THE CITY OF SAN DIEGO

DATE OF NOTICE: January 13, 2020

PUBLIC NOTICE
OF AVAILABILITY OF
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

DEVELOPMENT SERVICES DEPARTMENT

SAP No. 24007539

The City of San Diego Development Services Department, as the Lead Agency, has prepared a draft Supplemental Environmental Impact Report (SEIR) for the following project and is inviting your comments regarding the adequacy of the document. The draft Environmental Impact Report has been placed on the City of San Diego City Clerk's website at **https://www.sandiego.gov/ceqa/draft** under the heading of "California Environmental Quality Act (CEQA) Notices & Documents." In addition, the Notice was also distributed to the Central Library as well as the Carmel Mountain Ranch Branch Library.

Comments must be received by February 27, 2020, to be included in the final environmental document considered by the decision-making authorities. Please send your written comments to the following address: **E. Shearer-Nguyen, Environmental Planner, City of San Diego Development Services Center, 101 Ash Street, Suite 1200, San Diego, CA 92101 or e-mail your comments to DSDEAS@sandiego.gov with the Project Name and Number in the subject line.**

General Project Information:

- Project Name: **Avion**
- Project No. 598173 / SCH No. 97111070
- Community Plan Area: Black Mountain Ranch
- Council District: 5

Subject: A request for a REZONE from AR-1-1 to RS-1-14; VESTING TENTATIVE MAP (VTM); PLANNED DEVELOPMENT PERMIT (PDP); SITE DEVELOPMENT PERMIT (SDP); MULTI-HABITAT PLANNING AREA BOUNDARY LINE ADJUSTMENT; and a reorganization consisting of expansion of Olivenhain Municipal Water District's (OMWD's) sewer latent powers and annexation to OMWD and the district's sewer service area, to subdivide the project site and construct 84 multi-family residential, the transfer of 19 affordable units to Lot X of Map No. 15919 in the Black Mountain Ranch North Village Town Center, and the transfer of 14 market rate dwelling units to Lots 12, 13, 18 and 19 of Map No. 15919 in the Black Mountain Ranch North Village Town Center for a combined total of 117 dwelling units. The project would also construct various site improvements which include associated public and private streets, hardscape, retaining walls and landscaping. The project site consists of a 41.48-acre parcel of undeveloped land located approximately 0.6 mile south of Carmel Valley Road/Bernardo Center Drive, 1.2 miles west of Interstate 15, and 1.4 miles east of Black Mountain Road. The site is designated Low Density Residential and zoned AR-1-1 (Agricultural) within the Black Mountain Ranch Subarea Plan. Additionally, the site is within the Airport Land Use Compatibility Overlay Zone (Marine Corps Air Station [MCAS] Miramar), Airport Influence Area (MCAS-Miramar - Review Area 2), Affordable Housing Parking Demand, and the Very High Hazard Severity Zone. (LEGAL DESCRIPTION PARCEL 1: The Southeast quarter of the Southeast quarter of Section 32, Township 13 South, Range 2 West, San

Bernardino Base and Meridian, in the City of San Diego, County of San Diego, State of California, except for all crude oil, petroleum, gas, brea, asphaltium, and all kindred substances and other minerals under and said land, as reserved in Deed recorded May 30, 1960 as Instrument No. 111628 of Official Records. LEGAL DESCRIPTION PARCEL 2: Lots 1 and 2 and the Southeast quarter of the Northeast quarter of Section 5, Township 14 South, Range 2 West, San Bernardino Base and Meridian, in the City of San Diego, County of San Diego, State of California, except for all crude oil, petroleum, gas, brea, asphaltium, and all kindred substances and other minerals under and said land, as reserved in Deed recorded May 30, 1960 as Instrument No. 111628 of Official Records). **The site is not included on any Government Code listing of hazardous waste sites.**

Applicant: Lennar.

Recommended Finding: The draft SEIR concludes that the project would result in significant environmental impacts to the following areas: **Biological Resources, Cultural Resources (Historical Resources/Archaeology), Visual Quality (Landform Alteration),** and **Air Quality (Construction)**.

Availability in Alternative Format: To request this Notice, the draft SEIR, and/or supporting documents in alternative format, call the Development Services Department at 619-446-5460 or (800) 735-2929 (TEXT TELEPHONE).

Additional Information: For environmental review information, contact E. Shearer-Nguyen at (619) 446-5369. The draft SEIR and supporting documents may be reviewed or purchased for the cost of reproduction at the Development Services Department, located at 101 Ash Street, San Diego CA 92101. For information regarding public meetings and/or hearings on this project, contact the Project Manager, Jeffrey Peterson, at (619) 446-5237. This notice was published in the SAN DIEGO DAILY TRANSCRIPT and distributed on January 13, 2020.

Gary Geiler
Deputy Director
Development Services Department

THE CITY OF SAN DIEGO

SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Project No. 598173
SCH No. 97111070

SUBJECT: **AVION**: A request for a REZONE from AR-1-1 to RS-1-14; VESTING TENTATIVE MAP (VTM); PLANNED DEVELOPMENT PERMIT (PDP); SITE DEVELOPMENT PERMIT (SDP); MULTI-HABITAT PLANNING AREA BOUNDARY LINE ADJUSTMENT; and a reorganization consisting of expansion of Olivenhain Municipal Water District's (OMWD's) sewer latent powers and annexation to OMWD and the district's sewer service area, to subdivide the project site and construct 84 multi-family residential, the transfer of 19 affordable units to Lot X of Map No. 15919 in the Black Mountain Ranch North Village Town Center, and the transfer of 14 market rate dwelling units to Lots 12, 13, 18 and 19 of Map No. 15919 in the Black Mountain Ranch North Village Town Center for a combined total of 117 dwelling units. The project would also construct various site improvements which include associated public and private streets, hardscape, retaining walls and landscaping. The project site consists of a 41.48-acre parcel of undeveloped land located approximately 0.6 mile south of Carmel Valley Road/Bernardo Center Drive, 1.2 miles west of Interstate 15, and 1.4 miles east of Black Mountain Road. The site is designated Low Density Residential and zoned AR-1-1 (Agricultural)) within the Black Mountain Ranch Subarea Plan. Additionally, the site is within the Airport Land Use Compatibility Overlay Zone (Marine Corps Air Station (MCAS) Miramar), Airport Influence Area (MCAS-Miramar - Review Area 2), Affordable Housing Parking Demand, and the Very High Hazard Severity Zone. (LEGAL DESCRIPTION PARCEL 1: The Southeast quarter of the Southeast quarter of Section 32, Township 13 South, Range 2 West, San Bernardino Base and Meridian, in the City of San Diego, County of San Diego, State of California, except for all crude oil, petroleum, gas, brea, asphaltium, and all kindred substances and other minerals under and said land, as reserved in Deed recorded May 30, 1960 as Instrument No. 111628 of Official Records. LEGAL DESCRIPTION PARCEL 2: Lots 1 and 2 and the Southeast quarter of the Northeast quarter of Section 5, Township 14 South, Range 2 West, San Bernardino Base and Meridian, in the City of San Diego, County of San Diego, State of California, except for all crude oil, petroleum, gas, brea, asphaltium, and all kindred substances and other minerals under and said land, as reserved in Deed recorded May 30, 1960 as Instrument No. 111628 of Official Records). Applicant: Lennar.

ENVIRONMENTAL DETERMINATION:

Based on the analysis conducted for the project described above, the City of San Diego has prepared the following Supplemental Environmental Impact Report (SEIR) in accordance with the California Environmental Quality Act (CEQA). The analysis conducted identified that the project could result in significant impacts to the following issue area(s): **Biological Resources, Cultural Resources (Historical Resources/Archaeology), Visual Quality (Landform Alteration),** and **Air Quality (Construction)**.

The purpose of this document is to inform decision-makers, agencies, and the public of the significant environmental effects that could result if the project is approved and implemented, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

PUBLIC REVIEW DISTRIBUTION:

The following agencies, organizations, and individuals received a copy or notice of the draft SEIR and were invited to comment on its accuracy and sufficiency. Copies of the Draft SEIR, the Mitigation Monitoring and Reporting Program and any technical appendices may be reviewed in the offices of the Development Services Department, or purchased for the cost of reproduction.

Federal Government
Commanding General MCAS Miramar Air Station (13)
U.S. Environmental Protection Agency (19)
U.S. Fish and Wildlife (23)
Commanding General MCAS Miramar Air Station (24)
U.S. Army Corps of Engineers (26)

State of California
California Department of Fish and Wildlife (32)
California Department of Toxic Substances Control (39)
California Regional Water Quality Control Board, Region 9 (44)
State Clearinghouse (46A)
California Department of Transportation (51)
California Transportation Commission (51A)
California Transportation Commission (51)

City of San Diego
Mayor's Office (91)
Councilmember Bry, District 1 (MS 10A)
Councilmember Campbell, District 2 (MS 10A)
Councilmember Ward, District 3 (MS 10A)
Councilmember Montgomery, District 4 (MS 10A)
Councilmember Kersey, District 5 (MS 10A)
Councilmember Cate, District 6 (MS 10A)
Councilmember Sherman, District 7 (MS 10A)

City of San Diego - continued
Councilmember Moreno, District 8 (MS 10A)
Councilmember Gomez, District 9 (MS 10A)
Development Services Department
- EAS
- Transportation
- Planning Review
- Fire Plan Review
- Engineering Review
- Geology
- Landscaping
- PUD-Water and Sewer Development
- Project Manager

Planning Department
- MSCP
- Plan Long Range Planning
- Plan-Park and Recreation
- Plan-Facilities Financing

San Diego Fire-Rescue Department (MS 603)
San Diego Police Department (MS 776)
Transportation Development (78)
Development Coordination (78A)
Fire and Life Safety Services (79)
San Diego Fire – Rescue Department Logistics (80)
Library Department (81)
Central Library (81A)
Carmel Mountain Ranch Branch Library (81E)
Historical Resources Board (87)
Environmental Services Department (93A)
Facilities Financing (MS 93B)
City Attorney's Office (93C)

Other Groups, Organizations and Interested Individuals
Rancho Santa Ana Botanic Garden at Claremont (161)
Sierra Club (165)
San Diego Natural History Museum (166)
Mr. Jim Peugh (167A)
San Diego Audubon (167)
California Native Plant Society (170)
Citizens Coordinate for Century III (179)
Endangered Habitats League (182)
Endangered Habitats League (182A)
Carmen Lucas (206)
South Coastal Information Center (210)
San Diego Archaeological Center (212)
Save Our Heritage Organisation (214)
Ron Christman (215)

Other Groups, Organizations and Interested Individuals - continued
Clint Linton (215B)
Frank Brown, Inter-Tribal Cultural Resources Council (216)
Campo Band of Mission Indians (217)
San Diego County Archaeological Society, Inc. (218)
Kumeyaay Cultural Heritage Preservation (223)
Kumeyaay Cultural Repatriation Committee (225)
Native American Distribution – Public Notice Only (225A-S)
Black Mountain Ranch – Subarea I (226C)
Joan Mei
Angie Huang
Michael Beckman
Kimberly Uyeda
Alex Plishner, CalAtlantic/Lennar, Applicant
Marina Wurst, Project Design Consultants, Agent

RESULTS OF PUBLIC REVIEW:

( ) No comments were received during the public input period.

( ) Comments were received but did not address the accuracy or completeness of the draft environmental document. No response is necessary and the letters are incorporated herein.

( ) Comments addressing the accuracy or completeness of the draft environmental document were received during the public input period. The letters and responses are incorporated herein.



Gary Geiler
Deputy Director
Development Services Department

January 13, 2020
Date of Draft Report

Date of Final Report

Analyst: Shearer-Nguyen

Draft
Supplemental Environmental Impact Report for the Avion Project
San Diego, California
Project #598173
SCH #97111070

January 13, 2020

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D: Air Quality Analysis (RECON, November 2019)
E: Noise Analysis (RECON, November 2019)
F: Traffic Memo (KOA, June 2019)
G: Waste Management Plan (RECON, July 2019)

LIST OF ABBREVIATED TERMS

1998 EIR	Black Mountain Ranch (Subarea I) Subarea Plan Environmental Impact Report
ADD	Assistant Deputy Director
AME	Archaeological Monitoring Exhibit
ASMD	area-specific management directives
BCME	Biological Construction Mitigation/Monitoring Exhibit
BI	Building Inspector
BLA	Boundary Line Adjustment
BMP	Best Management Practices
BMR	Black Mountain Ranch
BMZ	Brush Management Zone
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CCR	California Code of Regulations
CD	Construction Documents
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
cfs	cubic feet per second
City	City of San Diego
CM	Construction Manager
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon monoxide
CRHR	California Register of Historic Resources
CSVR	Consultant Site Visit Record
dB(A)	A-weighted decibel
DPM	diesel particulate matter
DSD	Development Services Department
EAS	Environmental Analysis Section
ED	Environmental Designee
EIR	Environmental Impact Report
ESA	Endangered Species Act
ESL	Environmentally Sensitive Lands
FEIR	Final Environmental Impact Report
FHWA	Federal Highway Administration
FMZ	Fuel Modification Zone
FTA	Federal Transit Authority
GHG	Greenhouse gas
HCP	Habitat Conservation Plan
HRA	health risk assessment
HRG	Historical Resources Guidelines
Hz	Hertz
in/sec	Inches per second
ITP	Incidental Take Permit
LAFCO	Local Area Formation Commission
LDC	Land Development Code
L_{eq}	average equivalent sound level

L_{pw}	sound power
MHPA	Multi-Habitat Planning Area
MLD	Most Likely Descendent
MMC	Mitigation Monitoring Coordinator
MMRP	Mitigation Monitoring and Reporting Program
MRZ	Mineral Resource Zone
MSCP	Multiple Species Conservation Program
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Planning
NCFUA	North City Future Urbanizing Area
NO_2	Nitrogen dioxide
NOP	Notice of Preparation
NO_x	Oxides of nitrogen
NRHP	National Register of Historic Places
NTP	Notice to Proceed
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
OMWD	Olivenhain Municipal Water District
Pb	Lead
PDP	Planned Development Permit
PFFP	Public Facilities Financing Plan
PI	Principal Investigator
PM_{10}	Particulate matter less than 10 microns in diameter
$PM_{2.5}$	Particulate matter less than 2.5 microns in diameter
PPV	peak particle velocity
PRC	Public Resources Code
project	Avion Project
RAQS	Regional Air Quality Strategy
RE	Resident Engineer
ROG	Reactive organic gases
RPO	Resource Protection Ordinance
SANDAG	San Diego Association of Governments
SCIC	South Coastal Information Center at San Diego State University
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SDP	Site Development Permit
SEIR	Supplemental Environmental Impact Report
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SOI	sphere of influence
SO_x	Oxides of sulfur
TCM	Transportation Control Measures
U.S. EPA	United States Environmental Protection Agency
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VOC	Volatile organic compounds
VTM	Vesting Tentative Map

Executive Summary

This Supplemental Environmental Impact Report (SEIR) has been prepared for the Avion Project (project). This document analyzes the potential environmental effects associated with implementation of the project. The SEIR was prepared under the direction of the City of San Diego's (City's) Environmental Analysis Section and reflects the independent judgment of the City as lead agency pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code (PRC), Section 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). This SEIR was prepared to evaluate the environmental effects of the project.

S.1 Project Synopsis

This summary provides a brief synopsis of: (1) the project, (2) the results of the environmental analysis contained within this SEIR, (3) the alternative to the project that was considered, and (4) the major areas of controversy and issues to be resolved by decision makers. This summary does not contain the extensive background and analysis found in the document. Therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

S.1.1 Project Location and Setting

The project site consists of a 41.48-acre parcel of undeveloped land located approximately 0.6 mile south of Carmel Valley Road/Bernardo Center Drive, 1.2 miles west of Interstate 15, and 1.4 miles east of Black Mountain Road.

Topographically, the project site is located at the upper end of a broad north-south trending valley. A ridgeline occurs in the central portion of the site that rises in elevation from north to south from 740 feet mean sea level to 915 feet mean sea level. The project site is located in a developing area that consists primarily of residential development and open space. Land uses surrounding the project site include a portion of the Black Mountain Open Space Park to the west, east, and south, the Heritage Bluffs residential development to the north, and additional Black Mountain Open Space Park open space lands to the northwest.

S.1.2 Project Description

In July of 1998, the City adopted the Black Mountain Ranch (Subarea I) Subarea Plan in the former North City Future Urbanizing Area (NCFUA) and certified the Final Environmental Impact Report (FEIR; Land Development Review No. 96-7902, SCH No. 97111070). The Subarea Plan identifies several perimeter properties, which were originally held by 11 different ownerships. The Avion project site is within the area of the Subarea Plan referred to as the "Southeast Perimeter" properties, which are composed of four parcels (A, B, C, and D). The project site consists of Parcel C, totaling 41.48 acres. The 1998 Subarea Plan Environmental Impact Report (EIR) provides analysis for the project site, based on these general development parameters, but because no specific project design was known or proposed at the time the 1998 EIR was certified, the analysis of certain impacts for the site was only done at a "program level." The 1998 EIR acknowledges that future site-specific

CEQA analysis would be required for areas outside of the Black Mountain Ranch Vesting Tentative Map II project area.

Discretionary actions are those actions taken by an agency that call for the exercise of judgment in deciding whether to approve or how to carry out a project. For the project, the following discretionary actions are required and are further described below:

- Vesting Tentative Map (VTM)
- Rezone
- Planned Development Permit (PDP)
- Site Development Permit (SDP)
- Multi-Habitat Planning Area (MHPA) Boundary Line Adjustments
- A reorganization consisting of latent powers expansion for sewer service for Olivenhain Municipal Water District (OMWD) and annexation to OMWD's sewer service area (Local Area Formation Commission)

A VTM is required for the project to subdivide the property into one residential lot with 84 detached multi-family units and two open space (MHPA) lots to be dedicated in fee to the City. The VTM details the specific grading and necessary infrastructure. The site is currently zoned as AR-1-1 (Agricultural – Residential, minimum 10-acre lots). Under the project, the site would be rezoned to RS-1-14 (Residential Single Unit, minimum 5,000-square-foot lots).

The project includes a PDP to allow for development of detached multi-family residential units rather than single-family residential units, and a deviation to exceed the maximum retaining wall height outside of required setbacks. The project includes a SDP due to impacts to Environmentally Sensitive Lands (ESL; i.e., steep slopes and sensitive biological resources). The project also proposes a MHPA boundary line adjustment to preserve 4.99 acres of southern mixed chaparral, 0.49 acre of non-native grassland, and 0.13 acre of coastal sage scrub.

S.1.3 Project Objectives

In accordance with CEQA Guidelines Section 15124, the following primary objectives support the purpose of the project, assist the Lead Agency in developing a reasonable range of alternatives to be evaluated in this report, and ultimately aid decision-makers in preparing findings and overriding considerations, if necessary. The specific goals and objectives for the project are:

- Provide residential development that is consistent with the location and the goals and objectives of the adopted Black Mountain Ranch Subarea Plan.
- Provide new residential development, which is consistent with existing residential development patterns in the surrounding area.
- Implement “smart growth” principles of development through the provision of new residences within a complete master planned community.
- Implement sustainable development principles through the provision of a community of new residences with many energy-efficient features.
- Provide infrastructure improvements consistent with the Subarea Plan.

S.2 Summary of Significant Effects and Mitigation Measures that Reduce or Avoid the Significant Effects

Table S-1 summarizes the significant impacts identified through the environmental analysis completed for the project. Table S-1 also identifies the mitigation measures that would reduce and/or avoid the environmental effects as feasible, with a conclusion as to whether the impact would be mitigated to below a level of significance or if impacts would remain significant and unavoidable. Further discussion of potential and anticipated environmental impacts is detailed in Chapter 5.0.

S.3 Areas of Controversy

Pursuant to CEQA Section 15123(b)(2), an EIR shall identify areas of controversy known to the lead agency, including issues raised by the agencies, and the public, and issues to be resolved. The Notice of Preparation (NOP) for the SEIR was distributed on May 24, 2019, for a 30-day public review and comment period. No areas of controversy were raised in the comment letters received on the NOP or during the scoping meeting. The NOP and comment letters received are included in this SEIR as Appendix A.

S.4 Issues to be Resolved by the Decision-Making Body

The issues to be resolved by the decision-making body (in this case the City Council) are whether: (1) the significant impacts associated with land use, biological resources, cultural resources, and air quality would be fully mitigated to below a level of significance, (2) to approve the proposed alternative instead of the project, and how (3) to reduce significant and unavoidable environmental impacts to the maximum extent feasible while achieving project objectives through adoption of mitigation measures and/or the project alternative identified in this EIR. Furthermore, a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 would be required for those impacts found to be significant and unavoidable as identified in the EIR.

S.5 Project Alternatives

The CEQA Guidelines Section 15126.6 requires that an EIR compare the effects of a "reasonable range of alternatives" to the effects of a project. The alternatives selected for comparison should be those that would attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project. The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (CEQA Guidelines Section 15126.6[f]). CEQA generally defines "feasible" to mean an alternative that is capable of being

accomplished in a successful manner within a reasonable period of time while also taking into account economic, environmental, social, technological, and legal factors.

The EIR addresses one alternative in addition to the "no project" alternative, required under CEQA. Alternatives to the project are evaluated in full detail in Chapter 10 of this document.

S.5.1 No Project (No Development) Alternative

The No Project (No Development) Alternative would maintain the project site in its current condition. This alternative would preserve the existing environmental setting, and would thereby eliminate all of the project's impacts. However, the No Project (No Development) Alternative would not provide any of the project's benefits, including residential development and affordable housing consistent with the adopted Subarea Plan and expansion of the MHPA through a boundary line adjustment that would result in a net increase of 5.06 acres. These benefits would be foregone under this alternative. Furthermore, the No Project (No Development) Alternative would not meet any of the project objectives listed in Section S.1.3 above.

S.5.2 Reduced Development Footprint Alternative

The Reduced Development Footprint Alternative would reduce the grading footprint compared to the project. Under this alternative, the project would develop 117 residential units consistent with the amount anticipated for the project site in the Black Mountain Ranch (Subarea I) Subarea Plan by constructing attached multi-family structures with an increased density compared to the project.

The Reduced Development Footprint Alternative would incrementally reduce all of the project's significant impacts due to the smaller grading footprint. This alternative would avoid impacts to the MHPA and would not require a boundary line adjustment. Similarly, the smaller project footprint would reduce impacts to sensitive vegetation communities and reduce impacts on landform alteration. However, the increased density associated with this alternative would not be consistent with the character of the single-family and detached multi-family residential units surrounding the project site. Similarly, the increased density would require a height deviation to accommodate development of 117 units within the reduced grading footprint. Furthermore, the Reduced Development Footprint Alternative would lessen impacts on biological resources because the project would actually increase land within the MHPA through the proposed boundary line adjustment and would successfully mitigate impacts to sensitive vegetation communities to a level less than significant.

S.5.3 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires the identification of an environmentally superior alternative among the alternatives analyzed in an EIR. The guidelines also require that if the No Project Alternative is the environmentally superior alternative, then another environmentally superior alternative must be identified.

The Reduced Development Footprint Alternative would be considered the environmentally superior alternative. This alternative would avoid impacts to the MHPA and would not require a boundary line adjustment. Similarly, the smaller project footprint would reduce impacts to sensitive vegetation communities and reduce impacts on landform alteration. Although the increased density and introduction of attached multi-family residential units that would occur under this alternative would not be consistent with the character of the single-family and detached multi-family residential units surrounding the project site, it would be considered environmentally superior to the project due to the reduction in grading and biological impacts.

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
Biological Resources			
Would the project result in a substantial adverse impact on any Tier I habitats, Tier II habitats, Tier IIIA habitats, or Tier IIIB habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	**Vegetation Communities** **Impact BIO-1:** Impacts to coastal sage scrub, southern mixed chaparral, and non-native grassland would be significant.	**MM-BIO-1: Upland Vegetation Communities** Mitigation for impacts to coastal sage scrub (Tier II habitat), southern mixed chaparral (Tier IIIA habitat), and non-native grassland (Tier IIIB habitat) communities would be achieved through the preservation of habitat on the site located outside of the development area. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, the project would demonstrate to the satisfaction of the City that impacts to a total of 15.2 acres of sensitive vegetation would be mitigated by the on-site preservation of 24.03 acres of sensitive vegetation as summarized by habitat type in Table 5.2-5. The preserved habitat areas on the site would all be within the boundaries of the MHPA Boundary Line Adjustment (BLA) dedicated to the City in fee title. Acceptance of land dedicated in fee title is subject to approval by the City's Park and Recreation Open Space.	Less Than Significant
Would the project result in substantial adverse impacts, either directly or through habitat modifications, to any species identified as a	**Sensitive Wildlife** **Impact BIO-2:** Impacts to Cooper's hawk and/or rufous-crowned sparrow would be significant.	**MM-BIO-2: Standard City Construction Measures** Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, mitigation for general impacts to	Less Than Significant

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
candidate, sensitive or special status species in the Multiple Species Conservation Program (MSCP) or other local or regional plans, policies, or regulations, or by the CDFW or USFWS?		biological resources would be incorporated via standard measures including general mitigation measures, biological protections during construction, (includes monitoring, preconstruction meetings, and development of a Biological Condition Monitoring Exhibit, etc.) as described below. These biological resources protection requirements shall be depicted on the construction documents verbatim and implemented accordingly.	
		Biological Resource Protection During Construction **I. Prior to Construction** A. **Biologist Verification** - The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City's Biological Guidelines (2012), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		B. **Preconstruction Meeting** - The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage. C. **Biological Documents** - The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per the City's Biology Guidelines, MSCP, ESL Ordinance, project permit conditions; CEQA; endangered species acts (ESAs); and/or other local, state, or federal requirements. D. **Biological Construction Mitigation/ Monitoring Exhibit** (**BCME)** - The Qualified Biologist shall present a BCME, which includes the biological documents in "C" above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		other wildlife surveys/survey schedules (including USFWS protocol), timing of surveys, wetland buffers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City Assistant Deputy Director (ADD)/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents. E. **Avian Protection Requirements** - To avoid any direct impacts to Cooper's hawk, rufous-crowned sparrow, and coastal California gnatcatcher or any species identified as listed, candidate, sensitive, or special status in the MSCP, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of nesting for these three sensitive bird species on the	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		proposed area of disturbance. The preconstruction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the preconstruction survey to the City's Development Services Department (DSD) for review and approval prior to initiating any construction activities. If nesting activities for any of the above-mentioned sensitive bird species are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable state and federal law (i.e., appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section or Resident Engineer, and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		F. **Resource Delineation** - Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora and fauna species, including nesting Cooper's hawk, rufous-crowned sparrow, and coastal California gnatcatcher) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site. G. **Education** – Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.). **II. During Construction** A. **Monitoring** – All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the preconstruction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR shall be e-mailed to the MMC on the first day of monitoring, the first week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery. B. **Subsequent Resource Identification** – The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on-site (e.g., flag plant	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		specimens for avoidance during access, etc.). If active nests for Cooper's hawk, rufous-crowned sparrow, and coastal California gnatcatcher, or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific to local, state, or federal regulations have been determined and applied by the Qualified Biologist.	
		III. Post Construction Measures A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
Cultural/Historical Resources			
Would the project result in an alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site?	**Historic Resources** **Impact HIST-1:** Unearthing of subsurface deposits associated with HJP-3 during project construction would have the potential to result in a significant impact.	**MM-HIST-1:Archaeological Monitoring** **I. Prior to Permit Issuance** A. Entitlements Plan Check 1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.	Less Than Significant

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		B. Letters of Qualification have been submitted to ADD 1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation. 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG. 3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		II. Prior to Start of Construction A. Verification of Records Search 1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed. 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities. 3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		B. PI Shall Attend Precon Meetings 1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor. a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		2. Identify Areas to be Monitored a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/ excavation limits. b. The AME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation). 3. When Monitoring Will Occur a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present. **III. During Construction** A. Monitor(s) Shall be Present During Grading/Excavation/Trenching 1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/ excavation/trenching activities which could result in impacts to archaeological resources	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		as identified on the AME. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME. 2. The Native American consultant/ monitor shall determine the extent of their presence during soil disturbing and grading/ excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present. 4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		B. Discovery Notification Process 1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate. 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery. 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible. 4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		C. Determination of Significance 1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below. a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) which has been reviewed by the Native American consultant/monitor, and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		of discovery will be allowed to resume. Note: If a unique archaeological site is also an historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply. c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		IV. Discovery of Human Remains If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken: A. Notification 1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process. 2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		B. Isolate discovery site 1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains. 2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance. 3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		C. If Human Remains ARE determined to be Native American 1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, ONLY the Medical Examiner can make this call. 2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information. 3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes. 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if: a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR; b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance, THEN	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		c. To protect these sites, the landowner shall do one or more of the following: (1) Record the site with the NAHC; (2) Record an open space or conservation easement; or (3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by PRC 5097.98. The document shall be indexed as a notice under the name of the owner.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		D. If Human Remains are NOT Native American 1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial. 2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98). 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of Man. **V. Night and/or Weekend Work** A. If night and/or weekend work is included in the contract 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		2. The following procedures shall be followed. a. No Discoveries In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8AM of the next business day. b. Discoveries All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		c. Potentially Significant Discoveries If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV- Discovery of Human Remains shall be followed. d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made. B. If night and/or weekend work becomes necessary during the course of construction 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin. 2. The RE, or BI, as appropriate, shall notify MMC immediately. C. All other procedures described above shall apply, as appropriate.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		VI. Post Construction A. Preparation and Submittal of Draft Monitoring Report 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report. b. Recording Sites with State of California Department of Parks and Recreation The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report. 2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		3. The PI shall submit revised Draft Monitoring Report to MMC for approval. 4. MMC shall provide written verification to the PI of the approved report. 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals. B. Handling of Artifacts 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate. 3. The cost for curation is the responsibility of the property owner.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		C. Curation of artifacts: Accession Agreement and Acceptance Verification 1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable. 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC. 3. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5. D. Final Monitoring Report(s) 1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.	
		2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.	

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
Landform Alteration/ Visual Quality			
Would the project result in a substantial change in the existing landform?	**Landform Alteration** **Impact VIS-1:** The project would result in a substantial change in an existing landform. Therefore, impacts would be significant. This impact is consistent with the conclusion in the 1998 EIR.	The project has been designed to minimize the visual impacts of landform alteration to the extent feasible. As a result, the project would preserve approximately 23.75 acres of the project site (57.3 percent) within the proposed MHPA open space, which consists of natural vegetation, and would also preserve the majority of steep slopes on-site. The project would also revegetate manufactured slopes in order to minimize the visual impact of grading. However, no further mitigation is available to reduce impacts associated with landform alteration.	Significant and Unavoidable
Air Quality			
	Sensitive Receptors (Construction) **Impact AIR-1:** Dust generated from blasting operations required during project construction would have the potential to release naturally occurring subsurface arsenic, which could result in short-term exposure that may result in a significant impact.	**MM-AIR-1a: Arsenic Testing Protocol in Areas Requiring Blasting** Geocon shall obtain periodic random samples from select air-track borehole spoils or the ground surface over the course of the blasting program. The number of samples shall vary and be based on judgement depending on the size of the shot. The samples shall be assigned for analysis of arsenic using U.S. Environmental Protection Agency Test Method 6010B with a reporting limit of 1.0 milligram per kilogram. The sampling shall be performed under the direct supervision of Geocon's Project Manager and Professional Geologist.	Less Than Significant

Table S-1 Summary of Significant Environmental Impacts and Mitigation Measures			
Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		MM-AIR-1b: Blasting Dust Mitigation Plan The following protocols shall be performed to minimize the generation of visible dust during the hard rock blasting events: • The areas shall be heavily watered prior to the planned blasting. The amount of water applied shall depend on the size of the shot and composition of the materials exposed at the top of the shot (i.e., topsoil vs. hard rock). • A water truck shall be dedicated to pre-wet the ground surface. • Detergent, if necessary, shall be added to the water truck to reduce the surface tension of the water and promote soaking into the surface materials. The water used shall be confined to the area of the shot and not be allowed to migrate out of the work limits. Confinement of the water shall be achieved through use of earthen berms, ditches, or other containment features that shall prevent migration of the water outside the work area. • Once the boreholes are loaded with blasting agent, a final soaking shall occur just prior to the shot.	

Chapter 1
Introduction

This chapter provides a brief description of the background and scope of the Avion Project (project), the purpose and legal authority for this Supplemental Environmental Impact Report (SEIR), the SEIR scope and process, and an explanation of how the SEIR is organized.

1.1 Project Background

This SEIR updates the certified Environmental Impact Report No. 96-7902 (1998 EIR) prepared for the Black Mountain Ranch (Subarea I) Subarea Plan adopted in July 1998, and addresses the potential environmental effects of the proposed Avion Project (project). The Subarea Plan identifies several perimeter properties, which were originally held by 11 different ownerships. The Avion project site is within the area of the Subarea Plan referred to as the "Southeast Perimeter" properties, which are composed of four parcels (A, B, C, and D). The project site consists of Parcel C, totaling 41.48 acres, which is designated for 117 dwelling units. The anticipated development envelope for Parcel C would be approximately 17.74 acres. The remaining approximate 23.75 acres on-site would be preserved as Multi-Habitat Planning Area (MHPA) open space. The 1998 EIR provides analysis for the project site, based on these general development parameters, but because no specific project design was known or proposed at the time the 1998 EIR was certified, the analysis of certain impacts for the site was only done at a "program level", and that future site-specific California Environmental Quality Act (CEQA) analysis would be required for areas outside of the previously approved Black Mountain Ranch II Vesting Tentative Map (VTM)/Planned Residential Development (DEP No. 95-0173; SCH No. 95041041) project area.

1.2 Project Scope

The project requires approval of a VTM, a Rezone from AR-1-1 (Agricultural – Residential, minimum 10-acre lots) to RS-1-14 (Residential Single Unit, minimum 5,000-square-foot lots), a Planned Development Permit (PDP), a Site Development Permit (SDP), and a MHPA Boundary Line Adjustment to subdivide and construct 84 detached multi-family residential units. The Black Mountain Ranch Subarea Plan allows 117 dwelling units on-site, including a requirement for 19 affordable units. The project proposes to construct 84 detached multi-family units on-site and transfer 19 affordable units to Lot X of Map 15919 in the Black Mountain Ranch North Village Town Center. In addition, the project proposes the transfer of 14 market rate dwelling units to Lots 12, 13, 18 and 19 of Map 15919 in the Black Mountain Ranch North Village Town Center. In total, the project proposes a combined 117 dwelling units, including 19 affordable units, on-site and off-site in conformance with the Black Mountain Ranch Subarea Plan.

The San Diego Local Agency Formation Commission (LAFCO) would act as a responsible agency in accordance with CEQA. The applicant would be required to obtain approval from LAFCO of a reorganization consisting of expansion of Olivenhain Municipal Water District's (OMWD's) sewer latent powers and annexation to OMWD and the district's sewer service area.

Approximately 17.74 acres of the 41.48-acre site would be developed for residential uses and various site improvements, including private drives, hardscape, retaining walls, and landscaping. Native low-fuel volume species would be used to re-vegetate the graded slopes. The treatment for the interior would primarily be parkway street trees and groundcover, ornamental in nature, fire-resistant, and would complement the building architecture. The remaining approximate 23.75 acres on-site would be preserved as MHPA open space.

Grading operations would entail approximately 296,000 cubic yards of cut (maximum depth of 52 feet) and 296,000 cubic yards of fill (maximum depth of 64 feet), resulting in a net balance of soils on the project site. The project would construct retaining walls with a total length of 2,038 feet and a maximum height of 55 feet, 7 inches. Blasting may be required in conjunction with grading operations for the project in areas of shallow bedrock.

Discretionary actions required to implement the project include the following and are also described in detail in Chapter 3.0:

- VTM
- Rezone
- PDP
- SDP
- MHPA Boundary Line Adjustment
- A reorganization consisting of latent powers expansion for sewer service for OMWD and annexation to OMWD and the district's sewer service area (LAFCO).

1.3 SEIR Purpose Legal Authority

1.3.1 Intended Uses

This SEIR provides public agencies and the public in general with detailed information about the effect a proposed project is likely to have on the environment; lists ways in which the significant effects of such a project might be minimized; and identifies alternatives to such a project. This SEIR is an informational document for use by the City, decision-makers, public agencies, and the general public about the potential significant adverse environmental impacts of the project. This document complies with all criteria, standards, and procedures of CEQA (California Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Title 14 Section 15000 et seq.); the City's EIR Guidelines (2005); and the City's CEQA Determination Thresholds (2016). This document has been prepared as a project-level SEIR, and it represents the independent judgment of the City as Lead Agency (State CEQA Guidelines Section 15050).

1.3.2 Lead Agency

The City of San Diego is the Lead Agency for the project pursuant to Article 4 (Sections 15050 and 15051) of the CEQA Guidelines. The Lead Agency, as defined by CEQA Guidelines Section 15367, is the public agency that has the principal responsibility and authority for carrying out or approving the project. As Lead Agency, the City of San Diego Development Services Department,

Environmental Analysis Section conducted a preliminary review of the proposed development and determined that this SEIR was required. The analysis and findings in this document reflect the independent, impartial conclusions of the City.

1.3.3 Responsible and Trustee Agencies

State law requires that all EIRs be reviewed by responsible and trustee agencies. A Responsible Agency, defined pursuant to State CEQA Guidelines Section 15381, includes all public agencies other than the Lead Agency that have discretionary approval power over the project. A Trustee Agency is defined in Section 15386 of the CEQA Guidelines as a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of California.

Implementation of the project would require consultation with the following responsible and trustee agencies, as described below.

U.S. Fish and Wildlife Service (USFWS): Acting under the federal Endangered Species Act (ESA), the USFWS is responsible for ensuring that any action authorized, funded, or carried out by a federal agency (such as the U.S. Army Corps of Engineers) is not likely to jeopardize the continued existence of listed species or modify their critical habitat. Accordingly, the USFWS would provide input to the U.S. Army Corps of Engineers as part of the Section 404 process.

Within areas covered by San Diego's Multiple Species Conservation Program (MSCP) Subarea Plan, including the project site, the role of the USFWS is limited with respect to species covered under the Subarea Plan. For species covered by the Subarea Plan, the USFWS has granted take authorization for listed species to the City in accordance with the requirements of the MSCP Implementing Agreement, executed between the City, the USFWS, and the California Department of Fish and Wildlife (CDFW) in 1997.

For projects that are consistent with San Diego's MSCP, the City, therefore, has authority to grant permits for take of covered species and a separate permit is not required from the wildlife agencies. For listed species not included on the MSCP covered species list, the wildlife agencies retain permit authority. In addition, the USFWS along with the CDFW must approve the MHPA boundary line adjustments associated with each project.

California Department of Fish and Wildlife (CDFW): The CDFW has jurisdiction over sensitive wildlife that is held in trust for the people of California. The CDFW would be a Trustee Agency for the project, as sensitive wildlife is located on-site and in the project vicinity. The CDFW has the authority to reach an agreement with an agency or private party proposing to alter the bed, banks, or floor of any watercourse/stream, pursuant to Section 1600 et seq. of the State Fish and Game Code. The CDFW generally evaluates information gathered during preparation of the environmental documentation, and attempts to satisfy their permit concerns in these documents. Along with the USFWS, the CDFW must approve of any MHPA boundary adjustments.

Local Agency Formation Commission (LAFCO): LAFCO would have discretionary approval of a reorganization consisting of a latent powers expansion to provide sewer service and annexation to

OMWD and the district's sewer service area. LAFCO would act as a responsible agency in accordance with State CEQA Guidelines.

San Diego County Air Pollution Control District (SDAPCD): The County Board of Supervisors sits as the Board of the SDAPCD, which is an agency that regulates sources of air pollution within the county. This is accomplished through an integrated monitoring, engineering, and compliance operation, the components of which are separate divisions within the SDAPCD and each of them designed to protect the public from the adverse impacts of polluted air. The SDAPCD would be responsible for issuing permits with respect to air emissions for construction and operation of the project.

1.4 SEIR Scope

1.4.1 Type of EIR

This EIR has been prepared as a Project SEIR, as defined in Section 15163 of the CEQA Guidelines. In accordance with CEQA, this Project SEIR examines the environmental impacts of a specific development project and focuses on the physical changes in the environment that would result from the project, including all phases of planning, construction, and operation.

This SEIR tiers to the certified (No. 96-7902) 1998 EIR. This SEIR considers the issues discussed in the first-tier document and evaluates whether a significant effect has been adequately addressed or if there is an effect that was not addressed in the previous report.

1.4.2 Scope of SEIR

The scope of analysis for this SEIR was determined by the City of San Diego as a result of initial project review and consideration of comments received in response to the Notice of Preparation (NOP) distributed on July 2, 2019. The City's NOP and associated responses are included in Appendix A of this SEIR.

This SEIR serves as a supplement to the previously certified 1998 EIR, as referenced above. All environmental issues analyzed in the 1998 EIR were considered during initial review of the project. The following issues were determined to either: (1) lack a site-specific impact analysis and adequate mitigation for project impacts; or (2) result in new impacts that may be potentially significant and require subsequent analysis and/or mitigation as part of this SEIR:

- Land Use (Land Development Code Deviations, MSCP Consistency);
- Biological Resources;
- Cultural Resources;
- Landform Alteration/Visual Quality (landform alteration);
- Noise (construction); and
- Air Quality (construction)

These issues are discussed in detail in Chapter 5.0 of this SEIR. This SEIR provides project-specific environmental review pursuant to CEQA. The analysis identifies environmental effects specific to the project and appropriate mitigation, when warranted.

Chapter 9.0 of this SEIR, "No Changes in Analysis," contains a summary of the impacts of the project compared with the impacts analyzed in the 1998 EIR. The analysis in this document evaluates the adequacy of the 1998 EIR relative to approval of the project. The 1998 EIR indicates that significant impacts for the project site would be substantially lessened or avoided if the mitigation measures recommended in the EIR are implemented by future development for various environmental issues, as identified below in Table 1-1. Greenhouse gas (GHG) emissions were not addressed in the 1998 EIR. The issue of GHG is not addressed in this SEIR as the courts have established that climate change and GHG do not constitute "new information" because the effects of GHG on climate change were known when the EIR was certified in 1998 and therefore do not have to be addressed as "new information" in a SEIR (Citizens Against Airport Pollution v. City of San Jose (2014) 227 Cal.App.4th 788, 806-808). A comparison of the project to the 1998 EIR is provided below in Table 1-1. The project would implement applicable mitigation measures included in the 1998 EIR and/or this SEIR, as indicated in the table.

