.

Freshwater Marsh *[Tiers only listed for upland habitats]* - Freshwater dominant species, including southern cattail (*Typha domingensis*) and tule (*Schoenoplectus acutus*), occur scattered throughout the reaches of the canyon bottoms where perennial flows support this vegetation community. The total area of freshwater marsh within the Study Area is 0.33 acre.

Alkali Marsh *[Tiers only listed for upland habitats]* - In the Study Area, alkali marsh supports saltgrass (*Distichlis spicata*), African umbrella sedge, tule, annual beard grass (*Polypogon monspeliensis*), heliotrope (*Heliotropium curassavicum*), western ragweed (*Ambrosia psilostachya*), marsh fleabane (*Plucheaodorata*), southern cattail, common celery (*Apium graveolens*), and rushes (*Juncus* spp.). Only a small patch (0.27 acre) of alkali marsh occurs within the Study Area and can be found in the northernmost portion of Ruffin Canyon.

Non-Vegetated Channel *[Tiers only listed for upland habitats]* - This habitat supports sandy, gravelly, or cobbly ephemeral streambeds or channels, which generally are unvegetated. Variable water flows inhibit the growth of vegetation, although some weedy species of grasses including purple false brome (*Brachypodium distachyon*) may grow along the outer edges of the wash. Other species that grow here, usually less than 10 percent cover, include cocklebur (*Xanthium strumarium*) and California brickellbush (*Brickellia californica*).

3.3 Non-Sensitive Wildlife

The Study Area is composed of primarily chaparral, grassland, and coastal sage scrub communities which provide habitat for a variety of native and non-native plants and animals. Wildlife species include resident and migratory birds such as the American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), western scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), wrentit (*Chamaea fasciata*), northern mockingbird (*Mimus polyglottos*), California thrasher (*Toxostoma redivivum*), yellow-rumped warbler (*Dendroica coronata*), California towhee (*Pipilo crissalis*), spotted towhee (*Pipilo maculatus*), white-crowned sparrow (*Zonotrichia leucophrys*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis psaltria*). The vegetation communities within the Study Area are also considered important by the MSCP because they provide valuable raptor foraging habitat for species such as red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo lineatus*). Non-native grasslands are sometimes referred to as a naturalized community, and their sensitivity varies depending upon location, wildlife use, and composition. Grasslands serve as habitat for small mammals such as the pocket gopher (*Geomyidae*), California vole (*Microtus californicus*), and California ground squirrel (*Spermophilus beecheyi*) that in turn provide a prey base for foraging raptors. A compendium of wildlife species observed within the Study Area at the time of the surveys can be found in Appendix B.

3.4 Sensitive and Special-Status Species

Special-status species are plants and animals that are legally protected under the City of San Diego's MSCP Subarea Plan, CESA/FESA, or other regulations and species that are considered sufficiently rare or sensitive by the scientific community to qualify for such listing. These species are categorized as follows:

- Plants or animals covered by the City of San Diego's MSCP Subarea Plan
- Plants or animals listed or proposed for listing as threatened or endangered under the FESA (50 Code of Federal regulations [CFR] 17.12 [listed plants], 17.11 [listed animals];
- Plants or animals that are candidates for possible future listing as threatened or endangered under the FESA (61 FR 40, February 28, 1996);
- Plants or animals listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 California Code of Regulations [CCR] 670.5);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.);
- Plants that meet the definitions of rare and endangered under CEQA (State CEQA Guidelines, Section 15380);
- Plants considered by CNPS to be "rare, threatened or endangered in California" (Lists 1A, 1B, and 2 in CNPS Inventory 2012);
- Plants listed by CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4 in CNPS 2012), which may be included as special-status species on the basis of local significance or recent biological information; and
- Animals fully protected in California (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Sensitive Species Habitat Assessments

Following a literature review for the eighteen (18) listed/MSCP-covered/sensitive plant and wildlife species outlined in Section 2 (Survey Methodology) above, a habitat assessment was conducted by Cadre Environmental throughout the Study Area during the spring of 2012 to characterize potential resources for these species. As summarized in the following section, suitable habitat was documented within the Study Area for the following listed/MSCP-covered species:

- Coastal California Gnatcatcher (federally threatened; MSCP-covered)

Based on a lack of suitable habitat, the following species are not expected to occur within or adjacent to the Study Area and focused surveys are not warranted:

- Least Bell's Vireo (federally and state endangered; MSCP-covered) – minimal low quality riparian habitat occurs within the Study Area;

- Southwestern Willow Flycatcher (federally and state endangered; MSCP-covered) – no suitable breeding habitat occurs within the Study Area;
- San Diego Fairy Shrimp (federally endangered; MSCP-covered) – No vernal pools or seasonally-ponded depressions were documented within the Study Area; and
- Arroyo Toad (federally endangered; MSCP-covered) – No suitable breeding habitat documented within or adjacent to the Study Area.

The Study Area does not occur within or adjacent to a USFWS critical habitat designation for federally listed plants or wildlife species.

Special-Status Plants

The following discussion presents the special-status plant species documented within the Study Area and the special-status plant species that can be excluded from the Study Area based on the negative results of the 2012 surveys and/or lack of suitable habitat on site.

A list of sixty-eight (68) target special-status plant species was created to evaluate potential occurrence in the Study Area prior to conducting fieldwork, and to aid documentation of presence or absence of each plant during the Project surveys. This target list contains species that have some potential to occur in the Study Area based on published literature and information available on the internet, CNDDB (2012), CNPS (2012), CCH (2012), other record searches, and field experiences in San Diego County. Accordingly, each target species (presented in alphabetical order by scientific name), legal protection status, habitat requirements, and results of the 2012 surveys, including the species not detected in the Study Area, is presented in Table 3 below.

TABLE 3
RESULTS OF 2012 FOCUSED SURVEYS FOR SPECIAL-STATUS PLANT SPECIES

Species	Status	Season	Primary Habitat	Occurrence
Acanthomintha ilicifolia San Diego thornmint	FT, CE CRPR 1B.1 MSCP	Apr-June	Chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Usually found on vertisol clay soils or clay inclusions; 10-935 m.	Not Detected
Adolphia californica California adolphia	CRPR 2.1	Dec-May	Chaparral or maritime chaparral, coastal sage scrub, valley and foothill grassland on sandy, gravelly to clay soils; 15-300 m.	Not Detected
Ambrosia pumila San Diego ambrosia	FE CRPR 1B.1 MSCP	Apr-Oct	Chaparral, coastal scrub, valley and foothill grasslands, seasonally dry drainages, and vernal pools or alkaline soils, and in disturbed areas; 20-415 m.	Not Detected
Ambrosia monogyra desert fragrance	CRPR 2.2	Aug-Nov	Chaparral, alluvial scrub and washes, or Sonoran desert scrub; 10-500m.	Present in Study Area
Aphanisma blitoides aphanisma	CRPR 1B.2 MSCP	Mar-Jun	Coastal bluffs and scrub, coastal dunes, and alkali flats mostly along the immediate coast; <200m.	Not Detected

Species	Status	Season	Primary Habitat	Occurrence
Arctostaphylos glandulosa subsp. *crassifolia* Del Mar manzanita	FE CRPR 1B.1 MSCP	Dec-Apr	Sandy coastal mesas, ocean bluffs, mostly in southern maritime chaparral or Torrey pine forest; 0-365m.	Not Detected
Artemisia palmeri Palmer's sagewort	CRPR 4.2	May-Sep	Chaparral, coastal scrub, riparian scrub and woodland, and sandy mesic site; 15-915 m.	Not Detected
Atriplex coulteri Coulter's saltscale	CRPR 1B.2	Mar-Oct	Coastal bluff scrub, coastal dunes and coastal sage scrub, valley and foothill grasslands, alkaline or clay substrates; 3-460m.	Present in Study Area
Atriplex davidsonii Davidson's saltscale	CRPR 1B.2	Apr-Oct	Coastal scrub, coastal bluff scrub, playas, chenopod scrub, in saline-alkali soils; <500m.	Not Detected
Atriplex pacifica south coast saltscale	CRPR 1B.2	Mar-Oct	Coastal scrub, coastal bluff scrub, dunes; <300m.	Not Detected
Baccharis vanessae Encinitas baccharis	FT, CE CRPR 1B.1 MSCP	Aug-Nov	Chaparral on sandstone soils in steep, open, rocky areas; 60-720m.	Not Detected.
Bahiopsis (*Viguiera*) *laciniata* San Diego viguiera	CRPR 4.2	Feb-Jun	Chaparral, coastal scrub; 60-750m.	Present in Study Area and Along Project Alignment
Bloomeria (*Muilla*) *clevelandii* San Diego goldenstar	CRPR 1B.1 MSCP	Apr-May	Chaparral, coastal scrub, valley and foothill grassland, vernal pools, scrub edges; clay and loamy soils. Often on mounds between vernal pools; <450m.	Not Detected
Brodiaea filifolia thread-leaved brodiaea	FT, CE CRPR 1B.1 MSCP	Mar-Jun	Cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland surrounded by scrub. Mostly clay soils; 25-1120m.	Not Detected
Brodiaea orcuttii Orcutt's brodiaea	CRPR 1B.1 MSCP	May-Jul	Vernal pools, valley and foothill grassland, cismontane woodland, closed-cone coniferous forest, meadows and seeps, mesic clay habitats, sometimes serpentine, also along small drainages; 30-1615m.	Not Detected
Ceanothus verrucosus wart-stemmed ceanothus	CRPR 2.2 MSCP	Dec-May	Dry slopes in chaparral; <380m.	Not Detected
Centromadia pungens subsp. *laevis* smooth tarplant	CRPR 1B.1	Apr-Sep	Alkali scrub, alkali playas, alkali grasslands, meadows, riparian woodland, watercourses, and disturbed alkali habitats; <480m.	Not Detected
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	CRPR 1B.1	Jan-Aug	Coastal bluff scrub in sandy sites, coastal dunes; 3-100m.	No Detected
Chorizanthe orcuttiana Orcutt's spineflower	FE, CE CRPR 1B.1	Mar-May	Coastal scrub, southern maritime chaparral, Torrey pine woodland, sandy sites or openings; 3-130m.	No Detected

Species	Status	Season	Primary Habitat	Occurrence
Chorizanthe polygonoides var. *longispina* long-spined spineflower	CRPR 1B.2	Apr-Jul	Chaparral, coastal scrub, meadows, valley and foothill grassland. Usually gabbroic, clay or dense clay lens inclusions; 30-1450m.	Not Detected
Comarostaphylis diversifolia subsp. *diversifolia* summer holly	CRPR 1B.2	Apr-Jun	Often north-facing slopes in southern maritime chaparral or mixed chaparral; 30-550m.	Not Detected
Convolvulus simulans small-flowered morning-glory	CRPR 4.2	Mar-Jul	Chaparral openings, coastal scrub, and valley and foothill grasslands on clay and serpentine soils; 30-875m.	Present in Study Area
Corethrogyne filaginifolia var. *incana* San Diego sand aster	CRPR 1B.1	Jun-Sep	Coastal scrub, coastal bluff scrub, maritime chaparral; sometimes in disturbed sites and ecotones; 3-115m.	Not Detected
Corethrogyne filaginifolia var. *linifolia* Del Mar mesa sand aster	CRPR 1B.1 MSCP	May-Sep	Coastal bluff scrub, maritime chaparral, coastal sage scrub; 15-150m.	Not Detected
Deinandra paniculata Paniculate tarplant	CRPR 4.2	Apr-Nov	Usually vernally mesic, sometimes sandy, coastal scrub, valley and foothill grasslands, and vernal pools; 25-940m.	Not Detected
Dichondra occidentalis western dicondra	CRPR 4.2	Mar-Jul	Coastal scrub and chaparral on slopes and canyons, valley and foothill grasslands, and cismontane woodland; 50-500 m.	Not Detected
Dudleya brevifolia short-leaved dudleya	CE CRPR 1B.1 MSCP	Apr-Jun	Open southern maritime chaparral on the Lindvista formation; <250m	Not Detected
Dudleya variegata variegated dudleya	CRPR 1B.2 MSCP	May-Jun	Openings in chaparral, coastal scrub, and foothill grassland, mima mounds around vernal pools; 3-550 m.	Not Detected
Dudleya viscida sticky dudleya	CRPR 1B.2 MSCP	May-Jun	Coastal scrub, coastal bluff scrub, chaparral. On north and south-facing cliffs and rocky slopes; <450m.	Not Detected
Ericameria palmeri subsp. *palmeri* Palmer's goldenbush	CRPR 2.2 MSCP	Jul-Nov	Mesic chaparral and coastal scrub, mostly associated with drainages bordering riparian scrub; <600 m.	Not Detected
Eryngium aristulatum var. *parishii* San Diego buttoncelery	FE, CE CRPR 1B.1	Apr-Jun	Vernal pools, coastal scrub, valley and foothill grassland. San Diego mesa hardpan and claypan vernal pools & southern interior basalt flow vernal pools; usually surrounded by scrub; 15-620m.	Not Detected—no vernal pools found on site.

Species	Status	Season	Primary Habitat	Occurrence
Erysimum ammophilum sand-loving wallflower	CRPR 1B.2	Feb-Jun	Coastal dunes and scrub, and sandy openings in chaparral; <60m.	Not Detected
Euphorbia misera cliff spurge	CRPR 2.2	Dec-Aug	Coastal bluff scrub, coastal scrub. Rocky sites, often among cactus off the coast; <500m.	Not Detected
Ferocactus viridescens San Diego barrel cactus	CRPR 2.1 MSCP	May-Jun	Chaparral, coastal scrub, valley and foothill grassland. Often on exposed, level or south-sloping areas; often in coastal scrub near crest of slopes; 3-485m.	Present in Study Area and Along Project Alignment
Fritillaria biflora var. *biflora* chocolate lily	San Diego County - List D	Feb-Jun	Chaparral and grasslands, mesas and barrens, often on clay soil; <1200 m.	Not Detected
Harpagonella palmeri Palmer's grapplinghook	CRPR 4.2	Mar-May	Dry slopes and mesas in grasslands, sage scrub, and chaparral; 20-830m.	Present in Study Area
Heterotheca sessiliflora subsp. *sessiliflora* beach goldenaster	CRPR 1B.1	Jun-Sep	Coastal dunes, flats, scrub, and chaparral; <60m.	Not Detected
Holocarpha virgata subsp. *elongata* graceful tarplant	CRPR 4.2	Jul-Nov	Chaparral, sage scrub, grassland, woodlands, and forests; 60-1100 m.	Present in Study Area
Hordeum intercedens vernal barley	CRPR 3.2	Feb-Jun	Mesic grasslands, coastal dunes and scrub, vernal pools, and alkaline flats or depressions; <500m.	Not Detected
Isocoma menziesii var. *decumbens* decumbent goldenbush	CRPR 1B.2	Apr-Nov	Chaparral and coastal scrub, sometimes in grassy ectotones, preference for clay soils; 10-135m.	Not Detected
Iva hayesiana San Diego marshelder	CRPR 2.2	Apr-Oct	Marshes and swamps, intermittent streams, playas, and river washes; 10-500m.	Not Detected
Juncus acutus var. *leopoldii* southwestern spiny rush	CRPR 4.2	May-Jun	Mesic coastal dunes, meadows and alkaline seeps, riparian habitats, coastal salt marshes, and swamps; 3-900 m.	Present in Study Area
Lasthenia glabrata subsp. *coulteri* Coulter's goldfields	CRPR 1B.1	Feb-Jun	Coastal salt marshes, swamps, playas, depressions in valley and foothill grassland, and vernal pools. Usually found on alkali soil; <1220m.	Not Detected
Lepidium virginicum var. *robinsonii* Robinson's peppergrass	CRPR 1B.2	Jan-Jul	Chaparral, coastal scrub. Dry soils, shrubland; 1-945m.	Present in Study Area; now considered to be a synonym of a common species (The Jepson Manual 2012).
Leptosyne (*Coreopsis*) *maritima* sea dahlia	CRPR 2.2	Mar-May	Coastal scrub and mostly in coastal bluff scrub. Occurs on a variety of soil types, including sandstone; 5-150m.	Not Detected
Lotus nuttallianus Nuttall's lotus	CRPR 1B.1 MSCP	Mar-Jun	Coastal dunes, sandy coastal scrub or disturbed sites; 0-10m.	Not Detected

