# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
# SAN DIEGO REGION

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Clean Water Act Section 401 Water Quality Certification
and Waste Discharge Requirements
for Discharge of Dredged and/or Fill Materials

**PROJECT:** **Quarry Creek Master Plan**
**Certification Number R9-2013-0101**
**WDID: 9000002604**

Reg. Meas. ID: 390302
Place ID: 794332
Party ID: 540131
Person ID: 540132

**APPLICANT:** **Quarry Creek Investors, LLC**
**2750 Womble Road**
**San Diego, CA 92106**

**ACTION:**

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|---|---|
| ☐ Order for Low Impact Certification | ☐ Order for Denial of Certification |
| ☑ Order for Technically-conditioned Certification | ☐ Waiver of Waste Discharge Requirements |
| ☑ Enrollment in SWRCB GWDR Order No. 2003-017-DWQ | ☐ Enrollment in Isolated Waters Order No. 2004-004-DWQ |

## PROJECT DESCRIPTION

An application dated May 17, 2013 was submitted by Quarry Creek Investors, LLC (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (33 U.S.C. § 1341) for the proposed Quarry Creek Master Plan Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on July 10, 2014. The Applicant proposes to discharge dredged or fill material to waters of the United States and/or State associated with construction activity at the Project site. The Applicant has also applied for a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACE File No. 2012-00807-MER).

The Project is located within the cities of Carlsbad and Oceanside, County of San Diego, California, south of Interstate 78 and west of College Boulevard. The Project center reading is located at latitude 33.1781 and longitude -117.3054. The Applicant has paid all required fees for this Certification in the amount of $24,132.00. On May 21, 2013, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes to develop the 156 acre property into a residential-oriented planned community, including areas of open space. The eastern 100 acres of the Project area have historically been the subject of rock and concrete mining activities, which resulted in large

areas of earth removal and an excavation scar. This area is now the subject of mine reclamation by the present owner of the property (not the Applicant), which will reclaim the mined areas to a state usable for urban land uses per the local zoning and General Plan land uses designated for the property. The prior mining use and ongoing reclamation activities are a separate project from the Quarry Creek Master Plan Project.

An additional 2.8 acres of grading for off-site improvements adjacent to the Quarry Creek property will also occur as part of the Project. These improvements will occur within areas immediately adjacent to the Quarry Creek property that are within the Cities of Oceanside and Carlsbad and will include the construction of sewer line connections, potable and reclaimed waterlines, the Marron Road trail head, a train connection to Simsbury Court, and improvements to Haymar Drive.

The Project will generate a maximum of 636 dwelling units within 4 residential neighborhoods. The Quarry Creek Master Plan preserves approximately 92.16 acres (59 percent) of the property in biological open space. This includes three separate areas of important environmental resources including Buena Vista Creek and buffers, large tracts of riparian and wetland conservation areas, hillsides, and revegetated manufactured slopes adjacent to open spaces.

The Project will convert approximately 47.3 acres of pervious ground cover to impervious surfaces. Runoff leaving the developed Project area would be significantly greater in volume, velocity, peak flow rate, and duration than pre-development runoff from the same area without mitigation. Post-construction best management practices (BMPs) to manage and control the effects of these runoff increases will consist of 3 detention basins in order to reduce the peak discharges from the development to pre-Project conditions. These BMPs will be designed, constructed, and maintained to meet the City of Carlsbad's Standard Urban Storm Water Management Plan and the Final Hydromodification Management Plan.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction BMPs) to treat waste and reduce runoff or other effluents which may be discharged. Compliance with the Certification conditions will help ensure that construction and post-construction discharges from the Project will not cause on-site or off-site downstream erosion, damage to downstream properties, or otherwise damage stream habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan).

Project construction will permanently impact 0.42 acre (458 linear feet) of wetland waters of the United States and/or State and 0.11 acre (1,451 linear feet) of streambed waters of the United States and/or State. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources considering all potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density.

The Applicant reports that compensatory mitigation for the permanent loss of 0.53 acre of jurisdictional waters will be achieved through the purchase of 0.25 acre of re-establishment credits from the San Luis Rey Mitigation Bank and 0.47 acres of re-establishment and 1.58

acres of enhancement of waters of the United States and/or State within the Project site. All waters of the United States and/or State receiving temporary discharges of fill material will be restored upon removal of the fill. Mitigation for discharges of fill material to waters of the United States and/or State will be completed by the Applicant at the San Luis Rey Mitigation Bank located within the Bonsall hydrologic sub-area (HSA 903.12) at a minimum compensation ratio of 2.3:1 (area mitigated:area impacted), and on-site within the El Salto hydrologic sub-area (HSA 904.21) at a minimum compensation ratio of 4.9:1 (area mitigated:area impacted).

Detailed written specifications and work descriptions for the compensatory mitigation project including, but not limited to, the geographic boundaries of the project, timing, sequence, monitoring, maintenance, ecological success performance standards and provisions for long-term management and protection of the mitigation areas are described in the *Quarry Creek Wetland Mitigation Plan* (Mitigation Plan), dated June 10, 2014 and any subsequent version submitted to the San Diego Water Board. San Diego Water Board acceptance of the Mitigation Plan applies only to the Project described in this Certification and must not be construed as approval for other current or future projects that are planning to use additional acreage at the site for mitigation. The Mitigation Plan is incorporated in this Certification by reference as if set forth herein. The Mitigation Plan provides for implementation of compensatory mitigation which offsets adverse water quality impacts attributed to the Project in a manner that protects and restores the abundance, types and conditions of aquatic resources and supports their beneficial uses. Implementation of the Mitigation Plan will reduce significant environmental impacts to resources within the San Diego Water Board's purview to a less than significant level. Based on all of these considerations, the Mitigation Plan will adequately compensate for the loss of beneficial uses and habitat within waters of the United States and/or State attributable to the Project.

Additional Project details are provided in Attachments 1 through 5 of this Certification.

## TABLE OF CONTENTS



**Attachments:**

1. **Definitions**
2. **Project Location Maps**
3. **Project Site Plans**
4. **Mitigation Figures**
5. **CEQA Mitigation Monitoring and Reporting Program**

## I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to all water quality certification actions:

A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.

B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

## II. GENERAL CONDITIONS

A. **Term of Certification**. Water Quality Certification No. R9-2013-0101 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 U.S.C. §1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.

B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.

C. **General Waste Discharge Requirements**. The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification* (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:

http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/go_wdr401regulated_projects.pdf.

D. **Project Conformance with Application.** All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein. Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.

E. **Project Conformance with Water Quality Control Plans or Policies**. Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 U.S.C §1313).

F. **Project Modification**. The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.

G. **Certification Distribution Posting**. During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.

H. **Inspection and Entry**. The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:

1. Enter upon the Project or Compensatory Mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and

4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.

I. **Enforcement Notification**. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.

J. **Certification Actions**. This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:

1. Violation of any term or condition of this Certification;

2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of Buena Vista Creek or its tributaries;

3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;

4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and

5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.

K. **Duty to Provide Information**. The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.

L. **Property Rights**. This Certification does not convey any property rights of any sort, or any exclusive privilege.

M. **Petitions**. Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

## III. CONSTRUCTION BEST MANAGEMENT PRACTICES

A. **Approvals to Commence Construction**. The Applicant shall not commence Project construction until all necessary federal, State, and local approvals are obtained.

B. **Personnel Education.** Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.

C. **Spill Containment Materials.** The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.

D. **General Construction Storm Water Permit.** Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity*, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.

E. **Waste Management.** The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.

F. **Waste Management**. Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.

G. **Downstream Erosion.** Discharges of concentrated flow during construction or after Project completion must not cause downstream erosion or damage to properties or stream habitat.

H. **Construction Equipment.** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.

I. **Process Water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.

J. **Surface Water Diversion.** All surface waters, including ponded waters, must be diverted away from areas of active grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of the receiving water quality objectives. Any temporary dam or other artificial obstruction constructed must only be built from materials such as clean gravel which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.

K. **Re-vegetation and Stabilization.** All areas that have 14 or more days of inactivity must be stabilized within 14 days of the last activity. The Applicant shall implement and maintain BMPs to prevent erosion of the rough graded areas. After completion of grading, all areas must be re-vegetated with native species appropriate for the area. The re-vegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be accessed at http://www.cal-ipc.org/ip/inventory/.

L. **Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.

M. **Vegetation Removal.** Removal of vegetation must occur by hand, mechanically, or through application of United States Environmental Protection Agency (USEPA) approved herbicides deployed using applicable BMPs to minimize adverse effects to beneficial uses of waters of the United States and/or State. Discharges related to the application of aquatic pesticides within waters of the United States must be done in compliance with State Water Resources Control Board Water Quality Order No. 2004-0009-DWQ, the *Statewide General National Pollution Discharge Elimination System Permit for the Discharge of Aquatic Weed Control in Waters of the United States,* and any subsequent reissuance as applicable.

N. **Limits of Disturbance.** The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.

O. **On-site Qualified Biologist.** The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.

P. **Beneficial Use Protection**. The Applicant must take all necessary measures to protect the beneficial uses of waters of Buena Vista Creek and its' tributaries. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.

Q. **Storm Water Pollution Prevention Plan**. The Applicant must submit a final copy of the Storm Water Pollution Prevention Plan prior to the start of construction.

## IV. POST-CONSTRUCTION BEST MANAGEMENT PRACTICES

A. **Post-Construction Discharges.** The Applicant shall not allow post-construction discharges from the Project site to cause or contribute to onsite or off-site erosion or damage to properties or stream habitats.

B. **Storm Drain Inlets.** All storm drain inlet structures within the Project boundaries must be stamped or stenciled (or equivalent) with appropriate language prohibiting non-storm water discharges.

C. **Post-Construction BMP Design.** The Project must be designed to comply with the most current Standard Storm Water Mitigation and Hydromodification Plans for the County of San Diego. Post-construction BMPs are described in the *Preliminary Storm Water Management Plan for Quarry Creek* (SWMP).