Table 1-1
Impact Assessment Summary 1998 EIR

Issue Area	FEIR/Subarea Plan Analysis Conclusion[1]	New or Substantially Increased Impact?	New and/or Previous Mitigation)?	Resultant Project Impact after Mitigation?
A. Land Use				
Plan Consistency	Less than significant	No	No	Less than significant
LDC Deviations	Potentially[2] significant	No	No	Less than significant
MSCP consistency (MHPA Adjacency)	Potentially significant	**Yes**	New	Less than significant
B. Traffic	Significant unmitigated	No	Previous	Significant unmitigated
C. Biological Resources	Significant unmitigated	No	New	Less than significant
D. Hydrology/Water Quality	Significant mitigated	No	No	Less than significant
E. Landform Alteration/Visual Quality				
Landform Alteration	Potentially significant	**Yes**	New	Significant unmitigated
Visual Character	Significant mitigated	No	No	Less than significant
Unique geologic feature	Less than significant	No	No	Less than significant
Landmark Trees	Less than significant	No	No	Less than significant
F. Cultural Resources	Less than significant	No	No	Less than significant
G. Air Quality				
Direct Impacts (Traffic)	Significant unmitigated	No	No	Significant unmitigated
Cumulative Impacts (Construction)	Significant unmitigated	**Yes**	Previous	Less than significant
H. Geology and Soils	Potentially significant	No	No	Less than significant
I. Natural Resources/ Agriculture	Significant and unmitigated	No	No	Significant and unmitigated
J. Paleontological Resources	Less than significant	No	No	Less than Significant
K. Noise				
Traffic	Less than significant	No	No	Less than significant
Construction	Potentially significant	**Yes**	New	Less than significant
L. Public Facilities and Services				
Schools	Significant and mitigated	No	No	Less than significant
Parks and Recreation	Less than significant	No	No	Less than significant
Libraries	Less than significant	No	No	Less than significant
Police and Fire Services	Police: Less than significant Fire: Potentially significant	No	No	Less than significant
Water Supply and Service	Significant and mitigated	No	No	Less than significant

Table 1-1 Impact Assessment Summary 1998 EIR				
Issue Area	FEIR/Subarea Plan Analysis Conclusion[1]	New or Substantially Increased Impact?	New and/or Previous Mitigation)?	Resultant Project Impact after Mitigation?
Wastewater Generations	Potentially significant	No	No	Less than significant
Waste Management Service	Significant and mitigated	No	No	Less than significant
Electrical Utilities	Less than significant	No	No	Less than significant
M. Water Conservation	Significant and mitigated	No	No	Less than significant
N. Public Safety	Less than significant	No	No	Less than significant
O. Population	Less than significant	No	No	Less than significant

[1]The analysis applies to the southeast perimeter properties, if applicable; otherwise the conclusion is based on buildout of the overall Subarea Plan.
[2]"Potentially Significant" refers to impacts for which the 1998 EIR was unable to make a definitive conclusion about the significance of an impact for the perimeter properties due to a lack of site-specific information at the time the Subarea Plan was adopted.

1.4.3 SEIR Content and Format

1.4.3.1 SEIR Analysis Content

This SEIR determines whether implementation of the project would have a significant effect on the environment through analysis of the issues identified during the scoping process (see Section 1.3.2). Pursuant to CEQA Guidelines Section 15126, all phases of the project are considered in this SEIR when evaluating its potential impacts on the environment, including the planning, acquisition, development, and operation phases. Impacts are identified as direct or indirect, short-term or long-term, and assessed on a "plan-to-ground" basis. The "plan-to-ground" analysis addresses the changes or impacts that would result from implementation of the project compared to existing ground conditions.

1.4.4.2 SEIR Format

Organization

The format and order of contents of this SEIR follow the direction of the City's EIR Guidelines. A brief overview of the various chapters of this SEIR is provided below:

Executive Summary. Provides a summary of the SEIR and a brief description of the project, identifies areas of controversy, and includes a summary table identifying significant impacts, mitigation measures (new and from the 1998 EIR), and impact conclusion after mitigation. A summary of the analyzed project alternatives and comparison of the potential impacts of the alternatives with those of the project is also provided.

Chapter 1.0 Introduction. Contains an overview of the purpose and intended uses of the SEIR; identifies the Lead, Responsible, and Trustee Agencies; summarizes the SEIR scope and content; and details the CEQA environmental review process.

Chapter 2.0 Environmental Setting. Provides a description of the project's regional context, location, and existing physical characteristics and land use. Available public infrastructure and services, as well as relationship to relevant plans, are also provided in this chapter.

Chapter 3.0 Project Description. Provides a detailed discussion of the project, including background, objectives, key features, off-site components, and environmental design considerations. A description of the discretionary actions required to implement the project is also included.

Chapter 4.0 History of Project Changes. Provides an outline of the project's history and any changes in project design that have been made in response to environmental concerns raised during the City's review of the project.

Chapter 5.0 Environmental Analysis. Provides a detailed evaluation of potential environmental impacts of the project. In accordance with the City's EIR Guidelines, Chapter 5.0 begins with the issue of land use, followed by the remaining issues included in order of significance. Under each issue area, this chapter includes a description of the existing conditions relevant to each environmental topic including the regulatory framework; presentation of threshold(s) of significance based on the City of San Diego's CEQA Significance Determination Thresholds for the particular issue area under evaluation; identification of an issue statement; an assessment of any impacts associated with implementation of the project; a conclusion as to the significance of any project impacts; and recommendations for mitigation measures and mitigation monitoring and reporting, as appropriate, for each significant issue area. Where mitigation measures are required, a statement regarding the significance of the impact after mitigation is additionally provided.

Chapter 6.0 Significant Unavoidable Environmental Effects/Significant Irreversible Environmental Changes. Discusses the significant unavoidable impacts of the project, including those that can be mitigated but not reduced to below a level of significance. This chapter also describes the potentially significant irreversible changes that may be expected with development of the project and addresses the use of nonrenewable resources during its construction and operational life.

Chapter 7.0 Growth Inducement. Evaluates the potential influence the project may have on economic or population growth within the project area as well as the region, either directly or indirectly.

Chapter 8.0 Cumulative Impacts. Identifies the impacts of the project in combination with other planned and future development in the region.

Chapter 9.0 Subject Areas Requiring No Change in Analysis. The analysis and conclusions reached in a number of the environmental subject areas contained within the 1998 EIR do not require supplemental analysis and are not addressed in detail in Chapter 5 of this SEIR. These issues are briefly summarized in this chapter.

Chapter 10.0 Project Alternatives. Provides a description of two alternatives to the project, including a No Project/No Development Alternative and a Reduced Development Footprint Alternative.

Chapter 11.0 Mitigation Monitoring and Reporting Program. Documents all the mitigation measures identified in the 1998 EIR and this SEIR that are required to be implemented as part of the project.

Chapter 12.0 References Cited. Lists all of the reference materials cited in the SEIR.

Chapter 13.0 Individuals and Agencies Consulted. Identifies all of the individuals and agencies contacted during preparation of the SEIR.

Chapter 14.0 Certification. Identifies all of the agencies, organizations, and individuals responsible for the preparation of the SEIR.

Technical Appendices

Technical appendices, used as a basis for much of the environmental analysis in the SEIR, have been summarized in the SEIR and are printed under separate cover as part of the SEIR. The technical appendices are available for review at the City of San Diego Development Services Center, 1222 First Avenue, Fifth Floor, San Diego, California 92101.

Incorporation by Reference

As permitted by CEQA Guidelines Section 15150, this SEIR incorporates by reference previously certified 1998 EIR (No. 96-7902) subsequent addenda and approved plans, which provide supporting documentation used in the analysis for the project. This SEIR also references several technical studies and reports, including the City of San Diego General Plan and EIR (2008) and the Black Mountain Ranch Subarea Plan (2009, as amended). Information from these documents has been briefly summarized in this SEIR, and their relationship to this SEIR described. These documents are included in Chapter 12.0, References Cited, and are hereby incorporated by reference. They are available for review at the City of San Diego Development Services Center, 1222 First Avenue, Fifth Floor, San Diego, California 92101.

1.5 SEIR Public Review Process

1.5.1 Draft SEIR

In accordance with Sections 15085 and 15087 (a) (1) of the CEQA Guidelines, upon completion of the Draft SEIR a Notice of Completion is filed with the State Office of Planning and Research, and a notice of availability of the Draft SEIR is issued in a newspaper of general circulation in the area.

The Draft SEIR is distributed for a 45-calender day review to the public, and interested and affected agencies for the purpose of providing comments “on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated” (Section 15204, CEQA Guidelines). The public review period will be from November 15 through December 30, 2019.

This Draft SEIR and all related technical studies are available for review during the public review period at the offices of the City of San Diego, Development Services Department, located at 1222 First Avenue, Fifth Floor, San Diego, California, 92101. Copies of the Draft SEIR are also available at the following public locations:

Central Library 330 Park Boulevard San Diego, CA 92101	Carmel Valley Branch Library 3919 Townsgate Drive San Diego, CA 92130	Carmel Mountain Ranch Library 12095 World Trade Drive San Diego, CA 92128

An electronic copy of the SEIR and the technical analyses is posted on the Development Services Department website at https://www.sandiego.gov/ceqa/draft.

1.5.2 Final SEIR

Following public review of the Draft SEIR, the City will provide written responses to comments per CEQA Guidelines Section 15088 and consider the written comments in making its decision to certify the Final SEIR. Responses to the comments received during public review, a Mitigation Monitoring and Reporting Program, and Findings of Fact will be included with the Final SEIR. If no new significant and unmitigated impacts are identified for the project, then the City shall re-adopt the Statement of Overriding Considerations adopted in conjunction with the 1998 EIR.

The culmination of this process is a public hearing where the City Council will determine whether to certify the Final SEIR as being complete and in accordance with CEQA. Pursuant to Section 128.0310(a) of the City of San Diego Land Development Code, the Final SEIR will be available for public review for at least 14 calendar days before the first public hearing or discretionary action on the project.

Chapter 2
Environmental Setting

This chapter provides a description of existing site conditions for the Avion Property (project). The existing setting addresses the project site as well as the off-site components; and provides an overview of the local and regional environmental setting pursuant to Section 15152 of the State CEQA Guidelines.

2.1 Regional Setting

The project site is in the city of San Diego (City), in San Diego County, east of Interstate 5, west of Interstate 15, and north of State Route 56 (Figure 2-1). The project site lies approximately seven miles inland from the Pacific Ocean and is approximately 20 miles north of downtown San Diego.

The undeveloped 41.48-acre project site is located within the Black Mountain Ranch Subarea, which constitutes Subarea I of the former North City Future Urbanizing Area Framework Plan. The Black Mountain Ranch Subarea encompasses 5,098 acres in the northern portion of the City, and is generally bounded on the west, north, and east by unincorporated areas of San Diego County. The 4S Ranch and Santa Fe Valley Specific Plan areas form a portion of this county land. On the east, southeast, and south, the Black Mountain Ranch Subarea is bounded by the Rancho Peñasquitos and Rancho Bernardo community planning areas and Subarea IV Torrey Highlands.

2.2 Project Location

The project site is located approximately 0.6 mile south of Carmel Valley Road/Bernardo Center Drive, 1.2 miles west of Interstate 15, and 1.4 miles east of Black Mountain Road. The project site consists of a 41.48-acre parcel of undeveloped land (Assessor's Parcel Number 312-010-16 within Section 5 of Township 14 South, Range 2 West of the U.S. Geological Survey (USGS) 1996 7.5-minute topographic map, Poway quadrangle). The legal description of the project parcel is the southwest quarter of the northeast quarter of Section 5, Township 14 south, Range 2 west, San Bernardino base and meridian, in the City of San Diego, County of San Diego, State of California, except all crude oil, petroleum, gas, brea, asphaltum, and all kindred substances and other minerals under and in said land, as reserved in deed recorded May 30, 1960 as Instrument No. 111628.

2.3 Physical Environment

2.3.1 Landform

Topographically, the project site is located at the upper end of a broad north-south trending valley. A ridgeline occurs in the central portion of the site that rises in elevation from north to south from 740 feet mean sea level to 915 feet mean sea level. The ridge is bounded by two small canyons, one to the east and one to the west, with one main drainage course and smaller tributaries in each.

These drainages have slopes of moderate to steep grade. There is a small meadow in the northwest corner of the property, at the mouth of the eastern drainage.

2.3.2 Land Use

The project site is located in a developing area that consists primarily of residential development and open space (Figure 2-2). Land uses surrounding the project site include a portion of the Black Mountain Open Space Park to the west, east, and south, the Heritage Bluffs residential development to the north, and additional Black Mountain Open Space Park open space lands to the northwest. The project site is undeveloped, although a dirt road occurs along the crest of the ridge. Remnant concrete slabs from former structures occur at the north end of the site. The presence of various abandoned objects such as metal tanks, agricultural staking, and old irrigation lines indicate that the site was once used for minor agricultural activities. Native upland and wetland vegetation occurs on-site.

The project site is currently zoned as Agricultural – Residential in the Black Mountain Ranch (Subarea I) Subarea Plan (AR-1-1). Approximately 18.97 acres of the project site are included in the City's Multi-Habitat Planning Area (MHPA). MHPA lands are those that have been included within the City's Multiple Species Conservation Program (MSCP) Subarea Plan for habitat conservation. The MHPA boundary surrounds the area to be developed.

2.3.3 Transportation/Circulation

The regional transportation network in the project area consists of State Route 56 to the south, Interstate 15 to the east, and Interstate 5 to the west. Access to the project site would be provided by constructing an access road that would connect to Winecreek Drive at the northeast corner of the project site. There are no existing or proposed bus stops near the project site.

2.3.4 Historical Resources

A total of nine cultural resources have been identified on the project site:

- A record search of the South Coastal Information Center at San Diego State University identified two prehistoric archaeological sites recorded on the project property (CA-SDI-18428 and CA-SDI-18429) that both consist of flake scatters.
- Field surveys during July 2013 and December 2017 identified a total of seven cultural resources:
    - Three prehistoric isolates consisting of one or two flakes (7178-RDS-1, 7178-RDS-2, and 7178-HJP-1);
    - Two prehistoric sites (7179-HJP-2 and 7178-RDS-3);
    - A historic farmstead site (7178-HJP-3); and
    - A historic structure and associated road (7178-RDS-4).

None of the material identified during the 2013 survey was at, or immediately adjacent to, the mapped locations of either CA-SDI-18428 or CA-SDI-18429. The 2017 survey did find seven flakes within 15 meters of the mapped location of SDI-18428. RDS-3 and the flakes adjacent to SDI-18428 have been included in an expanded boundary for this site for recording purposes.

2.3.5 Biological Resources

Four vegetation communities and one land cover type occur on the project site. Southern mixed chaparral comprises the majority of the site with lesser acreages of coastal sage scrub, non-native grassland, and freshwater marsh patches. The single land cover type occurring on the project site consists of disturbed land.

Coastal sage scrub, southern mixed chaparral, non-native grassland, and freshwater marsh are all considered sensitive vegetation types by the City (City of San Diego 2012). Coastal sage scrub is ranked as a Tier II habitat, southern mixed chaparral as a Tier IIIA habitat, non-native grassland as a Tier IIIB habitat, and freshwater marsh as a wetland habitat. No sensitive plant species were observed on the project site and none are expected to occur due to lack of appropriate habitat and/or soil conditions. Two sensitive animal species (cooper's hawk and San Diego desert woodrat) were observed on-site, while four other sensitive animal species (Belding's orange-throated whiptail, coastal whiptail, coastal California gnatcatcher, and southern California rufous-crowned sparrow) have a moderate potential to occur on the project site due to the habitat conditions.

2.3.6 Air Quality

The project site is within the San Diego Air Basin (SDAB), as defined by the California Air Resources Board and San Diego Air Pollution Control District. The eastern portion of the SDAB is surrounded by mountains to the north, east, and south. These mountains tend to restrict airflow and concentrate pollutants in the valleys and low-lying areas below.

The SDAB is currently classified as a federal and state non-attainment area for ozone and a state non-attainment area for particulate matter less than 10 microns (PM_{10}), particulate matter less than 2.5 microns ($PM_{2.5}$), and ozone. Air pollutants transported into the basin from the adjacent South Coast Air Basin contribute to the nonattainment conditions in the SDAB.

2.4 Planning Context

Development projects in the City are generally guided by the City's General Plan, and more specifically by the applicable community plan. In addition, various other City, regional, and state plans, programs, and ordinances regulate the development of land within San Diego. A brief description of plans relevant to the project is provided below. A detailed evaluation of the project's consistency with relevant plans and ordinances was completed in conjunction with the 1998 Environmental Impact Report. This Supplemental Environmental Impact Report includes a consistency analysis with relevant City ordinances in Chapter 5.1.

2.4.1 City of San Diego General Plan

The City of San Diego General Plan sets forth a comprehensive long-term plan for development within the City. The General Plan incorporates a City of Villages strategy, which aims to redirect development away from undeveloped lands and toward already urbanized areas and/or areas with conditions allowing the integration of housing, employment, civic, and transit uses. This development strategy mirrors regional planning and smart growth principles intended to preserve remaining open space and natural habitat and focus development within areas with available public infrastructure.

2.4.2 Black Mountain Ranch (Subarea I) Subarea Plan

The Black Mountain Ranch Subarea Plan describes land use patterns and policies to guide the long-term use and development of the Black Mountain Ranch Subarea. A Subarea Plan is comparable to a community plan in regards to its content and relationship to the City's General Plan.

2.4.3 Land Development Code (Municipal Code)

The City's Municipal Code contains all the adopted ordinances for the City and is divided into 15 chapters. Chapters 11 through 14 are known collectively as the Land Development Code and include applicable development regulations for the Base Zones of a project site as well as supplemental development regulations contained within the applicable Overlay Zones.

2.4.3.1 Environmentally Sensitive Lands Regulations

The purpose of the Environmentally Sensitive Lands (ESL) Regulations (Land Development Code [LDC] Sections 143.0101 – 143.0160) is to protect, preserve and, where damaged, restore environmentally sensitive lands and the viability of the species supported by those lands. The ESL Regulations apply to all proposed development when environmentally sensitive lands, including sensitive biological resources, steep hillsides, floodplains, or coastal bluffs, are present. The regulations are designed to ensure that development occurs in a manner that protects natural resources and the natural and topographic character of the area, and retains biodiversity and interconnected habitats.

2.4.3.2 Historical Resources Regulations

The purpose of the City's Historical Resources Regulations, found in Section 143.0251 of the LDC, is to protect, preserve, and, where damaged, restore the historical resources of San Diego, which include historical buildings, historical structures or objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties. These regulations are intended to assure that development occurs in a manner that protects the overall quality of historical resources.

2.4.4 Multiple Species Conservation Program

The MSCP is a comprehensive habitat conservation planning program for San Diego County. A goal of the MSCP is to preserve a network of habitat and open space, thereby protecting biodiversity. Local jurisdictions, including the City of San Diego, implement their portions of the MSCP through subarea plans, which describe specific implementing mechanisms. MHPA lands are those that have been included within the City's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. MHPA lands are considered by the City to be a sensitive biological resource. Approximately 18,97 acres of the project site is within the MHPA, with the MHPA surrounding the area to be developed.

2.4.5 Air Quality Plans

Air quality plans provide an overview of the region's air quality and identify the pollution-control measures needed to expeditiously attain and maintain air quality standards. The region's plans include the San Diego Regional Air Quality Strategy, addressing state requirements, and the San Diego portion of the California State Implementation Plan, addressing federal requirements.

2.4.6 Water Quality Plans

The Water Quality Control Plan for the San Diego Basin designates beneficial uses for water bodies in the San Diego region, and establishes water quality objectives and implementation plans to protect those beneficial uses. The City's current Storm Water Standards Manual provides information to project applicants on how to comply with the permanent and construction storm water quality requirements in the City.

2.4.7 Olivenhain Municipal Water District Sphere of Influence

The Olivenhain Municipal Water District (OMWD) Sphere of Influence (SOI) defines long-range service boundaries for a city or special district. The project site is located within the OMWD adopted SOI and sewer service SOI.



FIGURE 2-1
Regional Location

Image Source: NearMaps (flown February 2019)



FIGURE 2-2

Project Location on Aerial Photograph

Chapter 3
Project Description

This section of the EIR provides a statement of the project goals and objectives, describes the specific characteristics of the project, discusses project phasing and construction, and identifies the discretionary actions required to implement the project. This section has been prepared pursuant to Section 15124 of the State CEQA Guidelines.

3.1 Relationship to the Black Mountain Ranch (Subarea I) Subarea Plan

In July of 1998, the City of San Diego (City) adopted the Black Mountain Ranch (Subarea I) Subarea Plan in the former North City Future Urbanizing Area (NCFUA) and certified the Final Environmental Impact Report (FEIR; Land Development Review No. 96-7902, SCH No. 97111070). The 1998 Subarea Plan and FEIR included: all of the previously approved Black Mountain Ranch II Vesting Tentative Map (VTM)/Planned Residential Development (DEP No. 95-0173; SCH No. 95041041) project area (3,690 acres; except for 94 acres[1]); 893 additional acres within the original Black Mountain Ranch ownership; and 515 acres of other ownership adjoining the Black Mountain Ranch parcels (perimeter properties). The Subarea Plan added 1,408 acres to the original Black Mountain Ranch community. At that time, the additional 1,408-acre area included a northern area comprising a mixed-use Northern Village (467 acres) with industrial, office, employment center, commercial/retail, and high-density residential areas; the finger ridges north of La Jolla Valley; a 300-room resort/hotel; a mixed-use southern village; seven additional residential development clusters; and four groupings of perimeter ownerships.

The Subarea Plan identifies several perimeter properties, which were originally held by 11 different ownerships (Figure 3-1). The Avion project site is within the area of the Subarea Plan referred to as the "Southeast Perimeter" properties, which are composed of four parcels (A, B, C, and D). The project site consists of Parcel C, totaling 41.48 acres. The Southeast Perimeter properties are designated by the Subarea Plan to allow for up to a total 330 residential units within a 66-acre development envelope (up to 5 dwelling units/gross acre). Specifically, Parcel C is designated for 117 dwelling units (Figure 3-2). The anticipated development envelope for Parcel C would be approximately 17.74 acres. The remaining approximate 23.75 acres on-site would be preserved as Multi-Habitat Planning Area (MHPA) open space. The 1998 Subarea Plan Environmental Impact Report (EIR) provides analysis for the project site, based on these general development parameters, but because no specific project design was known or proposed at the time the 1998 EIR was certified, the analysis of certain impacts for the site was only done at a "program level." The 1998 EIR acknowledges that future site-specific California Environmental Quality Act (CEQA) analysis would be required for areas outside of the Black Mountain Ranch VTM II project area.

[1]Ninety-four acres of dedicated Open Space at the eastern end of the panhandle was accounted for in the Rancho Peñasquitos Community Plan.

3.2 Project Objectives

In accordance with CEQA Guidelines Section 15124, the following primary objectives support the purpose of the project, assist the Lead Agency in developing a reasonable range of alternatives to be evaluated in this report, and ultimately aid decision-makers in preparing findings and overriding considerations, if necessary. The specific goals and objectives for the project are:

- Provide residential development that is consistent with the location and the goals and objectives of the adopted Black Mountain Ranch Subarea Plan.
- Provide new residential development, which is consistent with existing residential development patterns in the surrounding area.
- Implement "smart growth" principles of development through the provision of new residences within a complete master planned community.
- Implement sustainable development principles through the provision of a community of new residences with many energy-efficient features.
- Provide infrastructure improvements consistent with the Subarea Plan.

3.3 Description of Project Components

3.3.1 Residential Development

The project would develop 84 detached multi-family residential units and associated private drives as shown in the Site and Grading Plan (Figure 3-3). The proposed development would include grading, landscaping, brush management and the installation of all necessary infrastructure (utility lines, storm drains, etc.). The Black Mountain Ranch Subarea Plan allows 117 dwelling units on the site, including a requirement for 19 affordable units. The project proposes to construct 84 detached multi-family units on-site and transfer 19 affordable units to Lot X of Map 15919 in the Black Mountain Ranch North Village Town Center. In addition, the project proposes the transfer of 14 dwelling units to Lots 12, 13, 18 and 19 of Map 15919 in the Black Mountain Ranch North Village Town Center. In total, the project proposes a combined 117 dwelling units, including 19 affordable units, on-site and off-site in conformance with the Black Mountain Ranch Subarea Plan.

The proposed 84 detached multi-family units to be developed on-site would consist of four different housing product types: 20 detached multi-family, 2,289-square-foot residential units; 20 detached multi-family, 2,303-square-foot residential units; 22 detached multi-family, 2,446-sqaure-foot residential units, and 22 detached multi-family, 2,479-square-foot residential units. As shown in Table 3-1, the project would construct a total of 200,190 square feet of detached multi-family residential development based on this mix of product types.

Table 3-1 Total Project Square Footage			
Product Type	Square Footage of Product Type	Number of Units	Total Square Footage of Product Type
Product 1	2,289	20	45,780
Product 2	2,303	20	46,060
Product 3	2,446	22	53,812
Product 4	2,479	22	54,538
TOTAL		**84**	**200,190**

3.3.2 Natural Open Space

The project would preserve approximately 23.75 acres of natural open space on-site through dedication to the City's MHPA. The on-site MHPA open space would include preservation of two open space lots (Lots A and B), which would be dedicated in fee title to the City of San Diego. Within Lots A and B to be dedicated in fee title to the City, the project applicant would retain ownership of the 50-foot radii lots surrounding the storm drain outlets and grant them to the City through a Covenant of Easement.

3.3.3 Grading and Retaining Walls

Implementation of the VTM would result in approximately 296,000 cubic yards of cut (maximum depth of 52 feet) and 296,000 cubic yards of fill (maximum depth of 64 feet) over the approximately 15.69-acre graded area, resulting in a net balance of soils on the project site. Manufactured slopes in excess of 10 feet in height at a 2:1 gradient would be created on the perimeter of the development area boundary. Cut slopes would have a maximum height of 52 feet and 2:1 gradient. All the manufactured slopes would be contoured.

The project would construct retaining walls with a total length of 2,038 feet and a maximum height of 55 feet, 7 inches. Retaining walls would be constructed along both sides of the drainage that would be crossed by Winecreek Drive, on the western project boundary adjacent to the row of detached multi-family residential units accessed by Private Drives B and C, and on the eastern project boundary downslope from Private Drive E (see Figure 3-3).

3.3.4 Water, Sewer, and Stormwater Systems

A summary of the proposed water, sewer, and stormwater improvements for the project is provided below.

3.3.4.1 Water

Water service would be provided by the City of San Diego Public Utilities Department. The project would connect to existing water service facilities within the Heritage Bluffs residential development to north.

3.3.4.2 Sewer

As described in greater detail in Section 3.34.6 below, the San Diego Local Agency Formation Commission (LAFCO) would need to approve a reorganization consisting of an expansion of latent powers for the Olivenhain Municipal Water District (OMWD) sewer service area and the annexation of the project site to OMWD and the sewer service area. Proposed sewer flows generated by the project would be conveyed to the downstream sewer treatment plant owned and operated by the OMWD. The project sewer mains would connect to existing sewer facilities within the Heritage Bluffs residential development to north. The agreement to have OMWD provide sewer service rather than the City San Diego is consistent with two other adjacent projects within Black Mountain Ranch (East Clusters Unit 3 and the Heritage Bluffs residential development).

3.3.4.3 Stormwater

New storm drain facilities would be constructed per applicable San Diego standards. Storm drain inlets would be constructed to collect runoff from within the developed areas that would drain into an underground storm drain system. The project would comply with erosion control requirements of the City's Grading Ordinance and the State Water Resources Control Board's National Pollutant Discharge Elimination System General Permit. The project would include erosion control measures such as retaining walls and replanting slopes with container material in conformance with the grading ordinance and brush management guidelines

3.3.5 Access and Circulation

Access to the project site would be provided by constructing a private drive that would connect to Winecreek Drive at the northeast corner of the project site. Six interior private drives (A through G) would be constructed within the project site (refer to Figure 3-3). Private Drive A would connect to Winecreek Drive at the northeast corner of the project site and provide the main access to the site. Private Drives B, C, and G would be stub streets less than 150 feet in length. Internal circulation would include stop signs at internal intersections. Emergency access would be provided via Private Drive A’s connection to Winecreek Drive at the northeast corner of the project site.

3.3.6 Landscaping and Brush Management

The landscape concept plan design includes plantings to blend and complement the existing native planting surrounding the project site. Native low-fuel volume species would be used to revegetate the graded slopes, and the interior of the project site would feature parkway street trees and groundcover—ornamental in nature and fire resistant. Plant materials utilized in the landscape concept plan would be from the palette of plants known to perform well in this climactic zone and amended soil type. Figure 3-4 presents the landscape concept plan.

Brush Management Zones would be implemented with Zone 1 located adjacent to structures and must be the least flammable. Zone 2 would consist of selective thinning and pruning of native plants. The standard BMZ widths are 35 feet for BMZ 1 and 65 feet for BMZ 2 as stated in Table 142-04h of the City Municipal Code. The project proposes to implement Alternative Compliance measures to

traditional brush management zones that involve a reduction in BMZ 1 limits and introduction of a non-combustible wall between BMZ 1 and BMZ 2. By reducing the BMZ 1 limit and providing a non-combustible wall between BMZ 1 and BMZ 2, the overall impact to vegetation is reduced as the graded area is less. By reducing the BMZ 1 limit and providing a non-combustible wall between BMZ 1 and BMZ 2, the overall impact to vegetation is reduced as the graded area is less. All BMZ 1 impacts are located within the grading limits. The majority of the BMZ 2 impacts are also located within the grading limits. Although 1.32 acres of BMZ 2 impacts extend into southern mixed chaparral that lies outside of the grading limits primarily on the western side of the project area, BMZ 2 impacts are considered "impact neutral" and involve only minor thinning, trimming, and pruning of vegetation without destroying habitat value.

3.4 Discretionary Actions

Discretionary actions are those actions taken by an agency that call for the exercise of judgment in deciding whether to approve or how to carry out a project. For the project, the following discretionary actions are required and are further described below:

- Vesting Tentative Map (VTM)
- Rezone
- Planned Development Permit (PDP)
- Site Development Permit (SDP)
- MHPA Boundary Line Adjustments
- A reorganization consisting of latent powers expansion for sewer service for OMWD and annexation to OMWD and the district's sewer service area (LAFCO)

3.4.1 Vesting Tentative Map

A VTM is required for the project to subdivide the property into one residential lot with 84 detached multi-family units and two open space (MHPA) lots to be dedicated in fee to the City. The VTM details the specific grading and necessary infrastructure.

3.4.2 Rezone

The site is currently zoned as AR-1-1 (Agricultural – Residential, minimum 10-acre lots). Under the project, the site would be rezoned to RS-1-14 (Residential Single Unit, minimum 5,000-square-foot lots).

Application of the RS-1-14 zone would allow the project to include a variety of unit sizes, consistent with nearby residential development.

3.4.3 Planned Development Permit

The project includes a PDP to allow for development of detached multi-family residential units rather than single-family residential units and a deviation to exceed the maximum retaining wall height outside of required setbacks.

3.4.4 Site Development Permit

The project includes a SDP due to impacts to Environmentally Sensitive Lands (ESL; i.e., steep slopes and sensitive biological resources). Exceptions and deviations may be allowed by the City if certain findings can be made. The project has been designed to minimize impacts to ESL, and includes landform and contour grading; preservation of most sensitive biological resources in an MHPA open space preserve; and the revegetation of slopes with native plant species. The proposed encroachment into steep slopes is within the permitted allowances under ESL, and therefore, no deviations are required.

3.4.5 MHPA Boundary Line Adjustments

Adjustments to an MHPA boundary may be in cases where the new MHPA boundary results in an area of equivalent or higher biological value. The determination of the biological value of a proposed boundary change is made by the City in accordance with the MSCP Plan, with the concurrence of the Wildlife Agencies. After concurrence from the Wildlife Agencies is obtained, the MHPA boundary line adjustment must ultimately be approved through a San Diego hearing body such as the City Council.

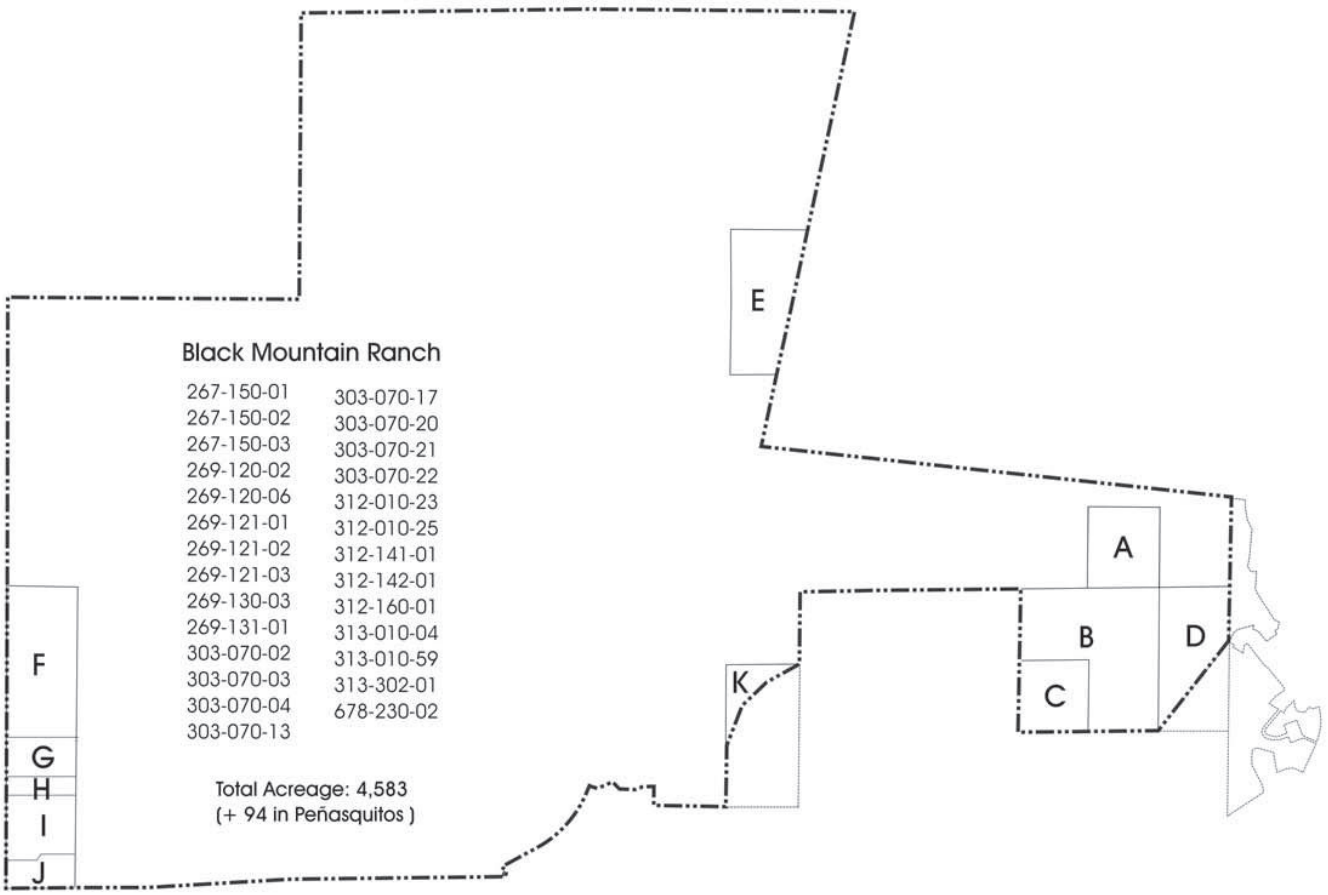
The existing MHPA boundary is shown on Figure 3-5a and the proposed MHPA boundary line adjustment is shown on Figure 3-5b. The proposed boundary line adjustment would entail the removal of 0.55 acre from the MHPA and the addition of 5.61 acres on-site (currently outside the MHPA). Land that would be incorporated into the MHPA through the boundary line adjustment consists of 4.99 acres of southern mixed chaparral, 0.49 acre of non-native grassland, and 0.13 acre of coastal sage scrub. The MHPA boundary line adjustment proposed in conjunction with the project is detailed in Section 5.1.4 of this document.

3.4.6 LAFCO Actions

The Cortese-Knox-Hertzberg Act requires that LAFCO conduct reviews of all municipal services provided in each county. In 2005, the San Diego LAFCO conducted the North Central San Diego County Municipal Service Review, which comprehensively studied existing and future public service conditions and evaluated organizational options to accommodate growth, prevent urban sprawl, and ensure that critical services are provided in an efficient and cost-effective manner. The analysis, which studied OMWD, the Rancho Santa Fe Community Services District, and the City of San Diego was accompanied by a Sphere of Influence Update. The project site is located within the OMWD's SOI and sewer service SOI.

In May 2005, the San Diego LAFCO adopted the update, which was affirmed in August 2007 and June 2013. A special district may only provide those activities described in its principal act. Those services are further restricted by LAFCO's responsibility to regulate latent powers (i.e., the services or functions authorized by the principal act, but not currently exercised by the district). Consequently, the project would require a reorganization consisting of an expansion of latent powers for sewer service and the annexation of the project site to OMWD and the district's sewer service area. Approval of the proposed approximately 41.48-acre reorganization to the OMWD sewer service area would increase the geographic area for OMWD to exercise latent powers for sewer service and annex the same territory to OMWD (Figure 3-6).