Species	Status	Season	Primary Habitat	Occurrence
Microseris douglasii subsp. p*latycarpha* small-flowered microseris	CRPR 4.2	Mar-May	Clay soils on plains, hillsides, and foothill slopes in association with native grasslands and vernal pool; 15-1070 m.	Present in Study Area
Monardella viminea willowy monardella	FE, CE CRPR 1B.1	Jun-Aug	Ephemeral alluvial washes or cobbly open areas in associated chaparral, coastal scrub and riparian habitats; 50-200m.	Not Detected
Myosurus minimus subsp. *apus* little mousetail	CRPR 3.1	Mar-Jun	Occurs in vernal pools with alkaline soils or in playas; 20-640m.	Not Detected— no vernal pools found on site.
Navarretia fossalis spreading navarretia	FT CRPR 1B.1 MSCP	Apr-Jun	Vernal pools and swales, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San Diego claypan vernal pools; in swales and pools often surrounded by other habitat types; 30-1300m.	Not Detected— no vernal pools found on site.
Navarretia prostrata prostrate navarretia	CRPR 1B.1	Apr-Jul	Vernal pools and swales, mesic coastal scrub, meadows, and alkaline grasslands; 15-700m.	Not Detected
Nemacaulis denudata var. *denudata* coast woolly-heads	CRPR 1B.2	Apr-Sep	Coastal dunes and sandy coastal scrub; 0-100m.	Not Detected
Ophioglossum californicum California adder's tongue	CRPR 4.2	Jan-Apr	Chaparral, grassy mesas, slopes, and around vernal pools; <450m.	Not Detected
Orcuttia californica California Orcutt grass	FE, CE CRPR 1B.1 MSCP	Apr-Aug	Vernal pools, on alkaline and southern basaltic claypan soils; 15-660m.	Not Detected— no vernal pools found on site.
Pentachaeta aurea subsp. *aurea* golden-rayed pentachaeta	CRPR 4.2	Mar-Jul	Cismontane woodlands, coastal scrub, openings in chaparral, lower montane coniferous forests, riparian woodlands, and mesic valley and foothill grasslands; 15-1850m.	Not Detected
Phacelia stellaris Brand's phacelia	CRPR 1B.1	Mar-Jun	Coastal scrub, coastal dunes, and open areas on sandy washes and/or benches in alluvial flood plains; 5-400m.	Not Detected
Pogogyne abramsii San Diego mesa mint	FE, CE CRPR 1B.1 MSCP	Mar-Jul	Vernal pools; 90-200m.	Not Detected— no vernal pools found on site.
Pogogyne nudiuscula Otay mesa mint	FE, CE CRPR 1B.1 MSCP	May-Jul	Vernal pools; 90-250m.	Not Detected—no vernal pools found on site.
Quercus dumosa Nuttall's scrub oak	CRPR 1B.1	Feb-Apr	Maritime chaparral, coastal scrub. Generally on sandy soils near the coast; sometimes on clay loam; 15-400m.	Present in Study Area
Quercus engelmannii Engelmann oak	CRPR 4.2	Apr-May	Oak woodlands and savanna, and chaparral; 50-1300m.	Not Detected

Species	Status	Season	Primary Habitat	Occurrence
Romneya coulteri Coulter's matilija poppy	CRPR 4.2	Mar-Jul	Chaparral and sage scrub, often after burns; 20-1200m.	Not Detected
Salvia munzii Munz's sage	CRPR 2.2	Feb-Apr	Chaparral and coastal sage scrub; 120-1100m.	Present in Study Area
Selaginella cinerascens ashy spike-moss	CRPR 4.2	Spring	Openings in chaparral, coastal sage scrub, grasslands, often in association with cobbly or sandy soils; <640m.	Present in Study Area
Senecio aphanactis California groundsel	CRPR 2.2	Jan-Apr	Chaparral and sage scrub, cismontane woodland, grassland, often alkaline flats; 15-800m	Not Detected
Stemodia durantifolia blue streamwort	CRPR 2.1	Mar-Jul	Drying shores of reservoirs, stream channels, wet sand in riparian habitats; 180-300m.	Not Detected
Stipa diegoensis San Diego needlegrass	CRPR 4.2	Feb-Jun	Rocky, often mesic coastal scrub and chaparral; 10-800m.	Not Detected
Suaeda esteroa estuary seablite	CRPR 1B.2	May-Oct	Mid-tidal coastal salt marshes; <5m.	Not Detected

Explanation of Table 3 Codes, and Summary of Information Sources:

Primary Sources*:* California Native Plant Society (2012), Inventory of Rare and Endangered Plants (online 8th edition, www.cnps.org); CNDDB (2012), Data Base Record Search for Information on Threatened, Endangered, Rare, or Otherwise Sensitive Species and Communities, USGS 7.5' La Jolla and La Mesa Quadrangles; Consortium of California Herbaria (2012), Smasch Accession Results (http://ucjeps.berkeley.edu.edu/cgi-bin/get_chc.pl); San Diego County Plant Atlas Project (2012) (http://www.sdplantatalas.org); MCAS Miramar INRMP (2011), Appendix B- Plants known to occur at MCAS Miramar; and Reiser (2001 ed.), Rare Plants of San Diego County, Aquafir Press.

Protection Status Criteria:
Federal Status State of California
FE – federally listed as endangered CE – State-listed as endangered
FT – federally listed as threatened CT – State-listed as threatened

City of San Diego
MSCP – species is covered under the MSCP

California Native Plant Society (CNPS): California Rare Plant Rank (CRPR)
CRPR 1A – plants presumed extinct in California
CRPR 1B – plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 2 – plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 3 – Plants about which we need more information, a review list
CRPR 4 – Plants of limited distribution, a watch list
.1 – Seriously endangered in California
.2 – Fairly endangered in California
.3 – Not very endangered in California

Season: Typical blooming period for the plant.

Primary Habitat: Most likely habitat where the plant occurs and/or typical vegetation community association, and range in elevation.

San Diego County Sensitive Plant List:
List A – Plants rare, threatened or endangered in California and elsewhere
List B – Plants rare, threatened or endangered in California but more common elsewhere
List C – Plants which may be rare, but need more information to determine their true rarity status
List D – Plants of limited distribution and are uncommon, but not presently rare or endangered

Special-Status Plant Species Found within the Study Area

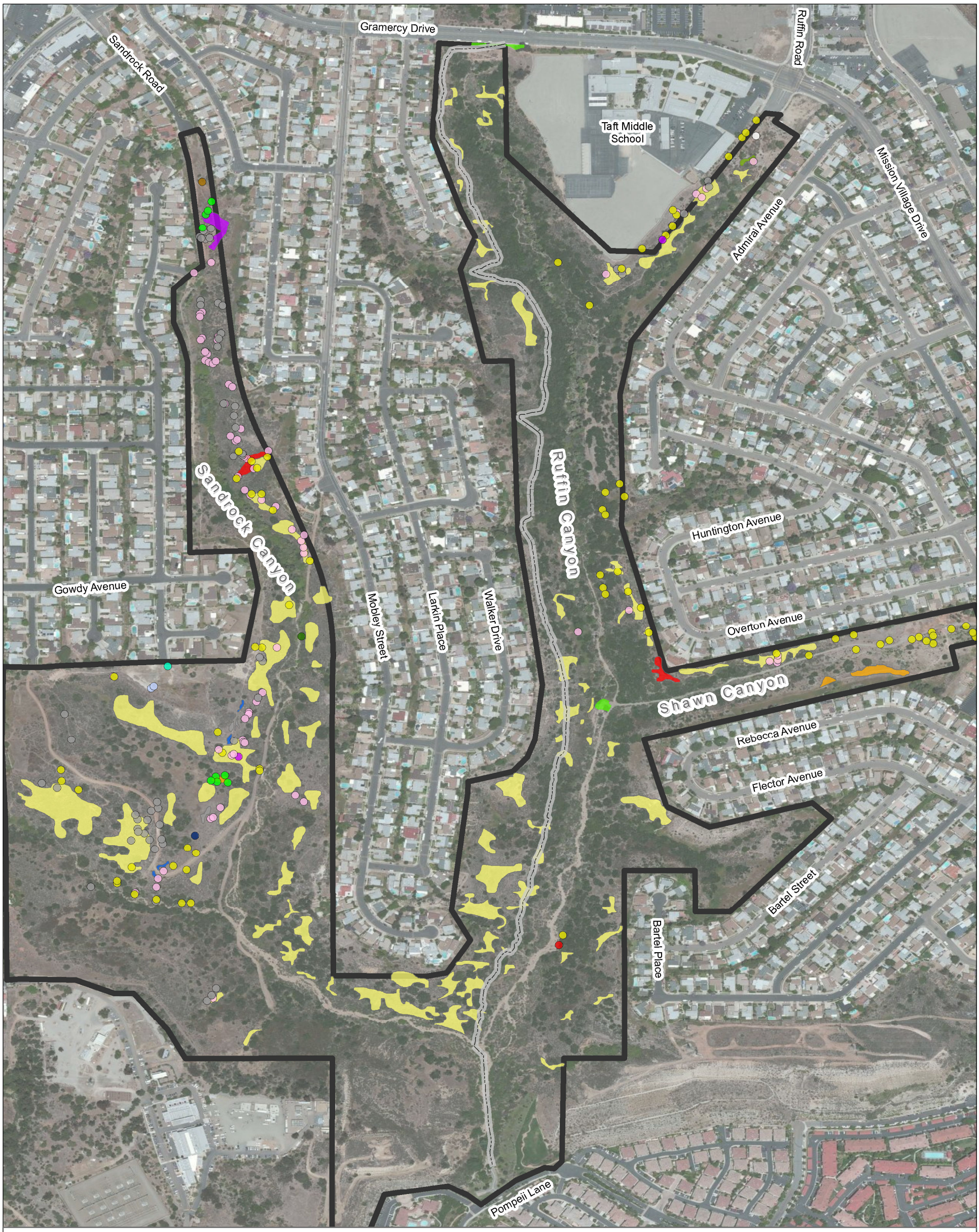
Focused surveys and floristic inventories were conducted by Cadre Environmental from February – October 2012 to determine presence/absence for the target listed/MSCP-covered or special-status plant species that have potential to occur within the Study Area. No FESA/CESA endangered or threatened plants were detected within the Study Area. However, of the sixty-eight (68) aforementioned special-status plants species, thirteen (13) were observed on the site, including those listed below. Of the 13 sensitive plants observed, only two (2) were detected along or adjacent to the proposed Project alignment in Ruffin Canyon – San Diego barrel cactus, which is also a MSCP-covered species, and San Diego viguiera. Sensitive plant species observed in the Study Area are shown in Figure 9, *Sensitive Plant Locations*, and Figures 10-12, *Sensitive Plant Photographs.*

Desert fragrance (*Ambrosia monogyra*) [CRPR 2.2] – Desert fragrance or singlewhorl burrobush is a perennial shrub in the *Asteraceae*. It is best known in California from Riverside and San Diego Counties, but extends east to Texas and south into Baja California, Mexico. Desert fragrance grows in chaparral, washes, and desert scrub habitats, and blooms from August through November. In the Study Area, desert fragrance is in known only from the Ruffin Canyon wash.

Coulter's saltbush (*Atriplex coulteri*) [CRPR 1B.2] – Coulter's saltbush (*Chenopodieaeae*) is a perennial herb that is typically associated with alkaline or saline clay soils. Its range extends from Santa Barbara County south through Orange and San Diego Counties into Baja California, Mexico. Although it is often found on coastal bluffs or in scrub, and alkaline flats, the plant also grows in valley and grassland habitats. In San Diego County, it is best known from San Onofre State Beach, Oceanside, Otay Mesa, and Dulzura Creek. In the Study Area, Coulter's saltbush is in known only from Sandrock Canyon.

San Diego barrel cactus (*Ferocactus viridescens*) MSCP-Covered, [CRPR 2.1] – The San Diego or coast barrel cactus is a perennial succulent (*Cactaceae*) that blooms May through June. It is known only from San Diego County and Baja California, Mexico, and grows in chaparral, coastal scrub, grasslands, and around vernal pools. San Diego barrel cactus is most frequent on dry, often south-facing hillsides on cobbly soils or ridge crests in open coastal sage scrub communities. San Diego barrel cactus is widespread in Ruffin, Sandrock, and Shawn Canyons in open, cobbly scrub habitats as shown in Figure 9, *Sensitive Plant Locations*, and Figure 11, *Sensitive Plant Photographs*. This was one of two special-status plants that were observed on or near the proposed Project alignment in Ruffin Canyon.

San Diego viguiera (*Bahiopsis laciniata*) [CRPR 4.2] – San Diego viguiera (formerly known as *Viguiera laciniata*; Baldwin et al. 2012) is a perennial shrub in the *Asteraceae*. It that ranges from Ventura County south into Baja California, Mexico; it likely has been introduced in the northern parts of its range. San Diego viguiera is frequently common in San Diego County and may be locally dominant, especially in the southern part of the county. San Diego viguiera occupies chaparral and coastal scrub habitats generally away from the immediate coast, but below 2500 feet in elevation. It blooms February through August. San Diego viguiera is common and often is a locally dominant component of arid coastal scrub habitats throughout the Study Area as shown in Figure 9, *Sensitive Plant Locations*, and Figure 12, *Sensitive Plant Photographs*. This was the



Sensitive Plant Species

- Palmer's grapplinghook *(Harpagonella palmeri)*
- Robinson's peppergrass *(Virginicum robinsonii)*
- San Diego County viguiera *(Viguiera laciniata)*
- San Diego barrel cactus *(Ferocactus viridescens)*
- ashy spike-moss *(Selaginella cinerascens)*
- graceful tarplant *(Holocarpha virgata elongata)*
- small-flowered morning-glory *(Convolvulus simulans)*
- Coulter's saltbush *(Atriplex coulteri)*
- Coulter's saltbush *(Atriplex pacifica)*
- Munz's sage *(Salvia munzii)*
- Nuttall's scrub oak *(Quercus dumosa)*
- Robinson's peppergrass *(Virginicum robinsonii)*
- San Diego County viguiera *(Viguiera laciniata)*
- San Diego barrel cactus *(Ferocactus viridescens)*
- ashy spike-moss *(Selaginella cinerascens)*
- desert fragrance *(Ambrosia monogyra)*
- graceful tarplant *(Holocarpha virgata elongata)*
- small-flowered microseris *(Microseris douglasii platycarpha)*
- southwestern spiny rush *(Juncus acutus var. sphaerocarpus)*

- Trail Allignment
- Construction Staging Area

0 500
Feet

SOURCE: CADRE Environmental, Rick Riefner Associates, ESA

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 9
Sensitive Plant Locations
Ruffin Canyon Trail Alignment Impacts

Desert fragrance (*Ambrosia monogyra*) CRPR 2.2

Coulter's saltbush (*Atriplex coulteri*) CRPR 1B.2

Figure 10 - Sensitive Plant Photographs

San Diego River Tributary Canyons Project
Focused Sensitive Species Surveys

CADRE Environmental

San Diego barrel cactus (*Ferocactus viridescens*) CRPR 2.1

Graceful tarplant (*Holocarpha virgata* subsp. *elongata*)
CRPR 4.2

Figure 11 - Sensitive Plant Photographs

San Diego River Tributary Canyons Project
Focused Sensitive Species Surveys

CADRE Environmental

Nuttall's scrub oak (*Quercus dumosa*) CRPR 1B.1

San Diego viguiera (*Bahiopsis laciniata*) CRPR 4.2

Figure 12 - Sensitive Plant Photographs

San Diego River Tributary Canyons Project
Focused Sensitive Species Surveys

CADRE Environmental

second of two special-status plants that were observed on or near the proposed Project alignment in Ruffin Canyon.

Small-flowered morning-glory (*Convolvulus simulans*) [CRPR 4.2] – The small-flowered morning-glory (*Convolvulaceae*) ranges from Baja California north to San Luis Obispo County, and inland from Riverside to Kern Counties. Its preferred microhabitat is vernally moist clays, serpentine seeps and ridges, around rock outcrops, in shallow soil habitats with scattered native shrubs, or in grasslands. This small annual plant flowers from March through June. This morning-glory is not a vine and is inconspicuous when growing among grasses. In the Study Area, small-flowered morning-glory is locally abundant in open, shallow-soil habitats in Sandrock Canyon as shown in Figure 9, *Sensitive Plant Locations*.

Palmer's grapplinghook (*Harpagonella palmeri*) [CRPR 4.2] – Palmer's grapplinghook (*Boraginaceae*) occurs over a wide range in cismontane southern California, on Santa Catalina Island, northwestern Mexico, and also extends east into Arizona. The preferred microhabitat of this small annual herb includes clay soils, dry slopes and mesas in sparsely vegetated sites within coastal sage scrub, chaparral, and grasslands. In the Study Area, Palmer's grapplinghook is locally abundant in open, shallow-soil habitats in Sandrock Canyon as shown in Figure 9, *Sensitive Plant Locations*.

Graceful tarplant (*Holocarphavirgata* subsp. *elongata*) [CRPR 4.2] – Graceful tarplant (*Asteraceae*) is known from Orange, Riverside, and San Diego Counties. This annual forb occurs in woodland, coastal scrub, chaparral and grassland habitats, which are mostly below 3,500 feet in elevation. Graceful tarplant grows in open scrub and grassland habitats in Sandrock and Shawn Canyons in the Study Area as shown in Figure 9, *Sensitive Plant Locations*, and Figure 11, *Sensitive Plant Photographs*.