D. **Post-Construction BMP Implementation.** All post-construction BMPs must be constructed, functional, and implemented prior to completion of Project construction, occupancy, and/or planned use, and maintained in perpetuity. The post construction BMPs must include those described in the SWMP, dated August 7, 2014, prepared on behalf of the Applicant by Rick Engineering Company; or any subsequent version of the SWMP approved by City of Carlsbad.

E. **Post-Construction BMP Maintenance.** The post construction BMPs must be designed, constructed, and maintained in accordance with the most recent California Storm Water Quality Association (CASQA) [1] guidance. The Applicant shall:

1. No less than two times per year, assess the performance of the BMPs to ensure protection of the receiving waters and identify any necessary corrective measures;

2. Perform inspections of BMPs, at the beginning of the wet season no later than October 1 and the end of the wet season no later than April 1, for standing water, slope stability, sediment accumulation, trash and debris, and presence of burrows;

3. Regularly perform preventative maintenance of BMPs, including removal of accumulated trash and debris, as needed to ensure proper functioning of the BMPs;

4. Identify and promptly repair damage to BMPs; and

5. Maintain a log documenting all BMP inspections and maintenance activities. The log shall be made available to the San Diego Water Board upon request.

## V. PROJECT IMPACTS AND COMPENSATORY MITIGATION

A. **Project Impact Avoidance and Minimization**. The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.

B. **Project Impacts and Compensatory Mitigation.** Unavoidable Project impacts to Buena Vista Creek and its unnamed tributaries within the Buena Vista Creek Watershed must not exceed the type and magnitude of impacts described in the table below. At a minimum, compensatory mitigation required to offset unavoidable temporary and permanent Project impacts to waters of the United States and/or State must be achieved as described in the table below:

[1] California Storm Water Quality Association (*California Storm Water BMP Handbook, New Development and Redevelopment 2003)*, available on-line at: http://www.cabmphandbooks.org/ [Accessed on January 15, 2012]

| | Impacts (acres) | Impacts (linear ft.) | Mitigation for Impacts (acres) | Mitigation Ratio (area mitigated :area impacted) | Mitigation for Impacts (linear ft.) | Mitigation Ratio (linear feet mitigated :linear feet impacted) |
|---|---|---|---|---|---|---|
| **Permanent Impacts** | | | | | | |
| Vegetated non-wetland (Riparian) | 0.42 | 458 | 0.47 acre Re-establishment[1]<br>1.58 acre Enhancement[2] | 1.1:1<br>3.8:1 | 3,364 | 1.8:1 |
| Streambed | 0.11 | 1,451 | 0.25 Re-Establishment[3] | 2.3:1 | N/A[3] | |

1. Streambed Re-establishment onsite in a tributary to Buena Vista Creek.
2. Enhancement onsite within Buena Vista Creek.
3. Mitigation credits will be purchased from the San Luis Rey Mitigation Bank. Mitigation credits purchased are not reported in terms of linear feet of mitigation; however, the mitigation is part of a larger linear restoration project.

C. **Compensatory Mitigation Plan.** The Applicant must submit a final copy of the Mitigation Plan to the San Diego Water Board prior to the start of construction.

D. **Compensatory Mitigation Plan Implementation.** The Applicant must fully and completely implement the Mitigation Plan; any deviations from, or revisions to, the Mitigation Plan must be pre-approved by the San Diego Water Board.

E. **Performance Standards.** Compensatory mitigation required under this Certification shall be considered as achieved once it has met the ecological success performance standards contained in the Mitigation Plan (Section IX, pages 20-23) to the satisfaction of the San Diego Water Board.

F. **Compensatory Mitigation Site Design.** The compensatory mitigation site(s) shall be designed to be self-sustaining once performance standards have been achieved. This includes minimization of active engineering features (e.g., pumps) and appropriate siting to ensure that natural hydrology and landscape context support long-term sustainability in conformance with the following conditions:

1. Most of the channels through the mitigation sites shall be characterized by equilibrium conditions, with no evidence of severe aggradation or degradation;

2. As viewed along cross-sections, the channel and buffer area(s) shall have a variety of slopes, or elevations, that are characterized by different moisture gradients. Each sub-slope shall contain physical patch types or features that contribute to irregularity in height, edges, or surface and to complex topography overall; and

3. The mitigation sites shall have a well-developed plant community characterized by a high degree of horizontal and vertical interspersion among plant zones and layers.

G. **Mitigation Credits.** Within 6 months of the issuance of this Certification, proof of mitigation credit purchase from the San Luis Rey Mitigation Bank must be provided to the San Diego Water Board. If mitigation credits are not available for purchase within 6 months of the issuance of this Certification, the Applicant must provide a Mitigation Plan that proposes compensatory mitigation at minimum compensation ratios of 3.8:1 for Non-wetland waters enhancement, 2.3:1 for streambed establishment, and 1.1:1 for non-wetland waters re-establishment (area mitigated:area impacted), and an additional 1:1 compensatory mitigation for the temporal loss of functions of waters of the State.

H. **Temporary Project Impact Areas.** The Applicant must restore all areas of temporary impacts and all other areas of temporary disturbance which could result in a discharge or a threatened discharge of pollutants to waters of the United States and/or State. Restoration must include grading of disturbed areas to pre-Project contours and re-vegetation with native species. The Applicant must implement all necessary BMPs to control erosion and runoff from areas associated with the Project.

I. **Long Term Management and Maintenance.** The compensatory mitigation site(s), must be managed, protected, and maintained, in perpetuity, in conformance with the long term management plan and the final ecological success performance standards identified in the Mitigation Plan. The aquatic habitats, riparian areas, buffers and uplands that comprise the mitigation site(s) must be protected in perpetuity from land-use and maintenance activities that may threaten water quality or beneficial uses within the mitigation area(s) in a manner consistent with the following requirements:

1. Any maintenance activities on the mitigation site(s) that do not contribute to the success of the mitigation site(s) and enhancement of beneficial uses and ecological functions and services are prohibited;

2. Maintenance activities must be limited to the removal of trash and debris, removal of exotic plant species, replacement of dead native plant species, and remedial measures deemed necessary for the success of the compensatory mitigation project;

3. The Mitigation site(s) must be maintained, in perpetuity, free of perennial exotic plant species including, but not limited to, pampas grass, giant reed, tamarisk, sweet fennel, tree tobacco, castor bean, and pepper tree. Annual exotic plant species must not occupy more than 5 percent of the mitigation site(s); and

4. If at any time a catastrophic natural event (e.g., fire, flood) causes damage(s) to the mitigation site(s) or other deficiencies in the compensatory mitigation project, the Applicant must take prompt and appropriate action to repair the damage(s) including replanting the affected area(s) and address any other deficiencies. The San Diego Water Board may require additional monitoring by the Applicant to assess how the compensatory mitigation site(s) or project is responding to a catastrophic natural event.

J. **Timing of Mitigation Site Construction.** The construction of proposed mitigation must be concurrent with Project grading and completed no later than 9 months following the start of Project construction. Delays in implementing mitigation must be compensated for by an increased mitigation implementation of 10% of the cumulative compensatory mitigation for each month of delay.

K. **Mitigation Site(s) Preservation Mechanism. Within 60 days from the start of Project construction**, the Applicant must provide the San Diego Water Board a draft preservation mechanism (e.g. deed restriction, conservation easement, etc.) that will protect all mitigation areas and their buffers in perpetuity. **Within one year of the issuance of this Certification**, the Applicant must submit proof of a completed final preservation mechanism that will protect all mitigation areas and their buffers in perpetuity. The conservation easement, deed restriction, or other legal limitation on the mitigation properties must be adequate to demonstrate that the sites will be maintained without future development or encroachment on the sites which could otherwise reduce the functions and values of the sites for the variety of beneficial uses of waters of the United States and/ or State that it supports. The legal limitation must prohibit, without exception, all residential, commercial, industrial, institutional, and transportation development, and any other infrastructure development that would not maintain or enhance the wetland and streambed functions and values of the sites. The preservation mechanism must clearly prohibit activities that would result in soil disturbance or vegetation removal, other than the removal of non-native vegetation. Other infrastructure development to be prohibited includes, but is not limited to, additional utility lines, maintenance roads, and areas of maintained landscaping for recreation.

## VI. MONITORING AND REPORTING REQUIREMENTS

A. **Representative Monitoring**. Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.

B. **Monitoring Reports**. Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section VI of this Certification.

C. **Monitoring and Reporting Revisions**. The San Diego Water Board may make revisions to the monitoring program at any time during the term of this Certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.

D. **Records of Monitoring Information.** Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;

2. The individual(s) who performed the sampling or measurements;

3. The date(s) analyses were performed;

4. The individual(s) who performed the analyses;

5. The analytical techniques or methods used; and

6. The results of such analyses.

E. **California Rapid Assessment Method.** California Rapid Assessment Method (CRAM)[2] monitoring must be performed to assess the current and potential ecological conditions (ecological integrity) of the impact site and proposed compensatory mitigation site(s). These conditions reflect the overall level of ecological function of an aquatic resource. Prior to initiating Project construction, the Applicant shall develop a monitoring plan to implement California Rapid Assessment Method (CRAM) monitoring. The Applicant must conduct a quantitative function-based assessment of the health of streambed habitat to establish pre-Project baseline conditions, set CRAM success criteria, and assess the mitigation site(s) progress towards meeting the success criteria. CRAM monitoring must be conducted prior to the start of Project construction authorized under this Certification and in years 3 and 5 following mitigation construction completion. CRAM monitoring results shall be submitted with the Annual Compensatory Mitigation Monitoring Report. An evaluation, interpretation, and tabulation of all CRAM assessment data shall be submitted with the Final Project Completion Report.