Map Source: City of San Diego



Black Mountain Ranch

267-150-01	303-070-17
267-150-02	303-070-20
267-150-03	303-070-21
269-120-02	303-070-22
269-120-06	312-010-23
269-121-01	312-010-25
269-121-02	312-141-01
269-121-03	312-142-01
269-130-03	312-160-01
269-131-01	313-010-04
303-070-02	313-010-59
303-070-03	313-302-01
303-070-04	678-230-02
303-070-13	

Total Acreage: 4,583
(+ 94 in Peñasquitos)

Perimeter Ownerships

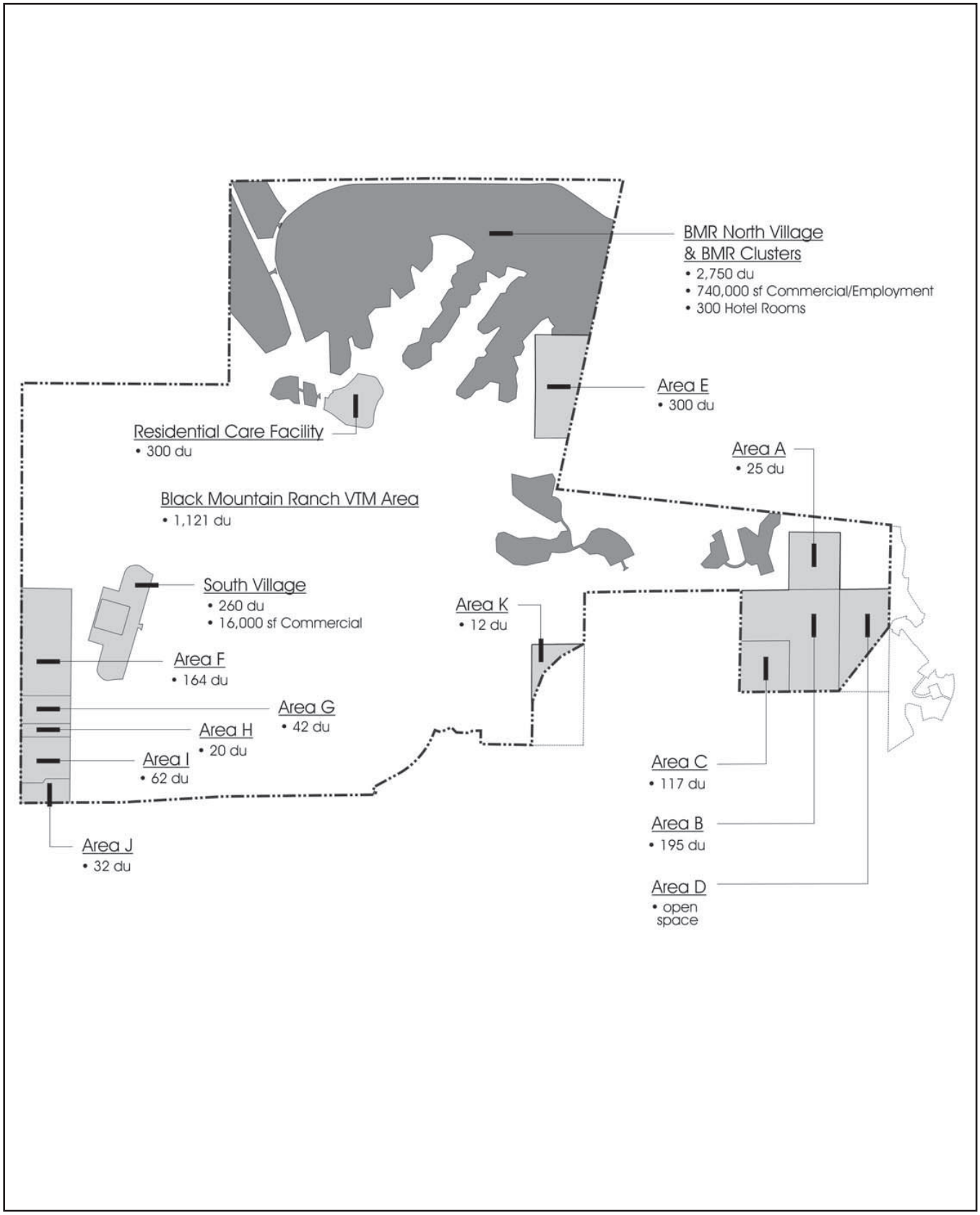
Area	APN	Acreage	Area	APN	Acreage
A	312-160-02	44.8	F	303-070-07	82.1
B	312-010-15	125.0	G	303-070-09	20.7
C	312-010-16	41.5	H	303-070-11	10.4
D	313-010-59	55.0 (+ 25 in Peñasquitos)	I	303-070-18	30.6
E	312-141-02	30.0	J	303-070-19	21.2
	678-230-04	37.2	K	312-010-09	16.0. (+ 64 in Peñasquitos)

Total Acreage: 514.5
(+ 89 in Peñasquitos)

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FIGURE 3-1
Black Mountain Ranch Subarea I

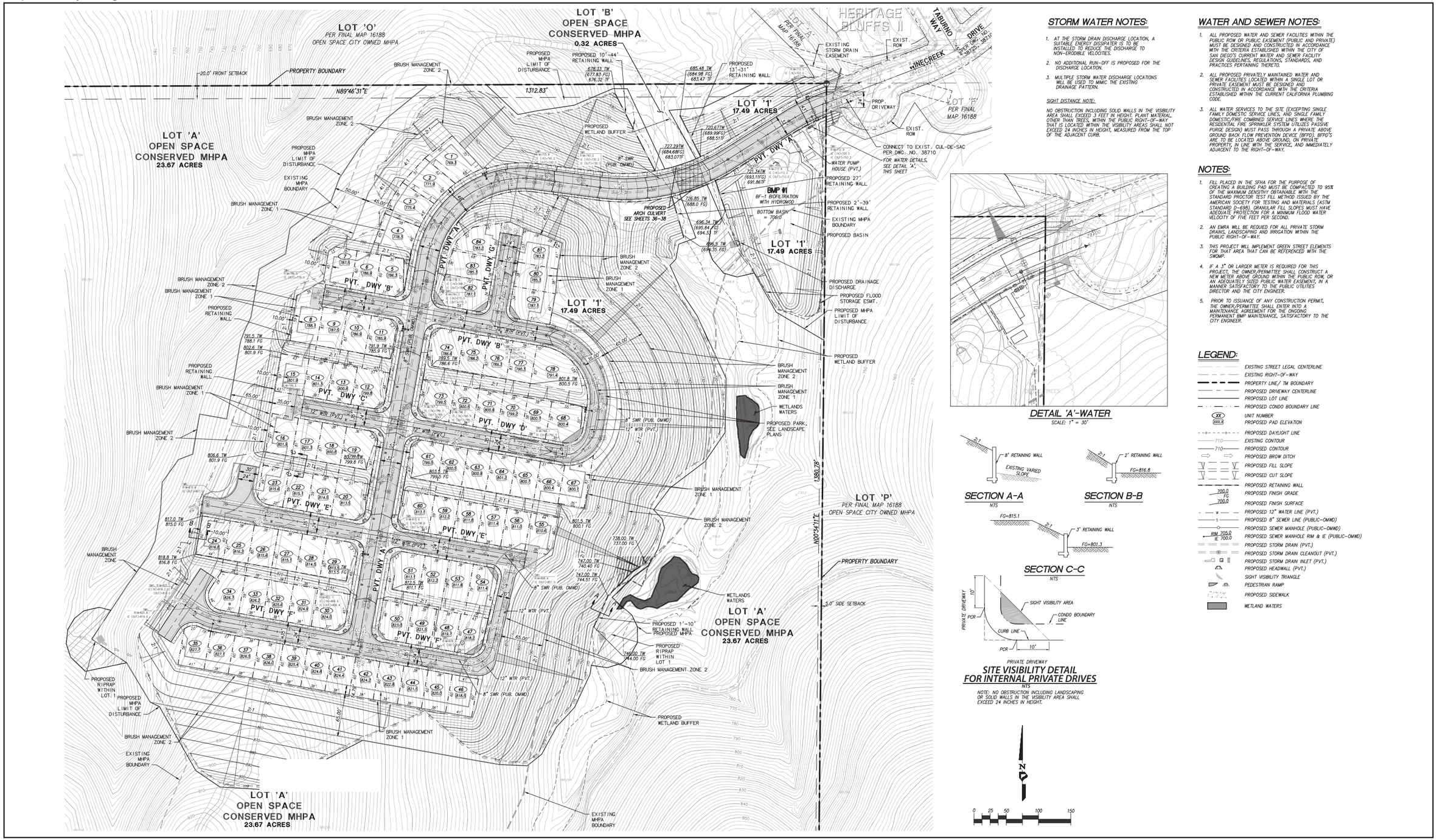
Map Source: City of San Diego



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FIGURE 3-2
Black Mountain Ranch Subarea Plan Designations

Map Source: Project Design Consultants (2019)



STORM WATER NOTES:

1. AT THE STORM DRAIN DISCHARGE LOCATION, A SUITABLE ENERGY DISSIPATER IS TO BE INSTALLED TO REDUCE THE DISCHARGE TO NON-ERODIBLE VELOCITIES.
2. NO ADDITIONAL RUN-OFF IS PROPOSED FOR THE DISCHARGE LOCATION.
3. MULTIPLE STORM WATER DISCHARGE LOCATIONS WILL BE USED TO MIMIC THE EXISTING DRAINAGE PATTERN.

SIGHT DISTANCE NOTE:

NO OBSTRUCTION INCLUDING SOLID WALLS IN THE VISIBILITY AREA SHALL EXCEED 3 FEET IN HEIGHT. PLANT MATERIAL, OTHER THAN TREES, WITHIN THE PUBLIC RIGHT-OF-WAY THAT IS LOCATED WITHIN THE VISIBILITY AREAS SHALL NOT EXCEED 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF THE ADJACENT CURB.

WATER AND SEWER NOTES:

1. ALL PROPOSED WATER AND SEWER FACILITIES WITHIN THE PUBLIC ROW OR PUBLIC EASEMENT (PUBLIC AND PRIVATE) MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE CRITERIA ESTABLISHED WITHIN THE CITY OF SAN DIEGO'S CURRENT WATER AND SEWER FACILITY DESIGN GUIDELINES, REGULATIONS, STANDARDS, AND PRACTICES PERTAINING THERETO.
2. ALL PROPOSED PRIVATELY MAINTAINED WATER AND SEWER FACILITIES LOCATED WITHIN A SINGLE LOT OR PRIVATE EASEMENT MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE CRITERIA ESTABLISHED WITHIN THE CURRENT CALIFORNIA PLUMBING CODE.
3. ALL WATER SERVICES TO THE SITE (EXCEPTING SINGLE FAMILY DOMESTIC SERVICE LINES, AND SINGLE FAMILY DOMESTIC/FIRE COMBINED SERVICE LINES WHERE THE RESIDENTIAL FIRE SPRINKLER SYSTEM UTILIZES PASSIVE PURGE DESIGN) MUST PASS THROUGH A PRIVATE ABOVE GROUND BACK FLOW PREVENTION DEVICE (BFPD). BFPD'S ARE TO BE LOCATED ABOVE GROUND, ON PRIVATE PROPERTY, IN LINE WITH THE SERVICE, AND IMMEDIATELY ADJACENT TO THE RIGHT-OF-WAY.

NOTES:

1. FILL PLACED IN THE SFHA FOR THE PURPOSE OF CREATING A BUILDING PAD MUST BE COMPACTED TO 95% OF THE MAXIMUM DENSITHY OBTAINABLE WITH THE STANDARD PROCTOR TEST FILL METHOD ISSUED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM STANDARD D-698). GRANULAR FILL SLOPES MUST HAVE ADEQUATE PROTECTION FOR A MINIMUM FLOOD WATER VELOCITY OF FIVE FEET PER SECOND.
2. AN EMRA WILL BE REQUIED FOR ALL PRIVATE STORM DRAINS, LANDSCAPING AND IRRIGATION WITHIN THE PUBLIC RIGHT-OF-WAY.
3. THIS PROJECT WILL IMPLEMENT GREEN STREET ELEMENTS FOR THAT AREA THAT CAN BE REFERENCED WITH THE SWQMP.
4. IF A 3" OR LARGER METER IS REQUIRED FOR THIS PROJECT, THE OWNER/PERMITTEE SHALL CONSTRUCT A NEW METER ABOVE GROUND WITHIN THE PUBLIC ROW, OR AN ADEQUATELY SIZED PUBLIC WATER EASEMENT, IN A MANNER SATISFACTORY TO THE PUBLIC UTILITIES DIRECTOR AND THE CITY ENGINEER.
5. PRIOR TO ISSUANCE OF ANY CONSTRUCTION PERMIT, THE OWNER/PERMITTEE SHALL ENTER INTO A MAINTENANCE AGREEMENT FOR THE ONGOING PERMANENT BMP MAINTENANCE, SATISFACTORY TO THE CITY ENGINEER.

DETAIL 'A'-WATER
SCALE: 1" = 30'

SECTION A-A
NTS

SECTION B-B
NTS

SECTION C-C
NTS

PRIVATE DRIVEWAY

SITE VISIBILITY DETAIL
FOR INTERNAL PRIVATE DRIVES
NTS

NOTE: NO OBSTRUCTION INCLUDING LANDSCAPING OR SOLID WALLS IN THE VISIBILITY AREA SHALL EXCEED 24 INCHES IN HEIGHT.

LEGEND:

- EXISTING STREET LEGAL CENTERLINE
- EXISTING RIGHT-OF-WAY
- PROPERTY LINE/ TM BOUNDARY
- PROPOSED DRIVEWAY CENTERLINE
- PROPOSED LOT LINE
- PROPOSED CONDO BOUNDARY LINE
- XX / 000.0 — UNIT NUMBER / PROPOSED PAD ELEVATION
- PROPOSED DAYLIGHT LINE
- 710 — EXISTING CONTOUR
- 710 — PROPOSED CONTOUR
- PROPOSED BROW DITCH
- PROPOSED FILL SLOPE
- PROPOSED CUT SLOPE
- PROPOSED RETAINING WALL
- 700.0 FG / 700.0 — PROPOSED FINISH GRADE
- PROPOSED FINISH SURFACE
- W — PROPOSED 12" WATER LINE (PVT.)
- S — PROPOSED 8" SEWER LINE (PUBLIC-OWMD)
- PROPOSED SEWER MANHOLE (PUBLIC-OWMD)
- RIM 705.0 / IE 700.0 — PROPOSED SEWER MANHOLE RIM & IE (PUBLIC-OWMD)
- PROPOSED STORM DRAIN (PVT.)
- PROPOSED STORM DRAIN CLEANOUT (PVT.)
- PROPOSED STORM DRAIN INLET (PVT.)
- PROPOSED HEADWALL (PVT.)
- SIGHT VISIBILITY TRIANGLE
- PEDESTRIAN RAMP
- PROPOSED SIDEWALK
- WETLAND WATERS

FIGURE 3-3
Site and Grading Plan

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Map Source: Project Design Consultants (2019)

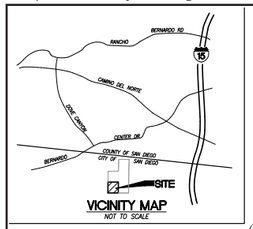
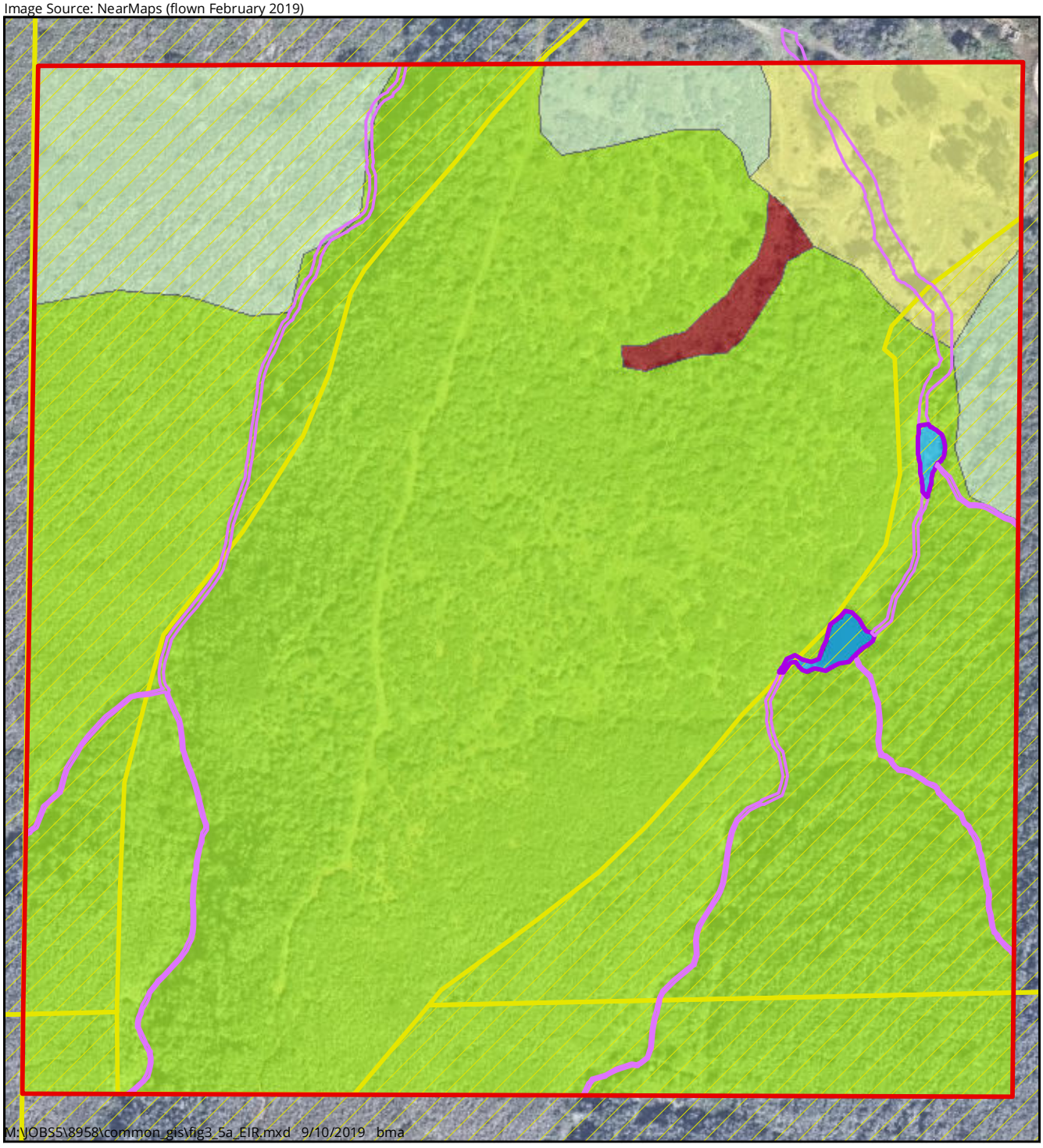

BERNARDO RD
RANCHO
CAMINO DEL NORTE
CAMINO DEL NORTE
CAMINO DEL NORTE

Image Source: NearMaps (flown February 2019)



Project Boundary

Existing MHPA Boundary

Jurisdictional Waters

Wetland Waters

Non-wetland Water/Streambed

Vegetation Community/Land Cover Type

Coastal Sage Scrub

Disturbed Land

Freshwater Marsh

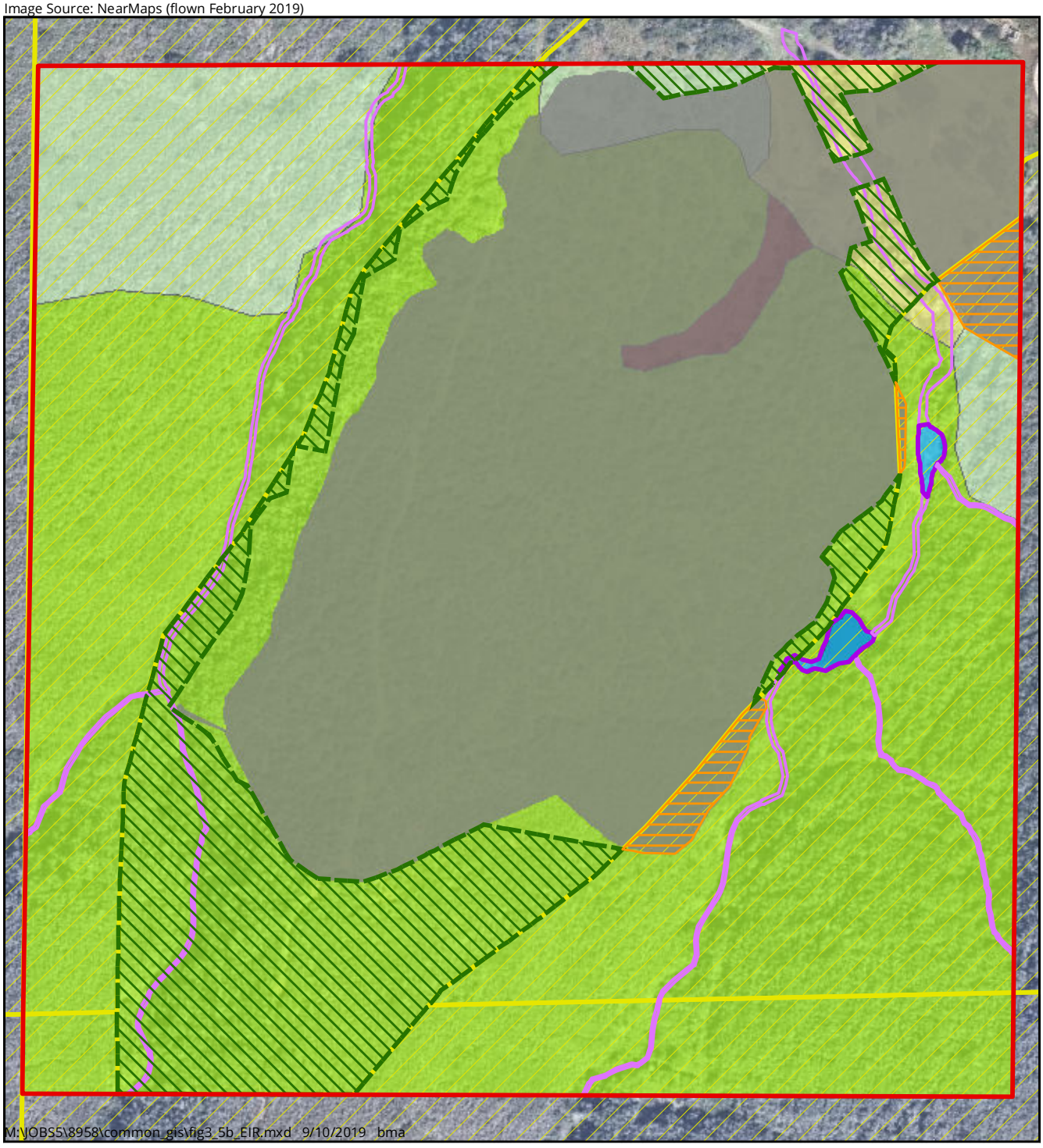
Non-native Grassland

Southern Mixed Chaparral

FIGURE 3-5a

Existing MHPA Boundary

Image Source: NearMaps (flown February 2019)



- Project Boundary
- Limit of Disturbance
- MHPA Addition
- MHPA Deletion
- Existing MHPA Boundary

Jurisdictional Waters

- Wetland Waters
- Non-wetland Water/Streambed

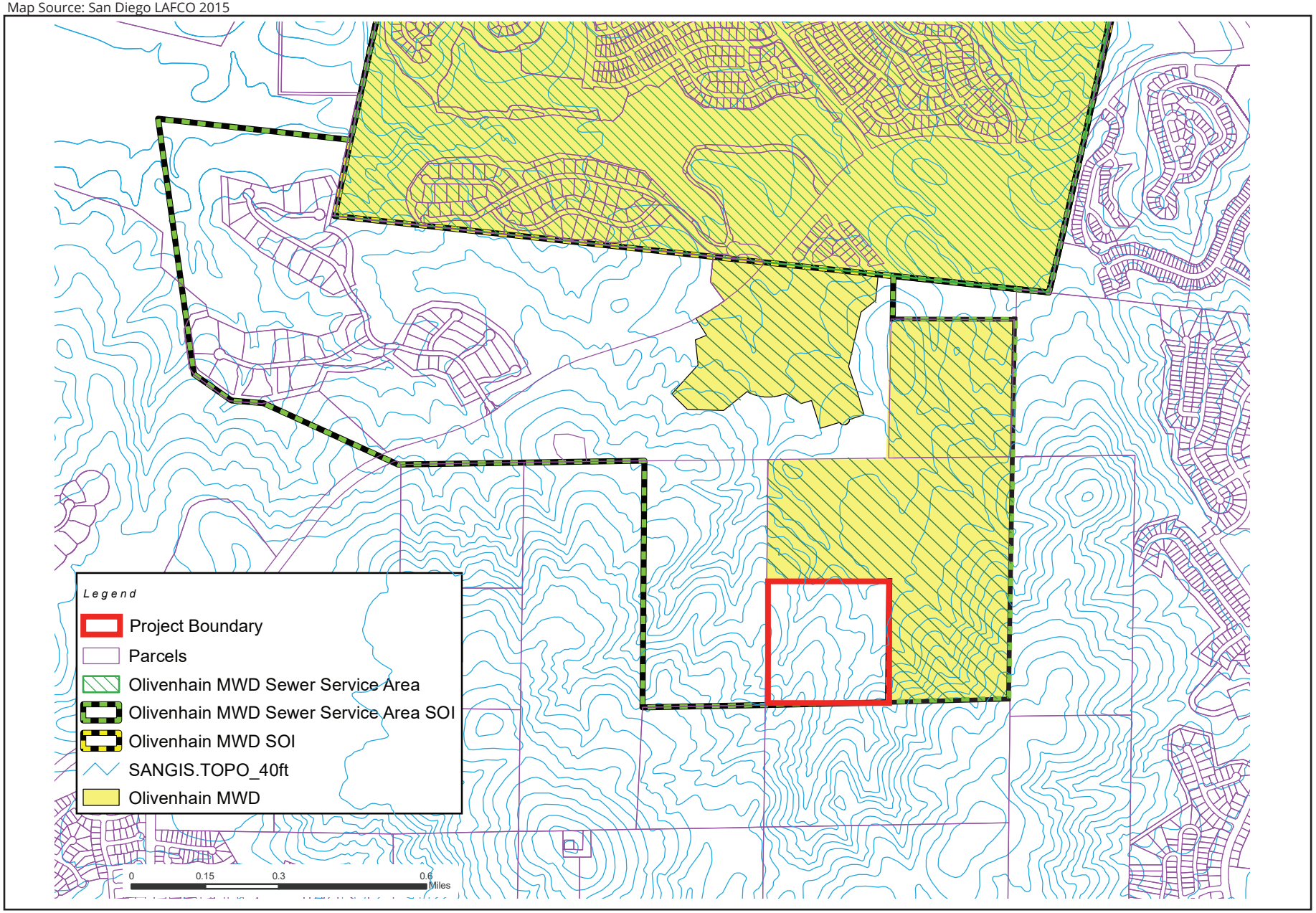
Vegetation Community/Land Cover Type

- Coastal Sage Scrub
- Disturbed Land
- Freshwater Marsh
- Non-native Grassland
- Southern Mixed Chaparral

FIGURE 3-5b

Proposed MHPA Boundary Line Adjustment

Map Source: San Diego LAFCO 2015



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FIGURE 3-6

Proposed Avion Project MWD Reorganization

Chapter 4
History of Project Changes

As described in Section 3.1, the project site is located within the area referred to as the "Southeast Perimeter" properties by the Subarea Plan. The project site consists of Parcel C of the Southeast Perimeter properties, totaling 41.48 acres. Parcel C is designated to allow for development of 117 dwelling units, including a requirement for 19 affordable units. However, initial review of the project site in 2017 determined that existing site constraints such as steep slopes and sensitive biological resources made full buildout of the parcel with 117 detached multi-family residential units infeasible. Similarly, the isolated location of the parcel southwest of existing and proposed commercial uses made the project site unsuitable for development of affordable housing units. Therefore, the project applicant designed the project to construct 84 detached multi-family units on-site and transfer the remaining density (14 market-rate units and 19 affordable housing units) to the Black Mountain Ranch North Village Town Center. The reduced density of the project would allow for development of 84 detached multi-family units based on the existing site topography, and the transfer of the 19 affordable housing units to the Black Mountain Ranch North Village Town Center would ensure that these units would be located closer to existing commercial uses.

Chapter 5
Environmental Analysis

All environmental issues analyzed in the 1998 Subarea Plan Environmental Impact Report (EIR) were considered during initial review of the project. Through City of San Diego (City) review of the project and comments received in response to the Notice of Preparation, the following issues were determined to either: (1) lack a site-specific impact analysis and/or adequate mitigation for project impacts; or (2) result in new impacts that may be potentially significant and require subsequent analysis and/or mitigation as part of this Supplemental Environmental Impact Report (SEIR):

- Land Use (Land Development Code [LDC] Compliance, Multiple Species Conservation Program [MSCP] Consistency);
- Biological Resources;
- Cultural Resources;
- Landform Alteration/Visual Quality (Landform Alteration);
- Noise (construction); and
- Air Quality (construction).

This chapter analyzes the potentially new environmental impacts that may occur as a result of project implementation. Each section within this chapter includes an environmental issue that has been identified for this project and addresses the issues from the 1998 EIR that require supplemental analysis.

The issue analyses include a summary of existing conditions; the criteria for the determination of impact significance; evaluation of potential project impacts; a list of required mitigation measures if applicable, and conclusion of significance after mitigation for impacts identified as requiring mitigation.

All potential direct and indirect impacts are evaluated in relation to applicable City, state, and federal standards, as reflected in the City's Significance Determination Thresholds, and include City goals and standards in compliance with the City General Plan (2008).

5.1 Land Use

This section evaluates potential land use impacts associated with the project in relation to land uses, policies, and regulations applicable to the project.

5.1.1 Relationship to the Black Mountain Ranch (Subarea I) Subarea Plan

The analysis in this section updates the land use analysis in the 1998 Environmental Impact Report (EIR), with an emphasis on effects that were not addressed in the previous report. Because no site-specific design was proposed at the time the 1998 EIR was prepared, issues regarding Land Development Code (LDC) deviations and Multiple Species Conservation Program (MSCP) consistency could not be analyzed in detail for the perimeter properties, and impacts were assumed to be potentially significant. Therefore, this section provides a site-specific analysis of LDC and MSCP consistency relative to the project. Other issues related to land use were adequately analyzed as part of the 1998 EIR, to which this Supplemental EIR (SEIR) is tiered. Those issues are summarized in Chapter 9.0.

5.1.2 Existing Conditions

The project site is undeveloped and located within the Black Mountain Ranch Subarea in the northern portion of the city of San Diego. The project site is located at the upper end of a broad north-south trending valley. A ridgeline occurs in the central portion of the site that rises in elevation from north to south from 740 feet mean sea level to 915 feet mean sea level. The ridge is bounded by two small canyons, one to the east and one to the west, with one main drainage course and smaller tributaries in each. These drainages have slopes of moderate to steep grade. There is a small meadow in the northwest corner of the property, at the mouth of the eastern drainage.

5.1.2.1 Land Use Context

The project site is currently zoned as Agricultural – Residential (AR-1-1). Approximately 22.51 acres of the project site have been designated as Low Residential (2–5 dwelling unit/acre) in the Black Mountain Ranch (Subarea I) Subarea Plan and the remainder of the site as Resource Based Open Space. The project site is within the City of San Diego's (City's) MSCP, and approximately 18.97 acres of the project site are included in the Multi-Habitat Planning Area (MHPA). The MHPA boundary surrounds the area to be developed.

5.1.2.2 Surrounding Land Uses

Figure 5.1-1 shows the existing land use designations surrounding the project site. Land uses surrounding the project site include a portion of the Black Mountain Open Space Park to the west, east, and south, and the Heritage Bluffs residential development to the north, and additional Black Mountain Open Space Park open space lands to the northwest.

The Black Mountain Ranch Subarea encompasses 5,098 acres and is generally bounded on the west, north, and east by unincorporated areas of San Diego County. The 4S Ranch and Santa Fe Valley Specific Plan areas form a portion of this county land. On the east, southeast, and south, the Black Mountain Ranch Subarea is bounded by the Rancho Peñasquitos and Rancho Bernardo Community Planning Areas and Subarea IV Torrey Highlands.

5.1.3 Regulatory Framework

5.1.3.1 City of San Diego General Plan

State law requires each city to adopt a general plan to guide its future development, and mandates that the plan be periodically updated to assure its continuing relevance and value (State Planning and Zoning Law, California Government Code, Section 65300). State law also requires the inclusion of seven mandatory elements into the General Plan (land use, circulation, housing, conservation, noise, open space, and safety) but permits flexibility and the inclusion of optional elements to best meet the needs of a particular city.

The City's General Plan sets forth a comprehensive, long-range vision and policy framework to guide future development within the City. A comprehensive update of the City's General Plan was adopted March 10, 2008 and was based on a new planning strategy for the City developed in the 2002 Strategic Framework Element. Known as the City of Villages strategy, the General Plan aims to redirect development away from undeveloped lands and toward already urbanized areas and/or areas with conditions allowing the integration of housing, employment, civic, and transit uses. This development strategy mirrors regional planning and smart growth principles intended to preserve remaining open space and natural habitat and focus development within areas with available public infrastructure.

5.1.3.2 Black Mountain Ranch Subarea Plan

The Black Mountain Ranch (BMR) Subarea Plan constitutes Subarea I of the former North City Future Urbanizing Area (NCFUA) Framework Plan, and consists of approximately 5,098 acres of land. The goal of the land use element is to create a pattern of land use and conservation that is clearly distinguishable from surrounding communities and that fosters appealing and enjoyable neighborhoods and business districts. The land use element of the BMR Subarea Plan focuses development in two villages surrounded by significant open space, recreational amenities, and low-density development. Overall, the Subarea Plan allows for development of 5,400 residential units on 1,395 acres, 235 acres of non-residential development, and 3,065 acres of open space. The remaining acreage is identified for development of streets. The majority of the Subarea Plan has been built out, with only a small number of planned residential and non-residential units yet to be developed. The project site is within the area of the Subarea Plan referred to as the "Southeast Perimeter" properties, which are composed of four parcels (A, B, C, and D). The project site consists of Parcel C, totaling 41.48 acres, and is designated for 117 dwelling units.

5.1.3.3 Land Development Code

a. Environmentally Sensitive Land Regulations

On January 1, 2000, Environmentally Sensitive Lands (ESL) Regulations were adopted by the San Diego City Council as a part of the LDC. The purpose of the ESL Regulations is to protect and preserve environmentally sensitive lands and the viability of the species supported by those lands. The regulations are intended to assure that development occurs in a manner that protects the overall quality of the resources and the natural and topographic character of the area. It is further intended that the development regulations for ESL, which include guidelines for biology, flood hazard areas, steep hillsides, and coastal bluffs and beaches, serve as standards for the determination of impacts and mitigation. Within the project site, ESL development regulations apply to sensitive biological resources, such as coastal sage scrub, southern mixed chaparral, and wetlands, which are discussed in detail in Section 5.2 below.

According to the ESL regulations, development that proposes encroachment into steep hillsides is subject to Municipal Code §143.0142 Development Regulations for Steep Hillsides, and the Steep Hillside Guidelines in the Land Development Manual. Outside of the MHPA, the allowable development area includes all portions of the premises without steep hillsides. The regulations state that steep hillsides shall be preserved in their natural state, except that development is permitted in steep hillsides if necessary to achieve a maximum development area of 25 percent of the premises. Development encroachment into steep hillsides and sensitive biological resources within the MHPA is restricted. Development within the MHPA beyond the allowed 25 percent would require a MHPA boundary line adjustment. A Site Development Permit (SDP) is required for projects proposing to impact any ESL.

b. Historical Resources Regulations

The purpose of the City's Historical Resources Regulations, found in Section 143.0251 of the LDC, is to protect, preserve, and, where damaged, restore the historical resources of San Diego, which include historical buildings, historical structures or objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties. These regulations are intended to assure that development occurs in a manner that protects the overall quality of historical resources. The Historic Resources Regulations require that development affecting designated historical resources or historical districts shall provide full mitigation for the impact to the resource, in accordance with the Historical Resources Guidelines of the Land Development Manual, as a condition of approval. If development cannot, to the maximum extent feasible, comply with the development regulations for historical resources, then a project would require a permit.

5.1.3.4 Multiple Species Conservation Program Subarea Plan

The MSCP is a comprehensive, long-term habitat conservation planning program that covers approximately 900 square miles in southwestern San Diego County under the federal and state Endangered Species Acts and state Natural Community Conservation Planning (NCCP) Act of 1991. Local jurisdictions, including the City, implement their portions of the regional umbrella MSCP through subarea plans, which describe specific implementing mechanisms. The City's MSCP Subarea

Plan was approved in March 1997 and covers approximately 206,000 acres within the City's jurisdictional boundary. The City, U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife have signed an MSCP Implementing Agreement that allows the City to issue incidental take authorizations for "MSCP Covered" species. The MSCP identifies approximately 57,000 acres as MHPA that is considered to be 90 percent conserved in order to adequately preserve habitat for the MSCP covered species.

MHPA lands are those that have been included within the City's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. MHPA lands are considered by the City to be a sensitive biological resource.

MHPA lands once occurred over the majority of the project site. In 1998, the Subarea Plan EIR evaluated whether the project site (Southeast Perimeter Parcel C) and several other perimeter properties would impact the MHPA. As part of this subarea plan, an MHPA Boundary Line Adjustment (BLA) was approved that reconfigured the MHPA boundary over the project site to further exclude portions of the central ridge and lower flat land, while still including the canyons to the east and west of the ridge. Approximately 18.97 acres of the project site are included within the City's MHPA as a result of the BLA approved for the Subarea Plan.

The MSCP Subarea Plan northern area has four general guidelines, none of which apply to the project site. Land uses that are considered compatible with the objectives of the MSCP and which are permitted uses in MHPA open space include:

- passive recreation;
- utility lines and roads (must adhere to MHPA construction and maintenance policies);
- limited water facilities and essential public facilities;
- limited low-density residential use;
- brush management zone-2; and
- limited agriculture.

For properties that are entirely within the MHPA, allowable development of up to 25 percent of the site can occur. San Diego's MSCP Subarea Plan states that adjustments to the MHPA boundary line are permitted without the need to amend San Diego's Subarea Plan, as discussed below.

a. Boundary Line Adjustment

An MHPA BLA may be requested by projects to move the MHPA boundary, as long as the adjustment provides an equivalent MHPA. The MHPA BLA requires approval from the City and Wildlife Agencies. For an MHPA BLA to be considered, it must meet six functional equivalency criteria to demonstrate the habitat conveyed is of equal or higher value. The comparison of biological value must analyze the following:

1. Effects on significantly and sufficiently conserved habitats (i.e., the exchange maintains or improves the conservation, configuration, or status of significantly or sufficiently conserved habitats);

2. Effects to covered species (i.e., the exchanges maintains or increases the conservation of covered species
3. Effects on habitat linkages and function of preserve areas (i.e., the exchange results in similar or improved management efficiency and/or protection for biological resources);
4. Effects on preserve configuration and management (i.e., the exchange results in similar or improved management efficiency and/or protection for biological resources);
5. Effects on ecotones or other conditions affecting species diversity (i.e., the exchange maintains topographic or structural diversity and habitat interfaces of the preserve); and/or
6. Effects to species of concern not on the covered species list (i.e., the exchange does not significantly increase the likelihood that an uncovered species will meet the criteria for listing under either the federal or state Endangered Species Acts; City of San Diego 1998).

b. Land Use Adjacency Guidelines

The City's MSCP Subarea Plan provides Land Use Adjacency Guidelines to avoid or reduce significant indirect impacts to MHPAs from adjacent land uses. The Land Use Adjacency Guidelines include drainage, lighting, noise, and slope grading recommendations for adjacent development, as well as recommendations for avoiding or redirecting toxic chemicals (e.g., from landscape or agricultural fertilization) and prohibition of the planting of invasive species.

Section 1.4.3 of San Diego MSCP Subarea Plan presents Land Use Adjacency Guidelines, as summarized below. Section 1.5.2 of the MSCP provides general management recommendations to implement these guidelines, as summarized below.

Drainage. All new and proposed parking lots and developed areas in and adjacent to the MHPA must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA.

Toxics. Land uses such as recreation and agriculture that use chemicals or generate by-products that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality, need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA.

Lighting. Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

Noise. Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species.

Barriers. New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls and/or signage) along the MHPA boundary to direct public access to appropriate locations and reduce domestic animal predation.

Invasives. No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.

Brush management. New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zone 2 should be placed in an open space easement that identifies a homeowners association or other private party that would be responsible for the ongoing Zone 2 brush management activities. The amount of woody vegetation thinning shall not exceed 50 percent of the vegetation existing when the initial thinning is done. Additional thinning and pruning shall be done consistent with San Diego standards to obtain minimum vertical and horizontal clearances and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area would be the responsibility of a homeowners association or other private party.

Grading/land development. Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

5.1.4 Issue 1: LDC Deviations

Would the project require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment?

5.1.4.1 Threshold

According to the City's California Environmental Quality Act (CEQA) Significance Determination Thresholds, land use compatibility impacts may be significant if the project would result in:

- Conflict with an adopted land use designation or intensity and indirect or secondary environmental impacts could occur.

5.1.4.2 Impacts

The project is consistent with the underlying zone of RS-1-14 (Residential Single Unit, minimum 5,000-square-foot lots); however, a deviation from the applicable development regulations, for over-height retaining walls outside of the required setback is being requested. The project is requesting retaining walls with a maximum height of 55 feet, 7 inches that would be located along both sides of the existing drainage channel, where Section §142.0340 of the Land Development Code requires that the heights of retaining walls do not exceed 12 feet outside of required setbacks.

The retaining walls that would exceed the maximum height allowance would be located along both sides of the existing drainage that would be crossed by the arch culvert allowing for the extension of

Winecreek Drive. Implementation of these retaining walls would avoid encroachments into the existing drainage that would otherwise occur if the project conformed to the maximum height allowed by the RS-1-14 zone, thereby preventing impacts to sensitive wetlands.

The retaining walls would be downslope from the project and would not exceed the elevation of the arch culvert or the development pad. As a result, the proposed retaining walls that would deviate from the maximum height allowance would not be visible from the project site. Furthermore, the proposed retaining walls would be developed with earth tones that would blend in with the surrounding natural environment and would be landscaped with cascading vines at the top of the walls that would extend downslope to provide an aesthetically pleasing appearance from views off-site. Section 5.4, Landform Alteration/Visual Quality, addresses the over-height retaining walls; the analysis concludes that a negative visual appearance would not be created by the over-height walls proposed. The allowable deviation from the development regulations would not result in secondary environmental impacts as they would not be substantial, and would occur internal to the project, and not affect off-site areas.

5.1.4.3 Significance of Impacts

Proposed deviation from the base zone development regulations would not result in secondary physical impacts as they would be internal to the project and not affect off-site areas. The retaining walls would avoid impacts to wetlands and not result in any significant impacts related to visual resources. Therefore, impacts would be less than significant.

5.1.4.4 Mitigation, Monitoring, and Reporting

Mitigation would not be required.

5.1.5 Issue 2: MSCP Consistency

- Would the proposal conflict with the provisions of the City's MSCP Subarea Plan or other approved local, regional, or state habitat conservation plan?

5.1.5.1 Threshold

According to the City's Significance Determination Thresholds, land use impacts may be significant if the project would be:

- Inconsistent or conflict with adopted environmental plans for an area.

5.1.5.2 Impacts

The project site lies within the Northern Area of the City MSCP Subarea Plan, and areas of the project site are designated as MHPA (which is the City's planned habitat preserve system). The MSCP Subarea Plan provides guidelines for compatible uses within the MHPA, general planning policies, design guidelines, and general management directives regarding issues such as mitigation,

restoration, public access, trails and recreation, litter/trash storage, adjacency management issues, exotics control, and flood control. Consistency with MSCP land use policies is summarized below, with additional detail regarding biological impacts and mitigation provided in Section 5.2 below.

a. MHPA Boundary Line Adjustment

The current MHPA boundary in the vicinity of the project site is shown on Figure 3-5a. Minor encroachments into the current MHPA boundary on the eastern portion of the site would occur under the project (see Figure 3-5b). These encroachments would impact a total of 0.55 acre comprised of 0.14 acre of coastal sage scrub, 0.27 acre of southern mixed chaparral, and 0.14 acre of non-native grassland. Under the proposed MHPA BLA, these impact areas would be removed from the current MHPA and on-site land not currently within the MHPA would be added into the preserve. Land added into the MHPA with the BLA would include 5.61 acres comprised of 4.99 acres of southern mixed chaparral, 0.49 acre of non-native grassland, and 0.13 acre of coastal sage scrub (Table 5.1-1), resulting in a net gain of 5.06 acres.

Table 5.1-1
Summary of Proposed MHPA Boundary Line Adjustment

Vegetation Communities/ Land Cover Types	Existing MHPA Acres	Deletions (Impact) Acres	Added Acres	Proposed MHPA with BLA (Net Change)
Coastal Sage Scrub	3.58	0.14	0.13	3.57 (-0.01)
Southern Mixed Chaparral	15.03	0.27	4.99	19.75 (+4.72)
Non-native Grassland	0.23	0.14	0.49	0.58 (+0.35)
Freshwater Marsh	0.13	--	--	0.13 (0)
Disturbed Land	--	--	--	--
TOTAL	**18.97**	**0.55**	**5.61**	**24.03 (+5.06)**

The overall MSCP policy for BLAs requires that they must transfer equal or higher biological values of impacted species and habitats into the preserve. A comparison of the biological values of the impacted areas and land to be transferred into the preserve is presented below. This comparison is based on the six biological factors required by the MSCP for a MHPA BLA.