Southwestern spiny rush (*Juncus acutus* subsp. *leopoldii*) [CRPR 4.2] –The southwestern spiny rush (*Juncaceae*) ranges from San Luis Obispo County to Baja California, Mexico, and elsewhere. It occupies moist places and brackish locales with alkaline soils in many plant communities, including dunes, alkaline seeps and meadows, coastal salt marshes and swamps, stream banks, and riparian marshes. This large sharp-tipped perennial herb is easily identified and detected when present. The southwestern spiny rush grows in alkaline soils along stream banks and open riparian habitats in Sandrock Canyon in the Study Area as shown in Figure 9, *Sensitive Plant Locations*.

Robinson's Peppergrass (*Lepidium virginicum* var. *robinsonii*) [CRPR 1B.1] – Robinson's peppergrass is an annual plant in the mustard family (*Brassicaceae*). This variety occurs in coastal sage scrub and chaparral, often around rock outcrops, sandy or rocky soils, from San Bernardino County and Los Angeles County south to Baja California, Mexico; it is also found on Santa Cruz, San Clemente, and Santa Catalina Islands. Robinson's peppergrass blooms January through May and is now considered a synonym of *L. virginicum* subsp. *menziesii* (a common and widespread plant) in the recent taxonomic treat prepared by Al-Shehbaz (2012) for The Jepson Manual, Second Edition. The rare plant status of Robinson's peppergrass, however, has not been reviewed by CNPS (2012). In the Study Area, Robinson's peppergrass grows in open scrub and

cobbly soil habitats in Ruffin and Sandrock Canyons as shown in Figure 9, *Sensitive Plant Locations*.

Small-flowered microseris (*Microseris douglasii* subsp. *platycarpha*) [CRPR 4.2] – The small-flowered microseris (*Asteraceae*) is found from Los Angeles County south to Baja, California, and on Santa Catalina and San Clemente Islands. Its preferred microhabitat is grassy areas over clay soils, but it occurs in other plant communities including openings in coastal sage scrub and cismontane woodlands. This small annual herb flowers from March through May. A small population of small-flowered microseris grows in Sandrock Canyon as shown in Figure 9, *Sensitive Plant Locations*.

Nuttall's scrub oak (*Quercus dumosa*) [CRPR 1B.1] – Nuttall's scrub oak (*Fagaceae*) generally occurs in sandy soils near the coast in association with southern maritime chaparral, chaparral, and coastal sage scrub. This evergreen shrub ranges from the coastal slopes of the Santa Ynez Mountains in Santa Barbara County, and in the San Joaquin Hills, Orange County, south to San Diego County and NW Baja California, Mexico. It grows mostly within 2-3 kilometers of the coast. Nuttall's scrub oak prefers flat terrain, but it also grows on north-facing slopes and may grow in dense, monotypic stands. It is well known from nearby Kearny Mesa. Six large clumps of Nuttall's scrub oaks occur in open chamise chaparral in northern Sandrock Canyon within the Study Area as shown in Figure 9, *Sensitive Plant Locations*, and Figure 12, *Sensitive Plant Photographs*.

Munz's sage (*Salvia munzii*) [CRPR 2.2] – Munz's sage is an evergreen shrub in the mint family (*Lamiaceae*). It is known from San Diego County and Baja California, Mexico. It grows in chaparral and coastal sage scrub, and blooms from February through April. Within the Study Area, a small population of Munz's sage occurs in open coastal sage scrub in northern Ruffin Canyon as shown in Figure 9, *Sensitive Plant Locations*.

Ashy spike-moss (*Selaginella cinerascens*) [CRPR 4.1] – Ashy spike-moss is a perennial rhizomatous herb in the *Selaginellaceae*. It is known from Orange, Riverside, and San Diego Counties, and Baja California, Mexico. Ashy spike-moss grows in open chaparral, coastal sage scrub, and grasslands, often in association with cobbly or sandy soils. Ashy spike-moss is widespread in Ruffin and Sandrock Canyons in open, cobbly scrub habitats as shown in Figure 9, *Sensitive Plant Locations*.

Special-Status Wildlife

Coastal California Gnatcatcher

The coastal California gnatcatcher is the northernmost subspecies of California gnatcatcher. Its range extends from Ventura County down to Baja California, Mexico and is almost exclusively restricted to coastal scrub vegetation communities, including Venturan, Diegan and Riversidean sage scrub. Gnatcatchers may also occur in other nearby plant communities, especially during the non-breeding season, but are closely tied to coastal sage scrub for reproduction. Extensive breeding habitat loss and degradation, and brood parasitism by the brown-headed cowbird (*Molothrus ater*) have resulted in a rangewide decline of the coastal California gnatcatcher (USFWS 2010).

A total of five (5) pair of coastal California gnatcatchers and a single (1) male were detected during the focused and monitoring surveys conducted within the Study Area during the spring of 2012. Two (2) of these pairs occur within proximity to the proposed Project alignment. A status of "Pair" was cited when both a female and male individual were documented in close proximity (less than 50 ft). The delineated habitat utilization distribution areas are shown in Figure 13 and should be interpreted as the minimum extent of habitat used for foraging and movement observed during the 2012 survey efforts. All suitable coastal sage scrub vegetation communities documented within the Study Area are expected to be utilized for foraging, breeding and movement by the coastal California gnatcatcher as annual populations and habitat utilization naturally fluctuate. All remaining habitats are expected to occasionally be utilized for foraging and movement primarily based on the isolated condition of the Study Area and limitations on dispersal opportunities to suitable habitats within the region.

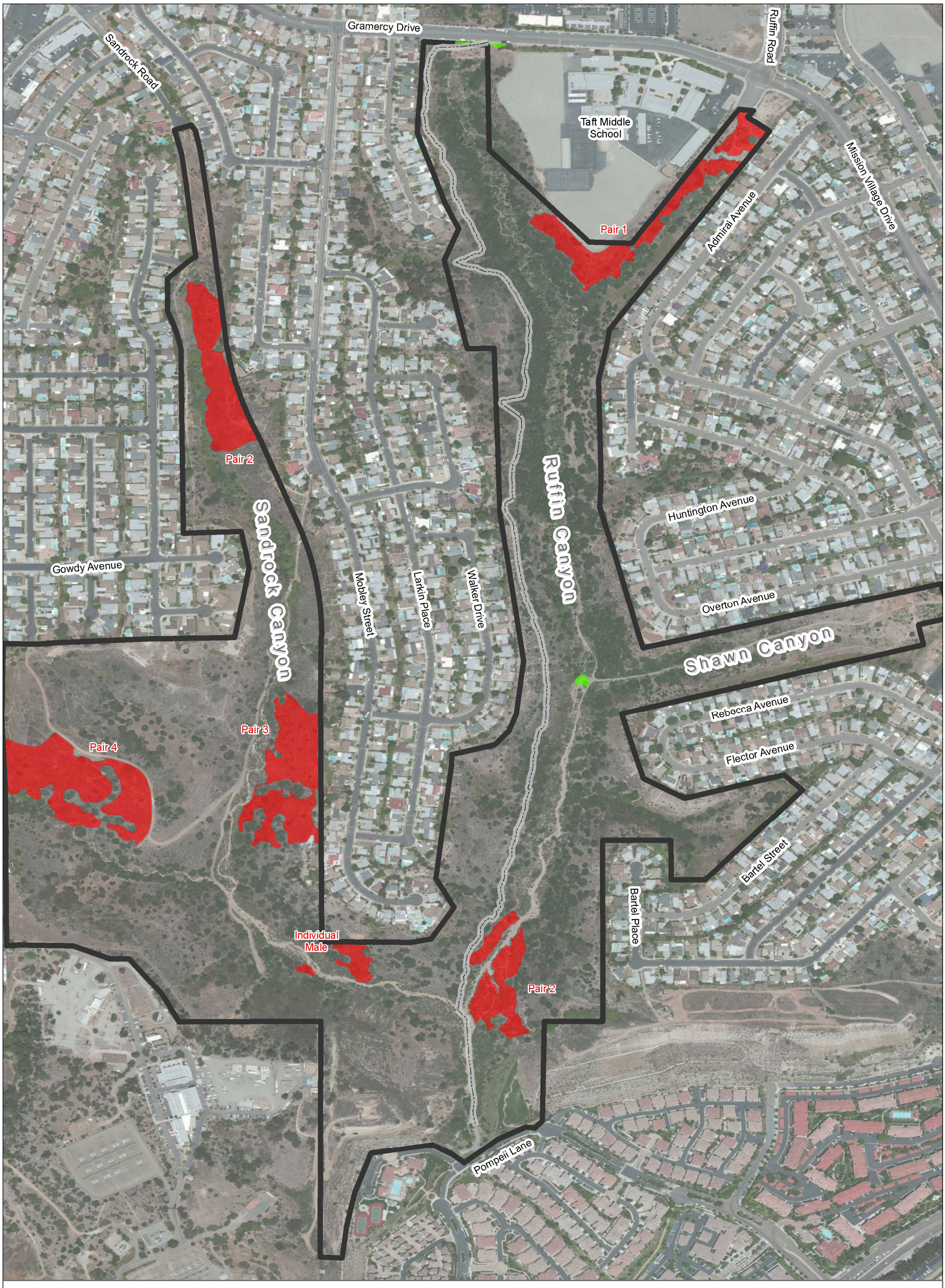
Least Bell's Vireo

Least Bell's vireo is an obligate riparian species during the breeding season and is characterized as preferring early successional habitat. This species typically inhabits structurally diverse woodlands along watercourses, including cotton-willow forests, oak woodlands, and mule fat scrub. Little is known about their winter habitat requirements, but they are not exclusively dependant on willow-dominated riparian woodland habitat on their wintering grounds. Extensive breeding habitat loss and degradation, and brood parasitism by the brown-headed cowbird have resulted in a rangewide decline of the least Bell's vireo (USFWS 1998).

Low quality habitat for the least Bell's vireo was documented within the Study Area within the 5.7 acres of riparian scrub scattered along the canyon floors within the Study Area. The majority of this area, however receives year-round urban water runoff, and is a highly invaded habitat. Many native wetland and riparian species in these areas have been displaced by a number of aggressive non-native tree species. The remaining native component of the riparian scrub onsite is comprised of late successional mulefat and willow. Least Bell's vireo was not detected during the biological surveys and the potential for the species to breed within the Study Area is low; therefore, focused surveys for the least Bell's vireo were not conducted.

Southwestern Willow Flycatcher

The southwestern willow flycatcher breeds in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes (e.g., reservoirs). Most of these habitats are classified as forested wetlands or scrub-shrub wetlands. Habitat requirements for wintering are not well known, but include brushy savanna edges, second growth, shrubby clearings and pastures, and woodlands near water. The southwestern willow flycatcher has experienced extensive loss and modification of breeding habitat, with consequent reductions in population levels. Destruction and modification of riparian habitats have been caused mainly by: reduction or elimination of surface and subsurface water due to diversion and groundwater pumping; changes in flood and fire regimes due to dams and stream channelization; clearing and controlling vegetation; livestock grazing; changes in water and soil chemistry due to disruption of natural hydrologic cycles; and establishment of invasive non-native plants. Concurrent with habitat loss have been increases in brood parasitism by the brown-headed



SOURCE: CADRE Environmental

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 13

Coastal California Gnatcatcher Observations
Ruffin Canyon Trail Alignment Impacts

cowbird, which inhibit reproductive success and further reduce population levels (USFWS 2002). No southwestern willow flycatchers were observed during the biological surveys. While southwestern willow flycatcher may utilize the riparian resources present within the Study Area as transitional habitat, no suitable breeding habitat was documented; therefore, focused surveys were not conducted.

A complete list of common and sensitive wildlife species documented during all focused survey efforts are included in Appendix B, *Faunal Compendium*.

3.5 Jurisdictional Resources

The potentially jurisdictional features within the Study Area generally consist of a primary unvegetated channel surrounded by a series of interconnected, braided ephemeral drainage components. The primary channel within the Study Area runs generally from north to south through Ruffin Canyon. This feature connects to a similar channel originating in Sandrock Canyon before entering a culvert at the southern extent of the proposed trail, located just west of the Project trailhead adjacent to the Escala community (Figure 14). This culvert flows into the San Diego River, and ultimately the Pacific Ocean. The Project alignment crosses the features discussed above within the Study Area.

The following analyses included the notation of wetland hydrology, wetland indicator soil series (hydric soils) and plant species (hydrophytic plants). Soils within the immediate vicinity of the potentially jurisdictional features are mapped as Gravel Pits and Olivenhain soils mapping units (Figure 3). Although Olivenhain soils have the potential to be considered hydric, soils observed did not exhibit hydric indicators.

Stands of riparian scrub containing mulefat and willow, interspersed with relatively large portions of unvegetated stream beds, occur within the immediate vicinity of the locations where the Project alignment crosses the aforementioned drainages (Figure 4). Hydrophytic vegetation, although observed to be dominant upstream within both Sandrock Canyon and Ruffin Canyon, was largely absent from the portions of the Project alignment that crossed the channels. Wetland Delineation Data Forms and representative photographs are included as Appendix C.

Obvious hydrologic indicators were noted within the channel, including sediment deposits and drainage patterns, but all hydrologic indicators were restricted to within the OHWM. The vegetative corridor exhibited no signs of regular inundation, surface flow, or ground water discharge at any of the sample points.

All four sample points exhibited multiple primary and secondary indicators of wetland hydrology. There is evidence of past sediment deposition, drift deposits, scouring, and associated flow throughout the extent of the feature. Only one of the four sample points, the southernmost sample point (Figure 14), exhibited a positive dominance test for hydrophytic vegetation. However, this sample point lacked sufficient indicators of hydric soils, and therefore could not be considered a federal wetland.

Figure Legend

- USACE (Corps) Significant Nexus
- Wetland Sample Location
- Culvert Location
- USACE (Corps) Jurisdiction
- CDFW Jurisdiction

*Note: Jurisdictional boundaries outside of the proposed impact footprint are visual estimates and not based on a formal delineation.

- Trail Allignment
- Construction Staging Area

0 500 Feet

SOURCE: ESA

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 14

Jurisdictional Resources Map

Ruffin Canyon Trail Alignment Impacts

The other three sample points lacked indicators of both hydrophytic vegetation and hydric soils. The data included in this report are based on the conditions observed during the January 17th and 24th, 2013 site visits. Photographs of the site conditions at the time of the field assessments are attached to this Survey Report (Appendix C).

A summary of agency jurisdiction as it relates to features observed within the Study Area is presented in Table 4.

TABLE 4
SUMMARY OF LIMITS OF JURISDICTION

Agency	Jurisdiction
USACE	Non-wetland waters, defined by OHWM
CDFW	Unvegetated streambed, defined by top of bank, and adjacent riparian habitat
RWQCB	Includes USACE and CDFW
City	Includes USACE and CDFW

3.6 Wildlife Corridors

The wildlife movement goals provided by the City's MSCP Subarea Plan for the Urban Area include maintaining canyons in a relatively natural state to allow for the movement of wildlife across the landscape. These canyon areas contribute to the MHPA either by providing habitat for native species to continue reproducing and finding new territories, or by providing necessary shelter and forage for migrating species. No designated wildlife movement corridors are identified in the City's MSCP Subarea Plan.

Wildlife movement in the Study Area is currently limited to the canyons, which provide a north-south wildlife movement corridor through dense urban development. The existing trails and unvegetated ephemeral streambeds provide easily traversable routes for wildlife to disperse within the canyon.

4. Impacts

<u>Issue 1</u>:Would the Project result in a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in the MSCP or other local regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Impact Thresholds

In accordance with the City's Significance Determination Thresholds (January 2011), biological resources impacts would be significant if the Project would:

- Directly or indirectly impact a Federal/State-listed species, a non-listed sensitive species, or an MSCP-covered species.
- Impact greater than 0.1 acre of upland habitat (Tier I-IIIB).
- Impact greater than 1.0 acre of non-native grasslands which are completely surrounded by existing urban development (Impacts to non-native grassland as the result of wetland or other native habitat creation are not significant).
- Impact greater than 0.01 acre of wetlands (excluding wetlands within the Coastal Zone and vernal pools; impacts to vernal pools are always considered significant regardless of the size of the impact).
- Include brush management not conducted in accordance with brush management regulations.
- Include construction noise levels which would exceed 60 db(A) during the avian breeding season.
- Include construction noise levels within the MHPA in or adjacent to areas of occupied coastal California gnatcatcher habitat which would exceed 60 db(A) during the breeding season.

Impact Analysis

Direct Impacts

Federal and State-Listed/MSCP-Covered Species

Coastal California Gnatcatcher

The coastal California gnatcatcher could potentially be directly and permanently impacted through mortality, nest abandonment/failure, and habitat reduction as a result of removal of 0.368 acre of coastal sage scrub habitat. Because the Project is within the MHPA, all impacts to coastal California gnatcatcher and its habitat are considered significant. In addition, for occupied California gnatcatcher habitat within the MHPA, construction or operational noise levels exceeding 60 dB(A) (or exceeding the existing ambient noise level if already above 60 dB(A)) during the breeding season (March 1st to August 15th) is considered significant.