F. **Annual Project Progress Reports.** The Applicant must submit annual Project progress reports describing status of BMP implementation and compliance with all requirements of this Certification to the San Diego Water Board prior to **March 1** of each year following the issuance of this Certification, until the Project has reached completion. The monitoring period for each Annual Project Monitoring Report shall be January 1st through December 31st of each year. The report must include the following information:

1. The names, qualifications, and affiliations of the persons contributing to the report;

2. The status, progress, and anticipated schedule for completion of Project construction activities including the installation and operational status of best management practices project features for erosion and storm water quality treatment;

3. A description of Project construction delays encountered or anticipated that may affect the schedule for construction completion; and

4. A description of each incident of noncompliance during the annual monitoring period and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

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[2] The most recent versions of the California Rapid Assessment Method (CRAM) for Wetlands and additional information regarding CRAM can be accessed at http://www.cramwetlands.org/

G. **Final Project Completion Report.** The Applicant must submit a Final Project Completion Report to the San Diego Water Board **within 30 days of completion of the Project.** The final report must include the following information:

1. Date of construction initiation;

2. Date of construction completion;

3. BMP installation and operational status for the Project;

4. As-built drawings of the Project, no bigger than 11"X17";

5. Photo documentation of implemented post-construction BMPs and all areas of permanent and temporary impacts, prior to and after Project construction. Photo documentation must be conducted in accordance with guidelines posted at http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/StreamPhotoDocSOP.pdf. In addition, photo documentation must include Global Positioning System (GPS) coordinates for each of the photo points referenced; and

6. An evaluation, interpretation, and tabulation of all California Rapid Assessment Method (CRAM) assessment data collected throughout the term of Project construction in accordance with section VI.E of this Certification.

H. **Annual Compensatory Mitigation Monitoring Report.** The Applicant must submit compensatory mitigation monitoring reports, annually, by **March 1** of each year containing sufficient information to demonstrate how the compensatory mitigation project is progressing towards accomplishing its objectives and meeting its performance standards. The monitoring period for each Annual Compensatory Mitigation Monitoring Report shall be January 1st through December 31st of each year. Mitigation monitoring reports must be submitted annually, for a period of not less than five years, sufficient to demonstrate that the compensatory mitigation project has accomplished its objectives and met ecological success performance standards contained in the Mitigation Plan. Following Project implementation the San Diego Water Board may reduce or waive compensatory mitigation monitoring requirements upon a determination that performance standards have been achieved. Conversely the San Diego Water Board may extend the monitoring period beyond five years upon a determination that the performance standards have not been met or the compensatory mitigation project is not on track to meet them.

The monitoring reports must include, but not be limited to, the following information:

1. Names, qualifications, and affiliations of the persons contributing to the report;

2. An evaluation, interpretation, and tabulation of the parameters being monitored, including the results of the Mitigation Plan monitoring program, and all quantitative and qualitative data collected in the field;

3. A description of the following mitigation site(s) characteristics:

   a. Detritus cover;
   b. General topographic complexity;
   c. General upstream and downstream habitat and hydrologic connectivity; and
   d. Source of hydrology;

4. Monitoring data interpretations and conclusions as to how the compensatory mitigation project(s) is progressing towards meeting performance standards and whether the performance standards have been met;

5. A description of the progress toward implementing a plan to manage the compensatory mitigation project after performance standards have been achieved to ensure the long term sustainability of the resource in perpetuity, including a discussion of long term financing mechanisms, the party responsible for long term management, and a timetable for future steps;

6. Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results;

7. Stream photo documentation, including all areas of permanent and temporary impact, prior to and after mitigation site construction. Photo documentation must be conducted in accordance with guidelines posted at http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/StreamPhotoDocSOP.pdf. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced;

8. A qualitative comparison to adjacent preserved streambed areas;

9. The results of the California Rapid Assessment Method (CRAM) monitoring required under section VI.E of this Certification;

10. As-built drawings of the compensatory mitigation project site(s), no bigger than 11"X17"; and

11. A survey report documenting boundaries of the compensatory mitigation site(s).

I. **Reporting Authority.** The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13385.

J. **Electronic Document Submittal.** The Applicant must submit all reports and information under required under this Certification in electronic format via e-mail to SanDiego@waterboards.ca.gov. Documents over 50 megabytes (MB) will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification No. R9-2013-0101:PIN 794332
2375 Northside Drive, Suite 100
San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF) format, and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2013-0101: PIN 794332.

K. **Document Signatory Requirements**. All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:

1. For a corporation, by a responsible corporate officer of at least the level of vice president.

2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.

3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.

4. A duly authorized representative may sign applications, reports, or information if:

   a. The authorization is made in writing by a person described above.

   b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.

   c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

L. **Document Certification Requirements**. All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

*"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are*

*significant penalties for submitting false information, including the possibility of fine and imprisonment."*

## VII. NOTIFICATION REQUIREMENTS

A. **Twenty Four Hour Non-Compliance Reporting.** The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within **24 hours** from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

B. **Hazardous Substance Discharge**. Except for a discharge which is in compliance with this Certification, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.

C. **Oil or Petroleum Product Discharge.** Except for a discharge which is in compliance with this Certification, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.

D. **Anticipated Noncompliance**. The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory

Mitigation project which may result in noncompliance with Certification conditions or requirements.

E. **Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:

1. **Transfer of Property Ownership:** The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board **within 10 days of the transfer of ownership.**

2. **Transfer of Mitigation Responsibility:** Any notification of transfer of responsibilities to satisfy the mitigation requirements set forth in this Certification must include a signed statement from an authorized representative of the new party (transferee) demonstrating acceptance and understanding of the responsibility to comply with and fully satisfy the mitigation conditions and agreement that failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the San Diego Water Board under Water Code section 13385, subdivision (a). Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board **within 10 days of the transfer date.**

3. **Transfer of Post-Construction BMP Maintenance Responsibility:** The Applicant assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity. At the time maintenance responsibility for post-construction BMPs is legally transferred the Applicant must submit to the San Diego Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer specifications. The Applicant must provide such notification to the San Diego Water Board within **10 days** of the transfer of BMP maintenance responsibility.

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of this Certification in the event that a transferee fails to comply.

F. **Discharge Commencement**. The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to** the start of Project construction.

## VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

A. The City of Carlsbad is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has filed a Notice of Determination dated April 9, 2013 for the Final Environmental Impact Report (FEIR) titled *Quarry Creek Master Plan* (State Clearing House Number 2012021039). The Lead Agency has determined the Project will have a significant effect on the environment and mitigation measures were made a condition of the Project.

B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has considered the Lead Agency's FEIR and finds that the Project as proposed will have a significant effect on resources within the San Diego Water Board's purview.

C. The San Diego Water Board has required mitigation measures as a condition of this Certification to avoid or reduce the environmental effects of the Project to resources within the Board's purview to a less than significant level.

D. The Lead Agency has adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6 and CEQA Guidelines section 15097 to ensure that mitigation measures and revisions to the Project identified in the FEIR are implemented. The Mitigation Monitoring and Reporting Program (MMRP) is included and incorporated by reference in Attachment 5 to this Certification. The Applicant shall implement the Lead Agency's MMRP described in the FEIR, as it pertains to resources within the San Diego Water Board's purview. The San Diego Water Board has imposed additional MMRP requirements as specified in section V and VI of this Certification.

E. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Determination in accordance with CEQA Guidelines section 15096 subdivision (i).

## IX. SAN DIEGO WATER BOARD CONTACT PERSON

Alan Monji, Environmental Scientist
Telephone: (619) 521-3968
Email: Alan.Monji@waterboards.ca.gov

## X. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Quarry Creek Master Plan** (Certification No. R9-2013-0101) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification* (General WDRs), which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information

come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2013-0101 issued on November 26, 2014.

David W. R

DAVID W. GIBSON
Executive Officer
San Diego Water Board

26 Nov. 2014
Date

## ATTACHMENT 1

## DEFINITIONS

**Activity** - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

**Buffer** - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

**California Rapid Assessment Method (CRAM) -** is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

**Compensatory Mitigation Project** - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

**Discharge of dredged material** – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

**Discharge of fill material** – means the addition of fill material into waters of the United States and/or State.

**Dredged material** – means material that is excavated or dredged from waters of the United States and/or State.

**Ecological Success Performance Standards** – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

**Enhancement** – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Establishment** – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

**Fill material** – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

**Isolated wetland** – means a wetland with no surface water connection to other aquatic resources.

**Mitigation Bank** – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

**Preservation** - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

**Re-establishment** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Start of Project Construction** - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

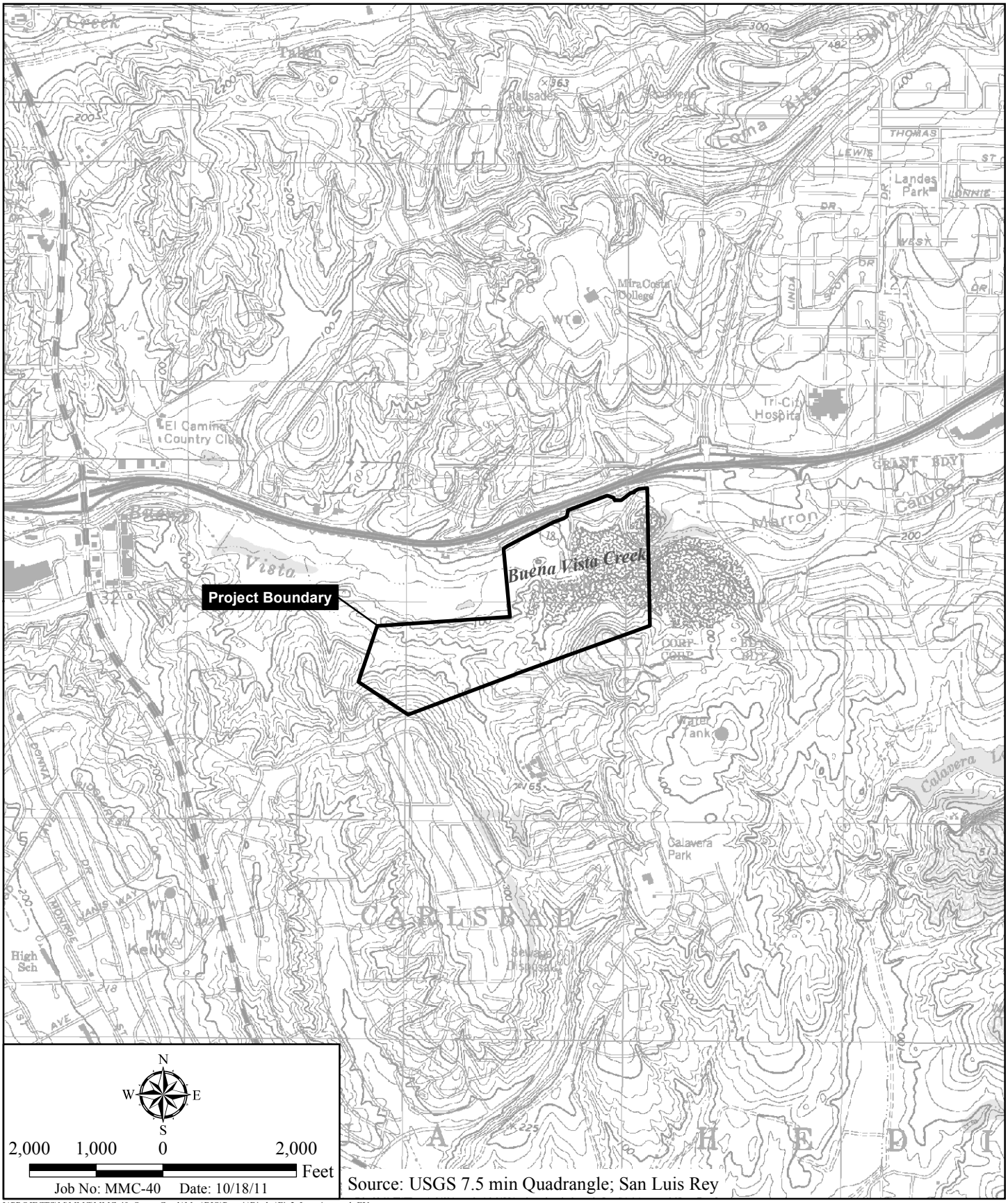
**Uplands** - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