Effects on Significantly and Sufficiently Conserved Habitats

- The amount and distribution of habitats considered significantly and sufficiently conserved within the preserve areas would be functionally equivalent to the impacted areas. The BLA would also result in an increase in total area due to an increase in acreage of southern mixed chaparral and non-native grassland. The areas of coastal sage scrub, southern mixed chaparral, and non-native grassland conserved together on-site within the adjusted MHPA would add approximately 5.06 acres of native habitat in excess of the amount of native habitat deleted, resulting in increases in the area of significantly conserved Tier IIIA and IIIB habitats within the MSCP subarea. The habitat value would be functionally higher relative to the current MHPA, despite the minor loss (0.01 acre) of coastal sage scrub as there would be a net gain of undisturbed native habitat to the MHPA. Thus, the proposed habitat exchange

would maintain and slightly improve the conservation, configuration, and area of significantly or sufficiently conserved habitats within this portion of the MHPA.

Effects to Covered Species

- The approved land exchange in this portion of the MHPA would maintain the overall conservation of covered species, as no covered species occur within the area to be deleted from the MHPA. The addition of southern mixed chaparral and non-native grassland habitats within the lands to be added to the MHPA may increase habitat for covered species that may occur in the vicinity of the project (e.g., coastal California gnatcatcher [*Polioptila californica californica*], Cooper's hawk [*Accipiter cooperii*]).

Effects on Habitat Linkages and the Function of Preserve Areas

- The project site is part of, and adjacent to, an existing open space area. Although it is reasonable to assume that wildlife may currently move locally through the project area, the site is somewhat restricted by residential development and paved roads in the Heritage Bluffs II project to the northeast. Currently, local wildlife movement may occur on the Avion site to the west, east, and south as the site is adjacent to MHPA lands within the undeveloped Black Mountain Park Open Space. In addition, some local north-south wildlife movement is possible along the ephemeral drainages that occur in the bottoms of the canyons. The proposed private drive crossing of the eastern drainage would be constructed as an arch culvert with a span of approximately 42 feet wide and 21 feet high, a span and height that would continue to allow local wildlife movement through this area.

  Although the Avion project would have minor affects to the existing habitat linkages to the southwest of the Heritage Bluffs II project through the loss of habitat, the MHPA boundary adjustment would offset this affect through the preservation of habitat linkages along the west, east, and south sides of the project where newly added MHPA area would occur. The addition of these conserved lands would preserve the local habitat linkages in these directions.

  Therefore, effects of the approved changes to the MHPA boundary would be negligible with respect to the function of the preserve area and habitat linkages. All of the changes approved are adjacent to a major wildlife corridor and associated linkages that would remain intact with linkages present.

Effects on Preserve Configuration and Management

- The proposed modifications to the MHPA boundary do not change the proportions or decrease the total area of the MHPA. The minor changes in shape or length of edges of the MHPA boundary are due to relatively small encroachments by the project. These minor encroachments into the MHPA would be offset by gains in native habitat acreage primarily on the southern portion of the site. The resulting MHPA preserve area configuration would be similar to the pre-construction condition and include the addition of land to the MHPA. The approved changes to the MHPA boundary would not conflict with any of the previously

identified conservation or management needs for the subarea or cause the need for additional measures.

Effects on Ecotones or Other Conditions Affecting Species Diversity

- The proposed changes to the MHPA boundary at this location would improve the extent of open space and local habitat linkages to the surrounding MHPA preserve lands. These modifications to the MHPA would maintain the local topographic and structural diversity of the preserve while slightly improving the habitat interfaces along the southern, western, and eastern project site borders over the current preserve design at this portion of the MHPA.

Effects to Species of Concern Not Covered under the MSCP

- The proposed MHPA BLA at this location would not significantly increase the likelihood that any uncovered species would be listed under either the federal or state Endangered Species Act. The observed nest of the San Diego woodrat would be avoided and the surrounding habitat would be preserved in open space.

The proposed MHPA boundary line adjustment was approved by the Wildlife Agencies and City MSCP on June 21, 2019. Once the boundary line adjustment is completed, no direct impacts or loss of MHPA lands would result from the project. The proposed MHPA BLA would be beneficial to the overall MHPA preserve at this location due to an increase in Tier IIIA and IIIB habitats and acreage of preserved land. The minor losses of coastal sage scrub, southern mixed chaparral, and non-native grassland habitats from encroachments into the current MHPA total 0.55 acre and would be offset by additions of coastal sage scrub, southern mixed chaparral, and non-native grassland habitats into the MHPA currently located within the southern portion of the project site totaling 5.06 acres. This proposed land exchange complies with the overall MSCP policy for BLAs, as the approved BLA would transfer equal or higher biological values of impacted species and habitats into the preserve.

b. Area Specific Management Directives

Measures to protect the MHPA are outlined in the MSCP and include general and specific guidelines for development within and adjacent to the MHPA, and management and monitoring goals for specific areas, habitat, and species. These guidelines are intended to preclude impacts, particularly those related to urban edge effects which include (but are not limited to) trampling, dumping, vehicular traffic, competition with invasive species (i.e., parasitism or predation from invasive animal species and habitat degradation from introduction of non-native plant species), predation by domestic animals, noise, collecting, recreational activities, and other human intrusion (City of San Diego 1997). Appendix A of the MSCP (City of San Diego 1997) also outlines species specific conditions of coverage for all covered species. These conditions of coverage are outlined in below.

Belding's Orange-throated Whiptail

The area-specific management directives (ASMDs) for Belding's orange-throated whiptail must address edge effects.

- To address edge effects, the entire development footprint shall be located outside of the MHPA. Manufactured slopes adjacent to the MHPA would be steep and relatively high to minimize potential edge effects and prevent encroachment into the MHPA. These slopes would be revegetated with native species.

Cooper's Hawk

The ASMDs for Cooper's hawk include a 300-foot impact avoidance area around active nests, and minimization of disturbance in oak woodlands and oak riparian forests.

- Should an active Cooper's hawk, or raptor nest, be detected within the MHPA during the pre-grading survey, discussed in Section 7.2.1, appropriate construction setback of 300 feet will be implemented until the fledglings are independent of the nest.

Coastal California Gnatcatcher

For coastal California gnatcatchers, the ASMDs must include additional measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure. No clearing of occupied habitat within the City of San Diego's MHPAs may occur during this species' breeding season between March 1 and August 15.

- The entire development footprint is outside of the MHPA. The manufactured slopes adjacent to the MHPA would be steep, relatively high, and revegetated with native species; therefore, the proposed project should not increase edge effects in the MHPA. A buffer occurs between the development footprint and the MHPA which should help protect from accidental fires spreading into the MHPA from the proposed project. As stated in the MHPA Adjacency Guidelines under Brush Management, vegetation clearing will be done consistent with City of San Diego standards and will avoid/minimize impacts to species such as the coastal California gnatcatcher.

Southern California Rufous-crowned Sparrow

For this species, the management directive includes maintenance of dynamic processes, such a fire, to perpetuate some open phases of coastal sage scrub with herbaceous components.

- The project would not alter the current dynamic processes, such as fire, as a buffer is provided between the development footprint and the MHPA which should help protect from accidental fires spreading into the MHPA from the proposed project.

c. MHPA Adjacency

MHPA surrounds the project's development footprint. As described in the MSCP, when land is developed adjacent to the MHPA, there is a potential for indirect impacts, or edge effects, that may degrade the habitat value or disrupt animals within the preserve area. These impacts could be short-term, resulting from construction activities, or long-term. Short-term construction impacts could result in disruption of nesting and breeding, and could thus affect the population of sensitive species. Long-term impacts would be associated with drainage, toxins, lighting, noise, invasives, brush management, access to MHPA, and grading/land development. Potential impacts to the adjacent MHPA would include an increase in urban pollutants entering sensitive water bodies, an increase in night lighting, habitat disturbance, removal of plant cover due to hiking, biking, and other human activities, increased presence of toxins, increased presence of non-native and invasive plant species, and pollutants (fugitive dust). Thus, projects adjacent to MHPA areas are subject to the MHPA Land Use Adjacency Guidelines.

The project has the potential for indirect impacts to the adjacent MHPA along the western, eastern, and southern boundaries. As stated in the MSCP Section 1.4.3 (City of San Diego 1997), land uses adjacent to the MHPA are to be managed to ensure minimal impacts to the MHPA. The MSCP establishes adjacency guidelines to be addressed on a project-by-project basis to minimize direct and indirect impacts and maintain the function of the MHPA. The guidelines listed in Section 1.4.3 of the MSCP (City of San Diego 1997) are outlined below with corresponding project action. Implementation of the MHPA Land Use Adjacency Guidelines would become conditions of project approval. Note that the discussion below first reiterates the MSCP MHPA Land Use Adjacency Guideline (*italicized* text) and then analyzes the project's compliance with the guideline.

Drainage

All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate (City of San Diego 2013).

- The project has been designed so as to not drain directly into the MHPA. All drainage will be treated on-site within the development footprint using detention/water quality basins to dissipate/detain and filter/treat runoff. The runoff from the development (storm water, irrigation, etc.), with the exception of the eastern fill slope, would be captured in storm drains that flow to the bioretention basin located in the northern portion of the site. The eastern fill slope would drain directly into the existing drainage course. Temporary irrigation of this slope would occur during the establishment of native vegetation to stabilize the slope and this supplemental irrigation would be discontinued within a couple of years. Irrigation rates during this period could be adjusted to minimize any excess runoff.

Toxics

Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal (City of San Diego 2013).

- The project would incorporate measures to reduce impacts caused by the application and/or drainage of chemicals or project generated by-products such as pesticides, herbicides, animal waste, and other substances that are potentially toxic or impactive to native habitats/flora/fauna (including water) into the MHPA. All construction-related activity that may have potential for leakage or intrusion shall be monitored by the Qualified Biologist/Owner's Representative or Resident Engineer to ensure there is no impact to the MHPA. The project has been designed to limit post-development storm water runoff discharge rates and velocities to maintain or reduce pre-development erosion and to reduce nutrients, organic compounds, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides by applying best management practices (BMPs).

  Construction BMPs, such as monitoring, flagging, staking or silt/bio fencing around sensitive areas would be used to ensure toxins from construction and project implementation would not impact the MHPA.

Lighting

Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting (City of San Diego 2013).

- Lighting for the project would be shielded and/or directed away from the MHPA. Lighting for the project would be responsive to the species in the area as well as the overall rural surroundings. Understanding that some species rely on darkness for shelter, feeding patterns, migrating, etc., the areas adjacent to any MHPA would be especially sensitive to light exposure in order to retain native characteristics. Placement and use of lighting associated with the project would be designed to be shielded and directed downward to minimize light pollution of adjacent MHPA lands and accommodate the habits of nocturnal species that prefer to move and forage in darkness.

  Additionally, the MHPA is located at the bottom of a manufactured slope and there would be a 20- to 30-foot elevation difference from the project. Any lighting for the project at the top of the slope would be shielded and directed away from the MHPA such that no direct illumination would occur towards the MHPA.

Noise

Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year (City of San Diego 2013).

- There is suitable Diegan coastal sage scrub habitat within the MHPA in the northwestern and northeastern portions of the site to support coastal California gnatcatcher. Protocol surveys shall be conducted to determine the presence or absence of this sensitive bird species if construction occurs within its breeding season noted above. If coastal California gnatcatcher is present within the MHPA, construction noise levels at the MHPA boundary shall not exceed 60 A-weighted decibels. Additionally, development adjacent to the MHPA has been designed to minimize noise impacts to coastal California gnatcatcher. A benefit of the project design is the MHPA is at a lower elevation than the entire project site; therefore, it is not anticipated that the MHPA will be impacted by excessive noise.

Brush Management

New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zones 2 and 3 will be combined into one zone (Zone 2) and may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA (City of San Diego 2013).

- Brush management is required on all premises that are within 100 feet of a structure and contain highly flammable, native, or naturalized vegetation. The standard brush management zone (Zone) widths are 35 feet for Zone 1 and 65 feet for Zone 2 as stated in Table 142-04h of the City Municipal Code. The project proposes to implement Alternative Compliance measures to traditional brush management zones that involve a reduction in Zone 1 limits consistent with the current requirements of Municipal Code Section 142.0412. By reducing the Zone 1 limit and providing a non-combustible wall between Zone 1 and Zone 2, the overall impact to vegetation is reduced as the graded area is less. All Zone 1 impacts are located within the grading limits. The majority of the Zone 2 impacts are also located within the grading limits. Although 1.32 acres of Zone 2 impacts to southern mixed chaparral lie outside of the grading limits primarily on the western side of the project area, Zone 2 impacts are considered "impact neutral" and involve only minor thinning, trimming, and pruning of vegetation without destroying habitat value. This 1.32-acre of Zone 2 located in southern mixed chaparral habitat is not included in the project's mitigation area and is not counted toward satisfying mitigation acreage. The Zone 2 zones located adjacent to the MHPA would be managed by the homeowners association. Therefore, the proposed brush management zones would comply with the City requirements.

Invasives

No invasive non-native plant species shall be introduced into areas adjacent to the MHPA (City of San Diego 2013).

- The project planting palette does not include any invasive or non-native plant species adjacent to the MHPA area. Additionally, according to City standards for brush management, Zone 2 will include only native, locally indigenous species.

  Native shrub species and hydroseed would be installed on the manufactured slope adjacent to the MHPA on the western and eastern slopes of the project and only temporarily irrigated until the plants have become established. It is recommended that they be irrigated using a temporary aboveground irrigation system. The plants should be installed in late winter to early spring, as this is the optimal time for native plant growth and seed germination. A 120-day plant establishment period and a 24-month maintenance and monitoring period are necessary to ensure that the native plants establish successfully. Maintenance activities would involve control of non-native plant species, maintenance and removal of the temporary irrigation system, and replacement planting (if necessary). The site should be monitored by a biologist quarterly to evaluate site conditions and to recommend remedial actions, if needed.

Barriers/Access

New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation (City of San Diego 2013).

- The project would include boundary fencing along lots at the top of slopes and at the edge of most private drives to delineate residential use areas from adjacent MHPA open space areas. Lots adjacent to MHPA open space would have a glass-block view fence and lots at the top of slopes would have a metal picket view fence. The entry private drive would have a 3-rail concrete fence to deter access to the adjacent MHPA open space area. The private drive segment that terminates in the southwest portion of the site dead ends into a steep cut slope which with signage would deter pedestrian access to the MHPA. The private drive segment in the southeast portion of the site adjacent to open space would be at the top of a steep slope that, along with signage, would restrict access to the adjacent MHPA located at the toe of the slope.

- Signs should be posted at the edge of unfenced private drives and along perimeter segments fenced with the 3-rail concrete fence to inform residents of the restricted adjacent MHPA open space preserve areas.

- The project would include native vegetated slopes adjacent to the MHPA boundary. These vegetated steep slopes (2.2:1-1.5:1) would also function as a deterrent to pedestrian access into the MHPA.

Grading/Land Development

Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA (City of San Diego 2013).

- The proposed manufactured slopes for the project do not encroach into the MHPA.

5.1.5.3 Significance of Impacts

The project would not conflict or be inconsistent with adopted environmental plans for the area. Therefore, impacts would be less than significant.

5.1.5.4 Mitigation, Monitoring, and Reporting

Mitigation would not be required.

Image Source: NearMaps (flown February 2019)



Project Boundary

Heritage Bluffs Boundary

CURRENT LAND USE

RESIDENTIAL

Single Family Residential

Multi-Family Residential

COMMERCIAL AND OFFICE

Commercial and Office

PUBLIC FACILITIES AND UTILITIES

Transportation, Communications, Utilities

Education

Institutions

PARKS AND RECREATION

Recreation

Open Space Parks

UNDEVELOPED

Undeveloped

0 Feet 1,000

M:\JOBS5\8958\common_gis\fig5.1_1_EIR.mxd 6/27/2019 bma

FIGURE 5.1-1
Existing Land Use Designations

5.2 Biological Resources

This section evaluates potential biological resources impacts associated with the project. The following discussion is based on the Biological Technical Report and appendices (including the Jurisdictional Waters Delineation) (RECON 2019a) prepared by RECON and included as Appendix B.

5.2.1 Relationship to the Black Mountain Ranch (Subarea I) Subarea Plan

The analysis in this section updates the biological resources analysis in the 1998 Environmental Impact Report (EIR), with an emphasis on effects that were not addressed in the previous report.

5.2.2 Existing Conditions

RECON biologists conducted a general biological survey of the project site on November 13 and December 8, 2017, to document the existing conditions of the biological resources occurring on the site. The project site was walked on foot and notes were taken on the flora and fauna observed during the survey (Table 5.2-1). A jurisdictional waters delineation was conducted on November 29, 2017 on the site to locate the extent of any wetland and non-wetland waters. A spring survey for sensitive plant species was conducted on the site on March 21, 2018. This survey also included a focused spring survey for thread-leaved brodiaea. Additional focused surveys for thread-leaved brodiaea were conducted on March 14 and April 12, 2019.

Table 5.2-1
Survey Dates, Times, and Weather Conditions

Date	Surveyors	Type of Survey	Beginning Conditions	Ending Conditions
11/13/17	Gerry Scheid Beth Procsal	General Biology Survey	8:00 a.m.; 60° F; wind 0-1 mph; 60% cloud cover	12:00 p.m.; 72° F; wind 0-1 mph; 40% cloud cover
11/29/17	Gerry Scheid	Wetland Delineation	12:00 p.m.; 75° F; wind 0-1 mph; 30% cloud cover	5:00 p.m.; 65° F; wind 0-1 mph; 30% cloud cover
12/8/17	Gerry Scheid Beth Procsal	General Biology Survey	8:00 a.m.; 65° F; wind 0-1 mph; 50% cloud cover	12:00 p.m.; 74° F; wind 0-1 mph; 20% cloud cover
3/21/18	Gerry Scheid	Spring Rare Plant Survey; Focused Thread-leaved Brodiaea Survey	10:00 a.m.; 70° F; wind 0-5 mph; 20% cloud cover	2:00 p.m.; 75° F; wind 0-5 mph; 20% cloud cover
3/14/19	Gerry Scheid	Spring Rare Plant Survey; Focused Thread-leaved Brodiaea Survey	NA	NA
4/12/19	Gerry Scheid	Spring Rare Plant Survey; Focused Thread-leaved Brodiaea Survey	NA	NA

NA = not applicable.
° F = degrees Fahrenheit; mph = miles per hour

5.2.2.1 Botany

Four vegetation communities and one land cover type occur on the project site (Table 5.2-2). Southern mixed chaparral comprises the majority of the site with lesser acreages of coastal sage scrub, non-native grassland, and freshwater marsh patches (Figure 5.2-1). A total of 62 plant species (36 native and 26 non-native species) were observed during the survey (Appendix B - Attachment 1). A description of each of these vegetation communities and land cover types is provided below.

Table 5.2-2
Existing Vegetation Communities and Land Cover Types
(acres)

Vegetation Communities/ Land Cover Types	Existing Acres Inside MHPA	Existing Acres Outside MHPA	Total
Coastal Sage Scrub	3.58	0.74	4.32
Southern Mixed Chaparral	15.03	19.36	34.39
Non-native Grassland	0.23	2.06	2.29
Freshwater Marsh	0.13	--	0.13
Disturbed Land	--	0.35	0.35
TOTAL	**18.97**	**22.51**	**41.48**
MHPA = Multi-Habitat Planning Area			

a. Coastal Sage Scrub

Patches of coastal sage scrub vegetation occur in the northeast corner and northwest portion of the site. Black sage (*Salvia mellifera*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac, and California sagebrush (*Artemisia californica*) make up this shrub community. Coastal sage scrub is ranked as a Tier II habitat.

b. Southern Mixed Chaparral

The southern mixed chaparral on the site is dominated by a mixture of chaparral shrub species that includes chamise (*Adenostoma fasciculatum*), laurel sumac (*Malosma laurina*), mission manzanita (*Xylococcus bicolor*), toyon (*Heteromeles arbutifolia*), and lilac (*Ceanothus tomentosus*). Dense chaparral covers the slopes to the east and west while a more open chaparral occurs along the ridge and eastern flank. Southern mixed chaparral is ranked as a Tier IIIA habitat.

c. Non-native Grassland

Non-native grassland occurs in the northeast portion of the site in the flatter land where past land use was most intense. The grassland area supports a mixture of non-native annual grasses such as purple falsebrome (*Brachypodium distachyon*), smooth brome (*Bromus hordaceous*), red brome (*Bromus madritensis*), ripgut grass (*Bromus diandrus*), and slender wild oat (*Avena barbata*). Scattered non-native trees were planted in this area and include species of eucalyptus (*Eucalyptus* spp.), Italian cypress (*Cupressus sempervirens*), Canary Island pine (*Pinus canariensis*), and Peruvian peppertree (*Schinus molles*). Non-native grassland as a Tier IIIB habitat.

d. Freshwater Marsh

Two impoundments occur along the drainage course within the eastern canyon. These impoundments have been breached and do not hold water for long durations anymore, but do support herbaceous freshwater marsh vegetation. Plant species observed in the impoundments include annual beardgrass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), pale spike rush (*Eleocharis macrostachya*), alkali heliotrope (*Heliotropium curassavicum*), and hedge nettle (*Stachys rigida*). Freshwater marsh is considered a type of wetland habitat.

e. Disturbed Land

A small area of disturbed land occurs in the north-central portion of the site where past land use had altered the soils. Non-native plants such as black mustard (*Brassica nigra*), star-thistle (*Centauria meletensis*), stinkwort (*Dittrichia graveolens*), and Italian thistle (*Carduus pycnocephalus*) dominate this area in a dense stand.

5.2.2.2 Zoology

A list of the wildlife species detected in the survey areas is provided in Appendix B - Attachment 2. A general discussion of wildlife usage in the survey areas is presented below.

a. Amphibians

No amphibians were observed during the survey. The site lacks a permanent water source; therefore, it is unlikely that amphibians occur on the site.

b. Reptiles

No reptile species were observed during the survey. The site likely supports a small population of common lizard species such as the western fence lizard (*Sceloporus occidentalis*) and side-blotched lizard (*Uta stansburiana*).

c. Birds

Fifteen bird species were observed on the site during the survey. Common bird species observed include wrentit (*Chamaea fasciata henshawi*), black phoebe (*Sayornis nigricans semiatra*), and Anna's hummingbird (*Calypte anna*).

d. Mammals

Four mammal species were detected on the site. Coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), and southern mule deer (*Odocoileus hemionus fuliginata*) were all detected by the presence of their scat. San Diego desert woodrat (*Neotoma lepida intermedia*; CDFW Species of Special Concern) was detected by the presence of a nest.

5.2.2.3 Sensitive Biological Resources

a. Sensitive Vegetation Communities

Coastal sage scrub, southern mixed chaparral, non-native grassland, and freshwater marsh are all considered sensitive vegetation types under the City (City of San Diego 2012). Coastal sage scrub is ranked as a Tier II habitat, southern mixed chaparral as a Tier IIIA habitat, non-native grassland as a Tier IIIB habitat, and freshwater marsh as a wetland habitat. All these habitat designations require mitigation for impacts to these habitat types.

b. Sensitive Plant Species

A spring survey to look for sensitive plant species was conducted on the site on March 21, 2018. No sensitive plant species were observed during the spring survey and none are expected to occur on the site. A list of sensitive plant species, including species endemic to San Diego County, with the potential for occurrence on the site is provided in Appendix B - Attachment 3.

One sensitive plant species, thread-leaved brodiaea (*Brodiaea filifolia*), was initially considered to have a potential to occur on the project site solely due to close proximity to a known population to the north that occurs within the Heritage Brodiaea Preserve. The Heritage Brodiaea Preserve population of thread-leaved brodiaea occurs within open space set aside as part of the Heritage Bluffs II development project. Over ten thousand individual thread-leaved brodiaea plants have been documented in this preserve. The thread-leaved brodiaea in the Heritage Brodiaea Preserve occur on heavy clay soils.

A focused spring survey for thread-leaved brodiaea was also conducted on the Avion project site on March 21, 2018. Additional focused surveys for thread-leaved brodiaea were conducted on March 14 and April 12, 2019. These surveys were timed to coincide with the emergence and observability of the existing population of this species within the Heritage Brodiaea Preserve. No thread-leaved brodiaea plants were observed on the Avion project site and none are expected to occur. Therefore, there is a low potential for this species to occur on the site due to the following several factors.

- Historically Chaparral/Sage Scrub Habitat – A review of historical aerial photographs back to 1953 show that the Avion project area was vegetated with shrublands (i.e., chaparral, coastal sage scrub) while the location of the Heritage Preserve to the north has been grassland to the present. By the mid-1960s the Avion site had an established homestead that cleared the surrounding shrublands for access, buildings, and local agricultural activities. The non-native grassland areas that currently occur on the site colonized some of these disturbed areas once they were abandoned.

- Poor Quality Grassland Habitat – The non-native grassland vegetation on the project site has been subject to historical disturbances (e.g., dirt roads, clearing, agricultural activities, homestead, etc.). The non-native grassland that developed after the homestead was abandoned grew a tall, thick thatch that makes it difficult for herbaceous species other than grasses to persist. This grass thatch is much taller and denser than that where the known thread-leaved brodiaea population to the north occurs. The non-native grassland on the site

currently supports an active gopher population that is present throughout the habitat. This level of gopher activity confined to a relatively small area creates conditions that are not suitable for plants that grow from bulbs or corms.

- Low Plant Species Composition – The existing non-native grassland areas on the site are comprised of dense stands of non-native grasses almost to the complete exclusion of other plant species. No plant species from bulbs or corms occur in the grassland on the site. This condition is in sharp contrast to the Heritage Brodiaea Preserve where the less dense grassland (i.e., lower thatch development) habitat on heavy clay soil supports bulb and corm species such as thread-leaved brodiaea, blue-eyed grass, blue dicks, death camas, and goldenstar in relatively large numbers.

- Lack of Clay Soil – Thread-leaved brodiaea in San Diego County occurs primarily on clay soils that are moist during the spring, typically derived from granitic rock, and that support native grassland, annual grasslands, alkali grasslands, or open sage/chaparral scrub habitats (U.S. Fish and Wildlife Service [USFWS] 1998, 2005). The species may also occur on soils with a clay subsurface, or clay lenses within loamy, silty loam, loamy sand, silty deposits with cobbles, or alkaline soils. The Avion site occurs on shallow San Miguel-Exchequer rocky silt loam soils derived from meta-volcanic rock. The brodiaea population within the Heritage Preserve to the north occurs solely on Auld clay soils. This Auld clay soil lens does not extend onto the Avion site.

- Past Surveys – Thread-leaved brodiaea was not observed on the project site during a past biological survey conducted on the site in 2013 (RECON 2013). Numerous other surveys conducted over the last five years of the adjacent land to the north where the Heritage Bluffs II and East Clusters development projects are located did not find thread-leaved brodiaea in close proximity to the southern boundary of the Avion project site.

c. Sensitive Wildlife Species

Two sensitive wildlife species were observed during the survey. A Cooper's hawk (*Accipiter cooperii*) was observed flying over the project site. A nest of the San Diego desert woodrat was observed in the chaparral vegetation. The woodrat nest is located in dense chaparral in the northeastern portion of the project site to the east of the drainage course (see Figure 5.2-1).

Four other sensitive species have a moderate potential to occur on the project site due to the habitat conditions. Two sensitive reptile species, Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*) and coastal whiptail (*Aspidoscelis tigris stejnegeri*), may occur in small numbers in the shrub land habitats on the project site. Two sensitive bird species, coastal California gnatcatcher (*Polioptila californica californica*) and southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), have the potential to occur in small numbers in the coastal sage scrub and southern mixed chaparral areas on the project site. A list of sensitive wildlife species with the potential to occur on the site is provided in Appendix B - Attachment 4.

A habitat assessment for the potential for the site to support western burrowing owl (*Athene cunicularia hypugaea*) was conducted during the general survey of the site. It was determined that there is a low potential for this species to occur on-site, as the non-native grassland present is likely

too small an acreage to support burrowing owl, the structure of the grassland (i.e., tall, dense) is not optimal for burrowing owl, and the lack of observations of suitable burrows, burrow complexes, or any sign of burrowing owl presence on-site.

d. Jurisdictional Waters and Wetlands

The drainage courses, their tributaries, and the two impoundment areas located on the project site are considered federal and state jurisdictional waters (Table 5.2-3). The major drainage courses are federal (USACE) non-wetland waters and state (CDFW, Regional Water Quality Control Board) streambed features that are ephemeral. These drainage courses do not support wetland vegetation, but occur within the upland chaparral habitat in the canyon bottoms. The two impoundments support herbaceous wetland plant species, hydric soils, and secondary wetland hydrology indicators, and therefore, are federal and state wetlands. The two impoundment areas support herbaceous wetland plants and, therefore, are considered a wetland under the City's Biology Guidelines (City of San Diego 2012).

Table 5.2-3
Jurisdictional Waters

Jurisdictional Waters Type	Existing Acres	Agency
Wetland	0.13	U.S. Army Corps of Engineers Regional Water Quality Control Board California Department of Fish and Wildlife City of San Diego
Non-wetland water/Streambed	0.63	U.S. Army Corps of Engineers Regional Water Quality Control Board California Department of Fish and Wildlife
TOTAL	**0.76**	

5.2.2.4 Wildlife Movement Corridors

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high-density population areas; and facilitate the exchange of genetic traits between populations (Beier and Loe 1992). Wildlife movement corridors are considered sensitive by the City and Wildlife Agencies.

Regional wildlife corridors were established as part of the MSCP planning that is documented in the Subarea Plan EIR. These established wildlife corridors connected the La Jolla Valley and associated Lusardi Creek lowlands to the Black Mountain Open Space Preserve to the east and south (Figure 5.2-2). The anticipated development boundary of the Avion property adjacent to the Black Mountain Open Space Preserve were accounted for in the development of these regional wildlife corridors. The Avion project site is surrounded by portions of the Black Mountain Open Space

Preserve and currently wildlife movement can occur across the property in all directions except from the northeast where movement is impeded by the existing Heritage Bluffs II residential area.

5.2.3 Regulatory Framework

5.2.3.1 Natural Habitat Conservation and Planning

The Natural Community Conservation Planning (NCCP) program was enacted by the State of California in 1991 to provide long-term regional protection of natural vegetation and wildlife diversity while allowing compatible development. The NCCP process was initiated to provide an alternative to single-species conservation efforts (habitat conservation plans). The NCCP is intended to provide a regional approach to the protection of species within a designated natural community. In the City, the MSCP is an outgrowth of this planning.

5.2.3.2 Multiple Species Conservation Program

The MSCP is a comprehensive, long-term habitat conservation planning program that covers approximately 900 square miles in southwestern San Diego County under the federal and state Endangered Species Acts and state NCCP Act of 1991. The planned MSCP regional preserve is targeted at 172,000 acres. Local jurisdictions, including the City, implement their portions of the regional umbrella MSCP through Subarea Plans, which describe specific implementing mechanisms. The City's MSCP Subarea Plan was approved in March 1997. The City's MSCP study area includes 206,124 acres within its municipal boundaries. The City's planned MSCP preserve totals 56,831 acres, with 52,012 acres (90 percent) targeted for preservation. In 2004, the City committed to increasing the conservation target by 715 acres in association with revisions to the City's brush management regulations in response to local fires.

The MSCP Subarea Plan is a plan, which established the process for the issuance of incidental take permits (ITP) for listed species under Section 10(a)(1)(B) of the federal Endangered Species Act (ESA) and Section 2835 under the state ESA. The primary goal of the MSCP Subarea Plan is to conserve viable populations of sensitive species and to conserve regional biodiversity while allowing for reasonable economic growth. In July 1997, the City signed an Implementing Agreement with the USFWS and the CDFW. The Implementing Agreement serves as a binding contract between the City, the USFWS, and the CDFW that identifies the roles and responsibilities of the parties to implement the MSCP and Subarea Plan. The agreement allows the City to issue incidental take authorizations for "MSCP Covered" species. Applicable state and federal permits are still required for wetlands and listed species that are not covered by the MSCP.

"MSCP Covered" refers to species covered by the City's federal ITP issued pursuant to Section 10(a) of the federal ESA (16 United States Code § 1539(a)(2)(A)). Under the federal ESA, an ITP is required when non-federal activities would result in "take" of a threatened or endangered species. A habitat conservation plan (HCP) must accompany an application for a federal ITP. Take authorization for federally listed wildlife species covered in the HCP shall generally be effective upon approval of the HCP.

5.2.3.3 Multi-Habitat Planning Area

One of the primary objectives of the MSCP is to identify and maintain a preserve system which allows for animals and plants to exist at both the local and regional levels. The MSCP has identified large blocks of native habitat having the ability to support a diversity of plant and animal life known as "core biological resource areas." "Linkages" between these core areas provide for wildlife movement. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. Input from responsible agencies and other interested participants resulted in creation of the City's Multi-Habitat Planning Area (MHPA). The MHPA is the area within which the permanent MSCP preserve would be assembled and managed for its biological resources.

In accordance with the MSCP, for parcels located outside the MHPA:

> there is no limit on encroachments into sensitive biological resources, with the exception of wetlands and listed non-covered species' habitat [which are regulated by federal and state agencies and narrow endemic species as described below] … impacts to sensitive biological resources must be assessed, and mitigation, where necessary, must be provided in conformance with Section III of [the City's Biological Guidelines]. (City of San Diego 2012)

To address the integrity of the MHPA, guidelines were developed to manage land uses adjacent to the MHPA. The adjacency guidelines are intended to be addressed on a project-by-project basis either in the planning or management stage. These guidelines address the issues of drainage, toxics, lighting, noise, invasives, brush management, access to MHPA, and grading/land development. As shown in Table 5.2-2, 18.97 acres of the project is site is currently located within the MHPA.

5.2.3.4 Land Development Code/Environmentally Sensitive Lands

On December 9, 1997, the Environmentally Sensitive Lands (ESL) Regulations were adopted by ordinance as a part of the Land Development Code (LDC). The purpose of the ESL Regulations is to protect and preserve environmentally sensitive lands (e.g., sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and special flood hazard areas), along with the viability of the species supported by those lands. The regulations are intended to assure that development occurs in a manner that protects the overall quality of the resources and the natural and topographic character of the area. The ESL defines "sensitive biological resources" as those lands included within the MHPA as identified in the MSCP Subarea Plan, and other lands outside of the MHPA that contain: wetlands; vegetation communities classifiable as Tier I, II, IIIA or IIIB; habitat for rare, endangered or threatened species; or narrow endemic species. Per this definition, the entire project site, with the exception of 0.35 acres of disturbed land located outside the MHPA, qualifies as sensitive biological resources subject to ESL.

5.2.3.5 Land Development Manual/Biology Guidelines

The Biology Guidelines aid in the implementation and interpretation of ESL Regulations. Also, Section III of these Guidelines (Biological Impact Analysis and Mitigation Procedures) also serves as

standards for the determination of impact and mitigation under the California Environmental Quality Act (CEQA). The guidelines are the baseline biological standards for processing Neighborhood Development Permits, Site Development Permits and Coastal Development Permits issued pursuant to the ESL.

5.2.3.6 California Fish and Game Code and Migratory Bird Treaty Act

Raptors (birds of prey) and active raptor nests, as well as most other bird nests, are protected by the California Fish and Game Code 3503.5, which states that it is "unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird" unless authorized. In addition, active nests of most bird species are protected during the breeding season under the federal Migratory Bird Treaty Act (MBTA).

5.2.4 Issues 1, 2, and 3: Sensitive Biological Resources

- Would the proposal result in substantial adverse impacts, either directly or through habitat modifications, to any species identified as a candidate, sensitive or special status species in the MSCP or other local or regional plans, policies or regulations, or by the CDFW or USFWS?

- Would the proposal result in a substantial adverse impact on any Tier I, Tier II, Tier IIIA or Tier IIIB habitats as identified in the Biology Guidelines of the Land Development Code or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

- Would the proposal result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pools, riparian areas, etc.) through direct removal, filling, hydrological interruption, or other means?

5.2.4.1 Threshold(s)

In accordance with the City's Significance Determination Thresholds and LDC Biology Guidelines, the project would have a significant impact if it would:

- Result in a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by CDFW or USFWS;

- Result in a substantial adverse impact on any Tier I habitats, Tier II habitats, Tier IIIA habitats, or Tier IIIB habitats as identified in the Biology Guidelines of the Land Development Manual or other sensitive natural community identified in local or regional plans, policies or regulations, or by CDFW or USFWS; and/or

- Result in a substantial adverse impact on wetland (including, but not limited to, marsh, vernal pools, riparian areas, etc.) through direct removal, filling, hydrological interruption, or other means.

5.2.4.2 Impacts

a. Vegetation Communities

Project grading would impact coastal sage scrub, southern mixed chaparral, non-native grassland, and disturbed land both inside and outside of the MHPA (Table 5.2-4). The project proposes to implement Alternative Compliance measures to traditional brush management zones that involve a reduction in brush management zone (BMZ) 1 limits. By reducing the BMZ 1 limit and providing a non-combustible wall between BMZ 1 and BMZ 2, the overall impact to vegetation is reduced as all BMZ 1 impacts would be located within the grading limits. The majority of the BMZ 2 impacts are also located within the grading limits; however, 1.32 acres of BMZ 2 impacts to southern mixed chaparral lie outside of the grading limits primarily on the western side of the project area (Figure 5.2-3). The BMZ 2 impacts are considered "impact neutral" and involve only minor thinning, trimming, and pruning of vegetation.

Table 5.2-4
Impacts to Vegetation Communities and Land Cover Types
(acres)

Vegetation Communities/ Land Cover Types	Permanent Impact[1]		Construction Zone Impact[2]		
	Inside MHPA[3]	Outside MHPA	Inside MHPA	Outside MHPA	**Total**
Coastal Sage Scrub	0	0.53	0	0.03	**0.56**
Southern Mixed Chaparral	0	13.04	0	0.10	**13.14**
Non-native Grassland	0	1.33	0	0.17	**1.50**
Freshwater Marsh	0	0	0	0	**0**
Disturbed Land	0	0.35	0	0	**0.35**
TOTAL	**0**	**15.25**	**0**	**0.30**	**15.55**

[1]Includes all Brush Management Zone 1 impacts.
[2]Construction Zone impact area refers to area needed for remedial work to construct the manufactured slopes (see Figure 5.2-3).
[3]Assumes MHPA Boundary Line Adjustment approved

b. Sensitive Plants

No sensitive plant species were observed on the project site and none are expected to occur due to lack of appropriate habitat and/or soil conditions.

c. Sensitive Wildlife

General Wildlife: Direct impacts are anticipated to occur to small mammals and reptiles with low mobility during the grading of the project site. A biological monitor would be required to be present on-site during grading to preclude any avoidable/known impacts. Birds which are not nesting are expected to be able to avoid being impacted.

Sensitive Wildlife: The San Diego desert woodrat nest observed on-site occurs approximately 50 feet east of the grading limit and 45 feet east of where the limit fence would be placed. Therefore, impacts to the San Diego desert woodrat would not occur.

Potential impacts to species with a moderate potential for occurrence (e.g., Belding's orange-throated whiptail, coastal whiptail, southern California rufous-crowned sparrow) are not expected to affect a large number of individuals; therefore, any impacts to these species are not considered significant. Potential impacts to the Cooper's hawk would be considered significant.

Direct impacts could occur to Cooper's hawk and/or rufous-crowned sparrow that have a moderate to high potential to occur within the project area due to mass grading and vegetation removal. Impacts to these species identified as listed, candidate, sensitive, or special status in the MSCP are considered significant and require biological monitoring and avoidance of typical nesting periods.

d. Jurisdictional Waters and Wetlands

The project would not impact any federal, state, or city jurisdictional waters, including wetlands. The major access private drive into the project site would cross the eastern drainage course with an arch-culvert type bridge crossing resulting in no permanent impacts to the bed or bank of the drainage. The drainage course would remain in its natural soft-bottom configuration. Grading limits along the western and eastern boundaries would not encroach into the ephemeral streambeds or wetlands.

In accordance with San Diego Municipal Code Section 143.0141, a wetland buffer that ranges between 171 feet and 186 feet is being maintained on the eastern side of the project to protect and maintain the functions and values of the remaining on-site wetland areas (Figure 5.2-4). The buffer is located between the jurisdictional wetlands and the edge of the development to avoid and minimize any indirect edge effects to the wetlands. The buffer would include the manufactured 2.2:1 to 1.5:1 slopes to the east of the project, approximately 30 to 96 feet tall. These steep slopes would be revegetated with native species and also function as a barrier to pedestrians as the slopes would be too steep to walk. The wetland buffer distances would protect and maintain the biological, chemical, and physical functions of the wetlands.

5.2.4.3 Significance of Impacts

a. Vegetation Communities

Impacts to coastal sage scrub, southern mixed chaparral, and non-native grassland would be significant.

b. Sensitive Plants

No impacts to sensitive plant species would occur.

c. Sensitive Wildlife

Impacts to Cooper's hawk and/or rufous-crowned sparrow would be significant.

d. Jurisdictional Waters and Wetlands

No impacts to federal, state, or city jurisdictional waters, including wetlands, would occur.

5.2.4.4 Mitigation, Monitoring, and Reporting

a. Vegetation Communities

MM-BIO-1: Upland Vegetation Communities

Mitigation for impacts to coastal sage scrub (Tier II habitat), southern mixed chaparral (Tier IIIA habitat), and non-native grassland (Tier IIIB habitat) communities would be achieved through the preservation of habitat on the site located outside of the development area. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, the project would demonstrate to the satisfaction of the City that impacts to a total of 15.2 acres of sensitive vegetation would be mitigated by the on-site preservation of 24.03 acres of sensitive vegetation as summarized by habitat type in Table 5.2-5. The preserved habitat areas on the site would all be within the boundaries of the MHPA Boundary Line Adjustment (BLA) dedicated to the City in fee title. Acceptance of land dedicated in fee title is subject to approval by the City's Park and Recreation Open Space Division.

MM-BIO-2: Standard City Construction Measures

Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, mitigation for general impacts to biological resources would be incorporated via standard measures including general mitigation measures, biological protections during construction, (includes monitoring, preconstruction meetings, and development of a Biological Condition Monitoring Exhibit, etc.) as described below. These Biological Resources Protection requirements shall be depicted on the construction documents verbatim and implemented accordingly.