Consultation with the USFWS under Section 7 of the ESA is not required for costal California gnatcatcher as the proposed Project shall be subject to the MSCP.

Implementation of Mitigation Measures MM-BIO-1, MM-BIO-4, and MM-BIO-5, consistent with Area Specific Management Directives (ASMD) detailed in Table 3-5 of the City's MSCP Subarea Plan, would reduce direct impacts to coastal California gnatcatcher to less than significant. See the discussions under Issue 2 below, for more details regarding impacts to sensitive natural communities.

Least Bell's Vireo and Southwestern Willow Flycatcher

The least Bell's vireo and southwestern willow flycatcher have a low potential to utilize the riparian habitat within the Study Area for breeding due to the high level of ornamental species recruitment and disturbance in these areas. Neither species was detected or observed during the biological surveys; therefore no impacts are anticipated to occur.

Non-Listed/MSCP-Covered Species

San Diego Barrel Cactus

San Diego barrel cactus was found in proximity to the proposed Project alignment in Ruffin Canyon and may be directly and permanently impacted by project activities. Direct impacts would include trampling, crushing, grubbing, trimming or completely removing the plants during trail construction; all of which are considered significant impacts. The implementation of ASMD measures, such as the City's maintenance of a fuel management zone that extends into the canyon, will minimize the indirect effects of fire. Implementation of Mitigation Measures MM-BIO-2, MM-BIO-3, and MM-BIO-5 would reduce direct impacts to San Diego barrel cactus to less than significant.

Coastal Cactus Wren

Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) is considered a Species of Special Concern (SSC) by the state and also covered under the MSCP and protected by the MBTA. Although the species was not detected or observed during the biological surveys within the Study Area, there is still potential for the species to utilize the large patches of cacti found within the Project alignment for nesting. Direct impacts to coastal cactus wren can include loss of nesting habitat, including the large cactus stands throughout the coastal sage scrub, mixed chaparral, and ornamental vegetation; and take of nests due to Project implementation; both of which are considered a significant impact. Implementation of Mitigation Measures MM-BIO-3, MM-BIO-4, and MM-BIO-5, consistent with ASMD recommendations in the City's MSCP Subarea Plan, would reduce direct impacts to coastal cactus wren to less than significant.

Western Bluebird

In addition to the MSCP-covered coastal California gnatcatcher and San Diego barrel cactus, Western bluebird (*Sialia mexicana*) was detected within the Study Area. Direct impacts to western bluebird can include loss of nesting habitat, including 0.368 acre of coastal sage scrub, 0.521 acre of mixed chaparral, and 0.048 acre of riparian scrub habitat within the proposed alignment; and take of nests due to Project implementation; both of which are considered a

significant impact. Implementation of Mitigation Measures MM-BIO-4 and MM-BIO-5 would reduce these impacts to less than significant.

Narrow Endemic Plants

No species adopted by the City of San Diego as narrow endemic have been recorded within the Study Area. Therefore, there would be no direct impact on any narrow endemic species.

Non-Listed/Non-MSCP Covered Special-Status Species

Special-Status Plants

Twelve (12) non-listed/non-MSCP covered special-status plant species were observed in the Study Area, including desert fragrance, Coulter's saltbush, San Diego viguiera, small-flowered morning-glory, Palmer's grapplinghook, graceful tarplant, southwestern spiny rush, Robinson's peppergrass, small-flowered microseris, Nuttall's scrub oak , Munz's sage, and ashy spike-moss. Of those 12, only San Diego viguiera [CRPR 4.2] occurs within the proposed Project alignment and could be potentially impacted by Project implementation (see Figure 9). Direct impacts would include trampling, crushing, grubbing, trimming or completely removing the plants during Project construction; all of which are considered significant impacts. Implementation of Mitigation Measures MM-BIO-2, MM-BIO-3, and MM-BIO-5 would reduce direct impacts to sensitive plants to less than significant.

Special-Status Wildlife

Direct impacts to non-listed special-status wildlife species include those impacts to migratory birds covered by the MBTA. A total of 59 raptor and passerine bird species protected under the MBTA were detected or observed within the Study Area (see Appendix B). Direct impacts to migratory birds can include loss of nesting habitat and take of nests due to Project implementation; both of which are considered a significant impact. Implementation of Mitigation Measures MM-BIO-1, MM-BIO-4, and MM-BIO-5 would reduce these impacts to less than significant.

Indirect Impacts

Federal and State-Listed/MSCP-Covered Species

Coastal California Gnatcatcher

Indirect impacts to the federally threatened coastal California gnatcatcher can include construction noise, and other phenomena which are the result of Project construction which can alter the breeding and behavior patterns of the gnatcatcher. Any potential indirect impacts to the federally threatened coastal California gnatcatcher within the MHPA lands would be less than significant with the implementation of Mitigation Measures MM-BIO-1, MM-BIO-4, and MM-BIO-5, and preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the Site Development Permit. The SWPPP will list and implement Best Management Practices (BMPs) in order to minimize water quality impacts during construction, which will also consist of fugitive dust control and erosion prevention measures, thereby also reducing impacts to adjacent biological resources.

Post construction, indirect impacts may include increased anthropogenic disturbances from trail use such as noise; however, use of the trail will not be constant and will be pedestrian in nature. No motorized vehicles will be permitted to access the trail; therefore it is highly unlikely that ambient noise levels will exceed 60 dB(A). Furthermore, public access, pedestrian hiking trails (passive recreation) are a compatible land use in the MHPA and gnatcatchers are known to habituate to slight incremental increases in noise associated with intermittent pedestrian traffic. No indirect impacts from post construction operation of the trail are anticipated to occur to coastal California gnatcatcher.

Non-Listed/MSCP-Covered Species

San Diego Barrel Cactus

Indirect Impacts to San Diego barrel cactus can include spatial competition, which may occur from the introduction of invasive plant species through construction activities or trail use. Indirect impacts to San Diego barrel cactus, located within the MHPA lands, would be less than significant with the implementation of Mitigation Measure MM-BIO-2 and preparation of a SWPPP.

Coastal Cactus Wren

Indirect impacts to coastal cactus wren can include noise as a result of construction activities, and ambient noise as a result of trail use, both of which may disrupt breeding and behavior patterns. Indirect impacts to this species, located within the MHPA lands, would be less than significant with the implementation of Mitigation Measures MM-BIO-3 and MM-BIO-4, and preparation of a SWPPP.

Western Bluebird

Indirect impacts to the MSCP-covered western bluebird can include noise as a result of construction activities and Project implementation, which may disrupt breeding and behavior patterns. Implementation of Mitigation Measure MM-BIO-4 and preparation of a SWPPP would reduce this impact to less than significant.

Non-Listed/Non-MSCP Covered Special-Status Species

Indirect Impacts to non-listed special-status plant species such as San Diego viguiera can include spatial competition, which may occur from the introduction of invasive plant species through construction activities or trail use. Indirect impacts to non-listed special-status wildlife species including migratory birds and raptors can include noise as a result of construction activities which may disrupt breeding and behavior patterns. Indirect impacts to these special-status species located within the MHPA lands would be less than significant with the implementation of Mitigation Measures MM-BIO-2 and MM-BIO-4, and preparation of a SWPPP.

Narrow Endemics

There are no indirect impacts to narrow endemic species as none have been detected on-site.

Significance of Impacts

The Project would result in a direct loss of habitats that support the federally threatened and MSCP-covered coastal California gnatcatcher and non-listed special-status species such as San Diego barrel cactus, San Diego viguiera, and potentially coastal cactus wren. Habitats throughout the Study Area support the MSCP-covered western bluebird and other migratory bird species and nesting habitats regulated by the MBTA. Any direct or indirect impacts to these species would be considered significant. Implementation of Mitigation Measures MM-BIO-1 through MM-BIO-5 would reduce these impacts to less than significant.

Issue 2: Would the Project result in a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier III A Habitats, or Tier III B Habitats as identified in the Biology Guidelines of the Land Development Manual or other sensitive natural community identified in local or regional plans, polices, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Impact Thresholds

In accordance with the City's Significance Determination Thresholds (January 2011), biological resources impacts would be significant if the Project would:

- Impact greater than 0.1 acre of upland habitat (Tier I-IIIB).
- Impact greater than 1.0 acre of non-native grasslands which are completely surrounded by existing urban development (Impacts to non-native grassland as the result of wetland or other native habitat creation are not significant).
- Impact greater than 0.01 acre of wetlands (excluding wetlands within the Coastal Zone and vernal pools; impacts to vernal pools are always considered significant regardless of the size of the impact).
- Include brush management not conducted in accordance with brush management regulations.
- Include construction noise levels which would exceed 60 db(A) during the avian breeding season.
- Include construction noise levels within the MHPA in or adjacent to areas of occupied coastal California gnatcatcher habitat which would exceed 60 db(A) during the breeding season.

Impact Analysis

Direct Impacts

Impacts to vegetation communities as a result of Project implementation include on-site impacts to coastal sage scrub, chaparral, non-native grassland, disturbed/ornamental, and riparian/wetland habitats. A total of 0.604 acre of vegetation communities would be permanently impacted, and

0.647 acre would be temporarily impacted as a result of Project implementation. It should be noted that the City only recognizes "impacts" on a general scale and does not distinguish between temporary and permanent impacts. While temporary impacts (defined as areas where the root systems of upland vegetation are maintained and vegetation may reestablish on its own or areas that will be impacted for a short duration and subsequently restored to pre-existing conditions) are anticipated to occur from project implementation, all impacts, whether temporary or permanent shall be mitigated as if they were "permanent" according to the City's Biology Guidelines. Project impacts to vegetation communities are summarized in Table 5.

TABLE 5
PROJECT VEGETATION COMMUNITY IMPACTS

Community	Tier	Permanent Impacts (acres)	Temporary Impacts (acres)	Total Impact (acres)
Upland Habitat				
Coastal Sage Scrub	II	0.173	0.195	0.368
Mixed Chaparral	IIIA	0.255	0.266	0.521
Non-Native Grassland	IIIB	0.003	0.004	0.007
Disturbed/Ornamental	IV	0.127	0.165	0.292
Wetland Habitat				
Riparian Scrub	N/A	0.035	0.013	0.048
Non-Vegetated Channel	N/A	0.011	0.004	0.015
Total Combined Project Impacts		**0.604**	**0.647**	**1.251**

Coastal Sage Scrub

The permanent Project impact to coastal sage scrub (Tier II) from the construction of the trail is 0.173 acre. The temporary Project impact to coastal sage scrub from construction staging alongside the trail and staging areas is 0.195 acre. Total impacts to coastal sage scrub as a result of Project implementation is 0.368 acre. Impacts to coastal sage scrub are considered significant according to the City's CEQA Significance Determination Thresholds and~~, if mitigation occurs inside the MHPA, must~~shall be mitigated at a 1:1 ratio inside the MHPA and at a 2:1 ratio outside the MHPA~~1:1 ratio~~ through restoration of disturbed habitats in Tributary Canyons. Implementation of mitigation measure MM-BIO-5 would reduce impacts to coastal sage scrub to below a level of significance.

Mixed Chaparral

The permanent Project impact to mixed chaparral (Tier IIIA) is 0.255 acre. The temporary Project impact to mixed chaparral is 0.266 acres. Total impacts to mixed chaparral as a result of Project implementation is 0.521 acre. Impacts to chaparral are considered significant according to the City's CEQA Significance Determination Thresholds and ~~must~~ shall be mitigated at a 1:1 ratio inside the MHPA and at a 2:1 ratio outside the MHPA~~1:1 ratio~~ through restoration of disturbed habitats in Tributary Canyons ~~if mitigation occurs inside the MHPA.~~ Implementation of mitigation measure MM-BIO-5 would reduce impacts to chaparral to below a level of significance.

Non-Native Grassland

The permanent Project impact to non-native grassland (Tier IIIB) is 0.003 acre. The temporary Project impact to non-native grassland is 0.004 acre. Total impacts to non-native grassland as a result of Project implementation is 0.007 acre. Impacts to non-native grassland are considered insignificant according to the City's CEQA Significance Determination Thresholds (impacts are less than 1 acre), therefore no mitigation is required.

Disturbed/Ornamental

The permanent Project impact to disturbed/ornamental habitat (Tier IV) is 0.127 acre. The temporary Project impact to disturbed/ornamental habitat is 0.165 acres. Total impacts to disturbed/ornamental habitat as a result of Project implementation is 0.292 acre. The City's MSCP does not require mitigation for disturbed/ornamental habitat.

Riparian Habitats

The permanent Project impact to riparian habitat is 0.046 acre. The temporary Project impact to riparian habitat is 0.017 acre. Total impacts to riparian habitat as a result of Project implementation is 0.063 acre. Impacts to riparian/wetland habitats in excess of 0.01 acre are considered significant according to the City's CEQA Significance Determination Thresholds and must be mitigated for (see Issue 3 below for further discussion of these habitats). Implementation of mitigation measure MM-BIO-6 would reduce impacts to below a level of significance.

Indirect Impact

The Project falls within the City's MHPA lands. As such, indirect impacts to preserved habitat, including impacts from edge effects such as wildfire, invasive species introduction, planting with ornamentals and introduction of pesticides and fertilizers from neighboring residences, could potentially result in a significant impact to sensitive habitats and species within the MHPA. Edge effects currently exist due to use of an unauthorized trail system. The City maintains a brush management zone that extends into the canyon open space. Continued management by City of San Diego rangers, i~~I~~mplementation of Mitigation Measure MM-BIO-5 and BIO-6, and preparation of a SWPPP would reduce potential indirect impacts to less than significant.

Significance of Impact

The Project would result in significant impacts to the following sensitive upland vegetation communities: coastal sage scrub and chaparral; and significant impacts to wetland communities. The Project could also have a significant effect on adjacent habitats and species within the MHPA. Implementation of Mitigation Measures MM-BIO-5 and MM-BIO-6 would reduce these impacts to below a level of significance.

Mitigation, Monitoring, and Reporting

Refer to Mitigation Measures MM-BIO-5 and MM-BIO-6.

Issue 3:Would the Project result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact Thresholds

In accordance with the City's Significance Determination Thresholds (January 2011), biological resources impacts would be significant if the Project would:

- Impact greater than 0.01 acre of wetlands (excluding wetlands within the Coastal Zone and vernal pools; impacts to vernal pools are always considered significant regardless of the size of the impact).

Impact Analysis

Direct Impact

Impacts to waters of the U.S., including wetlands under the jurisdiction of CDFW, RWQCB, and City would occur from the Project as indicated in Table 6.

TABLE 6
SUMMARY OF JURISDICTIONAL IMPACTS

Agency	Acres
USACE	0.063
CDFW	0.063
RWQCB	0.063
City	0.063

The build-out of the Project would directly impact approximately 686 linear feet (at 4 feet in width; totaling 0.063 acre) of non-wetland ephemeral streambed with riparian scrub vegetation (waters of the U.S./State/RWQCB/City) located in the southern stretch of the alignment just north of the Escala community and a single tributary crossing near the northern end of the alignment (Figure 14).

USACE Jurisdiction

The existing ephemeral stream was determined to be connected to the Pacific Ocean via San Diego River through a culvert in the southern portion of the Project area (Figure 14), and hence is under the jurisdiction of the USACE. Approximately 0.063 acre of non-wetland waters under the jurisdiction of the USACE occur within the proposed Project alignment. This includes the 0.015 acre of unvegetated channel and 0.048 acre of riparian scrub that falls within the OHWM. No federal wetlands occur on the within or adjacent to the proposed Project alignment.

CDFW Jurisdiction

Based on the presence of a distinguishable channel with bed and bank, 0.063 acre was mapped as CDFW-jurisdictional unvegetated streambeds and riparian habitats within the proposed Project alignment. This includes 0.015 acre of non-vegetated channel and 0.048 acre of riparian scrub.

RWQCB Jurisdiction

All areas mapped as USACE-jurisdictional waters and CDFW-jurisdictional habitats fall with the Section 401 authorities of the RWQCB.

City Jurisdiction

All areas mapped as USACE-jurisdictional waters and CDFW-jurisdictional habitats fall under the jurisdiction of the City.

Impacts to non-wetland waters of the U.S./State and City wetlands are considered significant. Per the City Regulations, impacts to wetlands must be avoided. If there are no feasible measures to avoid the wetlands then mitigation is required at a 2:1 ratio. Implementation of Mitigation Measure MM-BIO-6 would reduce impacts to non-wetland waters to below a level of significance.

Indirect Impact

The build-out of the Project would not have any indirect impacts on any jurisdictional resources, because all jurisdictional resources are directly impacted by the Project.

Significance of Impact

Jurisdictional Resources

The Project would permanently and temporarily impact non-wetland waters of the U.S. and waters of the State associated with the on-site unvegetated ephemeral streambeds. Permanent impacts are mainly the result of routing the trail along the streambed within the narrow public use easement in the southern portion of Study Area within the Escala community. Temporary impacts are the result of trail construction staging alongside the trail. Impacts to these habitats are considered significant according to the City's CEQA Significance Determination Thresholds and would be mitigated at a ratio of 2:1 through the construction of an unvegetated ephemeral channel. In addition, the riparian scrub to be impacted by the Project is considered jurisdictional by CDFW, RWQCB, and the City. Permanent direct impacts to these jurisdictional resources are considered significant and must be mitigated at a 2:1 ratio per the City guidelines.