**Water quality objectives and other appropriate requirements of state law** – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

## ATTACHMENT 2

## LOCATION MAPS

1. Helix Environmental Planning, Figure 3, Project Location Map
2. Helix Environmental Planning, Figure 4, Project Aerial Photograph




Source: USGS 7.5 min Quadrangle; San Luis Rey

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# Project Location Map

QUARRY CREEK

HELIX Environmental Planning

Figure 3


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# Project Aerial Photograph

QUARRY CREEK

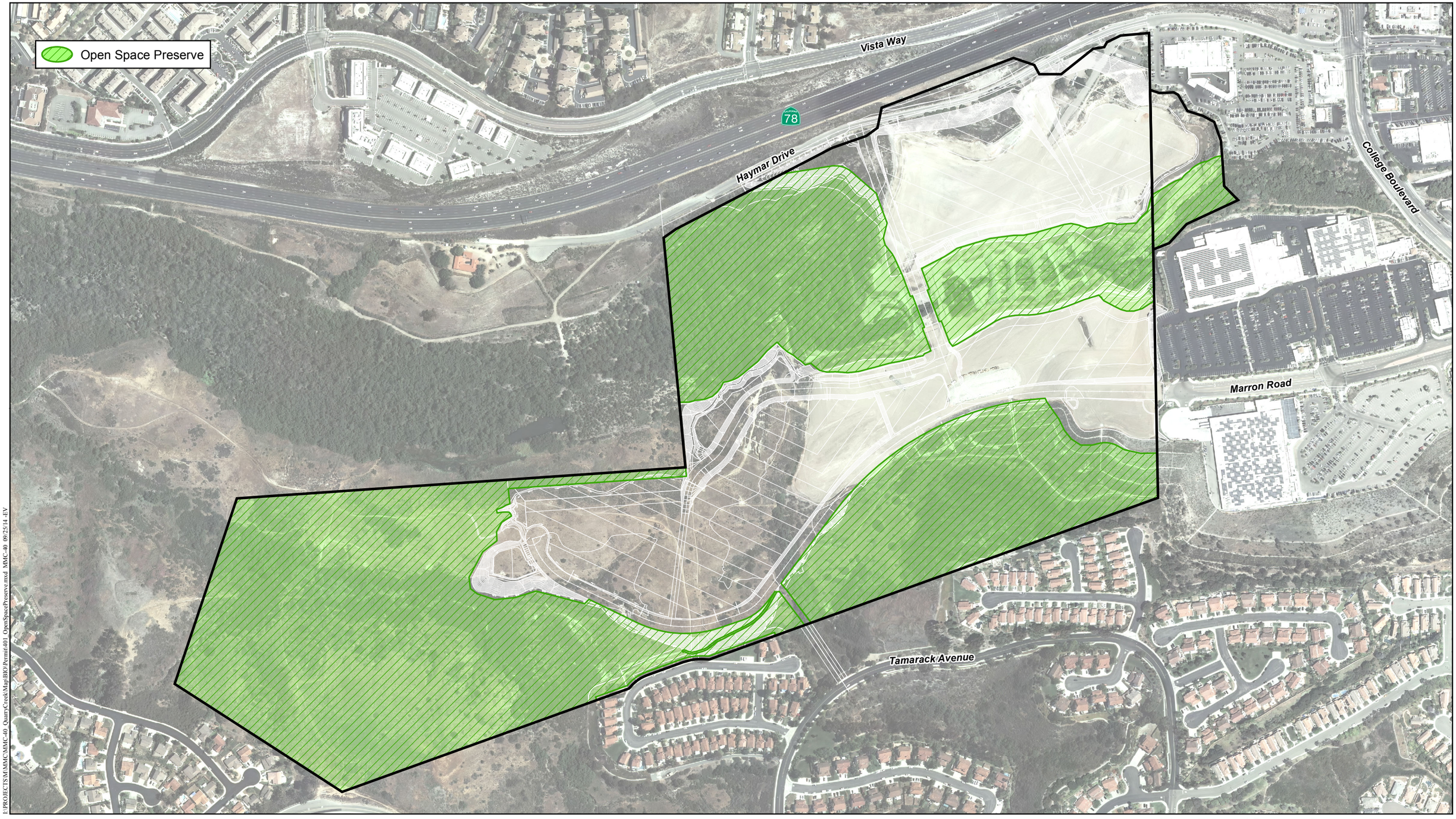
HELIX Environmental Planning

Figure 4

## ATTACHMENT 3

## PROJECT SITE PLANS

1. Helix Environmental Planning, Figure 3, USACE Jurisdictional Areas/Impacts
2. Helix Environmental Planning, Site Plan/Open Space Preserve

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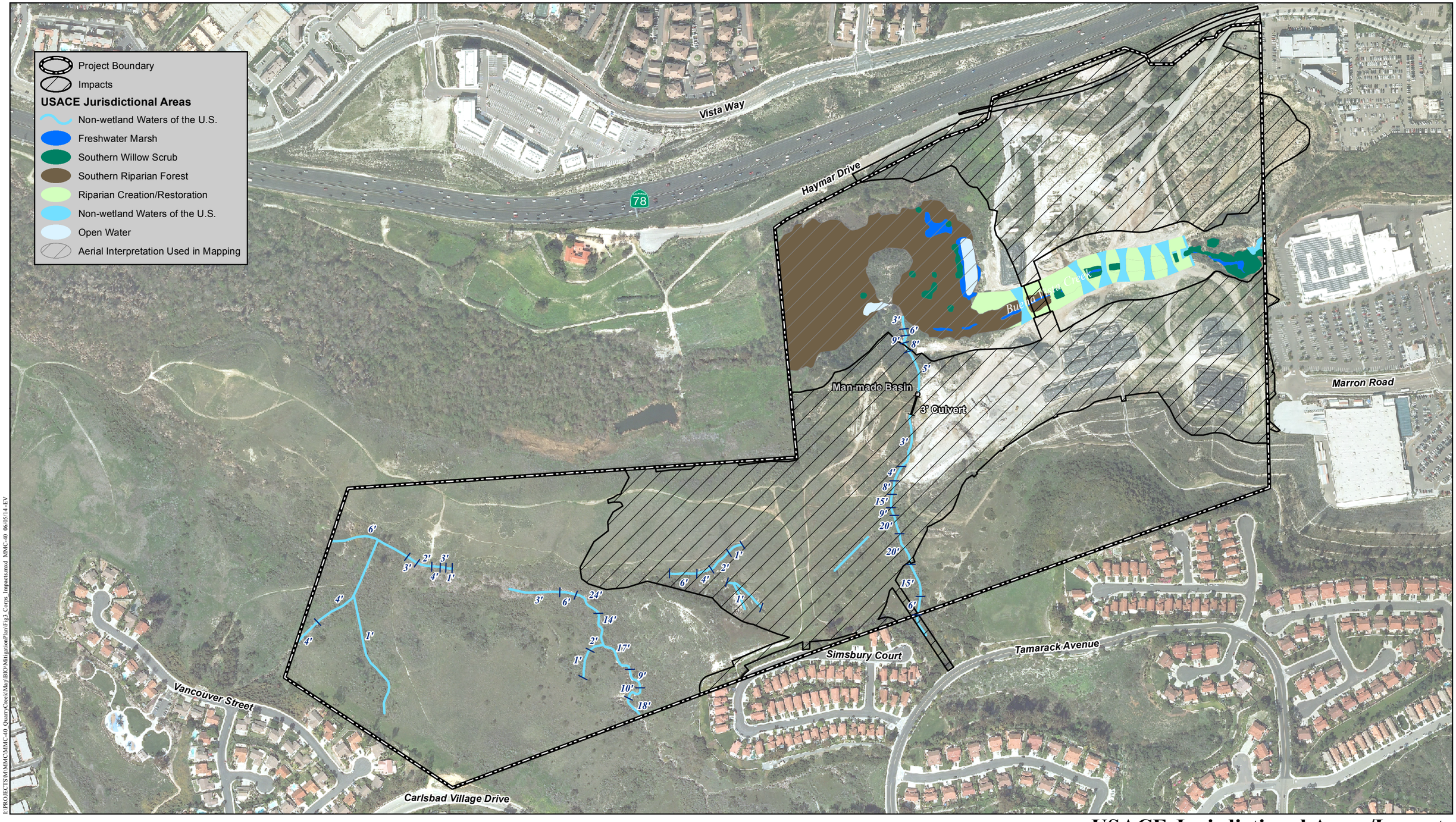
# Site Plan/Open Space Preserve