Table 5.2-5 Mitigation Requirement for Sensitive Vegetation Communities									
Vegetation Community (Tier)	Impact Inside MHPA	Mitigation Ratio with Preservation Inside MHPA	Sub-Total	Impact Outside MHPA	Mitigation Ratio with Preservation Inside MHPA	Sub-Total	Total Mitigation Requirement	On-site Preservation Inside MHPA[1]	Remaining Mitigation Requirement
Coastal Sage Scrub (Tier II)	0.14	1:1	0.14	0.60	1:1	0.60	0.74	3.53	0
Southern Mixed Chaparral (Tier IIIA)	0.32	1:1	0.32	12.99	0.5:1	6.49	6.81	19.47	0
Non-native Grassland (Tier IIIB)	0.14	1:1	0.14	1.58	0.5:1	0.79	0.93	0.53	0[2]
Freshwater Marsh (Wetland)	0	N/A	0	0	N/A	0	0	0.13	0
Total	**0.60**		**0.60**	**15.17**		**7.88**	**8.48**	**23.66**	**0**

[1]With Multi-Habitat PMHPA BLA.
[2]Assumes up-tier mitigation for non-native grassland.

Biological Resource Protection During Construction

I. Prior to Construction

A. **Biologist Verification** - The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City's Biological Guidelines (2012), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.

B. **Preconstruction Meeting** - The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.

C. **Biological Documents** - The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per the City's Biology Guidelines, MSCP, ESL Ordinance, project permit conditions; CEQA; endangered species acts (ESAs); and/or other local, state or federal requirements.

D. **Biological Construction Mitigation/Monitoring Exhibit** (**BCME)** - The Qualified Biologist shall present a BCME, which includes the biological documents in "C" above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including U.S. Fish and Wildlife Service protocol), timing of surveys, wetland buffers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City Assistant Deputy Director (ADD)/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.

E. **Avian Protection Requirements** - To avoid any direct impacts to Cooper's hawk, rufous-crowned sparrow, and coastal California gnatcatcher or any species identified as listed, candidate, sensitive, or special status in the MSCP, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of nesting for these three sensitive bird species on the proposed area of disturbance. The preconstruction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the preconstruction survey to the City's Development Services Department (DSD) for review and approval prior to initiating any construction activities. If nesting activities for any of the above-mentioned sensitive bird species are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable state and federal law (i.e., appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be

prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section or Resident Engineer, and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

F. **Resource Delineation** - Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora and fauna species, including nesting Cooper's hawk, rufous-crowned sparrow, and coastal California gnatcatcher) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.

G. **Education** – Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).

II. During Construction

A. **Monitoring** – All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the preconstruction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR shall be e-mailed to the MMC on the first day of monitoring, the first week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.

B. **Subsequent Resource Identification** – The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on-site (e.g., flag plant specimens for avoidance during access, etc.). If active nests for Cooper's hawk, rufous-crowned sparrow, and coastal California gnatcatcher, or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.

III. Post Construction Measures

A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.

b. Sensitive Plants

No mitigation is required.

c. Sensitive Wildlife

Impacts to Cooper's hawk and/or rufous-crowned sparrow would be mitigated through implementation of MM-BIO-2.

d. Jurisdictional Waters

No mitigation is required.

5.2.4.5 Significance after Mitigation

a. Vegetation Communities

Implementation of mitigation measures MM-BIO-1 and MM-BIO-2 would reduce impacts to a level less than significant.

b. Sensitive Wildlife

Implementation of mitigation measure MM-BIO-2 would reduce impacts to a level less than significant.

5.2.5 Issue 4: Wildlife Movement Corridors

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

5.2.5.1 Threshold(s)

In accordance with the City's Significance Determination Thresholds and LDC Biology Guidelines, the project would have a significant impact if it would:

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

5.2.5.2 Impacts

Minor local restrictions to wildlife would occur with the project. However, wildlife movement from a regional perspective would not be adversely disrupted by the project, as connections to large areas of native habitat would remain functional and in conformance with the Subarea Plan objectives for regional wildlife movement (see Figure 5.2-2).

5.2.5.3 Significance of Impacts

Impacts to wildlife movement would be less than significant.

5.2.5.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

5.2.6 Issues 5 and 6: MSCP/MHPA Conflicts

- Would the proposal conflict with the provisions of an adopted HCP, NCCP or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?

- Would the proposal introduce a land use within an area adjacent to the MHPA that would result in adverse edge effects?

5.2.6.1 Threshold(s)

In accordance with the City's Significance Determination Thresholds, a project would have a significant impact if it would:

- Result in a conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region; and/or

- Introduce land use within an area adjacent to the MHPA that would result in adverse edge effects.

5.2.6.2 Impacts

As described in Section 5.1.5.2a above, the project is consistent with Section 1.6.4 of the City's MSCP Subarea Plan, as it preserves lands dedicated to the MHPA. The MHPA BLA that was approved by the Wildlife Agencies and City MSCP on June 21, 2019 would ensure that the project meets the equivalency standards as they pertain to a no net loss of MHPA habitat area, functions, or values. As described in Section 5.1.5.2a above, the project would be consistent with the six biological factors required by the MSCP for a MHPA BLA, and the approved BLA would transfer equal or higher biological values of impacted species and habitats into the preserve. As described in Section 5.1.5.2c above, the project would be consistent with all of the MSCP MHPA Land Use Adjacency Guidelines.

5.2.6.3 Significance of Impacts

The project would not conflict with the City's MSCP or MHPA. Therefore, impacts would be less than significant.

5.2.6.4 Mitigation, Monitoring, and Reporting

Mitigation would not be required.

5.2.7 Issue 7: Local Policies and Ordinances

- Would the project result in a conflict with any local policies or ordinances protecting biological resources?

5.2.7.1 Threshold(s)

In accordance with the City's Significance Determination Thresholds, a project would have a significant impact if it would:

- Result in a conflict with any local policies or ordinances protecting biological resources.

5.2.7.2 Impacts

The project would comply with the ESL development regulations outlined in LDC Section §143.0141 for sensitive biological resources, as detailed below. All development occurring in sensitive biological resources is subject to a site-specific impact analysis conducted by a Qualified Biologist, in accordance with the Biology Guidelines in the Land Development Manual. Mitigation may include any of the following, as appropriate to the nature and extent of the impact: (a) dedication in fee title to the City of San Diego; or (b) dedication of a covenant of easement in favor of the City of San Diego; or (c) monetary payment.

An evaluation of the project's consistency with the City's ESL regulation for sensitive biological resources is presented below in a discussion that first presents the ESL regulation (italicized text), followed by an analysis of the project's compliance with the ESL regulation.

1) *Grading during wildlife breeding seasons shall be consistent with the requirements of the MSCP Subarea Plan.*

   As detailed in Section 5.2.4 above, grading would be permitted during the breeding season as subject to certain conditions.

2) *Sensitive biological resources that are outside of the allowable development area on a premises, or are acquired as off-site mitigation as a condition of permit issuance, are to be left in a natural state and used only for those passive activities allowed as a condition of permit approval.*

   Mitigation for sensitive biological resources would be accomplished through dedication of approximately 5.61 acres of land on-site to the City's MHPA to compensate for the deletion of 0.55 acre from the MHPA (net increase of 5.06 acres). Land within the MHPA could only be used as prescribed by the City's MSCP Subarea Plan.

3) *Inside and adjacent to the MHPA, all development proposals shall be consistent with the MSCP Subarea Plan.*

   As described in Section 5.1.5.2 above, the project would be consistent with MSCP Subarea Plan.

4) *Projects Located Outside the MHPA*

   The project is located within the MHPA. The MHPA boundary surrounds the area to be developed.

5) *Narrow Endemic Species: Outside the MHPA, measures for protection of narrow endemic species shall be required such as management enhancement, restoration and/or transplantation.*

   There are no narrow endemic species are present on the project site.

5.2.7.3 Significance of Impacts

Impacts related to local policies or ordinances would be less than significant.

5.2.7.4 Mitigation, Monitoring, and Reporting

Mitigation would not be required.

5.2.8 Issue 8: Invasive Species

- Would the project result in the introduction of invasive species of plants into a natural open space area?

5.2.8.1 Threshold(s)

In accordance with the City's Significance Determination Thresholds, a project would have a significant impact if it would:

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

5.2.8.2 Impacts

Invasive species are aggressive non-native plant species that threaten natural habitats by outcompeting native species and reducing biodiversity. These plants thrive in areas disturbed by activities such as grading, construction, and off-road-vehicle use or fire.

As described in Section 5.1.5.2c above, the project planting pallet would be consistent with the MHPA Land Use Adjacency Guidelines regarding invasive and non-native plant species adjacent to the MHPA. Native shrub species and hydroseed would be installed on the manufactured slope adjacent to the MHPA on the western and eastern slopes of the project and only temporarily irrigated until the plants have become established. A 120-day plant establishment period and a 24-month maintenance and monitoring period are necessary to ensure that the native plants establish successfully. Maintenance activities would involve control of non-native plant species, maintenance and removal of the temporary irrigation system, and replacement planting (if necessary). The site should be monitored by a biologist quarterly to evaluate site conditions and to recommend remedial actions, if needed.

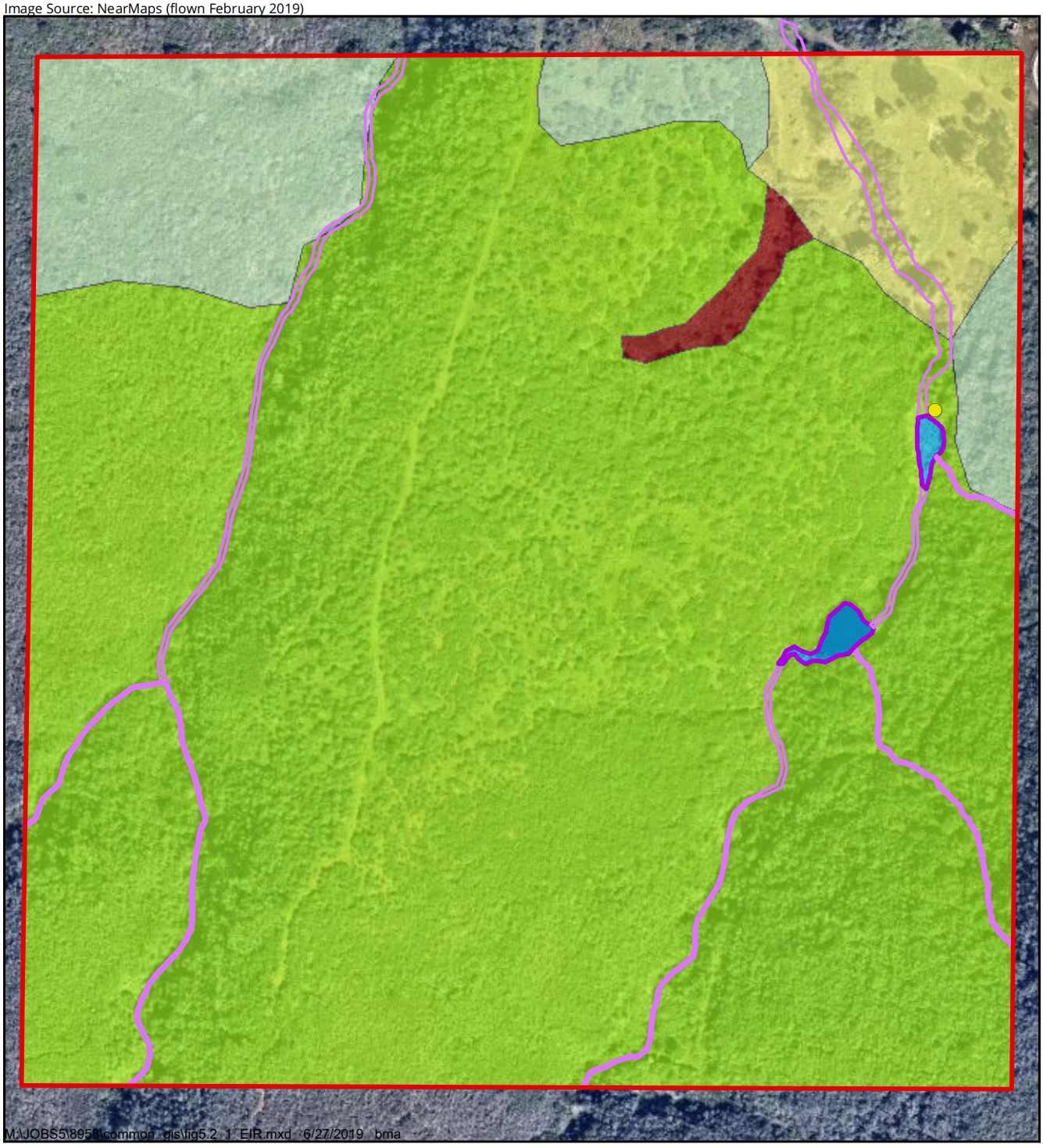
5.2.8.3 Significance of Impacts

Impacts related to invasive species would be less than significant.

5.2.8.4 Mitigation, Monitoring, and Reporting

Mitigation would not be required.

Image Source: NearMaps (flown February 2019)



0 Feet 200

Project Boundary

San Diego Desert Woodrat Nest

Jurisdictional Waters

Wetland Waters

Non-wetland Water/Streambed

Vegetation Community/Land Cover Type

Coastal Sage Scrub

Disturbed Land

Freshwater Marsh

Non-native Grassland

Southern Mixed Chaparral

FIGURE 5.2-1

Existing Biological Resources

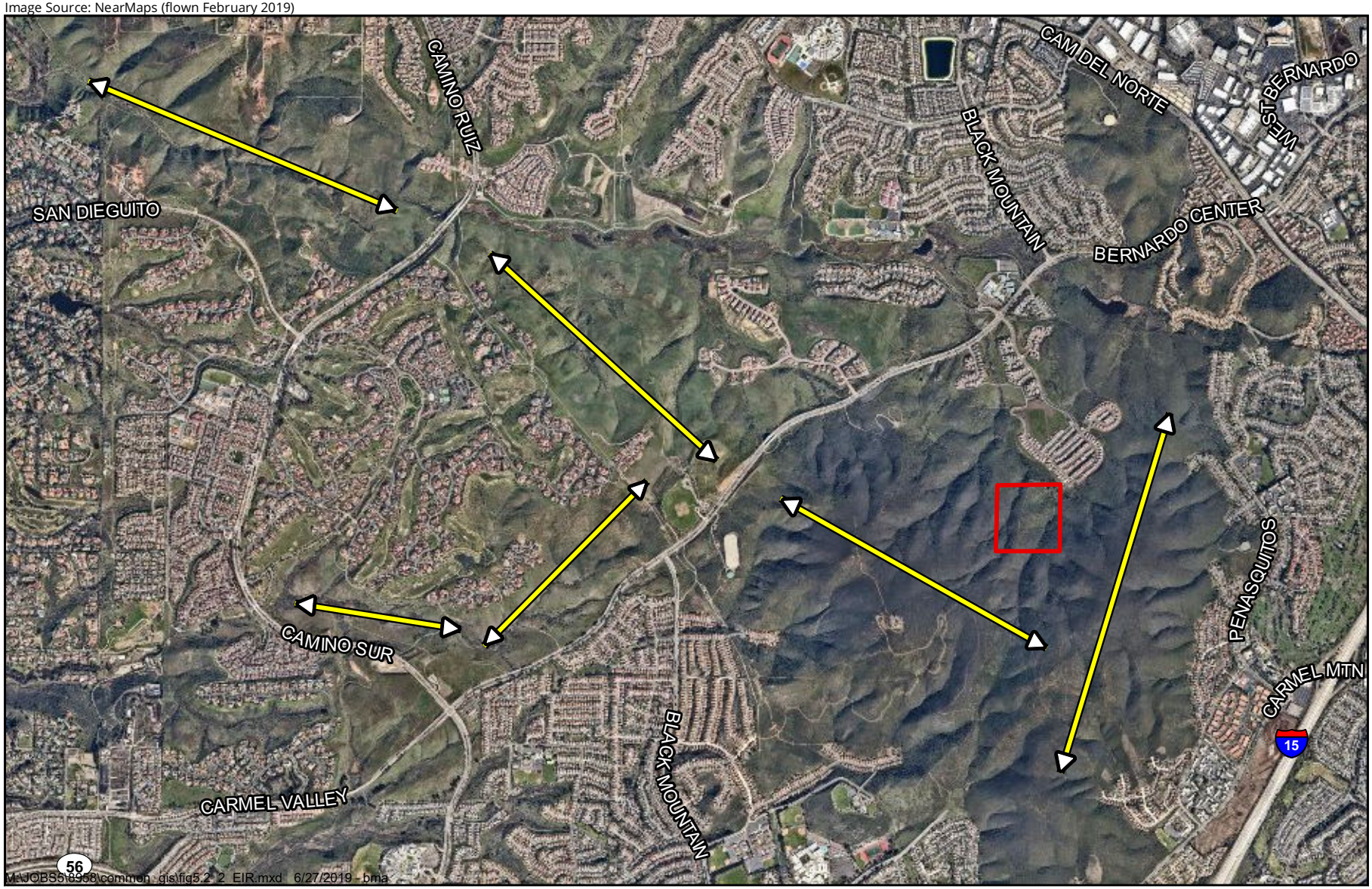


FIGURE 5.2-2

Location of Primary Subarea Plan Wildlife Corridors

Image Source: NearMaps (flown February 2019)



Project Boundary
Plan Lines
Limit of Grading
Construction Zone
Brush Managment Zone 1
Brush Managment Zone 2
Adjusted MHPA
San Diego Desert Woodrat Nest

Jurisdictional Waters
Wetland Waters
Non-wetland Water/Streambed

Vegetation Community/Land Cover Type
Coastal Sage Scrub
Disturbed Land
Freshwater Marsh
Non-native Grassland
Southern Mixed Chaparral

0 Feet 200

FIGURE 5.2-3
Location of Project Impacts

Image Source: NearMaps (flown February 2019)



Project Boundary

Plan Lines

Jurisdictional Waters

Wetland Waters

Non-wetland Water/Streambed

Wetland Buffer Distance

0 Feet 200

FIGURE 5.2-4
Location of Jurisdictional Waters/Wetland and Wetland Buffer

5.3 Cultural/Historical Resources

This section evaluates potential impacts to historical resources associated with the project. The following discussion is based on the Historical Resources Survey Report (RECON 2019b) and Results of the Cultural Resources Testing Program for CA-SDI-18,428 and CA-SDI-18,429 (RECON 2019c) prepared by RECON and included as Appendices C-1 and C-2, respectively.

5.3.1 Relationship to the Black Mountain Ranch (Subarea I) Subarea Plan

The analysis in this section updates the cultural resources analysis in the 1998 Environmental Impact Report (EIR), with an emphasis on effects that were not addressed in the previous report. Since the preparation of the 1998 EIR, nine previously unidentified archaeological sites were detected in the project area.

5.3.2 Existing Conditions

The project is located on the northern slope of Black Mountain, approximately 0.6 mile south of Carmel Valley Road/Bernardo Center Drive. Topographically, the project site is located at the upper end of a broad north-south trending valley. A ridgeline occurs in the central portion of the site that rises in elevation from north to south from 740 feet mean sea level to 915 feet mean sea level. The ridge is bounded by two small canyons, one to the east and one to the west, with one main drainage course and smaller tributaries in each. These drainages have slopes of moderate to steep grade. There is a small meadow in the northwest corner of the property, at the mouth of the eastern drainage. Topography slopes away to the north from the north edge of the property, eventually meeting the La Jolla Valley, about one mile to the north. One soil type occurs on the site, San Miguel-Exchequer rocky silt loam (U.S. Department of Agriculture 1973). This relatively shallow rocky soil is derived from metavolcanic parent materials. As described in Section 5.2.2.1, four vegetation communities occur on the project site. Southern mixed chaparral comprises the majority of the site, with lesser acreages of coastal sage scrub, non-native grassland, and freshwater marsh patches.

5.3.2.1 Cultural Setting

a. Prehistoric Period

The prehistoric cultural sequence in San Diego County is generally conceived as comprising three basic periods: the Paleoindian, dated between about 11,500 and 8,500 years ago and manifested by the artifacts of the San Dieguito Complex; the Archaic, lasting from about 8,500 to 1,500 years ago (A.D. 500) and manifested by the cobble and core technology of the La Jollan Complex; and the Late Prehistoric, lasting from about 1,500 years ago to historic contact (i.e., A.D. 500 to 1769) and represented by the Cuyamaca Complex. This latest complex is marked by the appearance of ceramics, small arrow points, and cremation burial practices.

The Paleoindian Period in San Diego County is most closely associated with the San Dieguito Complex, as identified by Rogers (1938, 1939, 1945). The San Dieguito assemblage consists of well-made scraper planes, choppers, scraping tools, crescentics, elongated bifacial knives, and leaf-shaped points. The San Dieguito Complex is thought to represent an early emphasis on hunting (Warren et al. 1993:III-33).

The Archaic Period brings an apparent shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish. The local cultural manifestations of the Archaic Period are called the La Jollan Complex along the coast and the Pauma Complex inland. Pauma Complex sites lack the shell that dominates many La Jollan sites. Along with an economic focus on gathering plant resources, the settlement system appears to have been more sedentary. The La Jollan assemblage is dominated by rough cobble-based choppers and scrapers, and slab and basin metates. Large side-notched and Elko series projectile points appeared. Large deposits of marine shell at coastal sites argue for the importance of shellfish gathering to the coastal Archaic economy.

Near the coast and in the Peninsular Mountains beginning approximately 1,500 years ago, patterns began to emerge which suggest the ethnohistoric Kumeyaay. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversify and intensify during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, but effective technological innovations. The late prehistoric archaeology of the San Diego coast and foothills is characterized by the Cuyamaca Complex. It is primarily known from the work of D. L. True at Cuyamaca Rancho State Park (True 1970). The Cuyamaca Complex is characterized by the presence of steatite arrowshaft straighteners, steatite pendants, steatite comales (heating stones), Tizon Brownware pottery, ceramic figurines reminiscent of Hohokam styles, ceramic “Yuman bow pipes,” ceramic rattles, miniature pottery various cobble-based tools (e.g., scrapers, choppers, hammerstones), bone awls, manos and metates, mortars and pestles, and Desert side-notched (more common) and Cottonwood Series projectile points.

b. Ethnohistory

The Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño) occupied the southern two-thirds of San Diego County. The Kumeyaay lived in semi-sedentary, politically autonomous villages or rancherias. Settlement system typically consisted of two or more seasonal villages with temporary camps radiating away from these central places (Cline 1984a and 1984b). Their economic system consisted of hunting and gathering with a focus on small game, acorns, grass seeds, and other plant resources. The most basic social and economic unit was the patrilocal extended family. A wide range of tools were made of locally available and imported materials. A simple shoulder-height bow was used for hunting. Numerous other flaked stone tools were made including scrapers, choppers, flake-based cutting tools, and biface knives. Preferred stone types were locally available metavolcanics, cherts, and quartz. Obsidian was imported from the deserts to the north and east. Ground stone objects include mortars and pestles typically made of locally available, fine-grained granite. Both portable and bedrock types are known. The Kumeyaay made fine baskets. These employed either coiled or twined construction. The Kumeyaay also made pottery, using the paddle-and-anvil

technique. Most were a plain brown utility ware called Tizon Brownware, but some were decorated (Meighan 1954; May 1976, 1978).

c. Spanish/Mexican/American Periods

The Spanish Period (1769–1821) represents a time of European exploration and settlement. Military and naval forces along with a religious contingent founded the San Diego Presidio, the pueblo of San Diego, and the San Diego Mission in 1769 (Rolle 1998). Native American culture in the coastal strip of California rapidly deteriorated despite repeated attempts to revolt against the Spanish invaders (Cook 1976). One of the hallmarks of the Spanish colonial scheme was the rancho system. In an attempt to encourage settlement and development of the colonies, large land grants were made to meritorious or well-connected individuals.

In 1821, Mexico declared its independence from Spain. During the Mexican Period (1822–1848), the mission system was secularized by the Mexican government and these lands allowed for the dramatic expansion of the rancho system. The southern California economy became increasingly based on cattle ranching. San Bernardo Rancho, approximately 0.64 mile to the north, is the closest rancho to the project. San Bernardo Rancho, 17,763 acres in size, was comprised of two land grants given to Joseph F. Snook in 1842 and 1845 (Pourade 1969). Snook, a British sea captain, married Maria Antonia Alvarado, daughter of Don Juan Bautista Alvarado. Don Juan owned Rancho Rincon del Diablo, the rancho just east of San Bernardo (Pourade 1969).

A second rancho, Los Peñasquitos Rancho, is approximately 0.7 mile to the south. Los Peñasquitos Rancho was awarded to Captain Francisco María Ruiz for meritorious service in 1823 (Pourade 1969). Los Peñasquitos Rancho comprised 8,486 acres, stretching from Soledad Canyon, near the Pacific Ocean, to within feet of the west end of the project, at the current intersection of Interstate 15 and Poway Road. Captain Ruiz built an adobe near Soledad Canyon and raised cattle on the rancho, but lived in Old Town. He transferred ownership of the rancho to Don Francisco María Alvarado, a prominent member of the San Diego community, in 1837 (Pourade 1969). Don Alvarado lived on the rancho, continuing to raise cattle. Ownership then passed to Captain George Johnson through his marriage to Don Francisco's daughter, Tomasa (Pourade 1969).

The Mexican Period ended when Mexico signed the Treaty of Guadalupe Hidalgo on February 2, 1848, concluding the Mexican–American War (1846–1848; Rolle 1998). The Battle of San Pasqual, fought during the Mexican–American War, was fought in the San Pasqual Valley, approximately nine miles northeast of the project. The battle was fought on December 6 and December 7, 1846, between American forces led by General Stephen W. Kearny and a smaller contingent of local Californios and Mexican Lancers, led by Captain Leonardo Cota and Major Andrés Pico. The American forces lost the battle and spent the next night at the Rancho San Bernardo ranch house. The great influx of Americans and Europeans resulting from the California Gold Rush in 1848–49 eliminated many remaining vestiges of Native American culture. California became a state in 1850.

The American homestead system encouraged settlement beyond the coastal plain into areas where Indians had retreated to avoid the worst of Spanish and Mexican influences (Carrico 1987; Cook 1976). A rural community cultural pattern existed in San Diego County from approximately 1870 to

1930. These communities were composed of an aggregate of people who lived within well-defined geographic boundaries, on farmsteads tied together through a common school district, church, post office, and country store (Hector and Van Wormer 1986). A small community developed in the San Dieguito River Valley to the north of the project in the late 1800s, but it was destroyed when Lake Hodges was filled in 1917 (Pourade 1969). In the post-World War II period, the economy shifted from ranching and agriculture to light manufacturing, military, and tourism.

5.3.2.2 Cultural Resource Investigations

a. Records Search

A record search was conducted at the South Coastal Information Center at San Diego State University (SCIC) in December 2017 for previously recorded historical resources on the project site. A total of 56 historic resources are listed within a one-mile radius of the project. The SCIC lists two prehistoric resources on the parcel, CA-SDI-18428 and CA-SDI-18429, both of which are flake scatters.

CA-SDI-18,428

CA-SDI-18428 is a flake scatter consisting of at least 15 quartz flakes. The core site measures 20 meters north-south by 5 meters east-west. Two additional flakes discussed in the site form potentially increased the site dimensions to 120 meters by 40 meters. However, the site boundary shape file did not include these two flakes. The site form noted limited ground visibility. The site was recorded by Affinis in 2007.

CA-SDI-18,429

CA-SDI-18429 is a scatter of five quartz fakes which were in a 5-by-5-meter area. Limited ground visibility was noted on the site form, recorded by Affinis in 2007.

b. Field Investigation

The project site was surveyed twice by RECON archaeologists; once on July 19, 2013, and a second time on December 21, 2017. A total of seven cultural resources were identified during the July 2013 and December 2017 surveys:

- Three prehistoric isolates consisting of one or two flakes (7178-RDS-1, 7178-RDS-2, and 7178-HJP-1)
- Two prehistoric sites (7179-HJP-2 and 7178-RDS-3)
- An historic farmstead site (7178-HJP-3)
- A historic structure and associated road (7178-RDS-4)

None of the material identified during the 2013 survey was at, or immediately adjacent to, the mapped locations of either CA-SDI-18428 or CA-SDI-18429. The 2017 survey did find seven flakes (7178-RDS-3) within 15 meters of the mapped location of SDI-18428. No cultural material was found at or adjacent to the mapped location of CA-SDI-18429 during the 2017 survey. A brief description of

all seven resources is provided below. Complete descriptions of each resource are presented in Appendix C.

Isolates

7178-RDS-1 is a prehistoric isolate consisting of two secondary flakes. One flake was of fine-grained porphyritic metavolcanic material and the other was of medium-grained metavolcanic material.

7178-RDS-2 is a prehistoric isolate consisting of a single white quartz secondary flake near the mapped location of CA-SDI-18428.

7178-HJP-1 is a prehistoric isolate consisting of a single white quartz secondary flake located during the 2013 survey near the mapped location of CA-SDI-18428.

Other Sites

7178-RDS-3 is a prehistoric site found during the 2013 survey consisting of three secondary flakes in an area of approximately 6 square meters. No material was relocated in the mapped location of RDS-3 during the 2017 survey. However, seven flakes were found close enough to CA-SDI-18428 during the 2017 survey to be included in an expanded boundary for that site. The area of RDS-3 has also been included in the expanded boundary of CA-SDI-18428.

7178-HJP-2 is a prehistoric site located during the 2013 survey. It consists of two secondary flakes and a single piece of shatter. All are fine-grained porphyritic metavolcanic material. Only one flake was relocated during the 2017 survey.

7178-HJP-3 is a homestead site located during the 2013 survey in the northeastern corner of the project. The existing components consist of two concrete slabs, a wall, an asphalt pad with associated fieldstone wall, a steel tank, and a fenced-in area. There is no foundation at the house site, as determined from aerial photographs. There is an asphalt pad immediately to the north and a low fieldstone wall and concrete walkway on the east side. It is possible the house sat on preformed concrete masonry piers that have been moved during or after the house was demolished in the early 2000s.

7178-RDS-4 is a historic site consisting of two buildings and an associated dirt road found during the 2013 survey. The main building and a small storage shed are built on a graded pad that cuts into the slope. The second building is a 10-foot-by-7-foot wood-framed storage shed with a shallow pitch gable roof. The associated dirt road runs along the west-facing slope on the eastern side of the project. The road is 10 to 15 feet wide and is cut into the slope.

5.3.3 Regulatory Framework

5.3.3.1 Federal

a. National Historic Preservation Act of 1966 and National Register of Historic Places

The National Historic Preservation Act of 1966 established the National Register of Historic Places (NRHP) as the official federal list of cultural resources that have been nominated by state offices for their significance at the local, state, or federal level. Listing on the NRHP provides recognition that a property is historically significant to the nation, the state, or the community. Properties listed (or potentially eligible for listing) on the NRHP must meet certain significance criteria and possess integrity of form, location, or setting. Barring exceptional circumstances, resources generally must be at least 50 years old to be considered for listing on the NRHP.

Criteria for listing on the NRHP are stated in Title 36, Part 60 of the Code of Federal Regulations (36 Code of Federal Regulations 60). A resource may qualify for listing if there is quality of significance in American history, architecture, archaeology, engineering, and culture present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association; and where such resources:

- Are associated with events that have made a significant contribution to the broad patterns of history.
- Are associated with the lives of persons significant in the past.
- Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction.
- Have yielded, or may be likely to yield, information important in prehistory or history.

Eligible properties must meet at least one of the NRHP criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character, the degree to which the original historic fabric has been retained, and the reversibility of changes to the property. The fourth criterion is typically reserved for archaeological and paleontological resources. These criteria have largely been incorporated into the California Environmental Quality Act (CEQA) Guidelines (Section 15065.5).

5.3.3.2 State

a. California Register of Historic Resources (Public Resources Code Section 5020 et seq.)

Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the California Register of Historic Resources (CRHR) as are State Historical Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

b. California Environmental Quality Act

For the purposes of CEQA, a significant historical resource is one that qualifies for the CRHR or is listed in a local historic register or deemed significant in an historical resources survey, as provided under Section 5025.1(g) of the Public Resources Code. A resource that is not listed in or is not determined to be eligible for listing in the CRHR, is not included in a local register or historic resources, or is not deemed significant in an historical resources survey may nonetheless be deemed significant by a CEQA lead agency.

As indicated above, the California criteria (State CEQA Guidelines Section 15065.5) for the registration of significant architectural, archaeological, and historical resources on the CRHR are nearly identical to those for the NRHP. Furthermore, CEQA Section 21083.2(g) defines the criteria for determining the significance of archaeological resources. These criteria include definitions for a "unique" resource, based on its:

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

c. Native American Burials (Public Resources Code Section 5097 et seq.)

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and designates the Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to a year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

5.3.3.3 Local

a. City of San Diego Municipal Code: Historical Resources Regulations

In January 2000, the City's Historical Resources Regulations (Regulations), part of the San Diego Municipal Code (Chapter 14, Article 3, Division 2: Purpose of Historical Resources Regulations or Sections 143.0201-143.0280), were adopted, providing a balance between sound historic preservation principles and the rights of private property owners. The Regulations have been developed to implement applicable local, state, and federal policies and mandates. Included in these are the City's General Plan, CEQA, and Section 106 of the National Historic Preservation Act of 1966. Historical resources, in the context of the City's Regulations, include site improvements, buildings, structures, historic districts, signs, features (including significant trees or other landscaping), places, place names, interior elements and fixtures designated in conjunction with a property, or other objects historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance to the citizens of the city. These include structures, buildings, archaeological sites, objects, districts, or landscapes having physical evidence of human activities. These are usually over 45 years old, and they may have been altered or still be in use.

Historic Resources Guidelines are incorporated in the City's Land Development Code by reference. These Guidelines set up a Development Review Process to review projects in the City. This process is composed of two aspects: the implementation of the Historical Resources Regulations and the determination of impacts and mitigation under CEQA.

Compliance with the Historical Resources Regulations begins with the determination of the need for a site-specific survey for a project. Section 143.0212(b) of the Regulations requires that historical resource sensitivity maps be used to identify properties in the City that have a probability of containing archaeological sites. These maps are based on records maintained by the South Coastal Information Center of the California Historic Resources Information System, as well as site-specific information in the City's files. If records show an archaeological site exists on or immediately adjacent to a subject property, the City shall require a survey. In general, archaeological surveys are required when the proposed development is on a previously undeveloped parcel, if a known resource is recorded on the parcel or within a one-mile radius, or if a qualified consultant or knowledgeable City staff member recommends it. A historic property (built environment) survey can be required on a project if the properties are over 45 years old and appear to have integrity of setting, design, materials, workmanship, feeling, and association.

Section 143.0212(d) of the Regulations states that if a property-specific survey is required, it shall be conducted according to the Guidelines criteria. Using the survey results and other available applicable information, the City shall determine whether a historical resource exists, whether it is eligible for designation as a designated historical resource, and precisely where it is located.

b. Historical Resources Register

The City provides a broader set of criteria for eligibility for the City's Historical Resources Register. As stated in the City's Historical Resources Guidelines, "Any improvement, building, structure, sign,

interior element and fixture, feature, site, place, district, area, or object may be designated as historic by the City of San Diego Historical Resources Board if it meets any of the following criteria:"

- Exemplifies or reflects special elements of the City's, a community's, or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or architectural development;
- Is identified with persons or events significant in local, state, or national history;
- Embodies distinctive characteristics of a style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;
- Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman;
- Is listed or has been determined eligible by National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historic Preservation Office for listing on the State Register of Historical Resources; or
- Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest, or aesthetic value or which represent one or more architectural periods or styles in the history and development of the city.

If a resource is not listed in, or determined eligible for listing in, the California Register, not included in a local register, or not deemed significant in a historical resource survey, City criteria states that it may nonetheless be historically significant.

c. General Plan Historic Preservation Element

The Historic Preservation Element of the General Plan provides guidance on archaeological and historic site preservation in San Diego, including the roles and responsibilities of the Historical Resources Board, the status of cultural resource surveys, the Mills Act, conservation easements, and other public preservation incentives and strategies. A discussion of criteria used by the Historical Resources Board to designate landmarks is included, as is a list of recommended steps to strengthen historic preservation in San Diego. The Element sets a series of goals for the City for the preservation of historic resources, and the first of these goals is to preserve significant historical resources. These goals are realized through implementation of policies that encourage the identification and preservation of historical resources.

City General Plan Policies HP-A.1 through HP-A.5 are associated with the overall identification and preservation of historical resources. This includes policies to provide for comprehensive historic resource planning and integration of such plans within City land use plans. These policies also focus on coordinated planning and preservation of tribal resources, promoting the relationship with Kumeyaay/Diegueño tribes. Historic Preservation policies HP-B.1 through HP-B.4 address the benefits of historical preservation planning and the need for incentivizing maintenance, restoration, and rehabilitation of designated historical resources.

5.3.4 Issue 1: Prehistoric/Historic Resources

- Would the project result in an alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site?

5.3.4.1 Threshold

The City has developed Significance Determination Thresholds to assist staff, project proponents, and the public in determining whether, based on substantial evidence, a project may have a significant effect on the environment, per CEQA Guidelines Section 21082.2 and, therefore, the environmental impact requires mitigation. The City's Significance Determination Thresholds for analyzing impacts to historical resources describe three kinds of impacts to historical resources: direct, indirect, and cumulative.

Direct impacts generally result from activities that would cause damage to or have an adverse effect on the resource. Indirect impacts (primarily for built environment resources but also applicable to archaeological resources) include the introduction of visual, audible, or atmospheric effects that are out of character with the historic property or alter its setting, when the setting contributes to the property's significance. For archaeological resources and traditional cultural properties, indirect impacts are often the result of increased public accessibility to resources not otherwise subject to impacts that may result in an increased potential for vandalism and site destruction. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. According to the City's Historical Resources Guidelines, the loss of a historical resource database due to mitigation by data recovery may be considered a cumulative impact. In the built environment, cumulative impacts most often occur to districts, where several minor changes to contributing properties, their landscaping, or to their setting over time could result in a significant loss of integrity to the district as a whole.

Based on the current City of San Diego's Significance Determination Thresholds, historical resource impacts may be significant if the project would affect any of the following:

- A resource listed in, eligible or potentially eligible for listing in the NRHP.
- A resource listed in, or determined to be eligible by, the State Historical Resources commission, for listing in the CRHR (Public Resources Code [PRC] Section 5024.1).
- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC, or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be

"historically significant" if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1).

- An archaeological site consisting of at least three associated artifacts/ecofacts (within a 40-square-meter area) or a single feature.
- A "traditional cultural property." A site would be considered to possess ethnic significance if it is associated with a burial or cemetery; religious, social or transitional activities of a discrete ethnic population; an important person or event as defined by a discrete ethnic population; or the belief system of a discrete ethnic population.

The determination of significance of impacts on historical and unique archaeological resources is based on the criteria found in Section 15064.5 of the State CEQA Guidelines. Section 15064.5 clarifies the definition of a substantial adverse change in the significance of a historical resource as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."

5.3.4.2 Impacts

a. CA-SDI-18,428

With the inclusion of the seven flakes found during the 2017 survey and RDS-3, the expanded boundary of CA-SDI-18,428 increased the site area to just over 2,300 square meters. It was determined that the site had the potential to be eligible under criterion 4 for inclusion on the CRHR, as well as inclusion under the City Historic Resources Register (HRR), criterion a. Therefore, a testing program was conducted that consisted of 17 shovel scrapes and 2 one-meter-square test units. Cultural material recovered during the test were washed, cataloged, and analyzed. Based on the results of the testing program, it was determined that CA-SDI-18,428 does not qualify as a significant historical resource under CEQA and does not qualify under any of the four criteria for inclusion on the California Register of Historical Resources. It was also determined that CA-SDI-18,428 does not qualify as a significant historical resource under any of the six criteria in the current City guidelines. Furthermore, it was also determined that CA-SDI-18,428 does not qualify as an important archaeological site under Division 2, Article 3, of the San Diego Municipal Code, because of its relatively limited variety and density of artifacts and the disturbed nature of the deposit. Recovered material was subsequently curated at the San Diego Archaeological Center (SDAC).

b. CA-SDI-18,429

No cultural material was found at or adjacent to the mapped location of CA-SDI-18,429 during the 2013 or the 2017 surveys. Since limited ground visibility may have obscured cultural material, a testing program was conducted for CA-SDI-18,429 that consisted of excavating three 2-meter-square surface scrapes. Cultural material recovered during the test was washed, cataloged, and analyzed. Thirteen artifacts were recovered from CA-SDI-18,429, all of which were debitage. No cultural material was found during either previous surveys of the site area. Based on the results of the testing program, it was determined that CA-SDI-18,429 does not qualify as a significant historical resource under CEQA and does not qualify under any of the four criteria for inclusion on the

California Register of Historical Resources. It was also determined that CA-SDI-18,429 does not qualify as a significant historical resource under any of the six criteria in the current City guidelines. Furthermore, it was also determined that CA-SDI-18,429 does not qualify as an important archaeological site under Division 2, Article 3, of the San Diego Municipal Code, because of its relatively limited variety and density of artifacts and the disturbed nature of the deposit. Recovered material was subsequently curated at the SDAC.

c. Isolates

All three isolates (RDS-1, RDS-2, and HJP-1) are located within the proposed development footprint and would be disturbed by proposed grading. However, cultural isolates generally lack characteristics that would qualify them for listing on the CRHR, and therefore, are not considered significant historical resources. Similarly, isolates are not considered significant under the City's historic resource guidelines.

d. Other Sites

RDS-3

As described in Section 5.3.2.2.a above, the seven flakes were found in the vicinity of CA-SDI-18,428 during the 2017 survey and RDS-3 have been included in the expanded boundary of that site. Therefore, potential impacts to these resources are included in the impact analysis for CA-SDI-18,428.

HJP-2

This lithic scatter site is not within the proposed development area and would not be impacted by the project.

RDS-4

The historic structure and associated road are not within the proposed development area and would not be impacted by the project. Therefore, no further work on this historical resource was required.