Compliance with the City's ESL Regulations (Section 143.0141) requires that a 100-foot buffer be maintained around riparian scrub as appropriate to protect the functions and values of the habitat. The southern portion of the trailhead near the Escala Community will permanently impact 0.048 acre of riparian scrub and 0.015 acre of non-vegetated channel. This alignment represents the most feasible alternative with the least amount of potential impacts to wetlands; however, the required 100-foot buffer cannot be fully maintained. It should be noted that implementation of the designated trail would benefit the surrounding wetland habitat through dissuasion of the public from sensitive wetland areas, thereby allowing the wetland habitat to flourish; however, because

the Project would impact City wetlands and wetland buffers, a deviation to the ESL Regulations would need to be granted by the City, as part of the Site Development Permit process, including the identification of a Biologically Superior Option. According to the City Land Use and Community Planning Element of the City's General Plan, and the Land Use Considerations in the MSCP, passive recreation (including linear hiking trails) is a compatible land use in the MHPA and City-designated Open Spaces. ~~The project qualifies as an Essential Public Service Project according to the City Wetland Deviations as it will service the community at large and not just a single property.~~ A~~The~~ 100-foot buffer shall be observed with respect to ~~the~~ created wetland mitigation habitat. Implementation of Mitigation Measure MM-BIO-6 would reduce impacts to below a level of significance.

Issue 4:Would the Project interfere substantially with the movement of any native resident of migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?

Impact Thresholds

In accordance with the City's Significance Determination Thresholds (January 2011), biological resources impacts would be significant if the Project would:

- Interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites.

Impact Analysis

The canyon provides a north-south wildlife movement corridor through urban development as well as a point of refuge for several migrating species. The existing trails and unvegetated ephemeral streambeds provide easily traversable routes for wildlife to disperse within the canyon. The areas surrounding the canyon are comprised of residential and urban development. No designated wildlife corridor exists in the immediate vicinity of the Project site. As this Project does not include the construction of obstacles to wildlife movement or designated wildlife corridors and may actually enhance wildlife movement within the canyon, it is in compliance with the area-specific management directives of the City's MSCP Subarea Plan.

Significance of Impact

The Project does not impact any regional wildlife corridors. Impacts to the movement of local wildlife would be less than significant.

Mitigation, Monitoring, and Reporting

No significant impacts have been identified; therefore, no mitigation is required.

Issue 5:Would the Project result in a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?

Impact Thresholds

In accordance with the City's Significance Determination Thresholds (January 2011), biological resources impacts would be significant if the Project would:

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region.

The project is consistent with provisions of the City of San Diego MSCP Subarea Plan and all associated terms and conditions, including the Area Specific Management Directives (ASMD) and special conditions detailed in Table 3-5 of the MSCP Subarea Plan. The Project occurs within the City's designated MHPA in the Urban Area of the City's Subarea Plan and Land Use Adjacency provisions. However, passive recreation such as public hiking trails is a compatible land use within the MHPA (MSCP 1997). Therefore, the proposed trail would not create any conflict with any adopted plans as cited above.

Issue 6:Would the Project result in introducing land use within an area adjacent to the MHPA that would result in adverse edge effects?

Impact Thresholds

In accordance with the City's Significance Determination Thresholds (January 2011), biological resources impacts would be significant if the Project would:

- Introduce a land use within an area adjacent to the MHPA that would result in adverse edge effects.
- Direct runoff, drainage or toxic effluents into the MHPA.

Impact Analysis

Existing conditions of the Project alignment within the MHPA include disturbed areas, exotic ornamental vegetation, and non-native grassland subject to disturbance during construction of the trail. As a result there is the potential for introduction of invasive plant species from these areas into adjacent native habitat patches. In addition, increased human activity may indirectly affect MSCP-covered species utilizing the MHPA lands. Implementation of Mitigation Measures MM-BIO-1 through MM-BIO-6 would reduce these impacts to less than significant.

Construction of the proposed project would be conducted primarily with the use of hand tools (powered and unpowered) such as digging and transfer shovels, pick mattocks, loopers, rakes, and wheel barrels. Small construction equipment, suitable for narrow and steep surroundings may be used for some soil movement; however, construction vehicles would primarily be limited to workers' commute vehicles, which would consist primarily of passenger automobiles and/or light trucks, and small equipment such as a compact excavator and loader. The proposed Project would prepare a SWPPP in accordance with the Site Development Permit. The SWPPP will list and implement BMPs in order to minimize water quality impacts during construction. Once operational, the trail would be more sustainable than the existing trail and would improve existing runoff patterns and reduce erosion along the alignment, thereby reducing sediment runoff into downstream water bodies. Compliance with the Site Development Permit, and properly designed, implemented, and maintained construction BMPs to address pollutants of concern would reduce potential adjacency impacts to MSCP-covered habitats and species inside the MHPA to less than significant during construction.

Significance of Impact

The Project could have a potentially significant effect on MHPA lands from increased human activity and invasive plant species. Implementation of a SWPPP and Mitigation Measures MM-BIO-1 through MM-BIO-6 would reduce any impacts to less than significant.

Mitigation, Monitoring, and Reporting

Refer to Mitigation Measures MM-BIO-1 through MM-BIO-6.

Issue 7: Would the proposed Project result in a conflict with any local policies or ordinances protecting biological resources?

Impact Thresholds

In accordance with the City's Significance Determination Thresholds (January 2011), biological resources impacts would be significant if the Project would:

- Conflict with any local policies or ordinances protecting biological resources.

Impact Analysis

The Project is within the City's MSCP Subarea Plan and on Environmentally Sensitive Lands (ESL), as defined in the Land Development Code (LDC). The Project site is subject to the policies, guidelines, and regulations of the City's MSCP Subarea Plan, the ESL regulations (Chapter 14, Division 1, San Diego Municipal Code), and the Biology Guidelines and Biology Survey Guidelines (~~2002~~2012). The Project has been designed to minimize, to the extent feasible, impacts to ESL through avoidance~~, enhancement,~~ and creation of habitat. The ESL Regulations do not allow impacts to wetlands unless a deviation is requested and granted. The Project would impact wetlands (unvegetated channel) and wetland buffers, and a deviation to the ESL

Regulations would need to be granted by the City, as part of the Site Development Permit process. The wetlands deviations will include a determination of the Biological Superior Option.

The Project also complies with the requirement that mitigation for impacts associated with a deviation achieves the goal of no-net-loss and retains the in-kind function. The Project Proponent would provide a permit/authorization/agreement from the USACE, RWQCB, and CDFW for impacts to non-wetland waters of the U.S. and waters of the State; permits would be obtained as part of the Project approvals prior to construction.

Significance of Impact

Implementation of Mitigation Measures MM-BIO-1 through MM-BIO-6 would ensure that the Project is in compliance with local policies and ordinances protecting biological resources.

Mitigation, Monitoring, and Reporting

Refer to Mitigation Measures MM-BIO-1 through MM-BIO-6.

Issue 8: Would the Project result in an introduction of invasive species of plants into a natural open space area?

Impact Thresholds

In accordance with the City's Significance Determination Thresholds (January 2011), biological resources impacts would be significant if the Project would:

- Introduce invasive species of plants into a natural open space area.

Impact Analysis

Existing conditions along the Project alignment currently have a substantial component of non-native invasive species and exotic ornamental vegetation, particularly along the mesa crest line just below the residential developments. Disturbed areas, exotic ornamental vegetation, and non-native grassland are subject to disturbance during construction of the trail. As a result, there is the potential for introduction of invasive plant species from these areas into adjacent native habitat patches. In addition, the Project would be required to comply with the Land Use Adjacency Guidelines in Section 1.4.3 of the City's MSCP Subarea Plan which prohibits the introduction of invasive non-native plants into areas of the MHPA. Implementation of a SWPPP and Mitigation Measures MM-BIO-5 through MM-BIO-6 would reduce any impacts to less than significant.

Significance of Impact

Based on existing conditions, and implementation of a SWPPP and Mitigation Measures MM-BIO-5 through MM-BIO-6 would reduce any impacts to less than significant, the Project is not likely to result in a substantial adverse change over the existing amount of invasive species present in the area. Therefore, this is considered to be a less than significant impact.

Mitigation, Monitoring, and Reporting

No significant impacts have been identified; therefore, no mitigation is required.

5. Mitigation Measures

Mitigation Measure MM-BIO-1

Prior to the issuance of any grading or construction permit and/or prior to the preconstruction meeting, the City shall verify that the Multi-Habitat Planning Area (MHPA) boundaries and the following Project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

- In order to avoid "take" of coastal California gnatcatcher, no clearing, grubbing, grading or other noise-generating construction activities shall occur between March 1st and August 15th. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist.

- If avoidance of the breeding season is not feasible a permitted biologist approved by USFWS to conduct breeding bird surveys for coastal California gnatcatcher shall conduct a preconstruction clearance survey for active nests no more than 3 days prior to the initiation of Project activities. If an active nest is found, the Project proponent shall delay all Project activities within 300 feet of on- and off-site suitable nesting habitat until August 15th. Alternatively, if an active nest is located the biologist can monitor the nest and any Project activities within 300 feet of the nest or as determined by a qualified biological monitor, shall be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, and/or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet between the Project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. A biological monitor must be present during all vegetation clearing and noise-generating construction activities during the breeding season in order to prevent take of active nests and to ensure that noise levels are not exceeding 60dB(A). If noise levels at the edge of occupied gnatcatcher habitat exceed 60dB(A), noise attenuation methods shall be installed and monitored.

~~In order to avoid impacts to the coastal California gnatcatcher, all vegetation clearing, grubbing or grading shall take place outside of the nesting season, which spans from March 1st to August 15th. If avoidance of the breeding season is not feasible, a permitted biologist approved by USFWS to conduct breeding bird surveys for coastal California gnatcatcher shall conduct a preconstruction clearance survey for active nests no more than 3 days prior to the initiation of project activities. If an active nest is found, the project proponent shall delay all project activities within 300 feet of on- and off-site suitable nesting habitat until August 15th. Alternatively, if an active nest is located the biologist can monitor the nest and any Project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, shall be postponed until the nest is vacated and juveniles have fledged and there is no evidence of~~

~~a second attempt at nesting. Flagging, stakes, and/or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet between the Project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. A biological monitor must be present during all vegetation clearing during the breeding season in order to prevent adverse impacts to active nests and to ensure that noise levels do not exceed 60dB(A).~~

Mitigation Measure MM-BIO-2

San Diego barrel cactus and San Diego viguiera shall be avoided. A biological monitor shall be present during all vegetation clearing to ensure impacts stay within the proposed Project footprint and to ensure impacts to these two species are avoided or minimized. If complete avoidance of these special-status plants is not feasible, then the following measures shall be implemented:

- Viguiera shall be restored by including seed of this species in coastal upland restoration seed mixes, per the Biology Guidelines of the Land Development Code (see Mitigation Measure MM BIO-5 below). Prior to removal of viguiera, duff and soil from the base of the plant that contains seeds shall be collected and used for restoration and revegetation.
- San Diego barrel cactus will be salvaged and transplanted within the identified upland restoration areas on the Project site, subject to approval by the City (see Mitigation Measure MM-BIO-3 below).

Mitigation Measure MM-BIO-3

Within the MHPA, impacts to coastal cactus wren habitat must be avoided. If avoidance of cactus wren habitat is not feasible, then prior to the issuance of the grading permit, all listed species below actually present onsite (as appropriate) shall be described in a salvage plan (included in the restoration plan) to the satisfaction of the City.

Scientific Name	**Common Name**
Cylindropuntia californica var. *californica*	snake cholla
**Cylindropuntia prolifera*	coast cholla
**Dudleya edulis*	ladies'-fingers
**Dudleya lanceolata*	coastal dudleya
**Dudleya pulverulenta*	chalky live-forever
Euphorbia misera	cliff spurge
**Ferocactus viridescens*	San Diego barrel cactus
**Mammillaria dioica*	fish-hook cactus
**Opuntia littoralis*	coastal prickly pear
**Opuntia oricola*	chaparral prickly pear
**Yucca whipplei*	our Lord's candle
**Yucca schidigera*	Mojave yucca

*****Species present onsite based on site specific biology reports & City staff input – this list is also subject to future refinements at the discretion of the City and Wildlife Agencies.

The salvage plan is required to provide appropriate species for use within City sanctioned coastal cactus wren mitigation sites. These sites are currently as follows: Northern- Lake Hodges and Wild Animal Park; Southern – Rancho Jamul/San Diego National Wildlife Refuge Sites.

Prior to construction, the following measures shall be implemented:

- Prior to the first preconstruction meeting, the applicant shall provide a letter of verification to the City stating that a qualified Biologist, as defined in the City of San Diego Biological Resource Guidelines, has been retained to implement the salvage plan.

- At least 30 days prior to the preconstruction meeting, the qualified Biologist shall verify that a coastal cactus wren plant salvage/relocation plan (including species, locations, numbers, timing and handling, etc.) has been completed and approved by the City and the appropriate contact from the receiving site (the City can aid notification by phone and/or email).

Post construction, the following measure shall be implemented:

- Prior to the release of the grading bond, the project biologist shall submit a letter report to the Environmental Review Manager that assesses any project impacts resulting from construction. Any actions taken related to coastal cactus wren protection, including salvage of species, shall also be included in this letter. This letter report shall be submitted to City Staff.

~~Within the MHPA, impacts to coastal cactus wren habitat must be avoided. This includes areas containing coast cholla *(Cylindropuntia prolifera*), ladies' fingers *(Dudleya edulis)*, coastal dudleya *(D. lanceolata)*, chalky live-forever *(D. pulverulenta)*, San Diego barrel cactus, fish-hook cactus *(Mammillaria dioica*), coastal prickly pear (*Opuntia littoralis*), chaparral prickly pear *(Opuntia oricola*), our Lord's candle (*Yucca whipplei*), and Mojave yucca (*Yucca schidigera*). If avoidance of cactus wren habitat is not feasible, then restoration of impacted habitat shall include salvage and transplantation of the aforementioned species within the Project site, subject to approval by the City.~~

Mitigation Measure MM-BIO-4

Proposed project activities (including, but not limited to, staging and disturbances to native and non-native vegetation, structures, and substrates) should not occur during the avian breeding season which runs from ~~March~~February 1st - ~~August~~September 15th to avoid impacts to birds or their eggs.

If avoidance of the avian breeding season is not feasible a qualified biologist with experience conducting breeding bird surveys shall conduct a preconstruction clearance survey for active nests no more than 3 days prior to the initiation of project activities. If a protected native bird is found, the project proponent shall delay all project activities within 300 feet of on- and off-site suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until ~~August~~September 15th. Alternatively, if an active nest is observed, the biologist can monitor the nest and any project

activities within 300 feet of the nest (within 500 feet for raptor nests), or as determined by a qualified biological monitor, shall be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, and/or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the Project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area.

If the biological monitor determines that a narrower buffer between the project activities and observed active nests is warranted, he/she shall submit a written explanation (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the project activities and the nest and foraging areas) to the City. Based on the submitted information, the City will determine whether to allow a narrower buffer.

The biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor shall send weekly monitoring reports to the City during the grubbing and clearing of vegetation, and shall notify the City immediately if project activities damage active avian nests.

The weekly reports shall also include, if necessary, additional mitigation in conformance with the City's Biology Guidelines and applicable State and Federal Law (i.e., appropriate follow up surveys, monitoring schedules, construction/noise barriers, and specific buffer widths [see below], etc.) to the satisfaction of the City.

In addition to the previous requirements, any development inside the MHPA which identifies the occurrence of the following species must include an impact avoidance area as follows:

- 300 feet from any nesting site of Cooper's hawk (*Accipiter cooperii*)
- 900 feet from any nesting sites of northern harriers (*Circus cyaneus*)
- 4,000 feet from any nesting sites of golden eagles (*Aquila chrysaetos*)
- 300 feet from any occupied burrow of burrowing owls (*Athene cunicularia*)

These conditions are requirements of the Incidental Take Authorization in order to consider these species adequately conserved under the MSCP. Although these species were not observed during the biological surveys, incidental observations during construction may warrant specific avoidance and minimization measures described in the Biology Guidelines of the Land Development Code.