QUARRY CREEK

HELIX Environmental Planning

0 400 Feet

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# USACE Jurisdictional Areas/Impacts

QUARRY CREEK MASTER PLAN MITIGATION PLAN

HELIX Environmental Planning

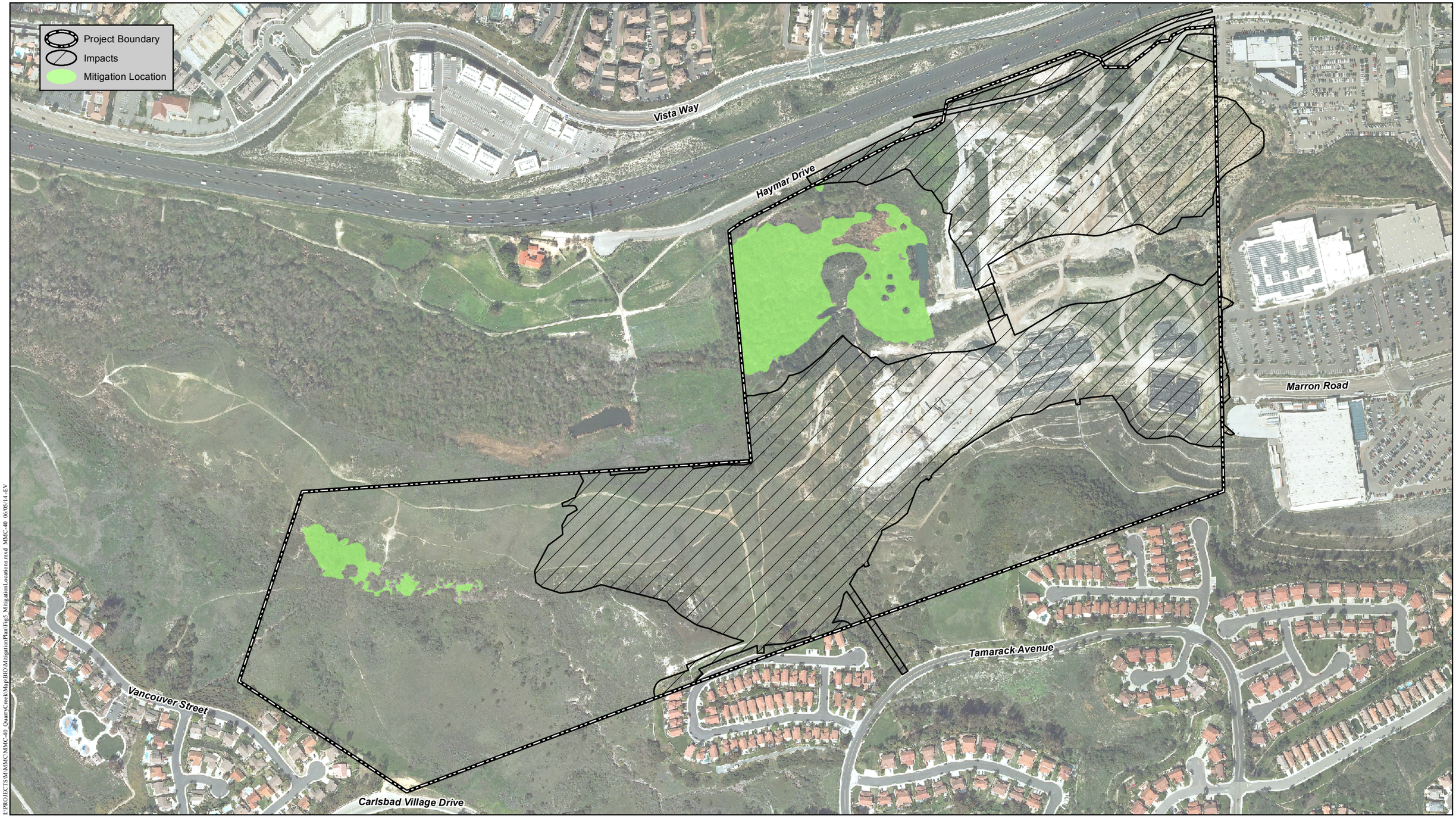
0 400 Feet

Figure 3

## ATTACHMENT 4

## MITIGATION DESIGN PLANS

1. Helix Environmental Planning, Figure 5, Mitigation Locations
2. Helix Environmental Planning, Figure 6, Buena Vista Creek Rehabilitation
3. Helix Environmental Planning, Figure 7, Tributary Re-Establishment

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# Mitigation Locations

QUARRY CREEK MASTER PLAN MITIGATION PLAN

HELIX Environmental Planning

0 400 Feet

Figure 5


I:\PROJECTS\MMCMMC-40_QuarryCreek\Map\BIO\MitigationPlan\Fig6_BuenaVistaCreek.mxd MMC-40 06/05/14 -EV

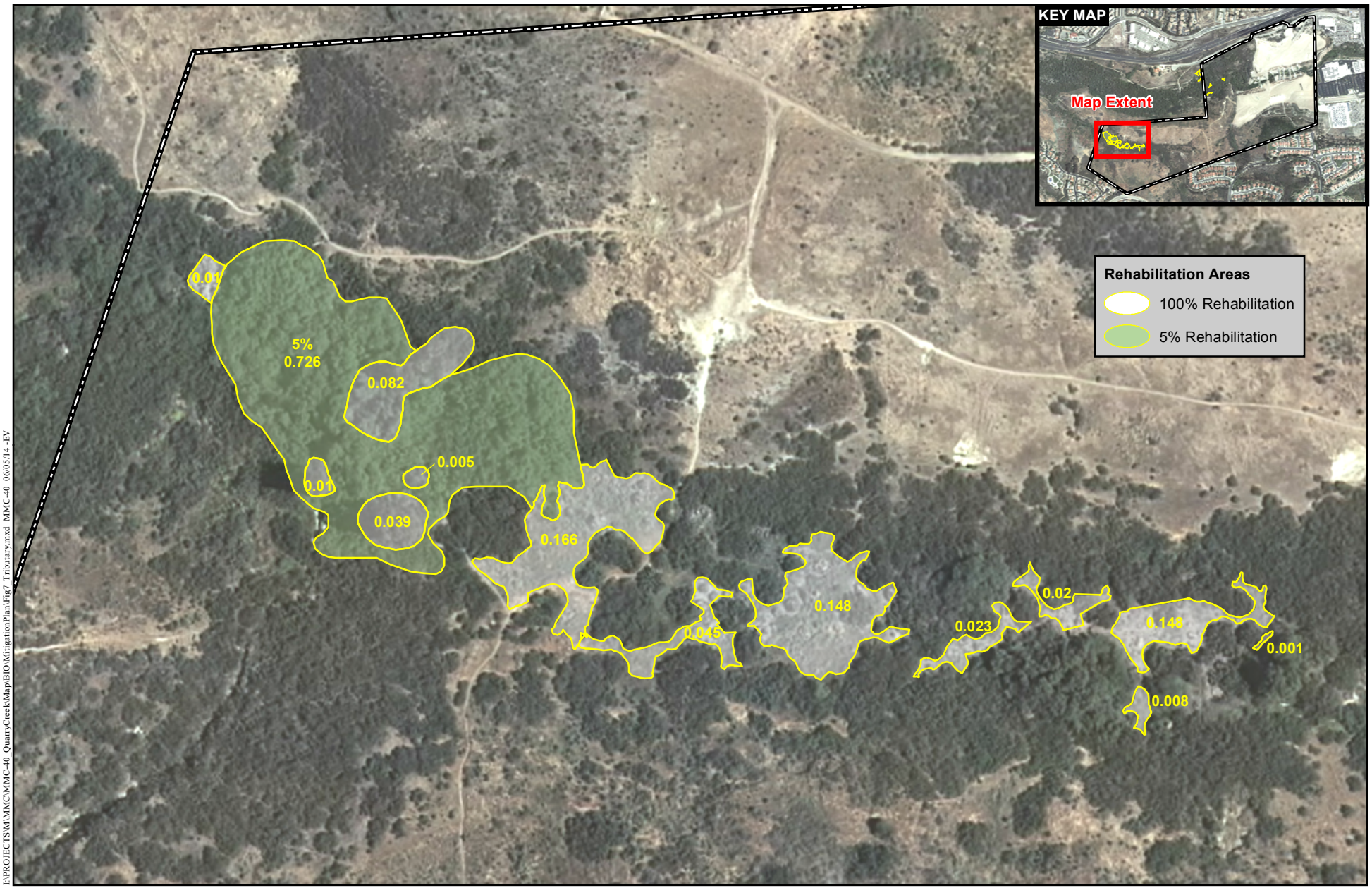
# Buena Vista Creek Rehabilitation

QUARRY CREEK MASTER PLAN MITIGATION PLAN

HELIX Environmental Planning

0 100 Feet

Figure 6

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# Tributary Re-establishment

QUARRY CREEK MASTER PLAN MITIGATION PLAN

HELIX Environmental Planning

N 0 100 Feet

Figure 7

## ATTACHMENT 5

## MITIGATION MONITORING AND REPORTING PROGRAM

1. HDR Quarry Creek Master Plan Final EIR, Mitigation Monitoring and Reporting Program Table

# 0.4 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation measures have been identified in the Environmental Impact Report (EIR) for the Quarry Creek Master Plan Project to reduce or eliminate potential environmental impacts associated with the project. The City of Carlsbad (City) is required to implement all adopted mitigation measures. In order to ensure compliance, the following mitigation monitoring program has been formulated. This program consists of a checklist followed by a detailed description of the mitigation measures.

A mitigation checklist has been prepared for the project. Table 1 summarizes the mitigation measures for the project. Information contained within the checklist clearly identifies the mitigation measure, delineates the monitoring schedule, and defines the conditions required to verify compliance. Following is an explanation of the seven columns that constitute the checklist.