HJP-3

The known components of HJP-3 lack sufficient integrity to be eligible for inclusion on the CRHR or for inclusion on the City HRR. None of the original buildings still stand, and the remaining slabs, few walls, and tank do not convey sufficient information of setting, feeling or association of the original farmstead on their own. The remaining elements also do not exhibit sufficient design or construction characteristics to be eligible themselves. However, project construction may unearth subsurface deposits associated with the farmstead, which could potentially be significant historical resources under criterion 4 for inclusion on the CRHR and under criterion a for inclusion on the City HRR.

5.3.4.3 Significance of Impacts

a. CA-SDI-18,428

Implementation of the testing program for CA-SDI-18,428 determined that impacts would be less than significant.

b. CA-SDI-18,429

Implementation of the testing program for CA-SDI-18,429 determined that impacts would be less than significant.

c. Isolates

Impacts on all three isolates (RDS-1, RDS-2, and HJP-1) would be less than significant.

d. Other Sites

HJP-2 and RDS-4 are not located within the proposed development area and would not be impacted by the project.

Unearthing of subsurface deposits associated with HJP-3 during project construction would have the potential to result in a significant impact.

5.3.4.4 Mitigation, Monitoring, Reporting

MM-HIST-1: Archaeological Monitoring

I. Prior to Permit Issuance

A. Entitlements Plan Check

1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

B. Letters of Qualification have been submitted to ADD

1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable,

individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.

2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.

3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.

2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.

B. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.

   a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.

2. Identify Areas to be Monitored

   a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.

b. The AME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).

3. When Monitoring Will Occur

a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.

b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.

III. During Construction

A. Monitor(s) Shall be Present During Grading/Excavation/Trenching

1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.

2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.

3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.

4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process

1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.

2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.

3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance

1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.

   a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.

   b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) which has been reviewed by the Native American consultant/monitor, and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. Note: If a unique archaeological site is also an historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.

   c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

A. Notification

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.

2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

B. Isolate discovery site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains.

2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance.

3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.

C. If Human Remains ARE determined to be Native American

1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, ONLY the Medical Examiner can make this call.

2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.

3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.

4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.

5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:

    a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR;

    b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance, THEN

    c. To protect these sites, the landowner shall do one or more of the following:

        (1) Record the site with the NAHC;

        (2) Record an open space or conservation easement; or

        (3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by PRC 5097.98. The document shall be indexed as a notice under the name of the owner.

    d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.

D. If Human Remains are NOT Native American

1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.

2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).

3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the

applicant/landowner, any known descendant group, and the San Diego Museum of Man.

V. Night and/or Weekend Work

A. If night and/or weekend work is included in the contract

1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.

2. The following procedures shall be followed.

a. No Discoveries

In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8AM of the next business day.

b. Discoveries

All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.

c. Potentially Significant Discoveries

If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV-Discovery of Human Remains shall be followed.

d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.

B. If night and/or weekend work becomes necessary during the course of construction

1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.

2. The RE, or BI, as appropriate, shall notify MMC immediately.

C. All other procedures described above shall apply, as appropriate.

VI. Post Construction

A. Preparation and Submittal of Draft Monitoring Report

1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.

   a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.

   b. Recording Sites with State of California Department of Parks and Recreation

      The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.

2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.

3. The PI shall submit revised Draft Monitoring Report to MMC for approval.

4. MMC shall provide written verification to the PI of the approved report.

5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

B. Handling of Artifacts

1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued

2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.

3. The cost for curation is the responsibility of the property owner.

C. Curation of artifacts: Accession Agreement and Acceptance Verification

1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.

2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

3. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5.

D. Final Monitoring Report(s)

1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.

2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

5.3.4.5 Significance after Mitigation

Implementation of mitigation measure MM-HIST-1a would reduce impacts to below a level of significance.

5.3.5 Issue 2: Religious/Sacred Uses

- Would the project result in any impact to existing religious or sacred uses within the potential impact area?

5.3.5.1 Threshold

In accordance with the City's Significance Determination Thresholds (2016), prehistoric and historic resource impacts may be significant if the project would result in:

- An impact to existing religious or sacred uses within the potential impact area.

5.3.5.2 Impacts

No known religious or sacred uses were identified within the project site. A Native American monitor was consulted and visited the project area. No existing religious or sacred uses, including religious or sacred lands, were identified by the Native American monitor. A letter was sent to the NAHC in Sacramento on January 4, 2018 requesting a search of their Sacred Lands File. A response was received on January 9, 2018 stating that search had been completed for the project area with negative results.

5.3.5.3 Significance of Impacts

Implementation of the project would not adversely affect any known religious or sacred uses on-site. No impact would occur.

5.3.5.4 Mitigation, Monitoring, Reporting

Mitigation would not be required.

5.3.6 Issue 3: Human Remains

- Would the project result in the disturbance of any human remains, including those interred outside of formal cemeteries?

5.3.6.1 Threshold

In accordance with the City's Significance Determination Thresholds, prehistoric and historic resource impacts may be significant if the project would result in:

- The disturbance of any human remains, including those interred outside of formal cemeteries.

5.3.6.2 Impacts

No known burial sites or cemeteries exist within the project site, and it is not anticipated that human remains would be discovered during construction. In the unlikely event of the discovery of human remains during project grading, work would halt in that area and the procedures set forth in the California Public Resources Code (Section 5097.98) and state Health and Safety Code (Section 7050.5) would be undertaken.

5.3.6.3 Significance of Impacts

No known burial sites or cemeteries exist within the project site, and it is not anticipated that human remains would be discovered during construction. Therefore, impacts would be less than significant.

5.3.6.4 Mitigation, Monitoring, Reporting

Mitigation would not be required.

5.4 Landform Alteration/Visual Quality

This section evaluates potential landform alteration/visual quality impacts associated with the project. The following discussion focuses on the change in visual character.

5.4.1 Relationship to the Black Mountain Ranch (Subarea I) Subarea Plan

The analysis in this section updates the landform alteration/visual quality analysis in the 1998 Environmental Impact Report (EIR), with an emphasis on effects that were not addressed in the previous report. Because no site-specific design was proposed at the time the 1998 EIR was prepared, impacts relative to landform alteration could not be analyzed in detail for the perimeter properties, and impacts were considered to be potentially significant. Therefore, this section provides a site-specific analysis of landform alteration impacts relative to the project. Other issues related to visual quality were adequately analyzed as part of the 1998 EIR, to which this Supplemental Environmental Impact Report is tiered. Those issues are summarized in Chapter 9.0.

5.4.2 Existing Topography and Landform

Topographically, the 5,098-acre Black Mountain Ranch Subarea, of which the project site is part, is characterized by a variety of landforms ranging from nearly flat-lying mesas in the north to Lusardi Creek/La Jolla Valley in the center flanked by rugged, steeply sloping hillside terrain dissected by smaller drainages and rolling hills. The more rugged terrain is found in the northwestern portion of the Subarea near Lusardi Creek and in the southeastern portion of the site near Black Mountain. The broad La Jolla Valley area, which crosses the central portion of Black Mountain Ranch North presents a gentler topography.

Topographically, the project site is located at the upper end of a broad north-south trending valley. A ridgeline occurs in the central portion of the site that rises in elevation from north to south from 740 feet mean sea level to 915 feet mean sea level. The ridge is bounded by two small canyons, one to the east and one to the west, with one main drainage course and smaller tributaries in each. These drainages have slopes of moderate to steep grade. There is a small meadow in the northwest corner of the property, at the mouth of the eastern drainage. While the project site is undeveloped, existing residential development associated with the Heritage Bluffs project is located to the north.

5.4.3 Issue 1: Development Features

1. Project bulk, scale, materials, or style which would be incompatible with surrounding development?

5.4.3.1 Threshold

According to the City of San Diego's (City's) California Environmental Quality Act (CEQA) Significance Determination Thresholds, impacts associated with development features may be significant if the project would:

a. Include crib, retaining, or noise walls greater than six feet in height and 50 feet in length with minimal landscape screening or berming where the walls would be visible to the public.

5.4.3.2 Impacts

As described in Section 3.3, Project Description, the proposed retaining walls would reach a maximum height of 55 feet, 7 inches and be located along both sides of the existing drainage channel that would be crossed by the arch culvert allowing for the extension of Winecreek Drive (refer to Figure 3-3). However, the proposed retaining walls would be downslope from the project and not exceed the elevation of the arch culvert or the development pad and therefore, not be visible from the project site once constructed. Furthermore, the retaining walls would be developed with earth tones that would blend in with the surrounding natural environment and would be landscaped with cascading vines at the top of the walls that would extend downslope to provide an aesthetically pleasing appearance from views off-site. The retaining walls along both the eastern and western project boundaries would be 135 feet in length and vary in height from one to ten feet. The maximum height of ten feet for these retaining walls would not exceed the height regulations of the underlying zone limiting the height of retaining walls outside of required setbacks to 12 feet. Although the length and height of these retaining walls to be constructed on the western and eastern project boundaries would exceed the dimensions listed in the threshold listed above, they would be downslope from the building pad and not visible from the project site. These retaining walls would also be developed with earth tones that would blend in with the surrounding natural environment and would be landscaped to provide an aesthetically pleasing appearance from views off-site.

5.4.3.3 Significance of Impacts

Although the project proposes retaining walls that would exceed the height regulations of the underlying zone, the retaining walls would be visible in a low visibility area nor would they result in a negative appearance, as they are located in a low visibility area and landscaped. For these reasons, impacts would be less than significant.

5.4.3.4 Mitigation, Monitoring, and Reporting

Mitigation would not be required.

5.4.4 Issue 2: Landform Alteration

- Would the project result in a substantial change in the existing landform?

5.4.4.1 Threshold

According to the City's CEQA Significance Determination Thresholds, landform alteration/visual quality impacts may be significant if the project would:

a. Alter more than 2,000 cubic yards of earth per graded acre by either excavation or fill, and one or more of the following conditions apply:

   1) Project would disturb steep hillsides in excess of the encroachment allowance of the Environmentally Sensitive Lands (ESL) regulations;

   2) The project would create manufactured slopes higher than 10 feet or steeper than 2:1 (50 percent) slope gradient;

   3) The project would result in a change in elevation of steep hillsides as determined by the San Diego Municipal Code Section 113.0103 from existing grade to proposed grade of more than 5 feet by either excavation or fill, unless the area over which excavation or fill would exceed 5 feet is only at isolated points on the site; or

   4) The project design includes mass terracing of natural slopes with cut or fill slopes to construct flat-pad structures.

b. However, the above conditions may not be considered significant if one or more of the following apply:

   1) The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed landforms will very closely imitate the existing on-site landform and/or the undisturbed, pre-existing surrounding neighborhood landforms. This may be achieved through naturalized variable slopes.

   2) The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed slopes follow the natural existing landform and at no point vary substantially from the natural landform elevations.

   3) The proposed excavation or fill is necessary to permit installation of alternative design features such as step-down or detached buildings, non-typical roadway or parking lot designs, and alternative retaining wall designs that reduce the project's overall grading requirements.

5.4.4.2 Impacts

Each of the individual thresholds is addressed below.

a. Would the project alter more than 2,000 cubic yards of earth per graded acre by either excavation or fill?

Project construction would grade 15.69 acres of the 41.48-acre project site (37.8 percent). Overall, the project proposes approximately 296,000 cubic yards of cut (maximum depth of 52 feet) and 296,000 cubic yards of fill (maximum depth of 64 feet) over the approximately 15.69-acre graded area, resulting in a net balance of grading on the project site. The project would therefore result in approximately 18,866 cubic yards of earthwork per graded acre. This amount of earthwork would exceed the 2,000 cubic yards of earth graded per acre threshold. Since grading would alter more than 2,000 cubic yards of earth per graded acre by either excavation or fill, the following is an analysis of the additional criteria pursuant to the City's thresholds.

1) Would project grading disturb steep (25 percent gradient or steeper) slopes in excess of the encroachment allowance of the ESL regulations and steep hillside guidelines (LDC, Section 143.0110)?

As described in Land Use Section 5.1.3.1, the project is subject to the ESL regulations of the San Diego Land Development Code, because the project site includes naturally steep hillsides. Project grading would encroach into 7.86 acres of steep slopes, which constitutes 18.95 percent of the project site. Although the project would impact an additional 5.50 acres of steep slopes to establish manufactured slopes that would be revegetated for erosion control purposes, Section 143.0142(g) of the Steep Hillsides Guidelines states that erosion control measures outside of the Coastal Overlay Zone are not subject to the 25 percent development area regulations for steep slopes. Therefore, the project's encroachment of 7.86 acres is within the 25 percent encroachment allowance as permitted by the City's ESL ordinance.

2) Would the project create manufactured slopes higher than 10 feet or steeper than 2:1 (50 percent) slope gradient?

The project would create manufactured slopes over 10 feet in height by creating cut slopes of up to 52 feet in height on the perimeter of the development area. These manufactured cut slopes would have a gradient of 2:1 (50 percent). All manufactured slopes on the project perimeter would be revegetated with native plant material in order to blend with the adjacent natural hillside, consistent with the City's grading and brush management regulations. Landscaping would help reduce the appearance of manufactured slopes relative to the natural landform.

3) Would the project result in a change in elevation of steep natural slopes from existing grade to proposed grade of more than 5 feet by either excavation or fill, unless the area over which excavation or fill would exceed 5 feet is only at isolated points on the site?

Overall, the project proposes approximately 296,000 cubic yards of cut (maximum depth of 52 feet) and 296,000 cubic yards of fill (maximum depth of 64 feet) over the approximately 15.69-acre graded area, resulting in a net balance of grading on the project site. The maximum depths of cut and fill for proposed grade would exceed 5 feet.

4) Would the project design include mass terracing of natural slopes with cut or fill slopes to construct flat-pad structures?

The project would include mass grading to terrace the underlying landform in order to create flat pads for development. While the project site would result in terracing within the development footprint, the project would result in grading of approximately 37.8 percent of the overall site area, and the majority of steep natural slopes surrounding the development would be retained within the 23.75 acres of the project site (57.3 percent) proposed to be preserved as Multi-Habitat Planning Area (MHPA) open space.

Conclusion

Construction earthwork would exceed the City's threshold of 2,000 cubic yards per graded acre. Although the project site contains naturally steep slopes throughout the project site, the project would not exceed the encroachment allowance into steep slopes permitted by the ESL regulations, and the majority of steep slopes would be preserved on-site within MHPA open space. Manufactured slopes would exceed 10 feet in height, and excavation or fill in excess of 5 feet from existing grade would occur around the perimeter of the development footprint. Manufactured slopes on the project perimeter would be revegetated with native plant material in order to blend with the adjacent natural hillside, consistent with the City's grading and brush management regulations. However, the project would not be consistent with threshold conditions two and three and, therefore, would result in a substantial change in an existing landform. None of the exceptions stated in the City's thresholds would apply.

5.4.4.3 Significance of Impacts

The project would result in a substantial change in an existing landform. Therefore, impacts would be significant. This impact is consistent with the conclusion in the 1998 EIR.

5.4.4.4 Mitigation, Monitoring, and Reporting

The project has been designed to minimize the visual impacts of landform alteration to the extent feasible. As a result, the project would preserve approximately 23.75 acres of the project site (57.3 percent) within the proposed MHPA open space, which consists of natural vegetation, and would also preserve the majority of steep slopes on-site. The project would also revegetate manufactured slopes in order to minimize the visual impact of grading. However, no further mitigation is available to reduce impacts associated with landform alteration.

5.4.4.5 Significance after Mitigation

Preservation of approximately 23.75 acres of natural vegetation on-site within the proposed MHPA open space and revegetation of manufactured slopes would not fully mitigate impacts associated with landform alteration. Therefore, impacts would remain significant and unavoidable. This significance determination is consistent with the conclusion in the 1998 EIR.

5.5 Air Quality

This section evaluates potential short-term (construction) and long-term (operational) air quality and odor impacts associated with the project. The following discussion is based on the Air Quality Analysis (RECON 2019d) prepared by RECON and included as Appendix D.

5.5.1 Relationship to the Black Mountain Ranch (Subarea I) Subarea Plan

The analysis in this section updates the air quality analysis in the 1998 Environmental Impact Report (EIR), with an emphasis on effects that were not addressed in the previous report. Because no site-specific design was proposed at the time the 1998 EIR was prepared, impacts relative to construction emissions, including blasting impacts, could not be analyzed in detail for the perimeter properties. Cumulative construction-related air quality impacts were considered to be potentially significant. Operational air quality impacts were adequately analyzed as part of the 1998 EIR, to which this Supplemental Environmental Impact Report (SEIR) is tiered. Those impacts are summarized in Chapter 9.0.

5.5.2 Existing Conditions

5.5.2.1 Project Site

The existing site is undeveloped and primarily covered with vegetation. The site is comprised of a central ridge that rises in elevation towards the south bounded by small canyons with drainage courses to the east and west, with a dirt road located along the crest of the ridge. As the project site is undeveloped, it is currently not a source of criteria pollutant emissions.

5.5.2.2 Regional

The project site is in the San Diego Air Basin (SDAB), which lies in the southwest corner of California and comprises the entire San Diego region. Population and emissions are concentrated mainly in the western portion of the county. The SDAB covers 4,260 square miles, includes about 8 percent of the state's population, and produces about seven percent of the state's criteria pollutant emissions. The City of San Diego covers approximately 330 square miles, or 8 percent, of the SDAB.

Air quality at a given location is a function of the types and quantities of pollutants being emitted into the air locally and throughout the basin, and the dispersal rates of pollutants within the region. The major factors affecting pollutant dispersion are wind speed and direction, the vertical dispersion of pollutants (which is affected by inversions), and the local topography. Air quality in the SDAB is impacted not only by local emissions but also by pollutants transported from other areas, in particular, ozone and ozone precursor emissions transported from the South Coast Air Basin and Mexico. Although the impact of transport is particularly important on days with high ozone concentrations, transported pollutants and emissions cannot be blamed entirely for the ozone

problem in the San Diego area. Studies show that emissions from the SDAB are sufficient, on their own, to cause ozone violations.

5.5.2.3 Existing Air Quality

Existing air quality is measured based upon ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are currently in effect, as well health effects of each pollutant regulated under these standards are shown in Table 5.5-1.

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards presented in Table 5.5-1. Air quality is commonly expressed as the number of days per year in which air pollution levels exceed the NAAQS and CAAQS. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are not equaled or exceeded at any time in any consecutive three-year period; and the federal standards (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

Table 5.5-1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		–		
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m^3)	–	Non-dispersive Infrared Photometry
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m^3)	–	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	–		–	0.5 ppm (1,300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[11]	–	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chroma-tography			

Table 5.5-1
Ambient Air Quality Standards

NOTES:
ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; – = not applicable.

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent measurement method which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

[8] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standards of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[14] In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: CARB 2016.

a. Local Air Quality

Air quality is commonly expressed as the number of days per year in which air pollution levels exceed federal standards set by the U.S. Environmental Protection Agency (U.S. EPA) or state standards set by the California Air Resources Board (CARB). The San Diego Air Pollution Control District (SDAPCD) maintains 10 air quality monitoring stations located throughout the greater San Diego metropolitan region. Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels.

The San Diego–Rancho Carmel Drive monitoring station, located at 11403 Rancho Carmel Drive, approximately 1.5 miles east of the project site, is the closest monitoring station to the project site. This monitoring station began operation in 2015 and currently measures CO and NO_2. The closest monitoring station that measures a wider range of pollutants is the Escondido–East Valley Parkway monitoring station, located at 600 East Valley Parkway approximately 9 miles northeast of the project site. This monitoring station measures ozone, CO, NO_2, PM_{10}, and $PM_{2.5}$. This station was temporarily closed in August 2015, and the new Escondido monitoring station is anticipated to begin operation in 2018. Table 2 in Appendix D provides a summary of measurements collected at the San Diego–Rancho Carmel Drive and Escondido–East Valley Parkway monitoring stations for the years 2012 through 2016.

The most recent five years of data available is shown in Table 2 in Appendix D, which identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the project site. Additionally, data for SO_2 have been omitted as attainment is regularly met in the SDAB, and few monitoring stations measure SO_2 concentrations.

5.5.2.4 Pollutants of Concern

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. The U.S. EPA has designated six criteria pollutants of primary concern: ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), lead (Pb), and particulate matter, which included to sub-categories, particulate matter less than 10 microns (PM_{10}) and particulate matter less than 2.5 microns ($PM_{2.5}$). The U.S. EPA developed primary and secondary NAAQS. Additionally, the state of California has developed the CAAQS, which generally set more stringent limits on the criteria pollutants. The NAAQS and CAAQS are summarized in Table 5.5-1 above.

If an air basin is not in either federal or state attainment for a particular pollutant, the basin is classified as non-attainment area for that pollutant. The SDAB is currently classified as a federal non-attainment area for ozone. At the state level, the SDAB is classified a non-attainment area for ozone, PM_{10}, and $PM_{2.5}$. Criteria pollutants, their typical sources, and effects are identified below.

a. Ozone

Ozone is the primary component of smog. Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of nitrogen oxides (NO_X) and reactive organic gases (ROG) (a.k.a. volatile organic compounds [VOC] or reactive organic compounds) in the presence of sunlight. The adverse health effects associated with exposure to ozone pertain primarily to the respiratory system. Scientific evidence indicates that ambient levels of ozone affect not only sensitive receptors, such as asthma sufferers and children, but healthy adults as well. Exposure to ozone has been found to significantly alter lung functions by increasing respiratory rates and pulmonary resistance, decreasing tidal volumes (the amount of air inhaled and exhaled), and impairing respiratory mechanics. Symptomatic responses include throat dryness, chest tightness, headache, and nausea. About half of smog-forming emissions come from automobiles.

b. Carbon Monoxide

Carbon monoxide is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. CO enters the bloodstream through the lungs by combining with hemoglobin, which normally supplies oxygen to the cells. However, CO combines with hemoglobin much more readily than oxygen does, resulting in a drastic reduction in the amount of oxygen available to the cells. Adverse health effects associated with exposure to CO concentrations include such symptoms as dizziness, headaches, and fatigue (U.S. EPA 2017a).

Small-scale, localized concentrations of CO above the NAAQS and CAAQS may occur at intersections with stagnation points such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as “CO hotspots” and are a concern at congested intersections, where automobile engines burn fuel less efficiently and their exhaust contains more CO.

c. Nitrogen Dioxide

Nitrogen dioxide is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Inhalation is the most common route of exposure to NO_2. Because NO_2 has relatively low solubility in water, the principal site of toxicity is in the lower respiratory tract. The severity of the adverse health effects depends primarily on the concentration inhaled rather than the duration of exposure. An individual may experience a variety of acute symptoms, including coughing, difficulty with breathing, vomiting, headache, and eye irritation during or shortly after exposure. After a period of approximately 4 to 12 hours, an exposed individual may experience chemical pneumonitis or pulmonary edema with breathing abnormalities, cough, cyanosis, chest pain, and rapid heartbeat.

d. Sulfur Dioxide

Sulfur dioxide is a combustion product, with the primary source being power plants and heavy industries that use coal or oil as fuel. SO_2 is also a product of diesel engine combustion. The health effects of SO_2 include lung disease and breathing problems for people with asthma. SO_2 in the atmosphere contributes to the formation of acid rain.

e. Particulate Matter

Health studies have shown a significant association between exposure to particulate matter and premature death in people with heart or lung diseases. Other important effects include aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and irregular heartbeat (U.S. EPA 2017b).

Inhalable Coarse Particles (PM_{10})

PM_{10} is particulate matter with an aerodynamic diameter of 10 microns or less. Ten microns is about one-seventh of the diameter of a human hair. Particulate matter is a complex mixture of very tiny solid or liquid particles composed of chemicals, soot, and dust. Under typical conditions (i.e., no wildfires) particles classified under the PM_{10} category are mainly emitted directly from activities that disturb the soil including travel on roads and construction, mining, or agricultural operations. Other sources include windblown dust, salts, brake dust, and tire wear.

Inhalable Fine Particles ($PM_{2.5}$)

Airborne, inhalable particles with aerodynamic diameter of 2.5 microns or less have been recognized as an air quality concern requiring regular monitoring. Federal regulations required that $PM_{2.5}$ monitoring begin January 1, 1999. Similar to PM_{10}, $PM_{2.5}$ is also inhaled into the lungs and causes serious health problems.

f. Lead

Lead is a metal found naturally in the environment as well as in manufactured products. At high levels of exposure, lead can have detrimental effects on the central nervous system. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions.

5.5.3 Regulatory Framework

5.5.3.1 Federal Regulations

The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (U.S.C.) 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the CAA [42 U.S.C. 7409], the U.S. EPA developed primary and secondary NAAQS.

Six criteria pollutants of primary concern have been designated: O_3, CO, SO_2, NO_2, Pb, and PM_{10} and $PM_{2.5}$. The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented above in Table 5.5-1. The current NAAQS are summarized in Table 5.5-1 above.

An air basin is designated as either attainment or non-attainment for a particular pollutant. Once a non-attainment area has achieved the ambient air quality standards for a particular pollutant, it is redesignated as an attainment area for that pollutant. To be redesignated, the area must meet air quality standards for three consecutive years. After redesignation to attainment, the area is known as a maintenance area and must develop a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. As mentioned above, the SDAB is a non-attainment area for the federal O_3 standard.

5.5.3.2 State Regulations

a. California Air Resources Board

The CARB has developed the CAAQS and generally has set more stringent limits on the criteria pollutants than the NAAQS (see Table 5.5-1). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Similar to the federal CAA, the state classifies as either "attainment" or "non-attainment" areas for each pollutant based on the comparison of measured data with the CAAQS. The SDAB is a non-attainment area for the state O_3 standards, the state PM_{10} standard, and the state $PM_{2.5}$ standard.

b. State Implementation Plan

The State Implementation Plan (SIP) is a collection of documents that set forth the state's strategies for achieving ambient air quality standards. The SDAPCD is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The SDAPCD adopts rules, regulations, and programs to attain state and federal air quality standards, and appropriates money (including permit fees) to achieve its objectives.

5.5.3.3 San Diego Air Pollution Control District

The SDAPCD prepared the original 1991/1992 Regional Air Quality Strategy (RAQS) in response to requirements set forth in the California CAA. The California CAA requires areas that are designated state non-attainment areas for O_3, CO, SO_2, and NO_2 prepare and implement plans to attain the standards by the earliest practicable date. The California CAA does not provide guidance on timing or requirements for attaining the state PM_{10} and $PM_{2.5}$ standards. Attached as part of the RAQS are the Transportation Control Measures (TCMs) adopted by the San Diego Association of Governments (SANDAG). Updates of the RAQS and corresponding TCM are required every three years. The RAQS and TCM set forth the steps needed to accomplish attainment of state and federal AAQS. The most recent update of the RAQS and TCM occurred in 2016.

The growth projections used by the SDAPCD to develop the RAQS emissions budgets are based on the population, vehicle trends, and land use plans developed in general plans and used by SANDAG in the development of the regional transportation plans and sustainable communities strategy. As such, projects that propose development that is consistent with the growth anticipated by SANDAG's growth projections and/or the general plan would be consistent with the RAQS. In the event that a project would propose a development that is less dense than that associated with the General Plan, the project would likewise be consistent with the RAQS. In the event a project proposes development that is greater than anticipated in the growth projections, further analysis would be warranted to determine if the project would exceed the growth projections used in the RAQS for the specific subregional area.

The project is consistent with the Black Mountain Ranch Subarea Plan. The project site was designated for development of 117 dwelling units, including a requirement for 19 affordable units, in the 1998 EIR (96-7902) to which this SEIR is tiered. The project would develop 84 detached multi-family residential units and associated streets, which would be consistent with the land use identified for the project site in the 1998 EIR (96-7902). Project density on-site would be less than what was assumed and analyzed for the property under the 1998 EIR, and the project would transfer the remaining density (19 affordable housing units and 14 market-rate units) to the Black Mountain Ranch North Village Town Center, pursuant to the density transfer allowances established by the Subarea Plan. Therefore, the project would be consistent with the Transportation Phasing Plan for buildout of the Subarea Plan, and would be consistent with the growth assumptions assumed in the RAQS.

5.5.4 Issue 1 Air Quality Violations (Construction)

- Would the project result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation?

5.5.4.1 Threshold

As stated in Appendix G of the California Environmental Quality Act (CEQA) Guidelines, "significance established by the applicable air quality management or air pollution control district may be relied upon." The City's air quality significance determination thresholds are established by the SDAPCD. The SDAPCD sets forth quantitative emission thresholds for stationary sources. Project-related air quality impacts would be considered significant if any of the applicable significance thresholds presented herein are exceeded.

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. Significance thresholds are listed in Table 5.5-2.

Table 5.5-2 Air Quality Impact Analysis Trigger Levels			
Pollutant	Emission Rate (pounds/hour)	Emission Rate (pounds/day)	Emission Rate (tons/year)
Carbon Monoxide	100	550	100
Nitrogen Oxide	25	250	40
Particulate Matter less than 10 Microns	--	100	15
Sulfur Oxide	25	250	40
Lead	--	3.2	0.6
Particulate Matter less than 2.5 Microns	--	67	10
Reactive Organic Gases	--	137	15
SOURCE: City of San Diego 2016; SDAPCD, Rules 20.1, 20.2, 20.3 (SDAPCD 2016).			

5.5.4.2 Impacts

Air emissions were calculated using California Emissions Estimator Model (CalEEMod) 2016.3.2 (California Air Pollution Control Officers Association [CAPCOA] 2017). CalEEMod is a tool used to estimate air emissions resulting from land development projects in the state of California. The model generates air quality emission estimates from three basics sources: construction sources, area sources (e.g., landscaping equipment and natural gas heating), and mobile sources (e.g., traffic). CalEEMod provides emission estimates of NO_X, CO, sulfur oxide (SO_X), PM_{10}, $PM_{2.5}$, and ROG. As discussed, this focused air quality report analyzes short-term impacts associated with construction.

Construction-related activities are temporary, short-term sources of air emissions. Sources of construction-related air emissions include:

- Fugitive dust from grading activities;
- Construction equipment exhaust;
- Construction-related trips by workers, delivery trucks, and material-hauling trucks; and
- Construction-related power consumption.

Construction-related pollutants result from dust raised during demolition and grading, emissions from construction vehicles, and chemicals used during construction. Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Construction operations are subject to the requirements established in SDAPCD Regulation 4, Rules 52, 54, and 55.

Heavy-duty construction equipment is usually diesel powered. In general, emissions from diesel-powered equipment contain more NO_X, SO_X, and particulate matter than gasoline-powered engines. However, diesel-powered engines generally produce less CO and less ROG than gasoline-powered engines. Standard construction equipment includes tractors/loaders/backhoes, rubber-tired dozers, excavators, graders, cranes, forklifts, rollers, paving equipment, generator sets, welders, cement and mortar mixers, and air compressors.

Primary inputs are the numbers of each piece of equipment and the length of each construction stage. Specific construction phasing and equipment parameters are not available at this time. However, CalEEMod can estimate the required construction equipment when project-specific information is unavailable. The estimates are based on surveys, performed by the South Coast Air Quality Management District and the Sacramento Metropolitan Air Quality Management District of typical construction projects, which provide a basis for scaling equipment needs and schedule with a project's size. Air emission estimates in CalEEMod are based on the duration of construction phases; construction equipment type, quantity, and usage; grading area; season; and ambient temperature, among other parameters. Emissions were modeled assuming that construction would last approximately two years. Construction equipment included in the emission calculations was based on construction equipment required for the adjacent Heritage Bluffs project, which required construction and blasting activities that would be similar to the project.

Table 5.5-3 shows the total projected construction maximum daily emission levels for each criteria pollutant. Standard dust control measures would be implemented as a part of project construction in accordance with SDAPCD rules and regulations. Fugitive dust emissions were calculated using CalEEMod default values, and did not take into account the required dust control measures. Additionally, the area around the blast site would be watered the day before and the morning of the blast in order to dampen the dust. Thus, the emissions shown in Table 5.5-3 are conservative.

Table 5.5-3
Summary of Worst-case Construction Emissions
(pounds per day)

	Emissions					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Site Preparation	4	46	23	<1	21	12
Grading/Blasting	13	120	87	<1	15	10
Building Construction	2	20	18	<1	1	1
Paving	1	13	15	<1	1	1
Architectural Coatings	24	2	2	<1	<1	<1
Maximum Daily Emissions	**24**	**120**	**87**	**<1**	**21**	**12**
Significance Threshold	*250*	*250*	*550*	*250*	*100*	*67*

ROG = reactive organic gases; NO_X = nitrogen oxide; CO = carbon monoxide; SO_X = sulfur oxide; PM_{10} = particulate matter less than 10 microns; $PM_{2.5}$ = particulate matter less than 2.5 microns

As shown in Table 5.5-3, project construction would not exceed the applicable regional emissions thresholds, including those for PM_{10} and $PM_{2.5}$. These thresholds are designed to provide limits below which project emissions would not significantly change regional air quality. Therefore, as construction emissions would be well below these limits, the project would not result in regional emissions that would exceed the NAAQS or CAAQS or contribute to existing violations. Furthermore, Table 5.5-3 shows that construction emissions of PM_{10} and $PM_{2.5}$ would not exceed 100 pounds per day. Therefore, the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

5.5.4.3 Significance of Impacts

The project would not exceed construction emission levels based on the significance determination thresholds. Therefore, maximum daily construction emissions are projected to be less than the applicable thresholds for all criteria pollutants, and impacts would be less than significant.

5.5.3.4 Mitigation, Monitoring, Reporting

Mitigation would not be required.

5.5.5 Issue 2: Sensitive Receptors (Construction)

- Would the project expose sensitive receptors to substantial pollutant concentrations?

5.5.5.1 Threshold

The SDAPCD's Supplemental Guidelines for Submission of Air Toxics "Hot Spots" Program Health Risk Assessments (SDAPCD 2015) provides guidance to perform health risk assessments (HRAs) within the SDAB. Although the SDAPCD guidance is specifically targeted toward health risk from air toxic emissions from stationary source operations, the thresholds were adapted here for informational purposes. The SDAPCD's current thresholds of significance for toxic air contaminant emissions from the operations of permitted and non-permitted sources are presented in Table 5.5-4.

Table 5.5-4
SDAPCD CEQA Toxic Air Contaminant Emissions Thresholds

Carcinogens	Non-Carcinogens
	Chronic
Maximally exposed individual risk equals or exceeds 10 in 1 million	Hazard Index equals or exceeds 1 for the maximally exposed individual

5.5.5.2 Impacts

Sensitive land uses include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities. Sensitive receptors surrounding the project site are limited to residential uses located northeast of the project site.

Construction of the project and associated infrastructure would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Construction of the project would result in the generation of diesel-exhaust diesel particulate matter (DPM) emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities and on-road diesel equipment used to bring materials to and from the project site.

Generation of DPM from construction projects typically occurs in a single area for a short period. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk

assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, if the duration of proposed construction activities near any specific sensitive receptor were two years, the exposure would be less than 6 percent of the total exposure period used for health risk calculation.

Therefore, because of the limited size of the project and the short duration of construction, DPM generated by construction is not expected to create conditions where the probability is greater than 10 in 1 million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic toxic air contaminants that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types, the DPM emissions of individual equipment would be substantially reduced over time.

Soils within the regional area are known to possess naturally occurring subsurface arsenic. Consequently, dust generated from blasting operations required during project construction would have the potential to release naturally occurring subsurface arsenic, which could result in short-term exposure.

5.5.5.3 Significance of Impacts

Construction of the project would not expose sensitive receptors to substantial pollutant concentrations, and impacts related to DPM would be less than significant. However, dust generated from blasting operations required during project construction would have the potential to release naturally occurring subsurface arsenic, which could result in short-term exposure that may result in a significant impact.

5.5.5.4 Mitigation, Monitoring, Reporting

MM-AIR-1a: Arsenic Testing Protocol in Areas Requiring Blasting

Geocon shall obtain periodic random samples from select air-track borehole spoils or the ground surface over the course of the blasting program. The number of samples shall vary and be based on judgement depending on the size of the shot. The samples shall be assigned for analysis of arsenic using U.S. Environmental Protection Agency Test Method 6010B with a reporting limit of 1.0 milligram per kilogram. The sampling shall be performed under the direct supervision of Geocon's Project Manager and Professional Geologist.

MM-AIR-1b: Blasting Dust Mitigation Plan

The following protocols shall be performed to minimize the generation of visible dust during the hard rock blasting events:

- The areas shall be heavily watered prior to the planned blasting. The amount of water applied shall depend on the size of the shot and composition of the materials exposed at the top of the shot (i.e., topsoil vs. hard rock).

- A water truck shall be dedicated to pre-wet the ground surface.
- Detergent, if necessary, shall be added to the water truck to reduce the surface tension of the water and promote soaking into the surface materials. The water used shall be confined to the area of the shot and not be allowed to migrate out of the work limits. Confinement of the water shall be achieved through use of earthen berms, ditches, or other containment features that shall prevent migration of the water outside the work area.
- Once the boreholes are loaded with blasting agent, a final soaking shall occur just prior to the shot.

5.5.5.5 Significance after Mitigation

Implementation of MM-AIR-1a and MM-AIR-1b would reduce potential impacts associated with dust generated from blasting operations that would have the potential to release naturally occurring subsurface arsenic to below a level of significance.

5.5.6 Issue 3: Odor (Construction)

- Would the project create objectionable odors affecting a substantial number of people?

5.5.6.1 Threshold

Per the City's CEQA Significance Determination Thresholds, determining the significance of potential odor impacts should be based on what is known about the quantity of the odor compound(s) that would result from the project's proposed use(s), the types of neighboring uses potentially affected, the distance(s) between the project's point source(s) and the neighboring uses such as sensitive receptors, and the resultant concentration(s) at receptors.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person (SDAPCD 1969). A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

5.5.6.2 Impacts

During construction, diesel equipment may generate some nuisance odors. Sensitive receptors near the project site include residential uses; however, exposure to odors associated with project construction would be short term and temporary in nature.

5.5.6.3 Significance of Impacts

Exposure to odors associated with construction would be short term and temporary in nature, and impacts would be less than significant.

5.5.6.4 Mitigation, Monitoring, Reporting

Mitigation would not be required.

5.5.7 Issue 4: Particulate Matter (Construction)

- Would the project exceed 100 pounds per day of particulate matter (dust)?

5.5.7.1 Threshold

Per the City's CEQA Significance Determination Thresholds, the project would have significant effects if a project would:

- Exceed 100 pounds of PM dust per day.

5.5.7.2 Impacts

As shown in Table 5.5-3, emissions of PM_{10} from construction would be below the City's significance threshold of 100 pounds per day.

5.5.7.3 Significance of Impacts

Construction of the project would not result in PM_{10} emissions exceeding 100 pounds per day, and impacts would be less than significant.

5.5.7.4 Mitigation, Monitoring, Reporting

Mitigation would not be required.

5.6 Noise

This section evaluates potential noise impacts associated with the project. The following discussion is based upon the Noise Analysis (RECON 2019e) prepared by RECON and included as Appendix E.

5.6.1 Relationship to the Black Mountain Ranch (Subarea I) Subarea Plan

The analysis in this section updates the noise analysis in the 1998 Environmental Impact Report (EIR), with an emphasis on effects that were not addressed in the previous report. Because no site-specific design was proposed at the time the 1998 EIR was prepared, impacts relative to construction noise, including blasting impacts, could not be analyzed in detail for the perimeter properties, including the project site. Construction-related noise impacts, including impacts to the adjacent Multi-Habitat Planning Area (MHPA) from development of the Southeast Perimeter properties, were considered to be potentially significant. The Noise Analysis addresses anticipated construction noise associated with land preparation activities, including blasting, which was not considered in the 1998 EIR analysis. Operational noise impacts were adequately analyzed as part of the 1998 EIR, to which this Supplemental Environmental Impact Report (SEIR) is tiered. Those impacts are summarized in Chapter 9.0.

5.6.2 Existing Conditions

The project site is located in a developing area that consists primarily of residential development and open space. A majority of the project site is surrounded by open space. The nearest circulation element roadway is Carmel Valley Road, which is approximately 2,800 feet to the north. Local residential streets are located in the newly constructed single-family residential neighborhood to the northeast. However, these local streets only provide access to the neighborhood and do not carry a significant amount of traffic. Existing noise levels on the project site would be similar to an open space and single-family residential neighborhood, which are relatively quiet. Distant vehicle traffic on Carmel Valley Road is the main transportation-related noise source. The existing traffic volume and speed for Carmel Valley Road were obtained from the San Diego Association of Governments Traffic Forecast Information Center (SANDAG 2019). Based on an existing traffic volume of 26,800 and a speed of 50 miles per hour on Carmel Valley Road, using Federal Highway Administration (FHWA) algorithms, it was calculated that the existing vehicle traffic noise level on the project site is approximately 57 CNEL (Appendix E).

5.6.2.1 Fundamentals of Noise

Sound levels are described in units called the decibel (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease. However, human perception of noise has no simple correlation with acoustical energy. A change in

noise levels is generally perceived as follows: 3 A-weighted dB [dB(A)] barely perceptible, 5 dB(A) readily perceptible, and 10 dB(A) perceived as a doubling or halving of noise (California Department of Transportation 2013).

In technical terms, sound levels are described as either a "sound power level" or a "sound pressure level," which while commonly confused are two distinct characteristics of sound. Both share the same unit of measure, the dB. However, sound power, expressed as L_{pw}, is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers such as an ear drum or microphone, the sound pressure level. Sound measurement instruments only measure sound pressure, and limits used in standards are generally sound pressure levels.

The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, the "A-weighted" noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are designated with the notation dB(A).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this study is the equivalent noise level (L_{eq}). The L_{eq} is the equivalent steady-state noise level in a stated period of time that is calculated by averaging the acoustic energy over a time period; when no period is specified, a 1-hour period is assumed.

Sound from a localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dB(A) for each doubling of the distance.

Traffic noise is not a single, stationary point source of sound. The movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over some time interval. The drop-off rate for a line source is 3 dB(A) for each doubling of distance.

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) provides an additional ground attenuation value of 1.5 dB(A) per doubling of distance. Thus, a point source over a soft site would drop off at 7.5 dB(A) per doubling of distance.