Mitigation Measure MM-BIO-5

Mitigation for permanent and temporary impacts to Tier II, Tier IIIA and Tier IIIB vegetation communities will occur through onsite habitat restoration within the existing disturbed and ornamental areas of the study area (see Figure 15). A Revegetation / Restoration Plan shall be

prepared consistent with Attachment B of the Land Development Code 2012 Biology Guidelines. ~~In addition, habitat enhancement shall be implemented through removal of exotic, invasive and ornamental species in areas identified for mitigation.~~ No mitigation shall occur within the 100-foot brush management zone below adjoining residential parcels as any onsite mitigation efforts shall need to remain in perpetuity without the risk of clearing or removal. In addition, all sensitive vegetation communities temporarily disturbed during Project implementation shall be restored to their original condition post construction. Per the Biology Guidelines of the Land Development Code:

- Impacts to 0.368 acre of coastal sage scrub and 0.521 acre of mixed chaparral will be mitigated at a 1:1 ratio inside the MHPA and at a 2:1 ratio outside the MHPA~~1:1 ratio~~ through creation of ~~1.05~~1.5 acres of coastal sage scrub habitat along the unauthorized trails and ~~within the MHPA,~~ within the existing disturbed areas at the north end of Ruffin Canyon and the far eastern end of Shawn Canyon (see Figure 15).
- A conceptual restoration plan pursuant to City guidelines will be prepared that includes the restoration of coastal sage scrub in disturbed habitats inside and outside the MHPA, and restoration of the unauthorized trail system in Ruffin and Sandrock Canyons.

Mitigation Measure MM-BIO-6

Prior to the issuance of any construction permits for the Project, the Project Proponent shall obtain a Section 404 Clean Water Act Nationwide Permit (NWP #42) from the USACE, Section 401 Water Quality Certification from the RWQCB, and Section 1602 Streambed Alteration Agreement from CDFW to address impacts to 0.063 acre of non-wetland waters of the U.S. and waters of the State.

As part of the Section 404 process, the results from the recent formal delineation of potential wetlands and other waters of the U.S. located within the Project Area shall be submitted to the USACE for verification. State and federal regulations require that the Project applicant avoid or minimize impacts to wetlands and waters and develop appropriate protection for wetlands. Wetlands that cannot be avoided must be compensated to result in "no net loss" of wetlands to ensure that the Project would maintain the current functions and values of on-site wetland habitats. Impacts to non-wetland waters of the U.S. and State within the Project boundary shall be mitigated for at a 2:1 ratio through the on-site creation of riparian scrub habitats and an ephemeral channel. The ephemeral channel shall be designed with a clear bed and bank such that an OHWM shall establish itself over time.

A Revegetation / Restoration Plan, also consistent with USACE guidelines for Habitat Mitigation and Monitoring Plans (HMMP), will be prepared consistent with Attachment B of the Land Development Code 2012 Biology Guidelines. Mitigation for the 0.063-acre impact to jurisdictional resources would occur onsite (see Figure 15), within the MHPA at a 2:1 ratio. The required mitigation would be fulfilled through the conversion of 0.2 acre of disturbed habitat along the canyon floor in the northern stretch of Ruffin Canyon into functioning native wetland habitat comprised of riparian scrub and non-vegetated channel.

SOURCE: CADRE Environmental

San Diego River Ruffin Canyon Trail and Urban Walk Project . 120929

Figure 15

Restoration Opportunity Map

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APPENDIX B
Cultural Letter Report

ESA

December 9, 2011

Ann Van Leer
President
Land Conservation Brokerage, Inc
4079 Governor Drive #330
San Diego, CA 92122

Re: Archaeological Records Search for the Sandrock, Ruffin, and Ellison Watershed's Trail Connection Project, San Diego County, California (ASM Project# 18900)

Dear Ms. Van Leer:

This letter report documents the results of an archaeological records search conducted by ASM Affiliates, Inc. (ASM), for the Sandrock, Ruffin, and Ellison Watershed's Trail Connection Project, Mission Valley, San Diego County, California (Figure 1). The purpose of the survey was to provide constraints information to assist the Land Conservation Brokerage, Inc in its compliance with the California Environmental Quality Act (CEQA) requirements. In summary, no previously recorded cultural sites were identified within the project area and recent cultural resource studies have been conducted in the Sandrock and Ruffin watersheds.

Records Search Results

ASM conducted a records search at the South Coastal Information Center (SCIC) of the California Historical Resources Information System (CHRIS) at San Diego State University on December 2, 2011. The record search area included a 0.25-mi. buffer zone around the APE (Figure 2). The request included a search of all relevant site records on file with the SCIC, as well as a search of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and other local registers to determine if significant archaeological or historical sites have previously been recorded within or near the project survey area. A sacred lands records search was also requested from Native American Heritage Commission (NAHC) on December 6, 2011.

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2470 N. Decatur Blvd., Suite 160, Las Vegas, Nevada 89108 • (702) 534-0375 • Fax: (702) 534-0316
20912 Frank Waters Rd., Stanwood, Washington 98292 • (360) 631-9685
www.asmaffiliates.com

Previous Studies

A total of 32 cultural resource studies have been completed within one quarter-mile radius of the APE. Two of the previous studies have included portions of the APE (see Table 1). The existing trail systems in the Ruffin Canyon and northern Sandrock Canyon Watersheds were surveyed by Maureen Kick in 2007 for the San Diego Vegetation Management Project. Southern Sandrock Canyon was last surveyed for cultural resources by Tim Gross in 2002 for the Serra Mesa Property Project. No previous archaeological surveys were reported within the Ellison Canyon Watershed.

Table 1. Previous studies identified in the APE

Report Author	Date	Report	Work type
Gross, Tim & Mary Robbins-Wade	2002	*Archaeological ResourcesSurvey, Serra Mesa Property, San Diego, California*. Affinis. Submitted to Sempra Energy.	Archaeological Overview, Assessment and Evaluation Study.
Kick, Maureen S.	2007	*Cultural Resources Technical Report for the San Diego Vegetation Management Project*. URS. Submitted to FEMA.	Archaeological Overview, Assessment and Evaluation Study.

Previously Recorded Cultural Resources

The records search identified two cultural resources, consisting of a prehistoric lithic scatter site, and a prehistoric isolate, which have been recorded within a one quarter-mile radius of the APE. These resources are summarized in Table 2. Neither resource occurs in the proposed APE.

Table 2. Previously recorded cultural resources

Trinomial, Primary No.	Site Type	Recorder	Date	Artifacts/Features	Eligibility
P-37-014959	Prehistoric Isolate	J. Clevenger	1990	Volcanic Debitage	Not Eligible
CA-SDI-15600	Prehistoric Lithic Scatter	J. Eighmey & T. Wahoff	2000	Quartz Cores and Debitage	Not Evaluated

A response from the NAHC on December 6, 2011 indicated that there were no Native American resources in the project area. However, this area of San Diego is known to the NAHC to be culturally sensitive and they have suggested a list of local Native Americans that may have specific knowledge of locations. Letters have been sent to these individuals and as yet no responses have been gained.

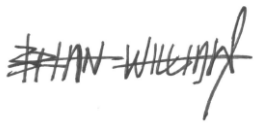
Recommendations

Due to the recent cultural resources studies in the Ruffin and Sandrock Canyon Watersheds and the nature of the proposed action, full-time archaeological monitoring is not recommended. As the purpose of this project is to create a trail through heavily vegetated areas, the visibility in the direct project area will be low. To prevent the unintentional disturbance of any as yet unrecorded cultural resources, archaeological monitoring is recommended for work conducted in the Ellison Canyon Watershed.

If archaeological resources are identified by the on-site archaeological monitor, the site boundary should be delineated with protective fencing or flagging and only hand removal of vegetation should occur within the site limits.

If you have any questions or require clarification of any of the information in this letter report, please do not hesitate to contact me at (760) 804-5757 or at bwilliams@asmaffiliates.com.

Sincerely,



Brian Williams, M.M.A., RPA
Senior Archaeologist, Carlsbad Office

cc: Ms. Jaime Lennox, South Coastal Information Center

Attachments Figure 1: Project vicinity map.
Figure 2: Proposed project map.

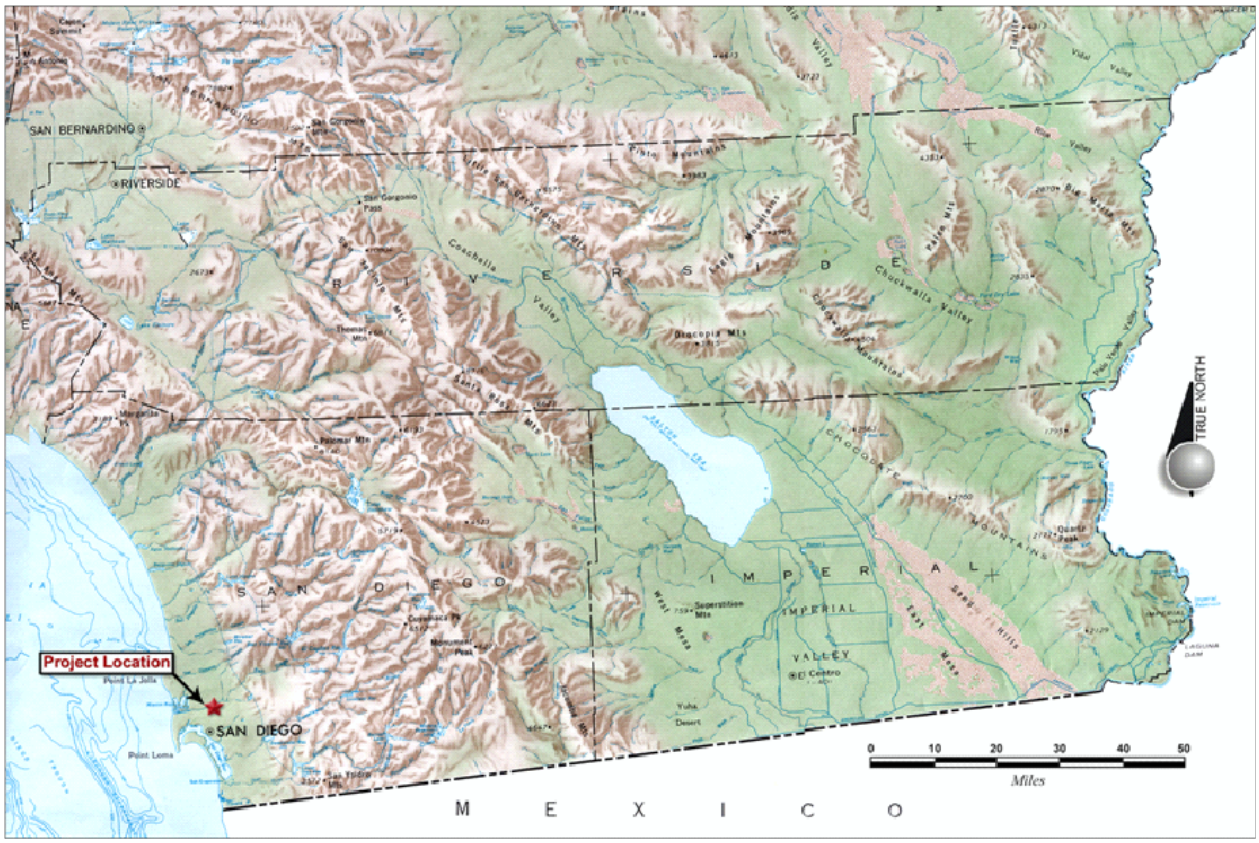


Figure 1, Project vicinity map.

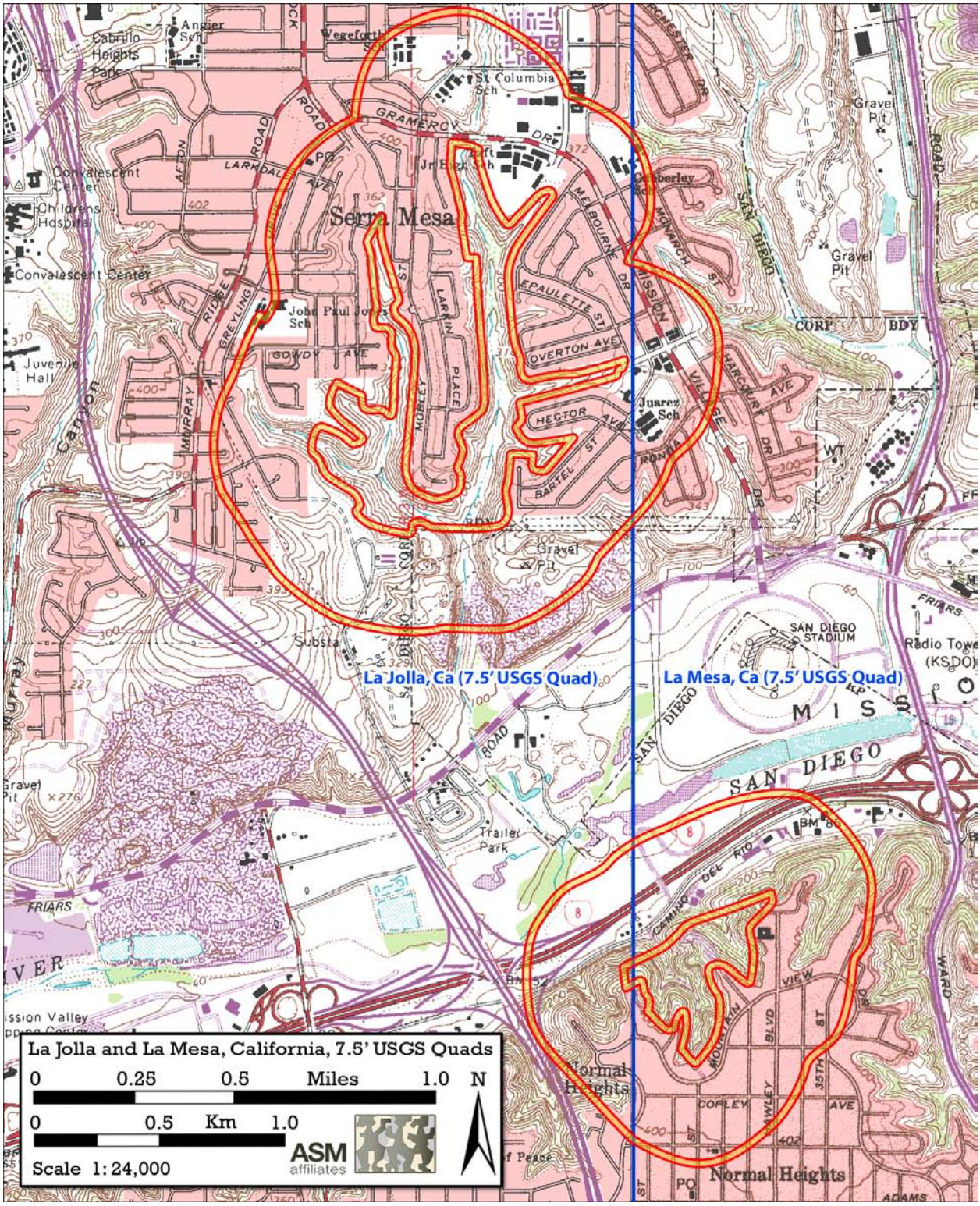


Figure 2: Proposed project map.

APPENDIX C
Geological Reconnaissance

Ninyo & Moore
Geotechnical and Environmental Sciences Consultants

GEOLOGIC SITE RECONNAISSANCE
SAN DIEGO RIVER TRIBUTARY
CANYONS PROJECT
NORTH STUDY AREA
SAN DIEGO, CALIFORNIA

PREPARED FOR:
ESA
9191 Towne Centre Drive, Suite 340
San Diego, California 92122

PREPARED BY
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
5710 Ruffin Road
San Diego, California 92123

January 28, 2013
Project No. 107463001

January 28, 2013
Project No. 107463001

Mr. Charlie Richmond
ESA
9191 Towne Centre Drive, Suite 340
San Diego, California 92122

Subject: Geologic Site Reconnaissance
San Diego River Tributary Canyons Project
North Study Area
Boulevard, California

Dear Mr. Richmond:

In accordance with your authorization, we have prepared this geologic site reconnaissance report for the North Study Area of the San Diego River Tributary Canyons Project in San Diego, California. This report presents our findings, conclusions, and recommendations regarding geologic conditions at the proposed project site.

We appreciate the opportunity to be of service on this project.

Sincerely,
NINYO & MOORE

Nissa. M. Morton, PG
Senior Staff Geologist

PROFESSIONAL GEOLOGIST
NISSA M MORTON
No 8949
STATE OF CALIFORNIA

Ronald D. Hallum, PG, CEG
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PROFESSIONAL GEOLOGIST
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Principal Geologist

REGISTERED GEOLOGIST
GREGORY T. FARRAND
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STATE OF CALIFORNIA

NMM/RDH/GTF/gg

Distribution: (1) Addressee

TABLE OF CONTENTS

1. INTRODUCTION

In accordance with your request, Ninyo & Moore has performed a geologic reconnaissance study of the North Study Area of the San Diego River Tributary Canyon Project located within the Serra Mesa community of the city of San Diego, California (Figure 1). The purpose of this study was to provide preliminary conclusions and recommendations regarding the geologic aspects of the proposed project. This report presents our preliminary findings and conclusions pertaining to the geologic conditions at the subject site. Subsurface exploration was not included in the scope of this reconnaissance study.