**Column 1** **Mitigation Measure:** An inventory of each mitigation measure is provided with a brief description.

**Column 2** **Type:** Each mitigation measure is classified as Project Design Mitigation (PD), Project Construction Mitigation (PC), Ongoing Mitigation (OM), or Long-Term Mitigation (LT) in order to identify at what stage in the project development process the mitigation measure can be implemented based upon the following definitions:

- PD - Project Design Mitigation: Mitigation that has been incorporated into the project at the design phase of project development (e.g., traffic control plan, landscape plan);
- PC - Project Construction Mitigation: Mitigation that is to be initiated at the project site prior to and/or during construction to avoid construction related impacts (e.g., dust or noise control measures);
- OM - On-going Mitigation: Mitigation associated with the project over a period of time (e.g., success of revegetation);
- LT - Long-Term Mitigation: Mitigation that requires monitoring over a greater period of time (e.g., five-year revegetation monitoring program).

**Column 3** **Monitor:** Identifies the City department/division or other public agency that is responsible for determining compliance with the mitigation measure and for informing the Planning Division about compliance.

**Column 4** **Schedule:** The monitoring schedule depends upon the progression of the overall project. Therefore, specific dates are not used within the "Schedule" column. Instead, scheduling describes a logical succession of events (e.g., prior to construction, annual) and if necessary, delineates a follow-up program.

**Column 5** **Compliance Action:** The monitor can easily determine a mitigation measure's completion by referring to "Compliance Action." Upon satisfaction of the requirement listed in this column, the mitigation measure is considered complete.

**Column 6** **Verification of Compliance:** The monitor verifies completion of the particular mitigation measure by initialing and dating in this column. Where the "Schedule" column

indicates annual or other ongoing mitigation measures, verification of compliance may not occur until completion of the project. Provision of all required signatures within the Verification of Compliance column signifies conclusion of the monitoring program.

**Column 7** **Remarks:** The status of ongoing and cumulative mitigation measures is to be documented during each visit. The space provided for remarks is obviously too small for inclusion of the remarks. It is intended that this space be used to indicate whether there are specific comments pertaining to the status of the mitigation measure. If there are additional comments they are to be attached to the checklist. Progress reports are required for the revegetation program. Information provided within progress reports will be helpful in the development of future mitigation programs.

This program is to be adopted by the lead and responsible agencies upon formulation of findings in order to comply with the requirements set forth by Assembly Bill 3180 (Public Resources Code Section 21081.6).

| Mitigation Measure | Type | Monitor | Schedule | Compliance Action | Verification of Compliance | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | | | Initial | Date | |
| *Air Quality* | | | | | | | |
| AQ-1 Prior to issuance of a grading permit, the project applicant shall prepare a dust control measure plan that includes Best Available Control Measures (BACM) that are designed to reduce $PM_{10}$ emissions. The dust control plan shall be submitted to the City of Carlsbad Engineering Division for review and approval. The following standards for construction emissions shall be implemented during construction:<br>• Apply water during grading (which includes blasting activity)/grubbing activities to all active disturbed areas at least twice daily;<br>• Apply non-toxic soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for ten days or more);<br>• Apply water to all on-site unpaved roadways at least two times daily;<br>• Reduce all construction related traffic speeds on-site to below 15 miles per hour (MPH);<br>• In disturbed areas, replace ground cover as quickly as possible;<br>• Suspend all excavating and grading operations when wind speeds exceed 25 miles per hour;<br>• All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114; and<br>• Gravel pads (construction entrances) must be installed at all access points to prevent tracking of mud onto public streets. | PC | City of Carlsbad Engineering and Planning Divisions | Prior to issuance of a grading permit | Prior to the issuance of a grading permit, a dust control measure plan shall be submitted to the City of Carlsbad Engineering Division for review and approval. | | | |
| *Biological Resources* | | | | | | | |
| BIO-1 Prior to issuance of a grading permit, mitigation plans for impacts to wetland and riparian species shall be submitted to the City for approval. The following measures shall be implemented:<br>• Impacts to southern riparian woodland, southern willow scrub, and mule fat scrub shall be mitigated at a 3:1 ratio with a | PC | City of Carlsbad Planning Division | Prior to issuance of a grading permit | Prior to issuance of a grading permit, the applicant shall submit mitigation plans for impacts to wetland and riparian | | | |

| Mitigation Measure | Type | Monitor | Schedule | Compliance Action | Verification of Compliance | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | | | Initial | Date | |
| minimum 1:1 creation ratio. In total, impacts to riparian vegetation communities shall require 1.26 acres of mitigation. The proposed project shall include 0.42 acres of riparian creation, and 0.84 acres of enhancement of wetlands on-site or immediately off-site along Buena Vista Creek. Refer to Figure 5.4-7 for the proposed location of riparian creation.<br>• Alternatively, the project may complete mitigation at an off-site location acceptable to the City and Resource Agencies.<br>• Impacts to 0.2 acres of native grassland shall be mitigated at a 3:1 ratio (0.6 acres) through on-site preservation of 0.1 acres of native grassland and restoration of 0.5 acres of native grassland within on-site open space.<br>• Impacts to 13.1 acres of Diegan coastal sage scrub shall be mitigated at a 2:1 ratio (26.2 acres) through on-site preservation of 24.7 acres of Diegan coastal sage scrub. The remaining 1.5 acres shall be mitigated through restoration of Diegan coastal sage scrub on-site.<br>• An additional 3.0 acres will be revegetated with Diegan coastal sage scrub species for erosion control purposes, and will be required to meet cover criteria for erosion control, but will not be required to meet success criteria for Diegan coastal sage scrub being used for project mitigation. All revegetated slopes will be maintained by the project proponent until success criteria have been met before being added to the preserve to be managed by the preserve manager.<br>• Impacts to 0.2 acres of coastal sage chaparral scrub and 0.1 acres of southern mixed chaparral shall be mitigated at a 1:1 ratio (0.3 acres) through on-site preservation of 0.2 acres of coastal sage chaparral scrub and 0.1 acres of southern mixed chaparral.<br>• Impacts to 24.6 acres of non-native grassland shall be mitigated at a 0.5:1 ratio (12.3 acres). The applicant shall include preservation of 10.0 acres of non-native grassland and either payment of the in lieu fee or restoration of 2.3 acres of grassland habitat on-site. | | | | species to the City for approval. | | | |

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| • Impacts to 6.3 acres of disturbed habitat, 0.1 acres of eucalyptus woodland and 0.4 acres of non-native vegetation shall be mitigated at a 0.1: 1 ratio with on-site preservation of 0.68 acres southern mixed chaparral (6.8 acres of impact times 0.1). | | | | | | | |
| BIO-2 Prior to issuance of a grading permit, the applicant shall submit a riparian restoration plan and a native grassland restoration plan for approval by the City of Carlsbad. The restoration plans shall include the following:<br><br>Riparian Restoration Plan<br><br>a) All final specifications and topographic-based grading, planting, and irrigation plans (0.5 foot contours and typical cross-sections) for the creation/ restoration-sites. All wetland mitigation areas shall be graded to the same elevation as adjacent existing jurisdictional wetlands areas, and/or to within one foot of the groundwater table, and shall be left in a rough grade state with microtopographic relief (including channels for wetlands) that mimics natural topography, as directed by the City and the USACE, USFWS, and CDFG (collectively referred to as "Resource Agencies"). Topsoil and plant materials salvaged from the impacted areas (including live herbaceous shrub and tree species) shall be transplanted to, and/or used as a seed/cutting source for, the riparian/wetland creation and enhancement areas to the maximum extent practicable as directed by the City of Carlsbad and Resource Agencies. Planting and irrigation shall not be installed until the City and Resource Agencies have approved of the mitigation-site grading. All plantings shall be installed in a way that mimics natural plant distribution, and not in rows;<br>b) Planting palettes (plant species, size, and number/acres) and seed mix (plant species and pounds/acres). The multitude of plant palettes proposed in the draft plans shall include native species specifically associated with the habitat type(s). Unless otherwise approved by the City and Resource Agencies, only | PC | City of Carlsbad Planning Division | Prior to issuance of a grading permit | Prior to issuance of a grading permit, the applicant shall submit a riparian restoration plan and a native grassland restoration plan for approval by the City of Carlsbad. | | | |

| Mitigation Measure | Type | Monitor | Schedule | Compliance Action | Verification of Compliance | | Remarks |
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| locally native species (no cultivars) obtained from as close to the project site as possible shall be used. The source and proof of local nativeness of all plant material and seed shall be provided;<br>c) Container plant survival shall be 80 percent of the initial plantings for the first five years. At the first and second anniversary of plant installation, all dead plants shall be replaced unless their function has been replaced by natural recruitment;<br>d) A final implementation schedule that indicates when all riparian/wetland impacts, as well as riparian/wetland creation/ restoration grading, planting, and irrigation, will begin and end. Necessary site preparation and planting shall be completed during the concurrent or next planting season (i.e., late fall to early spring) after the City and Resource Agencies' approval of grading. Any temporal loss of habitat caused by delays in riparian/wetland habitat creation/ restoration shall be offset through like habitat creation/ restoration at a 0.5: 1 ratio for every six months of delay (i.e., 1:1 for 12 months delay, l.5:l for 18 months delay, etc.). In the event that the project applicant is wholly or partly prevented from performing obligations under the final plans (causing temporal losses due to delays) because of unforeseeable circumstances or causes beyond the reasonable control, and without the fault of negligence of the project applicant, including but not limited to natural disasters (e.g., earthquakes, etc.), labor disputes, sudden actions of the elements (e.g., landslide activity), or actions or inaction by federal or state agencies, or other governments, the project applicant will be excused by such unforeseeable cause(s);<br>e) Five years of success criteria for wetland/riparian creation/ restoration areas, including: separate percent cover criteria for herbaceous understory, shrub midstory, and tree overstory, and a total percent absolute cover for all three layers at the end of five years; evidence of natural recruitment of multiple species for all habitat types; 0 percent coverage for Cal-IPC's "Invasive | | | | | | | |