5.6.2.2 Fundamentals of Vibration

Groundborne vibration consists of oscillatory waves that propagate from the source through the ground to adjacent structures. The frequency of a vibrating object describes how rapidly it is oscillating. The number of cycles per second of oscillation is the vibration frequency, which is

described in terms of hertz, abbreviated hertz (Hz). The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz.

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings caused by construction activities may be perceived as motion of building surfaces or rattling of windows, items on shelves, and pictures hanging on walls. Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), and when the structure and the construction activity are connected by foundations or utilities, such as sewer and water pipes.

Although groundborne vibration is sometimes noticeable in outdoor environments, groundborne vibration is almost never annoying to people who are outdoors (Federal Transit Administration [FTA] 2006). The primary concern from vibration is the ability to be intrusive and annoying to local residents and other indoor vibration sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High frequency vibrations reduce much more rapidly than low frequencies, so that low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances. When vibration encounters a building, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under certain circumstances, the ground-to-foundation coupling may also amplify the vibration level due to structural resonances of the floors and walls.

Vibration levels are usually expressed as single-number measure of vibration magnitude, in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second (in/sec). Since it is related to the stresses that are experienced by buildings, PPV is often used in monitoring of blasting vibration.

Vibration-sensitive receivers are generally considered the same as noise-sensitive receivers, but may also include historical structures, laboratories, research facilities, and similar facilities. All vibration-sensitive receivers in the vicinity of the project are typical residential uses. There are no special uses or historic structures affected by the project.

5.6.3 Regulatory Framework

5.6.3.1 Vibration

The threshold for blasting vibration impacts, as established by the U.S. Bureau of Mines, is 2.0 in/sec PPV at the closest structure. Additionally, as required by the County of San Diego Fire Code, pre- and post-blast inspections for building damage would be conducted by the blasting contractor prior to the first blast.

Based on best available data, impacts for hydraulic breakers, or hammers, and other non-transient sources such as those associated with project construction shall be considered significant if the PPV exceeds 0.2 in/sec.

5.6.3.2 City of San Diego Municipal Code

The City of San Diego regulates construction noise through Section 59.5.0404 of the City's Noise Abatement and Control Ordinance as follows:

(a) It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. . . .

(b) [I]t shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7:00 a.m. to 7:00 p.m.

5.6.3.3 MSCP Subarea Plan

The City of San Diego's Multiple Species Conservation Program (MSCP) and MHPA adjacency requirements, as well as associated guidelines produced by the U.S. Fish and Wildlife Service, require that noise be limited to a level not to exceed an hourly limit of 60 dB(A) L_{eq} or the average ambient noise level, whichever is greater, at the edge of MHPA habitat during the identified sensitive species breeding season of February 1 to September 15.

5.6.4 Issue 1: Noise and Vibration (Construction)

- Would the project result in or create a significant increase in the existing ambient noise levels, which exceed the City's noise ordinance?
- Would the project expose persons to or generate excessive ground-borne noise vibration?

5.6.4.1 Threshold

According to the City's CEQA Significance Determination Thresholds, a project would have a significant noise impact if it would result in:

- Exposure of people to construction noise levels that exceed the City's adopted Noise Ordinance, San Diego Municipal Code, Section 5.9.5.0404 (i.e., 75 dB(A) L_{eq}).

Additionally, the project would have a significant groundborne vibration impact if it would result in:

- Exposure of the nearest sensitive receiver to hydraulic breakers, hammers, and other non-transient source vibration levels that exceed 0.2 in/sec PPV; or blasting vibration levels that exceed 2.0 in/sec PPV.

5.6.4.2 Impacts

a. Residential Receivers

Construction activities produce varying degrees of ground vibration, depending on the equipment and methods employed. However, with a few exceptions, ground vibrations from typical construction activities very rarely reach levels high enough to cause damage to structures. Noise and vibration generated by general construction activities associated with the project were assessed in the Subarea Plan EIR. Consequently, excavation and other general construction activities are not assessed in this analysis. The noise and vibration analysis focused on the recently identified options for rock removal, including hammering, drilling, and blasting. As with noise, vibrations are attenuated by distance. The vibrations that would be produced by hammering, drilling, and blasting would travel relatively short distances as compared to noise. Therefore, the noise analysis focused on the receivers located northeast of the project site (Figure 5.6-1). The nearest receivers are the single-family homes associated with the Heritage Bluffs project, which is currently under construction and will be occupied once construction on this project begins. The nearest receptor is (would be) located approximately 175 feet northeast of the nearest hammering, drilling, and blasting location. The methodology use in the noise analysis is presented in Appendix E.

Hammering

Noise

Mounted hydraulic impact hammers would be used to remove the top of the rock formation. Hydraulic hammers used for rock breaking are assumed to operate at maximum power for approximately 20 percent of a given hour (FHWA 2008). A loader/backhoe would likely be used to clear broken rock and would have a utilization factor of approximately 40 percent. Rock breaking with hydraulic hammers is calculated to generate maximum noise levels on the order of 90 dB(A) at 50 feet. Assuming two hydraulic hammers and one loader/backhoe are operating for a full hour, hydraulic-hammer rock breaking would generate hourly noise levels of 86 dB(A) L_{eq} at 50 feet. Based on standard point source propagation noise levels, noise levels would attenuate to 75 dB(A) L_{eq} at the nearest residential property line 175 feet to the northeast, which would comply with the City's applicable construction noise level standards.

Vibration

According to the FTA, vibration levels associated with the use of mounted impact hammers are 0.089 in/sec PPV at 25 feet. Using FTA's recommended procedure for applying a propagation adjustment to these reference levels, vibration levels would exceed Caltrans-recommended threshold (0.2 in/sec PPV) at distances of 14 feet or less from a mounted hydraulic hammer. Vibrations at various distances are shown in Table 5.6-1. Vibration levels are anticipated to attenuate

to 0.005 in/sec PPV at nearest residential property line 175 feet to the northeast, which would not exceed 0.2 in/sec PPV from hydraulic hammering at local residences.

Table 5.6-1
Predicted Hydraulic Hammering Vibration Levels

Distance to Construction Non-rippable Rock (feet)	Impact Criteria (in/sec PPV)	Predicted Vibration Level (in/sec PPV)	Potential Significant Impact
5	0.2	**0.995**	Yes
10		**0.352**	Yes
11		**0.305**	Yes
12		**0.268**	Yes
13		**0.237**	Yes
14		**0.212**	Yes
15		0.191	No
20		0.124	No
25		0.089	No
175 – nearest residence		0.005	No

in/sec = inches per second; PPV = peak particle velocity
Bold = Exceeds 0.2 in/sec PPV

Drilling

Noise

As an alternative to hammering, drilling may be used to prepare the boreholes for explosives. While the numbers and diameters of the boreholes are dependent on the actual blasting process, the noise levels generated by a rock drill would not vary. According to the FHWA, a rock drill typically generates maximum noise levels of 85 dB(A) L_{eq} at 50 feet. As discussed previously, this is reduced by the actual time the equipment is generating the maximum noise in a given hour. Based on the FHWA data, a rock drill generates the greatest noise levels for approximately 20 percent of an hour. Thus, a single rock drill would generate an hourly noise level of 78 dB(A) L_{eq} at 50 feet. Assuming the use of a rock drill and a loader/backhoe are operating for a full hour, rock drilling operations would generate hourly noise levels of 80 dB(A) L_{eq} at 50 feet. Based on standard point source propagation noise levels, noise levels would attenuate to 69 dB(A) L_{eq} at the nearest residential property line 175 feet to the northeast, which is less than the City's applicable construction noise level limit of 75 dB(A) L_{eq}.

Vibration

According to the FTA, vibration levels associated with the use of rock drills are estimated to generate 0.089 in/sec PPV at 25 feet, which is the same level as the hydraulic impact hammer. Consequently, vibration levels generated by rock drilling would be the same as those shown in Table 5.6-1, and would attenuate to 0.005 in/sec PPV at nearest residential property line 175 feet to the northeast.

Blasting

Noise

Blasting involves drilling boreholes and placing small amounts of explosives in each hole. By limiting the amount of explosives in each hole, the blasting contractor can limit the fraction of the total energy released at any single time, which can limit noise and vibration levels. When explosive charges detonate in rock, almost all of the available energy from the explosion is used in breaking and displacing the rock mass. However, some blast energy escapes into the atmosphere as a sequence of airborne sound waves, a phenomenon known as "air blast over-pressure." These sound waves are very low frequency, below the audible range. Very high blast over-pressure levels can rattle or in some cases break windows. However, air-blast over pressure rarely reaches levels that could cause building damage with modern blasting practices.

According to the FHWA, within the audible frequency range, a blast generates maximum noise levels on the order of 101 dB(A) L_{max}. However, the total time for a blast would be seconds and only one blasting event would occur in a given hour. Consequently, hourly noise levels from blasting are calculated at 74 dB(A) L_{eq} at 50 feet, and would not exceed 75 dB(A) L_{eq} at the nearest residence 175 feet to the northeast.

Vibration

Vibration levels associated with blasting are site-specific and are dependent on the amount of explosives used, soil conditions between the blast site and the receptor, and the elevation where blasting would take place (specifically, how far below surface elevation where bedrock would be encountered). At the current stage of project design, a blasting and monitoring plan has not been completed. Therefore, specifics, such as the explosive, blasting quantities, and exact locations, have not been identified. However, it can be assumed all blasting locations would be within the boundaries of the non-rippable rock, and to be conservative, all the non-rippable rock is considered a blasting location. Consequently, noise and vibration impacts from blasting are calculated from the nearest location of the non-rippable rock to the nearest receiver, which is approximately 175 feet to the northeast (see Figure 5.6-1).

Ranges of vibration levels have been predicted at various distances from potential blasting sites for quantities of explosives ranging from 0.25 pound to 12 pounds per charge weight. The range of vibration levels in this analysis is due primarily to the quantity of explosive, as all other parameters were held constant. As shown in Table 5.6-2, blasting is predicted to generate vibration levels ranging from 0.06 in/sec PPV (from a 0.25-pound charge) to 1.34 in/sec PPV (from a 12-pound charge) at the nearest residence. Calculations are based on a receiver distance of 175 feet, which is the approximate distance to the nearest receiver from a potential blasting location. Calculation details are provided in the Noise Analysis (see Appendix E)

The resulting PPV from blasting can be decreased through best engineering practices used by professional, licensed, blasters, including, but not limited to, orienting the progressions of the charges away from receivers, decreasing confinement of the explosive energy, increasing spatial distribution of the charges, and increasing time of energy release or detonation. The County of San Diego Fire Code includes a minimum energy release time for individual charges of 8 milliseconds to limit vibrations.

Additionally, empirical data has shown that delays of as little as 5 milliseconds can minimize vibration in very close blasting situations (10 to 25 feet) (Bender 2007).

Table 5.6-2
Predicted Blasting Vibration Levels by Charge Weight

Distance to Non-Rippable Rock (feet)	Predicted Vibration Level by Charge Weight (in/sec PPV)							
	12 lb.	10 lb.	8 lb.	4 lb.	2 lb.	1 lb.	0.5 lb.	0.25 lb.
10	**130.93**	**113.16**	**94.66**	**54.37**	**31.23**	**17.93**	**10.30**	**5.92**
50	**9.97**	**8.62**	**7.21**	**4.14**	**2.38**	1.37	0.78	0.45
100	**3.29**	**2.84**	**2.38**	1.37	0.78	0.45	0.26	0.15
150	1.72	1.49	1.24	0.71	0.41	0.24	0.14	0.08
175 – nearest residence	1.34	1.16	0.97	0.56	0.32	0.18	0.11	0.06
200	1.08	0.94	0.78	0.45	0.26	0.15	0.09	0.05

in/sec = inches per second; PPV = peak particle velocity; lb. = pounds
NOTE: **Bold** numbers indicate an exceedance of 2.0 in/sec PPV, which would be considered an impact.

As shown in Table 5.6-2, the nearest receiver located 175 feet to the northeast of the proposed blasting locations is not anticipated to be exposed to vibration levels in excess of 2.0 in/sec PPV. Although a project-specific blasting plan and exact amount of explosive needed is not known at this time, the project would comply with the County Fire Code and would implement all feasible vibration reduction strategies, including conducting pre- and post-construction surveys of the nearest residence to any blast. The project would also monitor blasting vibrations and overpressure levels, the results of the monitoring would be used to reduce charge weights, increase timing between charges, or other appropriate measures as required to reduce vibrations from blasting. Furthermore, the proposed blasting activities would be subject to the following County Fire Code (County of San Diego 2017) and City requirements:

1. Per Section 59.5.0404 of the City's Noise Abatement and Control Ordinance, construction, including blasting, shall be prohibited between the hours of 7:00 p.m. and 7:00 a.m., or on Sundays, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday.

2. The blasting contractor shall obtain a permit from the Fire Chief of the City of San Diego per the requirements of Section 53.01 of the Municipal Code.

3. Blasting activities would follow guidance provided in the General Blasting Management Plan that would include an estimate of air blast overpressure and vibration levels of each shot at the nearest structure. A preliminary General Blasting Management Plan is included as Attachment 1. Blasting shall not commence until the City and Sherriff's Department has approved the General Blasting Management Plan.

4. Each blast shall be monitored and recorded with an air blast over-pressure monitor that is located outside the nearest residence to the blast.

5. The City project engineer shall review the request for each blast to verify blasting only of material that requires blasting.

6. To verify compliance with the blasting vibration limitations, all blasting operations shall be monitored with a seismograph located at the nearest structure. All seismograph reports shall be submitted to the City.

7. The City shall require a one-time notice in writing for each blast to the local fire agency and dispatch center and to all residences, including mobile homes, and businesses within 300 feet of potential minor blast locations. The notice shall be given not less than 24 hours, but not more than one week, before each blasting operation.

8. If any measure identified cannot be complied with, the project contractor shall obtain a City-approved noise consultant to perform noise and vibration monitoring until all measures can be complied with.

   The noise consultant shall conduct noise and vibration measurements at the nearest residence(s). The noise measurements shall be conducted for the duration of construction activities that do not comply with all measures. The noise consultant shall have the authority to stop work if noise levels exceed the City standards for construction (Section 59.5.0404 of the City's Noise Abatement and Control Ordinance), or exceed applicable vibration limits as defined in this report. At the conclusion of monitoring, the noise consultant shall prepare a letter report summarizing the measurements and findings, including any measures used to reduce noise and vibrations levels. The report shall include all measurement and calculation data used in determining impacts and resolutions and submitted to the Director of Community Development.

Implementation of these strategies would further ensure that vibrations from blasting would not exceed 2.0 in/sec PPV at the nearest residence.

b. Multi-Habitat Planning Area

The proposed MHPA BLA would remove minor encroachment areas and add un-disturbed on-site habitat not currently in the MHPA into the preserve (Figure 5.6-2). The occupied MHPA habitat is subject to an hourly limit of 60 dB(A) L_{eq} or the average ambient noise level, whichever is greater, at the edge of habitat during the identified sensitive species breeding season of February 1 to September 15. Possible blasting locations in relation to the proposed MHPA lands are presented in Figure 5.6-2.

As described in Section 5.1.4.2c above, the project would be consistent with all of the MSCP MHPA Land Use Adjacency Guidelines, including guidelines for noise. Per the MSCP MHPA Land Use Adjacency Guidelines, if coastal California gnatcatcher is present within the MHPA, construction noise levels at the MHPA boundary shall not exceed 60 A-weighted decibels.

5.6.4.3 Significance of Impacts

a. Residential Receivers

Noise and vibration impacts associated with impact hammering, rock drilling, and blasting would be less than significant.

b. Multi-Habitat Planning Area

The project would be consistent with the City's MSCP MHPA Land Use Adjacency Guidelines regarding noise. Therefore, impacts would be less than significant.

5.6.4.4 Mitigation, Monitoring, Reporting

a. Residential Receivers

Mitigation would not be required.

b. Multi-Habitat Planning Area

Mitigation would not be required.

Image Source: NearMaps (flown February 2019)

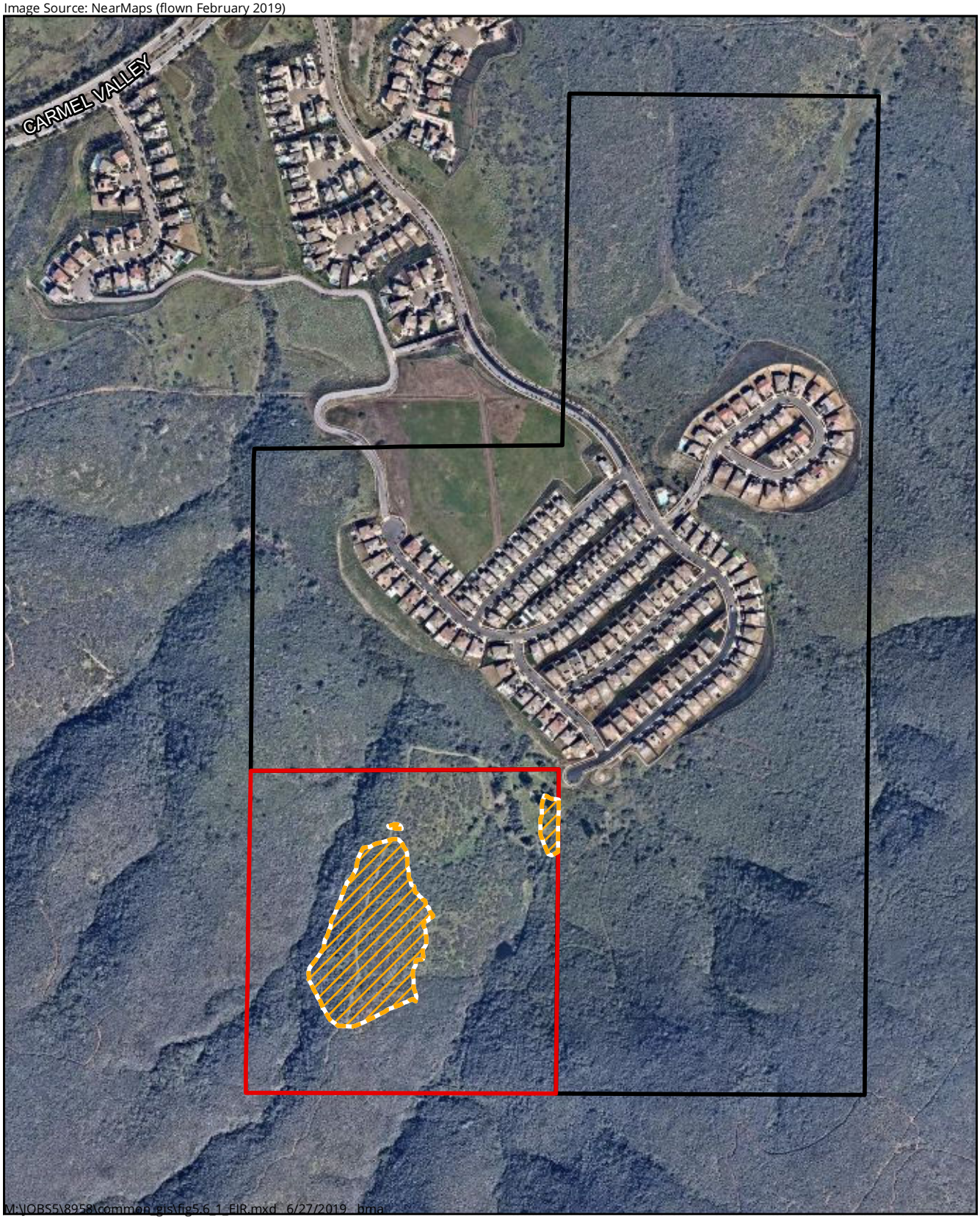


FIGURE 5.6-1

Possible Blasting Locations

Image Source: NearMaps (flown February 2019)

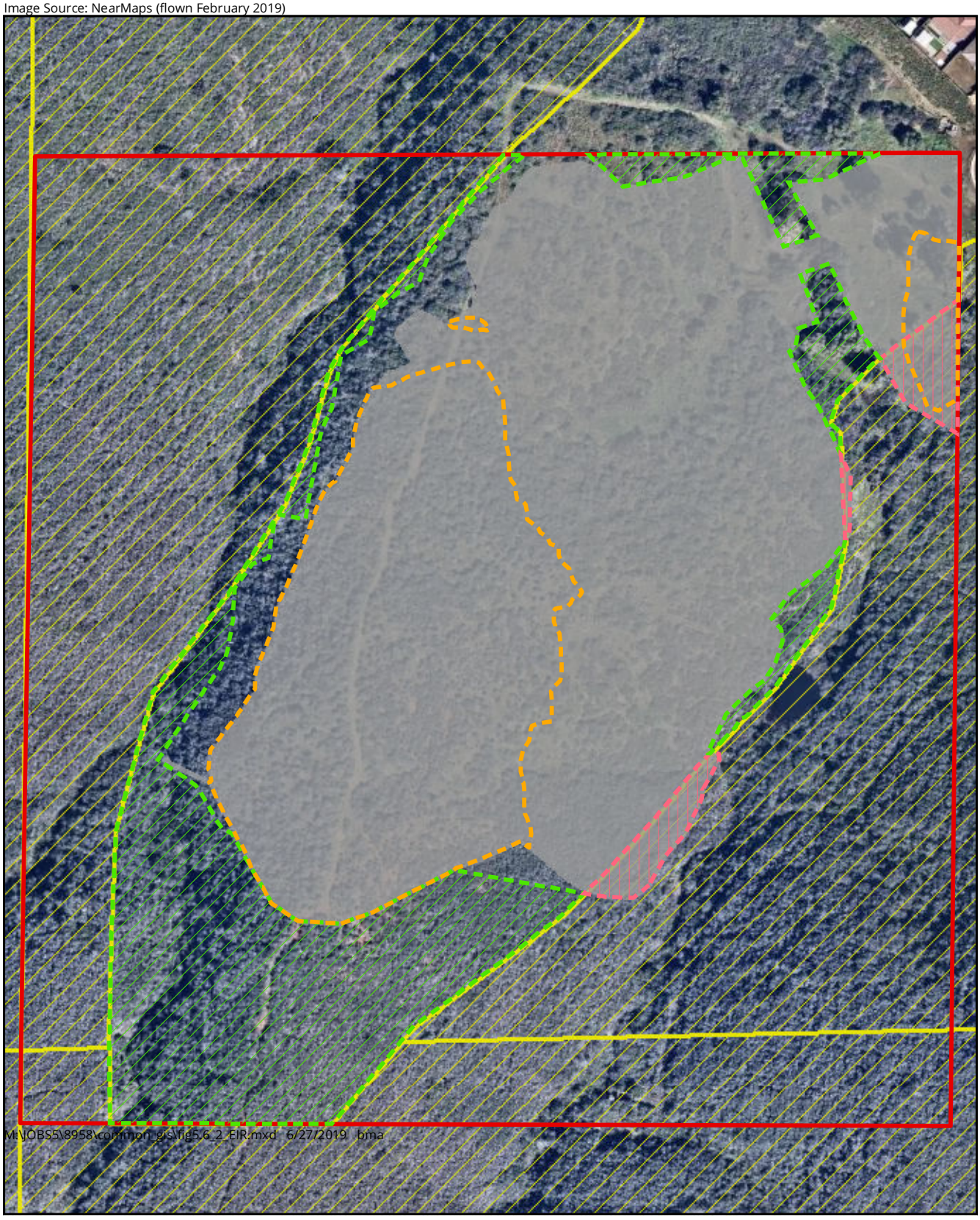


FIGURE 5.6-2
Adjacent MHPA

Chapter 6
Significant Unavoidable Environmental Effects/Irreversible Changes

This section addresses significant environmental impacts that cannot be avoided and irreversible environmental changes that would be involved should the project be implemented.

6.1 Significant Environmental Effects which Cannot Be Avoided if the Project Is Implemented

In accordance with CEQA Guidelines Section 15126.2 (b), any significant unavoidable impact of a project, including those impacts that can be mitigated but not reduced to below a level of significance despite the applicant's willingness to implement all feasible mitigation measures, must be identified in the SEIR. The project would not result in any new significant unavoidable impacts that were not previously identified in the 1998 Environmental Impact Report (EIR). Previously identified significant unavoidable impacts associated with buildout of the Subarea Plan that would not be mitigated to less than significant for the project include:

- Traffic
- Air Quality (direct and cumulative)
- Natural (Mineral) Resources and Agriculture
- Visual Resources/Landform Alteration

Table S-1 in the Executive Summary summarizes the project's significant environmental impacts and mitigation measures that would reduce impacts to a level less than significant. Chapter 11, Mitigation Monitoring and Report Program, lists the project-specific mitigation measures.

6.2 Irreversible Environmental Changes which Would Result if the Project Is Implemented

In accordance with CEQA Guidelines Section 15126.2 (c):

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvements which provide access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the

> project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

As described in the 1998 Subarea Plan EIR, the most prominent irreversible environmental change associated with the project would be the conversion of undeveloped land to urbanized uses. The conversion of undeveloped land to urbanized uses would be a permanent change because reversion of the land to its original condition would be nearly impossible once construction is complete.

Besides the commitment of land to urban use, implementation of the project would also involve the consumption of natural resources as well as energy derived from non-renewable sources, such as fossil fuels. Non-renewable resources generally include biological habitat, agricultural land, mineral deposits, water bodies, and some energy sources. As disclosed in the 1998 EIR, buildout of the Black Mountain Ranch Community including implementation of the project would result in significant irreversible impacts on agricultural and or mineral resources.

Implementation of the project would also require the irreversible consumption of natural resources and energy. Natural resource consumption would include lumber and other forest products, sand and gravel, asphalt, steel, copper, other metals, and water. Building materials, while perhaps recyclable in part at some long-term future date, would for practical purposes be considered permanently consumed. Energy derived from non-renewable sources, such as fossil fuels, would be consumed during construction and operational lighting, heating, cooling, and transportation uses. To minimize the use of energy, water, and other natural resources, the project would incorporate sustainable building practices into the site, architectural and landscape designs. As described in the 1998 EIR, design considerations aimed at improving energy efficiency, reducing landfill waste, and conserving water (e.g., utilizing recycled water; on-site collection and reuse of construction materials, etc.) have been incorporated into the overall Black Mountain Ranch Community and may serve to reduce irreversible water, energy, and building material consumption associated with construction and occupation of the project.

The project would not introduce any long-term risks to human health or safety. The residential units would be constructed according to all applicable regulations and standards to avoid unnecessary or unusual risks and accidents.

Chapter 7
Growth Inducement

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(d) requires that an Environmental Impact Report (EIR):

> Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (for example, a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population might tax existing community services facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Based on the City's Significance Determination Thresholds, a project would have a significant impact to growth inducement if a project would:

1. Induce substantial population growth in an area.
2. Substantially alter the planned location, distribution, density, or growth rate of the population of an area.
3. Include extensions of roads or other infrastructure not assumed in the community plan or adopted Capital Improvement Program project list, when such infrastructure exceeds the needs of the project and could accommodate future development.

According to the City's Significance Determination Thresholds, the first step is to determine if the project is growth inducing. More specifically, would the project foster economic or population growth, or construct new infrastructure facilities where none previously existed.

7.1 Project Effects on Growth

Since the adoption of the Subarea Plan in 1998, substantial development has occurred within and around the Black Mountain Ranch community. Development within the Subarea commenced in 2000, and two communities have since then emerged, the Santaluz community and the Del Sur community. The 3,100-acre Santaluz community occupies the southern portion of the Black Mountain Ranch Subarea and is approximately 90 percent built out. Santaluz is primarily composed of a golf course and low-density residential development. The 1,400-acre Del Sur community occupies the northern portion of Black Mountain Ranch and has approved final maps or construction occurring within approximately 50 percent of the community. Additionally, substantial development has occurred adjacent to the Subarea. The 4S Ranch community, located within the

unincorporated area directly adjacent to the Subarea to the northeast, is almost completely built out. The Rancho Peñasquitos Community Plan area lies to the east of the project site and is also essentially built out.

In conjunction with the Subarea Plan, a Transportation Phasing Plan was adopted to guide implementation of circulation improvements within and surrounding the community. Most of the major circulation improvements called for in the Transportation Phasing Plan have been or are currently being constructed. Also as identified within the 1998 EIR, major regional serving water and electrical utilities are sited within the Subarea. Utility and roadway extensions constructed in conjunction with the proposed Subarea I development plan would extend energy, roads, water, and sewer to the Subarea, but would not facilitate their extension to other sites where they are currently unavailable, and would not contribute to growth inducement.

As detailed in the 1998 EIR, buildout of the community would be required to ensure that other essential services, such as libraries, fire, and police, continue to meet City standards. Future development within the Subarea, along with other cumulative buildout in the area, would create demand for new facilities and levels of service. Since adoption of the Subarea Plan, required new facilities, such as schools, parks, police and fire stations, have been constructed within or adjacent to the Subarea. No additional public services would be needed to serve the project site. In conclusion, the project is consistent with the land use and buildout assumptions for the Subarea Plan. Planned facilities (e.g., roads, utilities) and services (schools, police, fire protection) are in place and are adequate to serve the project. The project would not extend any new roads, utilities, or services beyond those already anticipated to serve the buildout of the Black Mountain Ranch community. Therefore, the project would not be growth inducing.

Chapter 8
Cumulative Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15130(a) requires a discussion of cumulative impacts of a project "when the project's incremental effect is cumulatively considerable." Cumulatively considerable, as defined in Section 15065(c), "means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." According to Section 15130, the discussion of cumulative effects "need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness."

The following evaluation of cumulative impacts considers reasonably foreseeable projects in the vicinity of the project. According to Section 15130(b)(1) of the CEQA Guidelines, the discussion of cumulative effects is to be based on either (a) "a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those impacts outside the control of the agency," or (b) "a summary of projections contained in an adopted plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency."

The basis of and geographic area for the analysis of cumulative impacts is dependent on the nature of the issue. For this analysis, the evaluation of potential cumulative impacts is localized (e.g., construction noise, construction emissions, visual quality, and biological and cultural resources); therefore, a list of projects approach was employed. A brief description of these projects is presented in Table 8-1. The locations of these figures are shown in Figure 8-1.

For the other cumulative impacts, those which are regional in scope (e.g., traffic, air quality [operational emissions]), the analysis was conducted in conjunction with the Subarea Plan Environmental Impact Report (EIR). The analysis within the 1998 EIR is still relevant for regional cumulative issues (refer to Section 9.15).

Table 8-1
Cumulative Projects

Project Name	Location	Description/Status
East Clusters Enclave at Black Mountain Ranch	North of Carmel Valley Road. Access from Valle Del Sur Court.	The East Clusters Enclave Project consists of 27 residential units. The project has been constructed.
East Clusters Unit 3 at Black Mountain Ranch	Southwest of intersection of Bernardo Center Drive and Camino Del Norte.	The East Clusters Unit 3 Project consists of 90 residential units located within the former units 2 and 3 of the original 2001 East Clusters at Black Mountain Ranch Project. The project has been constructed.
Del Sur Court	East of Camino Del Sur. Access from Del Sur Court.	The Del Sur Court project consists of 206 senior (age-restricted) units (130 single-family detached and 76 single-family attached) for an age-restricted Continuing Care Facility. The project has been constructed.
Del Sur Retail Center	Intersection of Camino del Sur and Paseo del Sur.	The Del Sur Retail Center consists of a 143,000-square-foot retail store within a single building and other retail commercial uses totaling approximately 28,000 square feet. The project has been constructed.
Camelot/Northeast Perimeter Property	South of Camino San Bernardo. Access from Nicole Ridge Road.	The Camelot/Northeast Perimeter Property Project consists of 307 multi-family units. A total of 259 market rate units are located on-site within the parcel identified by the Subarea Plan as the Northeast Perimeter property. An additional 48 affordable units are located off-site within the Black Mountain Ranch North Village Town Center. The project has been constructed.
Heritage Bluffs II	South of Carmel Valley Road. Access from Winecreek Drive. South of East Clusters Unit 3.	The Heritage Bluffs II Project consists of 220 residential units. A total of 171 market rate units are located on-site within the parcels identified by the Subarea Plan as perimeter parcels A and B. An additional 35 affordable units and 14 market rate units are located off-site within the Black Mountain Ranch North Village Town Center. The project has been constructed.

8.1 Cumulative Effects Found to be Significant

8.1.1 Landform Alteration/Visual Quality

The 1998 EIR identified cumulative impacts related to landform alteration/visual quality. The EIR concludes that individual and cumulative landform alteration impacts would be limited by future project's compliance with the Environmentally Sensitive Lands (ESL; formerly Resource Protection Ordinance [RPO]) steep hillsides regulations and that implementation of the Subarea Plan Design Guidelines would serve to partially mitigate visual character impacts. As described in Section 5.4.2, the project would result in alteration of existing landforms. The project would be consistent with the City's ESL steep slope regulations, and the majority of steep slopes would be preserved on-site within Multi-Habitat Planning Area (MHPA) open space. However, manufactured slopes would exceed 10 feet in height, and excavation or fill in excess of five feet from existing grade would occur around the perimeter of the development footprint. Furthermore, preservation of approximately 23.75 acres of natural vegetation on-site within the proposed MHPA open space and revegetation of manufactured slopes would not fully mitigate impacts associated with landform alteration. Therefore, implementation of the project would result in cumulatively considerable and unavoidable impacts related to landform alteration/visual quality.

8.2 Cumulative Effects Found Not to be Significant

8.2.1 Land Use

The 1998 EIR identified potential cumulative land use impacts related to compliance with the RPO (now the ESL Ordinance). The 1998 EIR concluded that future projects may require deviations from the RPO that would result in cumulative impacts related to regulatory nonconformance.

As described in Section 5.1.3, the project would be consistent with the City's Land Development Code (LDC) ESL regulations relative to the issues of sensitive biological resources and steep slopes, and no deviations would be required. Therefore, the project's incremental effect would therefore not be cumulatively considerable related to LDC inconsistency. No direct impacts to habitat within the MHPA would result from the project following the adoption of the proposed MHPA boundary line adjustment. The project would be consistent with the six biological factors required by the Multiple Species Conservation Program (MSCP) for a MHPA boundary line adjustment (BLA), and the approved BLA would transfer equal or higher biological values of impacted species and habitats into the preserve.

All of the other projects presented in Table 8-1 are constructed and were required to comply with the LDC and MSCP prior to approval. Therefore, when considered with other cumulative projects, the project would not result in a significant cumulative impact related to LDC or MSCP conflicts.

8.2.2 Biological Resources

The 1998 EIR identifies a significant cumulative impact associated with the loss of important habitats, including wetlands and non-native grassland. As discussed in Section 5.2, the project would not impact any wetlands, and implementation of mitigation measure MM-BIO-1a would reduce impacts on non-native grassland and other sensitive upland communities to a level less than significant.

Projects that comply with the MSCP as specified by the City's Subarea Plan and its implementing ordinances are not expected to result in a significant cumulative impact for those biological resources adequately covered by the MSCP, including vegetation communities. As described in Section 5.2.6, conflicts with the MSCP MHPA Land Use Adjacency Guidelines related to noise would be mitigated through implementation of MM-BIO-1b. Additionally, approval of the project's MHPA BLA would ensure that the project meets the equivalency standards as they pertain to a no net loss of MHPA habitat area, functions, or values. As described in Section 5.1.4.2b above, the project would be consistent with the six biological factors required by the MSCP for a MHPA BLA, and the approved BLA would transfer equal or higher biological values of impacted species and habitats into the preserve. All the other project's presented in Table 8-1 are constructed and were required to comply with the MSCP and mitigate for impacts to biological resources as necessary. Therefore, when considered with other cumulative projects, the project would not result in a significant cumulative impact related to biological resources.

8.2.3 Cultural/Historical Resources

Archaeological resources are important for prehistoric or historic information that may be recovered. The 1998 EIR identifies cumulatively significant impacts to cultural resources. As discussed in Section 5.3, the project would not impact any known religious or sacred uses or disturb any human remains on-site, and implementation of mitigation measure MM-HIST-1 would reduce potential impacts on prehistoric/historic resources to a level less than significant.

All the other project's presented in Table 8-1 are constructed and were required to implement appropriate mitigation measures to reduce impacts on historical resources to a level less than significant as necessary. Therefore, when considered with other cumulative projects, the project would not result in a significant cumulative impact related to cultural/historical resources.

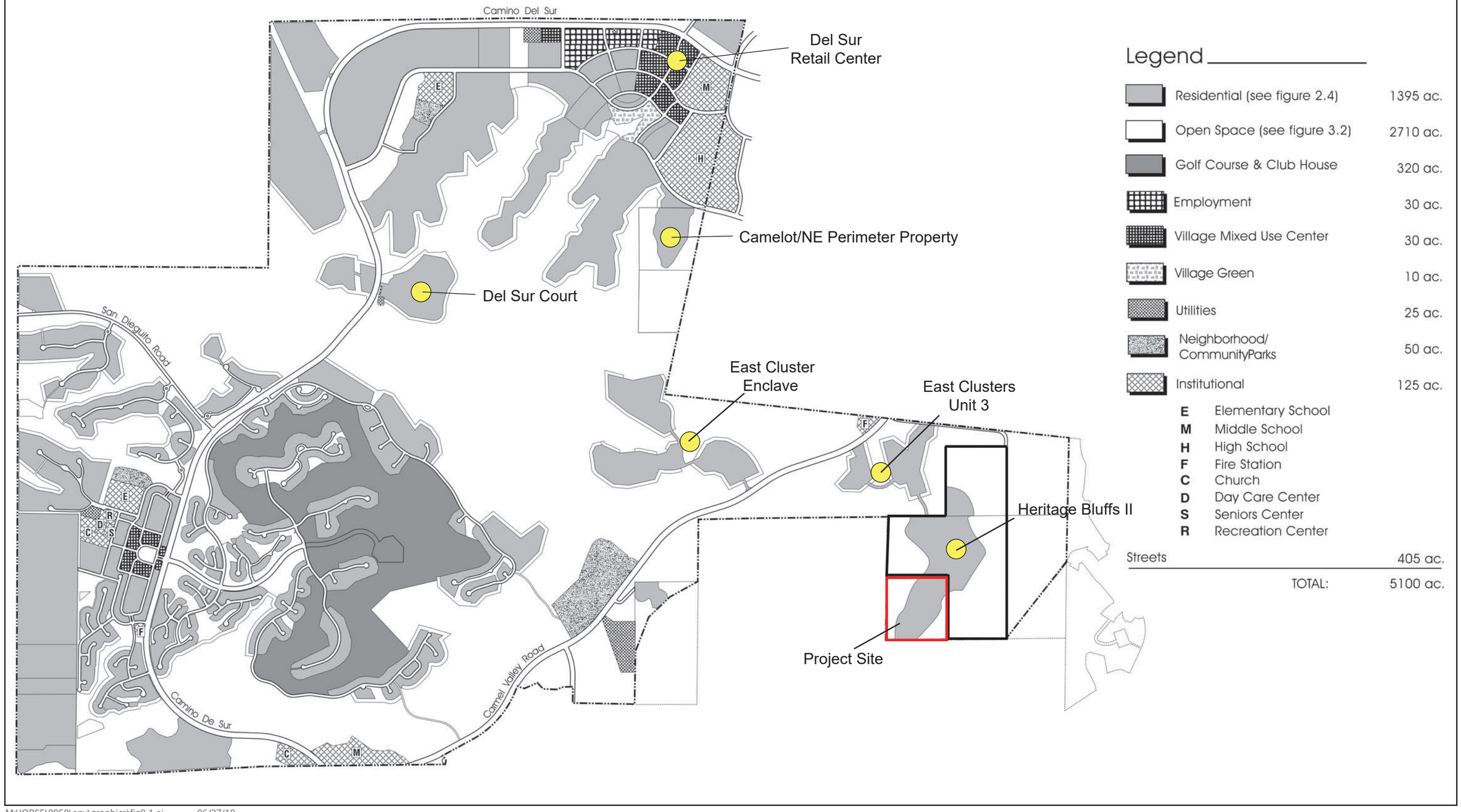
8.2.4 Air Quality

The 1998 EIR identifies construction-related emissions associated with buildout of the Subarea Plan as a significant cumulative impact. Construction of the project would be temporary in nature. As described in Section 5.5, the project would not violate any air quality standards or expose sensitive receptors to substantial pollutant concentrations. Additionally, all the projects presented in Table 8-1 are constructed and were required to implement measures to comply with maximum daily construction emissions as necessary. Therefore, when considered with other cumulative projects, the project would not result in a significant cumulative impact related to air quality.

8.2.5 Noise

The 1998 EIR did not address cumulative impacts relative to construction noise. Construction of the project would be temporary in nature. As described in Section 5.6, noise and vibration impacts associated with impact hammering, rock drilling, and blasting would be less than significant, and implementation of mitigation measure MM-BIO-1b would reduce noise impacts on the MHPA to a level less than significant. Additionally, all the projects presented in Table 8-1 are constructed and were required to implement measures to avoid construction noise impacts as necessary. Therefore, when considered with other cumulative projects, the project would not result in a significant cumulative impact related to noise.

Map Source: RECON 2015



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FIGURE 8-1
Location of Cumulative Projects

Chapter 9
Black Mountain Ranch (Subarea I) Subarea Plan EIR Subject Areas Requiring No Change in Analysis

Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15163, the analysis and conclusions reached in a number of the environmental subject areas contained within the 1998 Black Mountain Ranch (Subarea I) Subarea Plan Environmental Impact Report (EIR) do not require supplemental analysis and are not addressed further in this Supplemental Environmental Impact Report (SEIR). This is because the project would not result in changes affecting the analysis in the 1998 EIR, as there were no substantial changes in circumstances or new information available with respect to each subject area that would trigger a need for supplemental review (CEQA Guidelines Section 15162). These subject areas include:

- Land Use (Plan Consistency; Land Use Conflicts)
- Traffic/Circulation
- Hydrology and Water Quality
- Visual Quality (Area Character, Unique Features, Landmark Trees)
- Air Quality (Direct Impacts)
- Geology and Soils
- Agricultural Resources/Mineral Resources
- Paleontological Resources
- Noise (Traffic Noise)
- Public Facilities and Services
- Water Conservation/Domestic Water/Wastewater
- Public Safety
- Population
- Cumulative Impacts related to the above issues

Any future environmental review related to these subjects shall be required to refer to the 1998 EIR.