2. SCOPE OF SERVICES

Ninyo & Moore's scope of services for this project included the following:

- Reviewing background information listed in the References section of this report. The data reviewed included geologic maps, topographic maps, fault maps, flood zone maps, other published geologic data, aerial photographs, and online databases.
- Performing a field reconnaissance by Professional Geologists from our office to observe and document surface site conditions.
- Compiling and analyzing the data obtained from our background and field reconnaissance evaluations.
- Preparing this report presenting our preliminary findings, conclusions, and recommendations regarding geologic issues at the site.

3. SITE DESCRIPTION

The North Study Area of the proposed San Diego River Tributary Canyon Project is located west of Murray Ridge Drive, south of Gramercy Drive, and north of Friars Road in the city of San Diego. The project is located within existing open-space areas of Sandrock Canyon and Ruffin Canyon. The two parallel steep-sided canyons flow south into Mission Valley and the San Diego River drainage. Site elevations range from approximately 400 feet above mean sea level (MSL) in the northern portions of the site near Sandrock Road and Gramercy Drive, to approximately 125 feet MSL at the southern end of the site, near the mouth of Ruffin Canyon.

While adjacent to densely developed residential subdivisions, the majority of the project area is currently undeveloped open-space and is covered by moderate to dense growth of native chaparral, shrubs, low-lying grasses, and scattered trees. An unpaved road provides access from the southern termination of Chauncey Street to the base of Sandrock Canyon in the southwestern portion of the project area. During our site reconnaissance we also observed a concrete brow ditch along the western side of Sandrock Canyon as well as various underground utilities and associated improvements within the canyons.

4. PROJECT DESCRIPTION

Although design plans have not been prepared, we understand that the project will include development of foot/bicycle trails that will provide recreation and public access between Serra Mesa and Mission Valley. The proposed trails will extend approximately two miles and will be primarily located along the western flanks of Sandrock and Ruffin Canyons. The trails converge at the confluence of the canyons, located south of the termination of Mobley Street. South of the convergence, the trail continues southeast to a terminus near the Escala Community, with an alternate path terminating due south at the mouth of Ruffin Canyon. Based on our review of conceptual project plans, relatively minor cuts and fills into existing slopes are anticipated. The proposed trail alignment is presented on Figure 1.

5. GEOLOGY

Our findings regarding regional and site geology in the area of the proposed project are provided in the following sections.

5.1. Regional Geologic Setting

The project area is situated in the western portion of the Peninsular Ranges Geomorphic Province. This geomorphic province encompasses an area that extends approximately 900 miles from the Transverse Ranges and the Los Angeles Basin south to the southern tip of Baja California (Norris and Webb, 1990; Harden, 1998). The province varies in width

from approximately 30 to 100 miles and generally consists of rugged mountains underlain by Jurassic metavolcanic and metasedimentary rocks, and Cretaceous igneous rocks of the southern California batholith. The portion of the province in western San Diego County that includes the project area consists generally of uplifted and dissected coastal plain underlain by Upper Cretaceous, Tertiary, and Quaternary age sedimentary rocks.

The Peninsular Ranges Province is traversed by a group of sub-parallel faults and fault zones trending approximately northwest. Several of these faults, shown on Figure 2, are considered active faults. The Elsinore, San Jacinto, and San Andreas faults are active fault systems located northeast of the project area, and the Rose Canyon, Coronado Bank, San Diego Trough, and San Clemente faults are active faults located west of the project area. The Rose Canyon Fault Zone, the nearest active fault system, has been mapped approximately 4 miles west of the project site. Major tectonic activity associated with these and other faults within this regional tectonic framework consists primarily of right-lateral, strike-slip movement. Further discussion of faulting relative to the site is provided in the Faulting and Seismicity section of this report.

5.2. Site Geology

Based on our review of published geologic maps and our site reconnaissance, earth units at the project site consist of fill, topsoil/colluvium, alluvium, and formational earth materials of very old paralic deposits (formerly designated the Lindavista Formation), the Mission Valley Formation, and Stadium Conglomerate (Kennedy and Tan, 2008). A map of the regional geology is included as Figure 3. A brief description of these units, as described in the cited literature or as observed at the site, is presented below.

5.2.1. Fill

Fill soils are expected to underlie portions of the site due to construction of trails, adjacent housing developments, and buried utility lines. We anticipate these fills to be relatively shallow and to be generally composed of locally derived, reworked sand, silt, and gravel.

5.2.2. Topsoil/Colluvium

A mantle of topsoil/colluvium was observed across the site over most of the canyon slopes. Where observed, these soils generally consisted of reddish brown and brown, silty fine to medium sand and gravel. These soils generally thicken near the base of the slopes and grade into alluvium in the bottom of the canyons.

5.2.3. Alluvium

Alluvial soils were observed along the base of the canyons across the project site. These soils are expected to consist of mixed of light brown to dark brown, silty fine sand and sandy silt with gravel, cobbles, and boulders.

5.2.4. Very Old Paralic Deposits

Pleistocene-age very old paralic deposits (Kennedy and Tan, 2008) are mapped in the uppermost areas of the project canyons. This unit was formerly designated as the Lindavista Formation on older geologic maps. The very old paralic deposits were observed to consist of reddish brown, moderately to well cemented, silty sandstone with numerous gravels and cobbles and sandy conglomerate. The very old paralic deposits unconformably overlie the Mission Valley Formation.

5.2.5. Mission Valley Formation

The Eocene-age Mission Valley Formation (Kennedy and Tan, 2008) is mapped along the upper canyon slopes within the project area. The Mission Valley Formation is predominately composed of light brown to light gray, weakly cemented, fine to medium-grained silty sandstone. Where observed in outcrops at the site, the materials were generally massive to thinly bedded. The Mission Valley Formation conformably overlies the Stadium Conglomerate

5.2.6. Stadium Conglomerate

The Eocene-age Stadium Conglomerate (Kennedy and Tan, 2008) is mapped along the lower slopes and base of the project canyons. As observed, the Stadium Conglomerate is predominately composed of light brown to yellow-brown, moderately cemented, sandy cobble to boulder conglomerate.

5.3. Groundwater

Surface water was observed flowing in some areas within the main canyon bottoms and along some side canyons during our site reconnaissance. Pools of standing water were also observed in several areas. It should be noted that surface and groundwater levels are influenced by seasonal variations in precipitation, irrigation, runoff, and other factors, and are therefore subject to variation.

6. GEOLOGIC HAZARDS

In general, hazards associated with faulting and seismic activity include ground surface rupture, strong ground motion, and liquefaction. These considerations and other potential geologic hazards such as landsliding and flooding are discussed in the following sections.

6.1. Faulting and Seismicity

Like much of southern California, the subject site is considered to be in a seismically active area. Based on our review of readily available published geological maps and literature, the subject site is not underlain by known active or potentially active faults (i.e., faults that exhibit evidence of ground displacement in the last 11,000 years and 2,000,000 years, respectively). The subject site is not located within a State of California Earthquake Fault Zone (formerly known as an Alquist-Priolo Special Studies Zone) (Hart and Bryant, 2007). The active Rose Canyon fault zone is located approximately 4 miles west of the site.

Table 1 lists selected principal known active faults that may affect the subject site, the maximum moment magnitude (M_{max}) and the fault types as published for the California Geological Survey (CGS) by Cao et al. (2003). The approximate fault to site distance was calculated by the computer program FRISKSP (Blake, 2001) or measured on available geologic maps.

Table 1 – Principal Active Faults

Fault	Distance miles (kilometers) [1,2]	Moment Magnitude/ Fault Type [1]
Rose Canyon	4.0 (6.4)	7.2/B
Coronado Bank	17 (27)	7.6/B
Newport-Inglewood	31 (49)	7.1/B
Elsinore (Julian Segment)	37 (59)	7.1/A
Elsinore (Temecula Segment)	41 (66)	6.8/A
Earthquake Valley	42 (68)	6.5/B
Elsinore (Coyote Mountain)	47 (75)	6.8/A
Palos Verdes	58 (93)	7.3/B
San Jacinto (Coyote Creek Segment)	58 (94)	6.8/A
San Jacinto (Anza Segment)	59 (95)	7.2/A
Elsinore (Glen Ivy Segment)	60 (97)	6.8/A
San Jacinto (Borrego Segment)	62 (99)	6.6/A

Notes:
[1] Blake (2001)
[2] Cao, et al. (2003)

6.2. Surface Ground Rupture

Based on our review of the referenced literature and our site reconnaissance, active faults are not known to cross the project site. Therefore, the probability of damage from surface fault rupture is considered to be low. However, lurching or cracking of the ground surface as a result of nearby seismic events is possible.

6.3. Strong Ground Motion

Based on the peak horizontal ground acceleration (PGA) having a 2 percent probability of exceedance in 50 years which is defined as the Maximum Considered Earthquake (MCE). The statistical return period for PGA_{MCE} is approximately 2,475 years. In evaluating the seismic hazards associated with the project site, we have used a Site Class C for this preliminary evaluation.

Seismic hazards and classifications should be further evaluated through a full geotechnical evaluation including subsurface and laboratory evaluation. If the results of the geotechnical evaluation indicate a different Site Class, the following estimations will be revised. The site modified PGA_{MCE} is an estimated 0.54g using the United States Geological Survey (USGS) (USGS, 2011) ground motion calculator (web-based). The design PGA was 0.36g using the USGS ground motion calculator. These estimates of ground motion do not include near-source factors that may be applicable to the design of structures on site.

6.4. Liquefaction and Seismically Induced Settlement

Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Research and historical data indicate that loose granular soils and non-plastic silts that are saturated by a relatively shallow groundwater table are susceptible to liquefaction. Our preliminary evaluation indicates that the majority of the project site, which includes the side walls of the main canyons and side ravines, is underlain by dense formational materials and therefore not susceptible to liquefaction. The bottoms of the canyons are underlain by sandy alluvial soils with a shallow groundwater table and may be subject to liquefaction. As mapped in the City of San Diego Seismic Safety Study (2008), the potential for liquefaction or seismically induced settlement is considered low at the base of Ruffin Canyon and in the southern portion of the site (Figure 4). The potential for liquefaction should be further evaluated during a full geotechnical evaluation including subsurface borings and laboratory evaluation if development is planned for these areas.

6.5. Landsliding

Based on our review of referenced geologic and topographic maps, literature, and stereoscopic aerial photographs, large landslides or indications of deep-seated landsliding have not been mapped or identified underlying the project site. Several shallow surficial failures, were, however, observed during our field reconnaissance. These slope failures were generally observed on the central to lower portions of the canyon slopes and were observed to be up to roughly 30 feet across. These features were observed to be relatively shallow, earth

flow-type failures possibly caused by over-saturation of loose, surficial soils on steep slopes. Due to the steep terrain along portions of the proposed trail alignment, similar shallow surficial failures may be anticipated. Such failures may impact portions of the proposed trails. Identification of areas subject to shallow slope failures and potential engineering repair measures should be further evaluated as part of a full geotechnical evaluation.

In addition, several areas of excessive erosion were observed. These areas consisted of multiple narrow, steep-sided rills and gullies that occurred on steep sparsely vegetated slopes. Our observations indicate that the erosion is generally a result of diversion of runoff from adjacent development. Identification of areas subject to excess erosion and potential engineering repair measures should be further evaluated as part of a full geotechnical evaluation.

6.6. Flood Hazards

Based on review of a Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (FEMA, 2012), the site is mapped as lying outside of the 500-year floodplain. Based on this review, the potential for flooding of the site is considered low. However, short-term, high-volume stream flow could occur along canyon bottoms during periods of heavy rainfall and runoff. In addition, due to the elevation, topography, and the inland location of the property, the site is not considered susceptible to tsunamis or seiches.

7. CONCLUSIONS

The following conclusions were derived from our geologic reconnaissance and review of background information.

- Based on our review of published geologic maps and our site reconnaissance, the project area is expected to be underlain by fill, topsoil/colluvium, alluvium, and formational earth materials of very old paralic deposits, the Mission Valley Formation, and Stadium Conglomerate.
- Surface water is anticipated to occur seasonally along the bottoms of the main canyons and in some side canyons. In addition, short-term, high-volume stream flow could occur along canyon bottoms during periods of heavy rainfall and runoff.

- No active faults have been mapped or were observed within the study area.
- The potential for liquefaction along the main canyon bottoms is considered low, but should be further evaluated by subsurface evaluation if development is planned for these areas.
- While the risk for large, deep-seated slope failures is considered low, existing shallow surface failures and areas of excessive erosion were observed and may impact portions of the proposed trails.

8. RECOMMENDATIONS

Following development of preliminary plans, we recommend that a comprehensive geologic and geotechnical evaluation be conducted prior to construction of the proposed trails. This evaluation would include subsurface exploration and laboratory testing. The purpose of the subsurface evaluation would be to evaluate the subsurface conditions and to provide information pertaining to the geologic and geotechnical conditions, including grading and slope stability, at the project site.

9. LIMITATIONS

The geotechnical analyses presented in this report has been conducted in accordance with current engineering practice and the standard of care exercised by reputable geotechnical consultants performing similar tasks in this area. No warranty, implied or expressed, is made regarding the conclusions, recommendations, and professional opinions expressed in this report. Variations may exist and conditions not observed or described in this report may be encountered. Our preliminary conclusions and recommendations are based on an analysis of the observed surface conditions and the referenced background information. Subsurface evaluations were not performed as part of this study.

10. REFERENCES

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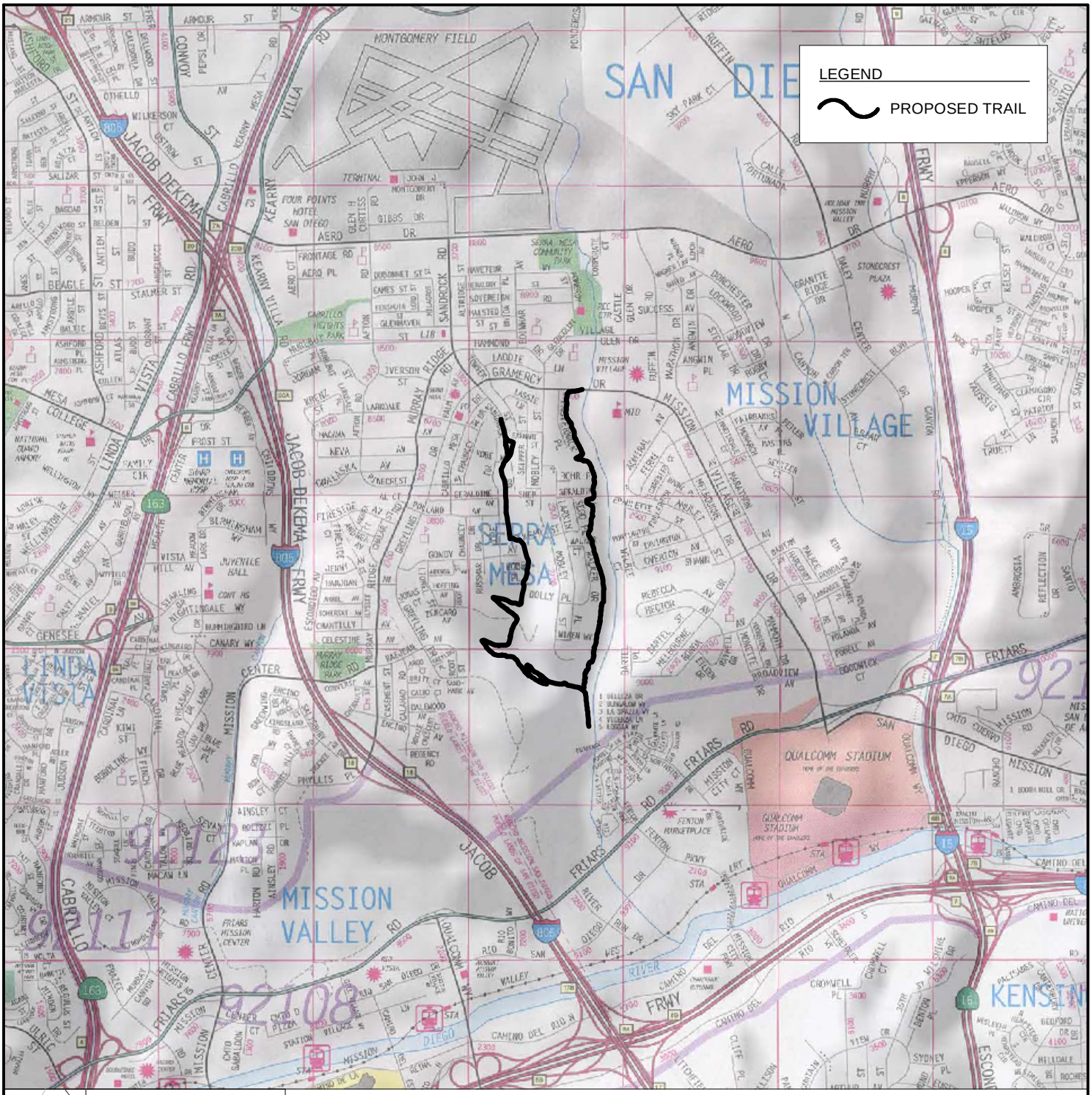
AERIAL PHOTOGRAPHS

Source	Date	Flight	Numbers	Scale
USDA	March 31, 1953	AXN-3M	99, 100, 190, and 191	1:20,000



SOURCES: PROPOSED TRAIL - ESA, 2013; 2008 THOMAS GUIDE FOR SAN DIEGO COUNTY, STREET GUIDE AND DIRECTORY; MAP © RAND MCNALLY, R.L.07-S-129.