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| Plant Inventory" species, and no more than 10 percent coverage for other exotic/weed species;<br>f) A minimum of five years of maintenance and monitoring of riparian/wetland creation/ restoration areas, unless success criteria are met earlier and all artificial water supply has been off for at least two years;<br>g) A qualitative and quantitative vegetation monitoring plan with a map of proposed sampling locations. Photo points shall be used for qualitative monitoring and stratified-random sampling shall be used for all quantitative monitoring;<br>h) Contingency measures in the event of creation/restoration failure;<br>i) Annual mitigation maintenance and monitoring reports shall be submitted to the City and Resource Agencies no later than December 1 of each year; and<br>j) A wetland delineation shall be performed to confirm that USACE and CDFG jurisdictional wetlands have been successfully created/restored prior to final approval of creation/ restoration-sites.<br>Native Grassland and Diegan Coastal Sage Scrub Habitat Restoration Plan<br>a) All final specifications and topographic-based grading (with 10-foot contours), planting, and irrigation plans (if irrigation is used). All upland habitat creation/restoration-sites shall be prepared for planting by decompacting the top soil in a way that mimics natural upland habitat top soil to the maximum extent practicable while maintaining slope stability. Topsoil and plant materials salvaged from the upland habitat areas to be impacted shall be transplanted to, and/or used as a seed/cutting source for, the upland habitat restoration/ creation areas to the maximum extent practicable as approved by the City of Carlsbad and the wildlife agencies. Planting and irrigation shall not be installed until the City and wildlife agencies have approved of upland habitat restoration/ creation-site grading. All | | | | | | | |

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| plantings shall be installed in a way that mimics natural plant distribution and not in rows;<br>b) Planting palettes (plant species, size, and number/acres) and seed mix (plant species and pounds/acres). The upland plant palette proposed in the draft plans shall include native species specifically associated with the habitat type(s). Unless otherwise approved by the City of Carlsbad and wildlife agencies, only locally native species (no cultivars) obtained from as close to the project site as possible shall be used. The source and proof of local nativeness of all plant material and seed shall be provided;<br>c) Container plant survival shall be 80 percent of the initial plantings for the first five years. At the first and second anniversary of plant installation, all dead plants shall be replaced unless their function has been replaced by natural recruitment;<br>d) A final implementation schedule that indicates when all native grassland and Diegan coastal sage scrub impacts, as well as native grassland and Diegan coastal sage scrub creation/ restoration grading, planting, and irrigation, will begin and end. Necessary site preparation and planting shall be completed during the concurrent or next planting season (i.e., late fall to early spring) after the City and wildlife agencies' approval of grading. Any temporal loss of habitat caused by delays in native grassland and Diegan coastal sage scrub habitat creation/ restoration shall be offset through like habitat creation/restoration at a 0.5:1 ratio for every six months of delay (i.e., 1:1 for 12 months delay, 1.5:1 for 18 months delay, etc.). In the event that the project applicant is wholly or partly prevented from performing obligations under the final plans (causing temporal losses due to delays) because of unforeseeable circumstances or causes beyond the reasonable control, and without the fault of negligence of the project applicant, including but not limited to natural disasters (e.g., earthquakes, etc.), labor disputes, sudden actions of the elements (e.g., further | | | | | | | |

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| landslide activity), or actions or inaction by federal or state agencies, or other governments, the project applicant will be excused by such unforeseeable cause(s);<br>e) Five years of success criteria for native grassland creation/ restoration areas, including: a total of 40-65 percent absolute cover; evidence of natural recruitment of multiple species; 0 percent coverage for Cal-IPC List A and B species, and no more than 10 percent coverage for other exotic/weed species;<br>f) A qualitative and quantitative vegetation monitoring plan with a map of proposed sampling locations. Photo points shall be used for qualitative monitoring and stratified, random sampling shall be used for all quantitative;<br>g) Contingency measures in the event of creation/restoration failure; and<br>h) Annual mitigation maintenance and monitoring reports shall be submitted to Carlsbad and the wildlife agencies after the maintenance and monitoring period and no later than December 1 of each year.<br><br>The USACE and CDFG require no net loss of wetlands. The proposed project would cause impacts to 0.21 acres of USACE jurisdictional areas and 0.47 acres of CDFG jurisdictional areas. The following mitigation is required for impacts to USACE and CDFG jurisdictional areas. | | | | | | | |
| BIO-3 Prior to the issuance of a grading permit, a mitigation plan shall submitted to the City for approval that provides mitigation for the permanent and temporary impacts to 0.23 acres of USACE jurisdictional areas and 0.55 acres of CDFG jurisdictional areas. Mitigation shall be accomplished through on-site mitigation at a 3:1 mitigation to impact ratio through a combination of habitat creation at a 1:1 ratio and restoration/enhancement at a 2:1 ratio; resulting in 0.69 acres of USACE mitigation, including at least 0.23 acres of creation; impacts to CDFG jurisdictional areas shall require 1.39 acres of mitigation, including at least 0.55 acres of creation. The riparian creation shall (0.55 acres) shall occur on-site, and the remaining 0.84 acres of mitigation would occur with enhancement of wetlands on-site or immediately off-site along Buena Vista Creek. Alternatively, the project may complete | PC | City of Carlsbad Planning Division | Prior to issuance of a grading permit | Prior to issuance of a grading permit, a mitigation plan that provides mitigation for the impacts to USACE and CDFG jurisdictional areas shall be submitted to the City for approval. | | | |

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| mitigation at an off-site location acceptable to the City and Resource Agencies. Refer to Figure 5.4-7 for the proposed location of riparian creation on-site. Impacts to 0.2 acres of the riparian habitat due to shade shall be mitigated through on-site or off-site enhancement of 0.20 acres of disturbed riparian habitat. | | | | | | | |
| BIO-4 Prior to construction activities during the avian breeding season (February 15-September 15); a qualified biologist shall conduct pre-construction surveys in the adjacent habitat for coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and nesting raptors. The survey shall begin not more than three days prior to the beginning of grading activities. The USFWS and CDFG (collectively referred to as "wildlife agencies") shall be notified if any of these species are observed nesting within 500 feet of proposed grading activities. No activities which would result in noise levels exceeding 60 dBA hourly Leq within this 500-foot buffer shall be allowed. Background noise (e.g., State Route 78 [SR-78]) shall be excluded from the 60 dBA calculation. If grading activities are not completed prior to the breeding season, and any of these species are present, and noise levels exceed this threshold, noise barriers shall be erected to reduce noise impacts to occupied habitat to below 60 dBA hourly Leq and/or the activities shall be suspended.<br><br>The proposed project may result in significant edge effects (including effects from human activity) along the western boundary of the project site, as well as along the development/ open space boundaries. To reduce edge effects, on-site human activity, and potential impacts related to the introduction of exotic and domestic animals, the following mitigation is required. | PC | City of Carlsbad Planning Division | Prior to construction | Prior to construction activities, a qualified biologist shall conduct pre-construction surveys in the adjacent habitat for coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and nesting raptors. The on-site biologist shall provide a written report to the City Planning Division stating whether species were observed within 500 feet of proposed grading activities.<br><br>If grading activities are not completed prior to the breeding season, and any of these species are present, and noise levels exceed the 60 dBA hourly threshold, noise barriers shall be erected to reduce noise impacts to occupied habitat to below 60 dBA hourly | | | |

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| | | | | Leq and/or the activities shall be suspended. | | | |
| BIO-5 Prior to issuance of a grading permit, the applicant shall incorporate the following measures into the grading plans, final project design, and landscaping plans:<br>• Temporary fencing (with silt barriers) shall be installed at the limits of project impacts (including construction staging areas and access routes) to prevent additional sensitive habitat impacts and to prevent the spread of silt from the construction zone into adjacent habitats to be avoided. Fencing shall be installed in a manner that does not impact habitats to be avoided. The applicant shall submit to the City, and the resource agencies (i.e., USACE, USFWS, and CDFG), for approval at least 30 days prior to initiating project impacts and the final plans for initial clearing and grubbing of sensitive habitat and project construction. These final plans shall include photographs that show the fenced limits of impact and all areas (including riparian/wetland or coastal sage scrub) to be impacted or avoided. If work occurs beyond the fenced or demarcated limits of impact, all work shall cease until the problem has been remedied to the satisfaction of the City and the resource agencies. Any riparian/wetland or upland habitat impacts that occur beyond the approved fence shall be mitigated at a minimum 5:1 ratio. Temporary construction fencing shall be removed upon project completion.<br>• A monitoring biologist approved by the resource agencies shall be on-site during clearing and grubbing of habitat that occurs within 200 feet of the grading limits. The monitoring biologist shall conduct weekly site visits during rough grading to ensure that the grading limits have been respected. The biologist must be knowledgeable of gnatcatcher, least Bell's vireo, and flycatcher biology and ecology. The applicant shall submit the biologist's name, address, telephone number, and work schedule on the project to the City and the resource agencies at least seven days prior to initiating project impacts. | PC | City of Carlsbad Planning Division | Prior to issuance of a grading permit | Prior to issuance of a grading permit, the applicant shall incorporate the measures listed in Mitigation Measure BIO-5 into the grading plans, final project design, and landscaping plans for approval by the City and the resource agencies (USACE, USFWS, and CDFG). | | | |

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| • The monitoring biologist shall periodically monitor adjacent habitats for excessive amounts of dust and shall recommend remedial measures to address dust control if necessary. The monitoring biologist shall implement a contractor training program to insure compliance with permit conditions. Any violations would be reported to the City and the wildlife agencies within 24 hours. Weekly reports will be submitted during initial clearing and grubbing, and monthly reports shall be submitted throughout the remainder of the grading of the site. A final report shall be submitted to the City and the wildlife agencies within 60 days of project completion.<br>• The clearing and grubbing of sensitive habitats shall occur outside of the bird breeding season (February 15 to September 15), unless a qualified biologist demonstrates to the satisfaction of the City and the wildlife agencies that all nesting is complete. The qualified biologist would need to be federally permitted for species such as the least Bell's vireo (*Vireo bellii pusillus*) and coastal California gnatcatcher (*Polioptila californica californica*) if the habitat being cleared has the potential to support these species. | | | | | | | |
| BIO-6 Prior to construction activities, the applicant shall complete the following tasks:<br>• A conservation easement shall be placed over those portions of the property required to meet project mitigation obligations (a conservation easement already exists over the open space previously set aside as part of the quarry reclamation effort).<br>• The applicant shall prepare and implement a perpetual management, maintenance, and monitoring plan (PMP) for all on-site biological conservation easement areas (a perpetual management, maintenance, and monitoring plan already exists over the open space previously set aside as part of the quarry reclamation effort). The applicant shall also establish a non-wasting endowment or other satisfactory financing mechanism for an amount approved by the City and resource agencies based on a Property Analysis Record (PAR; Center for Natural | PC | City of Carlsbad Planning Division | Prior to construction | Prior to construction activities, the City Planning Division shall verify that (1) the applicant has placed a conservation easement over the portions of the property required to meet project mitigation obligations and (2) the applicant has prepared and implemented a perpetual management, maintenance, and monitoring plan for all on-site biological | | | |

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| Lands Management 1998) or similar cost estimation method to secure the ongoing funding for the perpetual management, maintenance, and monitoring of the biological conservation easement area by an agency, non-profit organization, or other entity approved by the City and resource agencies. The applicant shall submit a draft plan including: (1) a description of perpetual management, maintenance, and monitoring actions and the PAR or other cost estimation results for the non-wasting endowment; and (2) proposed land manager's name, qualifications, business address, and contact information to the resource agencies for approval at least 30 days prior to initiating project impacts. Upon approval of the draft plan, the applicant shall submit the final plan to the City and resource agencies and a contract with the approved land manager, as well as transfer the funds for the non-wasting endowment to a non-profit conservation entity, within 60 days of receiving approval of the draft plan. | | | | conservation easements areas.<br>Upon approval of the draft plan, the applicant shall submit the final plan to the City and resource agencies and a contract with the approved land manager, as well as transfer the funds for the non-wasting endowment to a non-profit conservation entity, within 60 days of receiving approval of the draft plan. | | | |
| BIO-7 Concurrent with construction activities, the applicant shall complete the following tasks:<br>• Employees shall strictly limit their activities, vehicles, equipment, and construction materials to the fenced project footprint.<br>• To avoid attracting predators of the gnatcatcher, vireo, and flycatcher, the project site shall be kept as clean of debris as possible during project grading. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site.<br>• Pets of project personnel shall not be allowed on the project site during grading.<br>• Disposal or temporary placement of excess fill, brush, or other debris shall not be allowed in waters of the U.S. or their banks.<br>• All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas outside of waters of the U.S. within the fenced project | PC | City of Carlsbad Planning Division | During construction | Prior to construction activities, the applicant shall ensure that the tasks listed in Mitigation Measure BIO-7 are implemented. | | | |

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| impact limits. These designated areas shall be located in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering waters of the U.S., and shall be shown on the construction plans. Fueling of equipment shall take place within existing paved areas greater than 100 feet from waters of the U.S.<br>• Contractor equipment shall be checked for leaks prior to operation and repair, as necessary. "No fueling zones" shall be designated on construction plans.<br>• No species on the Cal-IPC "Invasive Plant Inventory" list shall be included in the project landscaping plans.<br>• The biological monitor shall inspect landscaping elements proposed to be installed within the Master Plan for the presence of Argentine ants. Any landscaping containing Argentine ants shall be rejected from being installed within the Master Plan area.<br>• All exterior lighting adjacent to preserved habitat shall be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from preserved habitat to the maximum extent practicable.<br>• All planning areas adjacent to preserved habitat shall have non-reflective windows to minimize bird strike issues. | | | | | | | |
| *Cultural Resources* | | | | | | | |
| CR-1 Prior to initiating any grading or construction activities, temporary construction fencing shall be erected around Locus 1 at site SDI-5651. Erecting fencing around Locus 1 will ensure no disturbance to the area occurs during earth work activities. Fencing around Locus 1 shall be established in consultation with the Luiseño Native American monitor and the archaeological monitor. Both a Native American monitor and archaeological monitor shall be present when the protective fencing is erected. | PC | City of Carlsbad Planning Division | Prior to grading or construction | Prior to initiating any grading or construction activities, the City will ensure that temporary construction fencing shall be erected around Locus 1 at site SDI-5651. The location of fencing will be established in | | | |

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| *Hazards and Hazardous Materials* | | | | | | | |
| HAZ-1 Per the California RWQCB, San Diego Region Order No., R9-2002-0342, any project activity that encounters or disturbs petroleum fuel contaminated soils (FCS) shall be required to follow the RWQCB's *Waste Discharge Requirements for the Disposal and/or Reuse of Petroleum Fuel Contaminated Soils in the San Diego Region,* and *Monitoring and Reporting Program No. R9-2002-0342 for the Disposal and/or Reuse of Petroleum Fuel Contaminated Soils in the San Diego Region*. The requirements for proper transport and disposal of the FCS shall be included on the grading plans and permits for the proposed project.<br><br>Additionally, the construction contractor shall be required to follow all additional federal, state and local regulations that included but are not limited to the California Water Code; California Code of Regulations Titles 22, 23, and 27; RWQCB Resolution No. R9-2007-0104 Conditional Waiver No. 8, specifically Sections 8.I.A and 8.II.D and E; and 29, 40, and 49 Code of Federal Regulations. | PC | City of Carlsbad Planning Division | Prior to issuance of a grading permit | Prior to the issuance of grading permits, all grading plans and permits shall include the requirements for proper transport and disposal of the FCS. Any project activity that encounters or disturbed petroleum fuel contaminated soils during grading or construction activities, shall be required to follow the RWQCB's *Waste Discharge Requirements for the Disposal and/or Reuse of Petroleum Fuel Contaminated Soils in the San Diego Region,* and *Monitoring and Reporting Program No. R9-2002-0342 for the Disposal and/or Reuse of Petroleum Fuel Contaminated Soils in the San Diego Region*. | | | |
| *Hydrology and Water Quality* | | | | | | | |
| WQ-1 Prior to issuance of a grading permit for any phase of the development, the applicant shall prepare and submit for review and approval of the Carlsbad City Engineer, a Storm Water Pollution Prevention Program (SWPPP) to demonstrate that pollutants will be controlled through compliance with the City of Carlsbad Standard Urban Stormwater Mitigation Plan (SUSMP), General Construction Stormwater | PD & PC | City of Carlsbad Engineering Division | Prior to issuance of a grading permit for any phase of the development | Prior to issuance of a grading permit for any phase of the development, the developer shall prepare and submit for review | | | |

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| Permit (Order No. 2009-0009-DWR, NPDES CAS000002), and the General Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES CAS0108758). The applicant shall be responsible for monitoring and maintaining the BMP erosion control measures identified below on a weekly basis in accordance with the City's grading and erosion control requirements (Municipal Code Section 15.16. et seq.). The locations of all erosion control devices shall be noted on the grading plans. BMPs that shall be installed include, but are not limited to, the following:<br>• Silt fence, fiber rolls, or gravel bag berms;<br>• Check dams;<br>• Street sweeping and vacuuming;<br>• Storm drain inlet protection;<br>• Stabilized construction entrance/exit;<br>• Hydroseed, soil binders, or straw mulch;<br>• Containment of material delivery and storage areas;<br>• Stockpile management;<br>• Spill prevention and control;<br>• Waste management for solid, liquid, hazardous, and sanitary waste-contaminated soil; and<br>• Concrete waste management. | | | | and approval of the Carlsbad City Engineer, a SWPPP to control pollutants in compliance with the City's SUSMP, General Construction Stormwater Permit, and the General Municipal Stormwater Permit. The developer shall be responsible for monitoring and maintain all project BMP erosion control measures on a weekly basis. | | | |
| WQ-2 Prior to the issuance of grading permits or other approvals for any public or private right-of-way improvements or site development plans, the developer shall prepare and submit for review and approval of the Carlsbad City Engineer, improvement plans that demonstrate that pollutants will be controlled through compliance with the City of Carlsbad SUSMP and SWMP. Approval of such plans shall be subject to a determination by the Carlsbad City Engineer that the proposed project has implemented an integrated Low Impact Development (LID) approach to meet criteria described in the City of Carlsbad SUSMP. The proposed project has incorporated the following LID strategies which include site design BMPs, source control BMPs and structural | PD & PC | City of Carlsbad Engineering Division | Prior to issuance of a grading permit | Prior to issuance of grading permits or other approvals for any public or private right-of-way improvements or site development plans, the developer shall prepare and submit for review and approval of the City of Carlsbad City Engineer, improvement | | | |

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| treatment control BMPs into the project design to the maximum extent practicable:<br>• Optimization of site layout (100-foot vegetated buffer, 50-foot building setback, minimizing disturbance of natural areas);<br>• Minimization of directly connected impervious areas and directing runoff from impervious areas to landscape where possible;<br>• Non-contiguous sidewalks;<br>• Street sweeping;<br>• Appropriate pest management;<br>• Covered trash enclosures;<br>• Storm drain inlet labeling;<br>• Incorporation of landscape and open space areas;<br>• Bioretention Extended Detention Basins;<br>• High rate media filter units; and<br>• Vegetated swales shall be comprised of local non-invasive plants. | | | | plans that demonstrate pollutants will be controlled through compliance with the City of Carlsbad SUSMP and SWMP. | | | |
| *Noise* | | | | | | | |
| N-1 The project proponent shall prepare a site specific noise study for each residential lot based upon the final site design (i.e., site plan for each residential project within the Master Plan), building orientation, and pad elevations. The site specific noise study shall demonstrate that the outside noise levels are below 60 dBA CNEL. | PD | City of Carlsbad Planning and Building Divisions | Prior to issuance of a building permit | Prior to issuance of a building permit, a site specific noise study for each residential lot based upon the final site design, building orientation, and pad elevations shall be completed and approved by the Building Division. | | | |