MAP INDEX

SCALE IN FEET

0 1,200 2,400 4,800

N

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE

Ninyo & Moore	SITE LOCATION	FIGURE
PROJECT NO.	DATE	SAN DIEGO RIVER TRIBUTARY CANYONS PROJECT SAN DIEGO, CALIFORNIA	1
107463001	1/13		

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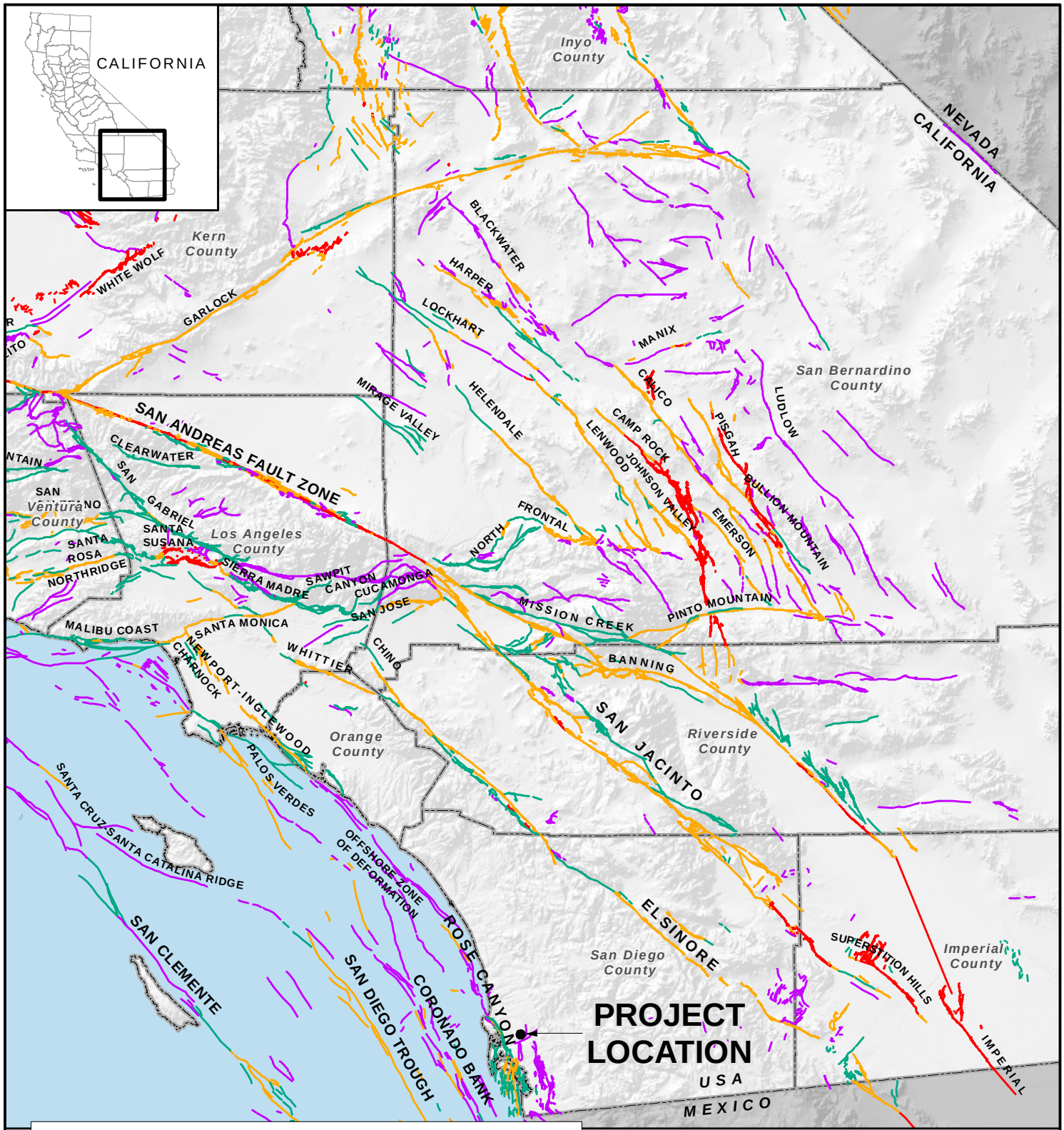


LEGEND

CALIFORNIA FAULT ACTIVITY

- HISTORICALLY ACTIVE
- HOLOCENE ACTIVE
- LATE QUATERNARY (POTENTIALLY ACTIVE)
- QUATERNARY (POTENTIALLY ACTIVE)
- STATE/COUNTY BOUNDARY

SOURCE: U.S. GEOLOGICAL SURVEY AND CALIFORNIA GEOLOGICAL SURVEY, 2006, QUATERNARY FAULT AND FOLD DATABASE FOR THE UNITED STATES.

SCALE IN MILES

0 30 60

N

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore

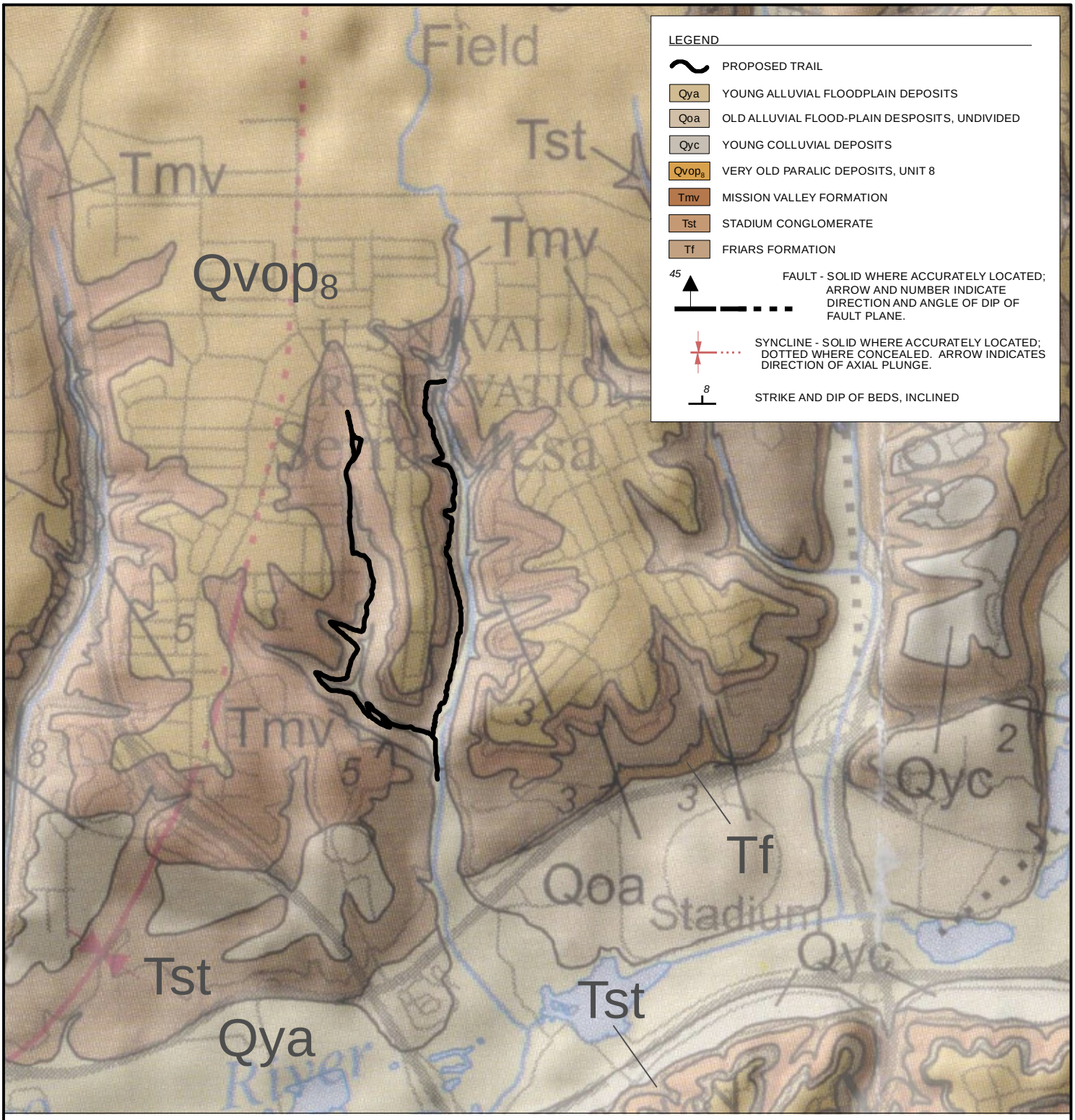
FAULT LOCATIONS

FIGURE 2

PROJECT NO.	DATE
107463001	1/13

SAN DIEGO RIVER TRIBUTARY CANYONS PROJECT
SAN DIEGO, CALIFORNIA

2_107463001_FL.mxd 1/28/2013 12:09:55 PM JDL



SOURCES: Proposed Trail - ESA, 2013; GEOLOGY - KENNEDY, M.P., AND TAN, S.S., 2008, GEOLOGIC MAP OF THE SAN DIEGO 30' X 60' QUADRANGLE, CALIFORNIA

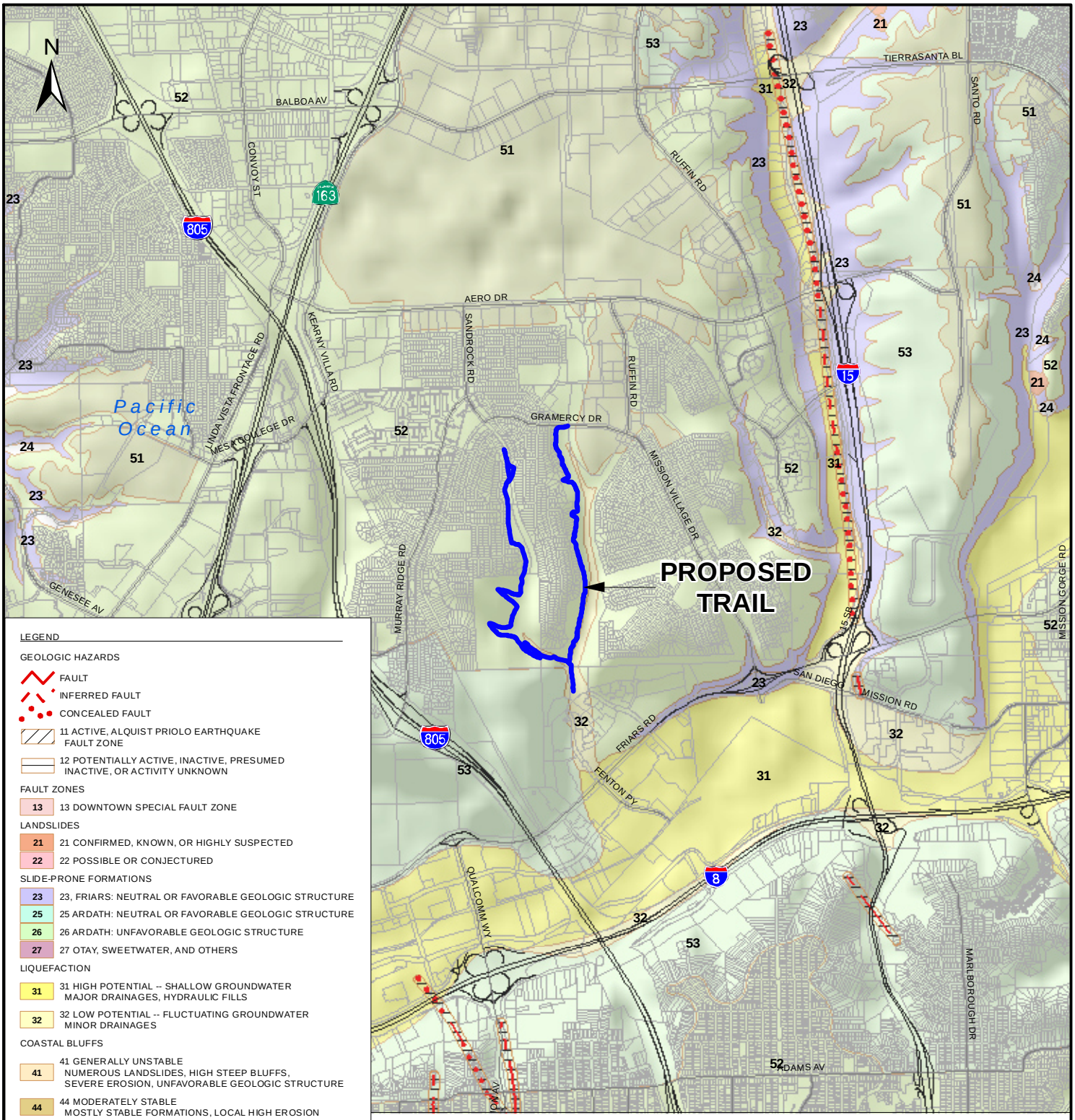
SCALE IN FEET
0 1,000 2,000 4,000

N

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	REGIONAL GEOLOGY	FIGURE
PROJECT NO. 107463001 / DATE 1/13	SAN DIEGO RIVER TRIBUTARY CANYONS PROJECT SAN DIEGO, CALIFORNIA	3

3_107463001_G.mxd 1/28/2013 12:36:34 PM JDL



LEGEND

GEOLOGIC HAZARDS

- FAULT
- INFERRED FAULT
- CONCEALED FAULT
- 11 ACTIVE, ALQUIST PRIOLO EARTHQUAKE FAULT ZONE
- 12 POTENTIALLY ACTIVE, INACTIVE, PRESUMED INACTIVE, OR ACTIVITY UNKNOWN

FAULT ZONES

- 13 — 13 DOWNTOWN SPECIAL FAULT ZONE

LANDSLIDES

- 21 — 21 CONFIRMED, KNOWN, OR HIGHLY SUSPECTED
- 22 — 22 POSSIBLE OR CONJECTURED

SLIDE-PRONE FORMATIONS

- 23 — 23, FRIARS: NEUTRAL OR FAVORABLE GEOLOGIC STRUCTURE
- 25 — 25 ARDATH: NEUTRAL OR FAVORABLE GEOLOGIC STRUCTURE
- 26 — 26 ARDATH: UNFAVORABLE GEOLOGIC STRUCTURE
- 27 — 27 OTAY, SWEETWATER, AND OTHERS

LIQUEFACTION

- 31 — 31 HIGH POTENTIAL -- SHALLOW GROUNDWATER MAJOR DRAINAGES, HYDRAULIC FILLS
- 32 — 32 LOW POTENTIAL -- FLUCTUATING GROUNDWATER MINOR DRAINAGES

COASTAL BLUFFS

- 41 — 41 GENERALLY UNSTABLE NUMEROUS LANDSLIDES, HIGH STEEP BLUFFS, SEVERE EROSION, UNFAVORABLE GEOLOGIC STRUCTURE
- 44 — 44 MODERATELY STABLE MOSTLY STABLE FORMATIONS, LOCAL HIGH EROSION
- 48 — 48 GENERALLY STABLE BROAD BEACH AREAS, DEVELOPED HARBOR

OTHER TERRAIN

- 51 — 51 LEVEL MESAS -- UNDERLAIN BY TERRACE DEPOSITS AND BEDROCK NOMIMAL RISK
- 52 — 52 OTHER LEVEL AREAS, GENTLY SLOPING TO STEEP TERRAIN, FAVORABLE GEOLOGIC STRUCTURE, LOW RISK
- 53 — 53 LEVEL OR SLOPING TERRAIN, UNFAVORABLE GEOLOGIC STRUCTURE, LOW TO MODERATE RISK
- 55 — 55 MODIFIED TERRAIN (GRADED SITES) NOMINAL RISK
- AREA NOT MAPPED

SOURCES: PROPOSED TRAIL - ESA, 2013; SANGIS, 2008, CITY OF SAN DIEGO SEISMIC SAFETY STUDY GEOLOGIC HAZARDS AND FAULTS.

SCALE IN FEET

0 1,500 3,000 6,000

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	GEOLOGIC HAZARDS	FIGURE
PROJECT NO. 107463001 / DATE 1/13	SAN DIEGO RIVER TRIBUTARY CANYONS PROJECT SAN DIEGO, CALIFORNIA	4

4_107463001_GH.mxd 1/28/2013 12:38:12 PM JDL