9.1 Land Use (Plan Consistency)

The land use analysis in 1998 EIR concluded that the Subarea Plan would be consistent with other adopted plans, and no significant impacts would occur. The project would be consistent with the designated land use and density assumptions identified for Southeast Perimeter Parcel C. Therefore, the project would also be consistent with adopted land use plans, and there would be no new significant or substantially increased adverse impacts beyond those previously identified in the 1998 EIR relative to land use plan consistency.

Because no site-specific design was proposed at the time the 1998 EIR was prepared, issues regarding Land Development Code deviations and Multiple Species Conservation Program (MSCP)

consistency could not be analyzed in detail for the perimeter properties, and impacts were assumed to be potentially significant. An analysis of the project's impacts relative to these land use issues is presented in Sections 5.1.3, and 5.1.4 of this SEIR.

9.2 Traffic/Circulation

The 1998 EIR included a traffic and circulation analysis for buildout of the entire Subarea Plan. The 1998 EIR identified numerous significant direct and cumulative impacts to the surrounding roadway network in conjunction with buildout of the Subarea Plan. Mitigation for buildout of the Subarea Plan resulted in the development of a Transportation Phasing Plan, which requires facilities be in place based on the total number of Equivalent Dwelling Units (1 Equivalent Dwelling Unit = 1 single-family dwelling or 10 Average Daily Traffic) constructed within the Subarea. The Transportation Phasing Plan is funded through payment of Public Facilities Financing Plan (PFFP) fees at the time of building permit issuance, with facilities constructed per the requirements of the Transportation Phasing Plan.

The project is consistent with the designated land use and density assumptions for Southeast Perimeter Parcel C. Additionally, a traffic impact memorandum prepared for the project demonstrated how the proposed 84 detached multi-family units would be consistent with the Subarea Plan and the traffic analysis presented in the 1998 EIR (KOA 2019; Appendix F). Therefore, the project would be subject to conditions of approval consistent with the Mitigation Monitoring and Report Program (MMRP) for the 1998 EIR. Specifically, prior to the issuance of any building permit, the project would be required to be in conformance with the Black Mountain Ranch Transportation Phasing Plan. The project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

9.3 Hydrology and Water Quality

9.3.1 Hydrology/Drainage

The 1998 EIR did not identify any significant impacts to natural drainage patterns; however, the EIR concluded that buildout of the Subarea would result in an increase in runoff due to the creation of new impervious surfaces. Runoff could result in adverse impacts to the drainage to the west, but impacts could be mitigated through proper design of future development. The MMRP for the 1998 EIR specified that detailed drainage design and best management practices (BMPs) would be conditions for any subsequent tentative maps for development within the Southeast Perimeter properties. Consistent with the MMRP, the project prepared a site-specific Preliminary Drainage Report (PDC 2019b) and Storm Water Quality Management Plan (SWQMP) (PDC 2019c). There are minimal drainage facilities on the project site in the existing condition, and stormwater on-site currently sheet flows into natural channels. Additionally, approximately two acres off-site to the east drains northwest through the project site towards the natural channel located on the east side of the project.

The post-project drainage pattern has been designed to be generally consistent with the existing drainage pattern on-site and would not alter the destination of downstream flows. The project

proposes to introduce new drainage facilities consisting of culverts, brow ditches, curb gutters, storm drain inlets, and pipes that would convey flows to a new biofiltration basin to be constructed in the northeast corner of the project site. The biofiltration basin would treat and detain stormwater flows before discharging them into the existing channel on the eastern side of the project site.

The biofiltration basin would be needed to reduce post-project stormwater flows. Introduction of new impervious surfaces associated with the project would increase the 100-year storm runoff rate from the existing 20.6 cubic feet per second (cfs) to 25.7 cfs in the post-project condition. However, the proposed biofiltration basin includes design features that would reduce the 100-year storm runoff rate to less than or equal to the 20.6 cfs present in the existing condition. The biofiltration basin would include an aboveground storage component with a series of flow orifices that would detain stormwater and slowly release treated stormwater. Additionally, the biofiltration basin would include riprap energy dissipaters to reduce flow velocities both entering and exiting the basin. Therefore, no new significant or substantially increased adverse impacts relative to hydrology would result from implementing the project.

9.3.2 Water Quality

The 1998 EIR also concluded that implementation of the Subarea Plan has the potential to significantly impact water quality (both directly and cumulatively) in the San Dieguito River and Lagoon. The EIR MMRP recommends measures to reduce levels of erosion, sedimentation, and runoff and requires that the recommended measures or the equivalent thereof would be conditions of future tentative maps for the Southeast Perimeter properties.

Since the certification of the 1998 EIR, the regulatory framework relative to water quality and drainage has changed. The project would be required to comply with new regulatory standards. To ensure that the project would comply with new state and local regulations, a site-specific SWQMP was prepared for the project (PDC 2019c). The project would be consistent with the land use for the site as designated by the Subarea Plan. Therefore, pollutants of concern would be the same as those addressed in previous documents, and the BMPs for the project will comply with the City's requirements for stormwater treatment. In addition to the proposed biofiltration BMP attenuating flows to provide detention benefits for peak flows, the proposed biofiltration basin is also designed to treat the water quality flows (the "85^{th} percentile runoff") and mitigate for hydromodification impacts. The project would construct a biofiltration basin in the northeast corner of the project site that would meet City pollutant control and volume retention requirements and also control post-developed flow rates to within 10 percent of the pre-developed flow durations across the range of hydromodification mitigation flows, which include flow frequencies ranging from a fraction of the 2-year flow (Q2) to the 10-year flow (Q10). The proposed biofiltration basin would be lined, would not allow for infiltration, and would include an 18-inch engineered soil mix on top of a 3-inch washed sand layer. Additionally, the lower portion of the biofiltration basin includes a 3-inch choking stone layer above the gravel layer. Based on the design components described above, the Preliminary Hydromodification Management Study completed for the project determined that the biofiltration basin would satisfy the Preliminary Hydromodification Management Study requirements of the San Diego Regional Water Quality Control Board (PDC 2019d). Furthermore, the project would include other source control BMPs such as storm drain stenciling/signage and prohibition of illicit discharges into the MS4. In addition to the permanent BMPs, temporary BMPs will be employed during

construction and will include BMPs such as desilting basins, silt fences, gravel bags, fiber rolls, and other erosion control measures. These temporary BMPs would be employed consistent with the State Water Resources Control Board's General Permit for Storm Water Discharges Associated with Construction Activity. All of the water quality treatment measures described above would meet or exceed those previously identified, and there would be no new significant or substantially increased adverse impacts associated with water quality.

9.4 Visual Quality

Because no site-specific design was proposed for the Southeast Perimeter properties at the time the 1998 EIR was prepared, the EIR concluded that potential landform alteration impacts would be evaluated during subsequent environmental review. Therefore, the analysis of project impacts relative to landform alteration is discussed in Section 5.4.2 of this SEIR.

The 1998 EIR concluded that impacts to views from Black Mountain Park of future residential development within the southeast perimeter properties may be significant. The MMRP indicates that the application of Design Guidelines identified in the Subarea Plan that address residential lot grading, siting of structures, architectural styles, setbacks, exterior use areas, walls and fences, exterior lighting and landscaping, would allow for a consistent community character to be retained and minimize impacts to views. The Subarea Plan states:

> All Perimeter Properties and the BMR North Clusters will be required to adopt the Design Guidelines approved for the BMR VTM/PRD or required to develop independent design guidelines conforming to the Framework Plan, this Subarea I plan and compatible with the BMR VTM/PRD Design Guidelines.

Design Guidelines have been developed for the project and are consistent with the Subarea Plan Design Guidelines. Therefore, conclusions from the 1998 EIR are applicable and the project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR relative to visual character.

The 1998 EIR did not identify any significant impacts to unique geologic or topographic features from future development within the Subarea. The EIR analysis stated that the southeast perimeter properties would encroach into approximately 9 percent of sensitive on-site slopes. The project would encroach into approximately 18.95 percent of steep slopes subject to Environmentally Sensitive Lands (ESL; with allowances for erosion control). The encroachment is within the allowable limits of the City's ESL ordinance, as detailed in Section 5.1.3 of this SEIR. Therefore, new or substantially increased adverse impacts would result, and the conclusions are consistent with those of the 1998 EIR.

The 1998 EIR did not identify the presence of any distinctive or landmark trees within the subarea. No landmark trees are present on the project site, and no further analysis is required.

9.5 Air Quality

The 1998 EIR identified significant direct and cumulative air quality impacts to regional air quality as a result of vehicle traffic and construction-related activities, respectively. Relative to direct (operational) air quality impacts, the 1998 EIR concluded that buildout of the subarea would not conform to the Regional Air Quality Strategy, and impacts would be significant and unmitigated. The project is consistent with the land use and buildout assumptions for the perimeter properties as described in the 1998 EIR; therefore, the project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the 1998 EIR.

The EIR incorporated mitigation measures that would reduce fugitive dust impacts from construction activity. Dust control during construction and grading operations would be regulated in accordance with the rules of the San Diego Air Pollution Control District. Incorporation of these mitigation measures would reduce construction-related air quality impacts to below a level of significance. The project would incorporate such mitigation as described in the 1998 EIR. However, in addition to the land development activities described in the 1998 EIR, the project may require blasting in areas of shallow bedrock. Construction-related air quality impacts associated with blasting are discussed in Section 5.5.3 of the EIR.

9.6 Geology and Soils

The 1998 EIR states that there are no significant soil or geologic conditions observed or known to exist within the subarea that would preclude implementation of future development. The southeast perimeter parcels are generally underlain by Santiago Peak metavolcanics, which exhibit good bearing and stable slope characteristics, although expansive soils may be encountered.

The 1998 EIR concluded that potentially significant geologic conditions exist, which would require mitigation as part of any future tentative maps. The site-specific Geotechnical Report prepared for the project concluded that no soil or geologic conditions exist at the project site that would preclude the proposed development, provided the measures recommended in the report are implemented for design and construction.

The City's Geology Section has reviewed and determined that the site-specific Geotechnical Investigation, which includes recommendations to be followed during project construction, adequately addresses the geologic conditions potentially affecting the project site (Geocon 2018a). Furthermore, implementation of proper engineering design and utilization of standard construction practices to be verified at the building permit stage, in conjunction with implementation of the recommendations of the Geotechnical Investigation, would ensure that the potential for impacts associated with geologic hazards would be less than significant. Therefore, based on the results of the Geotechnical Investigation, there would be no new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

The 1998 EIR also concluded that without erosion control measures, there is a potentially significant increased erosion impact associated with the implementation of the Subarea Plan. These impacts would be mitigated to a level below significance by incorporation of appropriate control measures,

as outlined in the 1998 EIR. Additionally, the project would implement temporary construction BMPs to control erosion consistent with the State Water Resources Control Board's General Permit for Storm Water Discharges Associated with Construction Activity. Therefore, there would be no new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

9.7 Agricultural Resources/Mineral Resources

According to the 1998 EIR, Farmland of Local Importance and grazing lands would be lost with development of the perimeter properties. Specifically, 15 acres of grazing land and up to 204 acres of Farmland of Local Importance may be lost with the development of the southeast perimeter properties. Although portions of the subarea are in limited current agricultural use, no prime farmlands would be removed and the loss of agricultural land is not considered a significant direct impact. The cumulative effects of the loss of agricultural land from conversion are considered significant and unmitigated. The project would impact a similar development footprint as identified in the 1998 EIR for southeast perimeter Parcel C. Conclusions regarding the loss of agricultural resources would be consistent with the previous analysis, and the project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

The 1998 EIR concluded that implementation of future development as proposed in the Subarea Plan would preclude mining of the mineral resource zone (MRZ)-2 aggregate for the foreseeable future, and the cumulative effects of the incremental loss of potential aggregate deposits are considered significant and unmitigated. The project is consistent with the land use and buildout assumptions for the Subarea Plan; therefore, the conclusions regarding the loss of aggregate resources would remain, and the project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the 1998 EIR.

9.8 Paleontological Resources

The 1998 EIR states that the Southeast Perimeter properties are located in Santiago Peak metavolcanics formations, which are areas with low paleontological resource sensitivity. The project would impact a similar development footprint as identified in the 1998 EIR for southeast perimeter Parcel C. Conclusions regarding paleontological resource impacts would be consistent with the previous analysis, and the project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

9.9 Noise

For the southeastern perimeter parcels, the 1998 EIR identified that the 65 community noise equivalent level (CNEL) contour would be located near the northern property line, around 400 feet from Carmel Valley Road. The 60 CNEL contour would be around 1,000 feet from Carmel Valley Road. The City's exterior noise level standard would, therefore, not be exceeded on the southeastern perimeter parcels, as all development would be located outside the 60 CNEL contour area. Therefore, interior noise level standards would be met with standard construction techniques in the areas proposed for development. Impacts relative to traffic noise would be less than

significant for the subject site. Because the project is consistent with the land use and buildout assumptions and conceptual development footprint identified in the Subarea Plan, noise impacts associated project traffic and noise contours associated with surrounding roadways would be consistent with the analysis in the 1998 EIR. The project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR relative to operational noise.

The 1998 EIR indicated that potential future construction-related noise impacts to sensitive wildlife within the Multi-Habitat Preservation Area (MHPA) may result from grading and construction in the southeast perimeter properties. MHPA adjacency impacts associated with noise are addressed in Section 5.1.5 of this SEIR. Additionally, blasting may be required during construction activities. Construction noise and vibration impacts require subsequent analysis and are addressed in Section 5.6.4 of this SEIR.

9.10 Public Facilities and Services

As required of all development proposals, the project would be required to pay applicable impact fees for public facilities and services prior to the issuance of building permits.

9.10.1 Schools

The 1998 EIR concluded that the additional elementary, middle, and high school students generated by buildout of the Subarea Plan would contribute to the already overcrowded schools and is considered a direct and cumulatively significant impact. The 1998 EIR stated that implementation of the following condition and offers of dedication would reduce direct and cumulative school impacts from subarea development to below a level of significance:

a) Collection of required fees and setting aside three school sites, and provision of partial acreage for a future high school site.

Mitigation for school impacts would include implementation of a final financing agreement and phasing plan for future development in the subarea and the Poway Unified School District as identified in the school district's School Facilities Master Plan and Financing Plan for the Black Mountain Ranch Subarea, which may or may not include participation in school facilities financing with other surrounding development projects. The Poway Unified School District proposed establishment of a Mello-Roos community facilities district; however, some other mutually acceptable means could be employed. Proof of a final financing agreement and school site purchase agreement would be required prior to City Council approval of the Subarea Plan.

School impacts would be reduced to below a level of significance by implementing the mitigation measures identified in the 1998 EIR. Because the project is consistent with the land use and buildout assumptions and conceptual development footprint identified in the Subarea Plan, impacts to schools would be consistent with those previously identified, and the project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

9.10.2 Parks and Recreation

The 1998 EIR concluded that the dedication of community and neighborhood park sites totaling 59 acres (both public and private), and the proposed dedication of 2,211 acres of resource and amenity public open space, would provide adequate park and recreation facilities for future needs of the development and nearby communities. No significant impacts were identified. Because the project is consistent with the land use and buildout assumptions identified in the Subarea Plan, impacts to parks and recreational facilities would be consistent with those previously identified, and the project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

9.10.3 Libraries

The 1998 EIR concluded that the Rancho Peñasquitos, Carmel Mountain Ranch, and Rancho Bernardo libraries would adequately serve the needs of the Black Mountain Ranch Subarea, and usage impacts to these libraries would not be significant. Because the project is consistent with the land use and buildout assumptions identified in the 1998 EIR, impacts to libraries would be consistent with those previously identified, and the project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the previous EIR.

9.10.4 Police and Fire Services

The 1998 EIR concluded that reasonable police response times to the subarea for routine and emergency calls-for-service are anticipated; therefore, impacts to police services are considered less than significant. Because the project is consistent with the land use and buildout assumptions and conceptual development footprint identified in the Subarea Plan, impacts associated with police services would be consistent with the analysis in the 1998 EIR.

Relative to fire services, the 1998 EIR concluded that City Fire Department may or may not be able to provide first response to all portions of the subarea within six minutes. The 1998 EIR incorporated the following mitigation measure:

> Service letters from the City of San Diego Fire Department shall be submitted when building permits are applied for. If the Fire Department cannot respond within six minutes, then building plans would include fire sprinkler systems or other measures to the satisfaction of the Fire Department. Similar requirements would apply to all other development proposals in the Subarea.

As a condition of approval, the project would be required to implement mitigation identified in the 1998 EIR MMRP for potential fire service response impacts. The project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

The project would add 84 detached multi-family residential units. The 2011 City Gate Associates' study, which is the guidance document for San Diego Fire–Rescue Department's future planning, includes a new planned fire station (#48) in this area to serve Black Mountain Ranch.

9.10.5 Water Supply and Service

The 1998 EIR concluded that although buildout of the Subarea Plan would increase water service demand, the increase was not a significant impact with the implementation of conservation measures and recycled water systems. The 1998 EIR included the following mitigation measures, which would be incorporated into future development project design guidelines to address cumulative water usage concerns.

1. Limit grading in areas where no construction is proposed; thereby reducing the need for planting and irrigation of graded areas.

2. Provide lifts of low-clay content soil in landscaped areas to improve infiltration.

3. Reduce runoff potential from landscaped areas by using berming, raised planters, and drip irrigation systems.

4. Install soil moisture override systems in all common irrigation areas to avoid sprinkling when the ground is already saturated.

5. Identify in the plant materials list in the project design guidelines whether or not plants are native or naturalize easily and incorporate a list of local California sources for native plants.

6. Incorporate low-flush toilets, low-flow faucets, and timers on sprinklers (including nighttime watering) into project design.

7. Provide information regarding water conservation measures to new residents at the time of lot purchase.

The Development Coordinator would review grading, landscape, and building permits to ensure that the above measures have been noted on plans.

A Water Supply Assessment and Water Supply Verification Report were prepared for the 2009 Subarea Plan Amendment project by the City Water Department (November 2008) in compliance with the requirements of Senate Bill 610 and Senate Bill 221. The water reports identified that the water demand projections for the amendment project were included in the water demand forecasts within the Urban Water Management Plan and other water resource planning documents of the Water Department, the San Diego County Water Authority, and Metropolitan Water District. Water supplies necessary to serve existing demands, projected demands of the Subarea Plan Amendment project, and future water demands within the Water Department's service area, as well as the actions necessary to develop these supplies, have been identified in the water supply planning documents of the Water Department, the San Diego County Water Authority, and the Metropolitan Water District.

The project is consistent with the land use and buildout assumptions and conceptual development footprint identified in the Subarea Plan and subsequent Subarea Plan Amendment. Additionally, the project would implement all water conservation measures identified in the MMRP for the 1998 EIR (see Section 9.11, below).

Water service would be provided by the City, and the project would make domestic water and fire protection water connections to the existing 12-inch Pomerado Park 920 Pressure Zone public water lines within Winecreek Drive at the northwestern project boundary adjacent to Heritage Bluffs. The Water System Analysis completed for the project determined that a private water booster station would be required to provide adequate flow and pressure (Dexter Wilson 2018a). This private water booster station would be a private facility and would be installed in the northwest corner of the project site within Winecreek Drive. The project would also include off-site improvements to install three interties between the existing dual Pomerado Park 920 Pressure Zone. These three interties would be installed within existing water supply facilities located within the Bernardo Center Drive and Winecreek Drive roadways and would not result in any environmental impacts. Implementation of these improvements would ensure that adequate flow and pressure is available to provide water service to the project site. Therefore, impacts associated with water supply services would be consistent with the analysis in the 1998 EIR. The project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

9.10.6 Wastewater Generation

The 1998 EIR indicated that new or expanded on-site sewer facilities may be required for development of the perimeter properties. Mitigation required pursuant to the 1998 EIR included that as a condition of the future maps, future applicants would submit a sewer capacity analysis to the City's Public Utilities Department. If additional capacity is needed, the applicant would provide for the needed improvements to the satisfaction of the Water Department Manager.

Consistent with the 1998 EIR MMRP, a Sewer System Analysis was prepared for the project (Dexter Wilson 2018b). As described in Chapter 3.0 Project Description, the project would require a reorganization consisting of an expansion of latent powers for sewer service and the annexation of the project site into the Olivenhain Municipal Water District (OMWD). The project would connect to the existing OMWD sewer system within Winecreek Drive at the northwestern project boundary adjacent to Heritage Bluffs. The project would install a gravity sewer system with eight-inch sewer lines and a minimum slope of two percent. The Sewer System Analysis concluded that the off-site gravity sewer collection system that the project would connect to has adequate flow capacity to serve the project. Therefore, no additional off-site improvements would be required, and there would be no change to the conclusions from the 1998 EIR. The project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

9.10.7 Waste Management Services

The 1998 EIR concluded that buildout of the Subarea Plan would result in the generation of a significant amount of solid waste affecting waste management services, such as landfill disposal, refuse collection, recycling programs, as well as the City's ability to comply with the state waste reduction mandate unless a waste reduction recycling plan is prepared specifying measures that would be incorporated in project design to minimize waste generation and divert waste from disposal. The 1998 EIR included mitigation for solid waste that requires:

1. Future residential development within the Subarea would comply with the City's recycling program.

2. The requirement for recycling bins or containers would be included in the Design Review Guidelines for all projects and the Conditions, Covenants, and Restrictions.

3. Future development will be required to develop a waste reduction/recycling plan addressing both construction phase as well as ongoing project impacts and specifying waste reduction measures that would be incorporated in project design to minimize solid waste impacts.

The project would be required to comply with the City's Recycling Ordinance, and waste would be collected by City haulers. Additionally, the project would comply with Land Development Code Chapter 14, Article 2, Division 8 (Refuse and Recyclable Materials Storage Regulations), as specified in the Design Guidelines. Finally, the project would comply with the project-specific Waste Management Plan (WMP; RECON 2019f, Appendix G). Compliance with City regulations and the approved WMP would ensure that no new significant or substantially increased adverse impacts would result relative to solid waste. The project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the 1998 EIR.

9.10.8 Electrical Utilities

The 1998 EIR concluded that utilities and infrastructure are available to the subarea and no significant adverse impacts to dry or wet utility systems or service would result from buildout of the community. The project is consistent with the land use assumptions and conceptual footprint identified in the 1998; therefore, impacts to electrical facilities would be consistent with those previously identified, and the project would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the EIR.

9.11 Water Conservation/Domestic Water/ Wastewater

The 1998 EIR indicates that buildout of the subarea would incrementally increase the demand for domestic water service, and the relatively small increase is not considered a significant impact, particularly since recycled water would be used for landscaping irrigation throughout large portions of the Subarea and conservation measures such as low-flow shower heads and toilets would be incorporated into future developments.

Presently, reclaimed water is used everywhere within developed portions of the subarea, except the East Clusters and other areas along Carmel Valley Road to the east of the community park. The project would not be served by reclaimed water because it lacks large common areas necessitating irrigation. Consistent with the conclusions of the 1998 EIR, the project's contribution to the cumulative impact associated with water supplies would be reduced to a nominal level by the mitigation measures outlined in the 1998 EIR MMRP.

9.12 Public Safety

The 1998 EIR concluded that no significant impacts associated with electromagnetic fields are anticipated from development of the Subarea due to restrictions and approval requirements associated with encroachment into San Diego Gas & Electric easements. The Phase I Environmental Site Assessment prepared for the project did not identify any recognized environmental conditions and determined that no further actions regarding the potential for hazardous materials were required for the project (Geocon 2018b). The project is consistent with the Subarea Plan and would not result in any new significant or substantially increased adverse impacts beyond those previously identified in the 1998 EIR.

9.13 Population

The 1998 EIR concluded that assuming a 25-year buildout, with an annual population increase of 560 people, no significant impacts on the planned growth rate for the region are expected. The Subarea Plan is part of a comprehensive subarea planning program designed to anticipate and resolve indirect impacts caused by increased population. Because the project is consistent with the land use and buildout assumptions of the Subarea Plan, there would be no new significant or substantially increased adverse impacts beyond those previously identified.

Chapter 10
Project Alternatives

The California Environmental Quality Act (CEQA) Guidelines Section 15126.6 requires that an environmental impact report (EIR) compare the effects of a "reasonable range of alternatives" to the effects of a project. The alternatives selected for comparison should be those that would attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project. The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (CEQA Guidelines Section 15126.6[f]). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, while also taking into account economic, environmental, social, technological, and legal factors.

The project would result in potentially new site-specific significant, direct, and/or cumulative environmental impacts to land use, biological resources, landform alteration/visual quality, air quality, and noise beyond those previously identified in the 1998 EIR. Mitigation measures have been identified that would reduce all *new* direct and cumulative impacts to below a level of significance, with the exception of impacts to landform alteration/visual quality. In developing the alternatives to be addressed in this section, consideration was given to their ability to meet the basic objectives of the project and eliminate or substantially reduce significant environmental impacts. As identified in Chapter 3.0, project objectives include the following:

- Provide residential development that is consistent with the location and the goals and objectives of the adopted Black Mountain Ranch Subarea Plan.
- Provide new residential development, which is consistent with existing residential development patterns in the surrounding area.
- Implement "smart growth" principles of development through the provision of new residences within a complete master planned community.
- Implement sustainable development principles through the provision of a community of new residences with many energy-efficient features.
- Provide infrastructure improvements consistent with the Subarea Plan.

The alternatives identified in this chapter are intended to further reduce or avoid significant environmental effects of the project. This chapter addresses the No Project (No Development) Alternative and the Reduced Development Footprint Alternative. Each major issue area included in the impact analysis of this Supplemental Environmental Impact Report (SEIR) has been given consideration in the alternatives analyses, and impacts are summarized in Table 10-1.

Table 10-1 Comparison of Project and Alternatives Impacts Summary			
Environmental Issue Area	Project	No Project (No Development) Alternative	Reduced Development Footprint Alternative
Land Use	Significant and mitigated	Less than the Project	Greater than the Project
Biological Resources	Significant and mitigated	Less than the Project	Less than the Project
Cultural/Historical Resources	Significant and mitigated	Less than the Project	Similar to the Project
Landform Alteration/ Visual Quality	Significant and unavoidable	Less than the Project	Less than the Project, but still significant and unavoidable
Air Quality	Significant and mitigated	Less than the Project	Less than the Project
Noise	Less than Significant	Less than the Project	Less than the Project

10.1 No Project (No Development) Alternative

10.1.1 Description

The No Project (No Development) Alternative would maintain the project site in its current condition and would preserve the existing environmental setting (see Figure 2-2).

10.1.2 Analysis of the No Project (No Development) Alternative

10.1.2.1 Land Use

No development would occur under the No Project (No Development) Alternative. Consequently, this alternative would not require any deviations from the City's Land Development Code (LDC), Environmentally Sensitive Lands (ESL) ordinance, or the Historic Resource Regulations. Similarly, this alternative would not conflict with the Multiple Species Conservation Program (MSCP)/Multi-Habitat Planning Area (MHPA). Therefore, impacts related to land use under the No Project (No Development) Alternative would be less than the project.

10.1.2.2 Biological Resources

No grading or construction activities would occur under the No Project (No Development) Alternative. Consequently, this alternative would not impact any sensitive vegetation communities or wildlife species. Similarly, this alternative would not require an MHPA boundary line adjustment. Therefore, impacts related to biological resources under the No Project (No Development) Alternative would be less than the project.

10.1.2.3 Cultural/Historical Resources

No grading or construction activities would occur under the No Project (No Development) Alternative. Consequently, this alternative would not impact any unknown subsurface deposits associated with HJP-3 that could be unearthed during construction. Therefore, impacts related to cultural/historical resources under the No Project (No Development) Alternative would be less than the project.

10.1.2.4 Landform Alteration/Visual Quality

No grading or construction activities would occur under the No Project (No Development) Alternative. Consequently, this alternative would not alter existing landforms on the project site, including steep hillsides. Therefore, impacts related to landform alteration/visual quality under the No Project (No Development) Alternative would be less than the project.

10.1.2.5 Air Quality

No construction or blasting activities would occur under the No Project (No Development) Alternative. Consequently, this alternative would not generate construction emissions. Therefore, impacts related to air quality under the No Project (No Development) Alternative would be less than the project.

10.1.2.6 Noise

No construction or blasting activities would occur under the No Project (No Development) Alternative. Consequently, this alternative would not generate construction noise and vibration that could affect sensitive receptors or the adjacent MHPA. Therefore, impacts related to noise under the No Project (No Development) Alternative would be less than the project.

10.1.3 Conclusion Regarding the No Project (No Development) Alternative

The No Project (No Development) Alternative would maintain the project site in its current condition. This alternative would preserve the existing environmental setting, and would thereby eliminate all of the project's impacts. However, the No Project (No Development) Alternative would not provide any of the project's benefits, including residential development and affordable housing consistent with the adopted Subarea Plan and expansion of the MHPA through a boundary line adjustment that would result in a net increase of 5.06 acres. These benefits would be foregone under this alternative. Furthermore, the No Project (No Development) Alternative would not meet any of the project objectives listed in Section 10.1 above.

10.2 Reduced Development Footprint Alternative

10.2.1 Description

The Reduced Development Footprint Alternative would reduce the grading footprint compared to the project. Through this footprint reduction the project would avoid impacts to the MHPA and would not require a boundary line adjustment. Similarly, the smaller project footprint would reduce impacts to sensitive vegetation communities and reduce impacts on landform alteration. Under this alternative, the project would develop 117 residential units consistent with the amount anticipated for the project site in the Black Mountain Ranch (Subarea I) Subarea Plan by constructing attached multi-family structures with an increased density compared to the project.

10.2.2 Environmental Analysis of the Reduced Development Footprint Alternative

10.2.2.1 Land Use

The Reduced Development Footprint Alternative would reduce the grading footprint, and thereby avoid encroachment into the MHPA. Consequently, this alternative would be consistent with the MHPA and would not require a boundary line adjustment. However, the increased density associated with the project would require a height deviation to allow for development of 117 units within the reduced grading footprint. Therefore, impacts related to land use under the Reduced Development Footprint Alternative would be greater than the project.

10.2.2.2 Biological Resources

The Reduced Development Footprint Alternative would reduce the grading footprint, and thereby avoid encroachment into the MHPA. Furthermore, the reduced grading footprint would also lessen impacts on sensitive upland vegetation communities compared to the project. Therefore, impacts related to biological resources under the Reduced Development Footprint Alternative would be less than the project.

10.2.2.3 Cultural/Historical Resources

Although the Reduced Development Footprint Alternative would reduce the overall grading footprint, this reduction would not occur within the general location of HJP-3. Consequently, the Reduced Development Footprint Alternative would still have the potential to impact unknown subsurface deposits associated with HJP-3 that could be unearthed during construction. Therefore, impacts related to cultural/historical resources under the Reduced Development Footprint Alternative would be similar to the project.

10.2.2.4 Landform Alteration and Visual Quality

The Reduced Development Footprint Alternative would reduce the grading footprint, and thereby reduce the amount of landform alteration and encroachment into steep slopes. However, the increased density associated with this alternative would not be consistent with the character of the single-family and detached multi-family residential units surrounding the project site. On balance, the reduction of landform alteration and encroachment into steep slopes would lessen impacts compared to the project, but would remain significant and unavoidable.

10.2.2.5 Air Quality

The Reduced Development Footprint Alternative would reduce the grading footprint, and thereby reduce the amount of construction emissions. Although potential impacts would not be fully avoided, they would be reduced compared to the project. Therefore, impacts related to air quality under the Reduced Development Footprint Alternative would be less than the project.

10.2.2.6 Noise

The Reduced Development Footprint Alternative would reduce the grading footprint, and thereby reduce the amount of construction noise and vibration. Although potential impacts would not be fully avoided, they would be reduced compared to the project. Therefore, impacts related to noise under the Reduced Development Footprint Alternative would be less than the project.

10.2.3 Conclusion Regarding the Reduced Development Footprint Alternative

The Reduced Development Footprint Alternative would incrementally reduce all of the project's significant impacts due to the smaller grading footprint. This alternative would avoid impacts to the MHPA and would not require a boundary line adjustment. Similarly, the smaller project footprint would reduce impacts to sensitive vegetation communities and reduce impacts on landform alteration. However, the increased density associated with this alternative would not be consistent with the character of the single-family and detached multi-family residential units surrounding the project site. Similarly, the increased density would require a height deviation to accommodate development of 117 units within the reduced grading footprint. Furthermore, the Reduced Development Footprint Alternative would lessen impacts on biological resources because the project would actually increase land within the MHPA through the proposed boundary line adjustment and would successfully mitigate impacts to sensitive vegetation communities to a level less than significant.

10.3 Environmentally Superior Alternative

CEQA Guidelines section 15126.6(e)(2) requires the identification of an environmentally superior alternative among the alternatives analyzed in an EIR. The guidelines also require that if the No

Project Alternative is the environmentally superior alternative, then another environmentally superior alternative must be identified.

The Reduced Development Footprint Alternative would be considered the environmentally superior alternative. This alternative would avoid impacts to the MHPA and would not require a boundary line adjustment. Similarly, the smaller project footprint would reduce impacts to sensitive vegetation communities and reduce impacts on landform alteration. Although, the increased density and introduction of attached multi-family residential units that would occur under this alternative would not be consistent with the character of the single-family and detached multi-family residential units surrounding the project site, it would be considered environmentally superior to the project due to the reduction in grading and biological impacts.

Chapter 11
Mitigation Monitoring and Reporting Program

Section 21081.6 of the State of California Public Resources Code (PRC) requires a Lead or Responsible Agency that approves or carries out a project where an EIR has identified significant environmental effects to adopt a "reporting or monitoring program for adopted or required changes to mitigate or avoid significant environmental effects." The City of San Diego is the Lead Agency for the Avion Project Supplemental Environmental Impact Report (SEIR), and therefore must ensure the enforceability of the Mitigation Monitoring and Reporting Program (MMRP). An SEIR has been prepared for this project that addresses potential environmental impacts and, where appropriate, recommends measures to mitigate these impacts. As such, an MMRP is required to ensure that adopted mitigation measures are implemented.

The SEIR, incorporated herein as referenced, focuses on issues determined to be potentially significant by the City. This SEIR also considers the issues discussed in the first-tier document and evaluates whether a significant effect has been adequately addressed or if there is an effect that was not addressed in the previous report. The issues determined to require subsequent analysis in the SEIR include land use, biological resources, cultural/historical resources, landform alteration/visual quality, air quality, and noise. Chapter 9.0 of the SEIR, Black Mountain Ranch (Subarea I) Subarea Plan EIR Subject Areas Requiring No Change in Analysis, contains a summary of the impacts of the project compared with the impacts analyzed in the 1998 EIR. The 1998 EIR concluded that the following impacts were significant: land use, transportation/circulation, biological resources, hydrology/water quality, landform alteration/visual quality, air quality, geology and soils, natural resources/agriculture, noise, public facilities and services, and water conservation. The 1998 EIR indicates that significant impacts for the project site would be substantially lessened or avoided if the mitigation measures recommended in the EIR were implemented by future development for various environmental issues. Previous mitigation measures from the 1998 EIR are identified below, along with a conclusion as to whether the impact would be mitigated to below a level of significance.

After analysis, new or substantially increased potentially significant impacts requiring mitigation were identified in the SEIR for biological resources, cultural/historical resources, landform alteration, and air quality. The environmental analysis concluded that all of these significant and potentially significant impacts could be avoided or reduced through implementation of recommended mitigation measures, with the exception of impacts to landform alteration. Mitigation measures that would reduce and/or avoid the environmental effects of the project are carried forward and have been incorporated into this MMRP.

As Lead Agency for the proposed project under the California Environmental Quality Act (CEQA), the City of San Diego will administer the MMRP for the following environmental issue areas as identified in the Avion Project SEIR and 1998 EIR: transportation/circulation, air quality, biological resources, historical/cultural resources, and air quality. This MMRP shall be made a requirement of project approval.

A. GENERAL REQUIREMENTS – PART I

Plan Check Phase (prior to permit issuance)

1. Prior to the issuance of a Notice to Proceed (NTP) for a subdivision, or any construction permits, such as Demolition, Grading or Building, or beginning any construction related activity on-site, the Development Services Department (DSD) Director's Environmental Designee (ED) shall review and approve all Construction Documents (CD) (plans, specification, details, etc.) to ensure the MMRP requirements are incorporated into the design.

2. In addition, the ED shall verify that the MMRP Conditions/Notes that apply ONLY to the construction phases of this project are included VERBATIM, under the heading, "**ENVIRONMENTAL/MITIGATION REQUIREMENTS**."

3. These notes must be shown within the first three (3) sheets of the construction documents in the format specified for engineering construction document templates as shown on the City website:

   http://www.sandiego.gov/development-services/industry/standtemp.shtml

4. The **TITLE INDEX SHEET** must also show on which pages the "Environmental/Mitigation Requirements" notes are provided.

5. **SURETY AND COST RECOVERY –** The Development Services Director or City Manager may require appropriate surety instruments or bonds from private Permit Holders to ensure the long-term performance or implementation of required mitigation measures or programs. The City is authorized to recover its cost to offset the salary, overhead, and expenses for City personnel and programs to monitor qualifying projects.

B. GENERAL REQUIREMENTS – PART II

Post Plan Check (After Permit Issuance/Prior to Start of Construction)

1. **PRECONSTRUCTION MEETING IS REQUIRED TEN (10) WORKING DAYS PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.** The PERMIT HOLDER/OWNER is responsible to arrange and perform this meeting by contacting the CITY RESIDENT ENGINEER (RE) of the Field Engineering Division and City staff from MITIGATION MONITORING COORDINATION (MMC). Attendees must also include the Permit holder's Representative(s), Job Site Superintendent and the following consultants:

   Qualified Paleontological Monitor(s), Acoustician, Archaeologist(s), Native American Monitor(s), and Biologist(s)

   NOTE: Failure of all responsible Permit Holder's representatives and consultants to attend shall require an additional meeting with all parties present.

Contact Information:

a) The PRIMARY POINT OF CONTACT is the **RE** at the **Field Engineering Division – 858-627-3200**

b) For Clarification of ENVIRONMENTAL REQUIREMENTS, it is also required to call **RE and MMC at 858-627-3360**

2. **MMRP COMPLIANCE:** This Project, Project Tracking System (PTS) No. 598173 and/or Environmental Document No. 598173, shall conform to the mitigation requirements contained in the associated Environmental Document and implemented to the satisfaction of the DSD's Environmental Designee (MMC) and the City Engineer (RE). The requirements may not be reduced or changed but may be annotated (i.e. to explain when and how compliance is being met and location of verifying proof, etc.). Additional clarifying information may also be added to other relevant plan sheets and/or specifications as appropriate (i.e., specific locations, times of monitoring, methodology, etc.).

   NOTE: Permit Holder's Representatives must alert RE and MMC if there are any discrepancies in the plans or notes, or any changes due to field conditions. All conflicts must be approved by RE and MMC BEFORE the work is performed.

3. **OTHER AGENCY REQUIREMENTS:** Evidence of compliance with all other agency requirements or permits shall be submitted to the RE and MMC for review and acceptance prior to the beginning of work or within one week of the Permit Holder obtaining documentation of those permits or requirements. Evidence shall include copies of permits, letters of resolution or other documentation issued by the responsible agency.

   - California Department of Fish and Wildlife: California Fish and Game Code Section 1602 Streambed Alteration Agreement
   - Federal Emergency Management Agency: Conditional Letter of Map Revision
   - Regional Water Quality Control Board: National Pollutant Discharge Elimination System General Construction Permit, Clean Water Act Section 401 waiver/certification
   - U.S. Army Corps of Engineers: Clean Water Act Section 404 authorization
   - San Diego County Airport Land Use Commission Consistency Determination (Conditional Consistency November 6, 2018)

4. **MONITORING EXHIBITS:** All consultants are required to submit, to RE and MMC, a monitoring exhibit on a 11x17 reduction of the appropriate construction plan, such as site plan, grading, landscape, etc., marked to clearly show the specific areas including the **LIMIT OF WORK**, scope of that discipline's work, and notes indicating when in the construction schedule that work will be performed. When necessary for clarification, a detailed methodology of how the work will be performed shall be included.

NOTE: Surety and Cost Recovery – When deemed necessary by the Development Services Director or City Manager, additional surety instruments or bonds from the private Permit Holder may be required to ensure the long-term performance or implementation of required mitigation measures or programs. The City is authorized to recover its cost to offset the salary, overhead, and expenses for City personnel and programs to monitor qualifying projects.

5. **OTHER SUBMITTALS AND INSPECTIONS:** The Permit Holder/Owner's representative shall submit all required documentation, verification letters, and requests for all associated inspections to the RE and MMC for approval per the following schedule:

Document Submittal/Inspection Checklist		
Issue Area	**Document Submittal**	**Associated Inspection/ Approvals/ Notes**
General	Consultant Qualification Letters	Prior to Preconstruction Meeting
General	Consultant Construction Monitoring Exhibits	Prior to or at Preconstruction Meeting
Land Use	Multi-Habitat Planning Area (MHPA) Land Use Adjacency Issues Consultant Site Visit Records (CSVR)	Land Use Adjacency Issue Site Observations
Biology	Biologist Limit of Work Verification	Limit of Work Inspection
Biology	Biology Reports	Biology/Habitat Inspection
Archaeology	Archaeology Reports	Archaeology/Historic Site Observation
Noise	Blasting Management Plan	Prior to issuance of the first grading permit
Waste Management	Waste Management Reports	Waste Management Inspections
Bond Release	Request for Bond Release Letter	Final MMRP Inspections Prior to Bond Release Letter

C. SPECIFIC MMRP ISSUE AREA CONDITIONS/REQUIREMENTS

Biological Resources

Vegetation Communities

MM-BIO-1: Upland Vegetation Communities

Mitigation for impacts to coastal sage scrub (Tier II habitat), southern mixed chaparral (Tier IIIA habitat), and non-native grassland (Tier IIIB habitat) communities would be achieved through the preservation of habitat on the site located outside of the development area. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, the project would demonstrate to the satisfaction of the City that impacts to a total of 15.2 acres of sensitive vegetation would be mitigated by the on-site preservation of 24.03 acres of sensitive vegetation as summarized by habitat type in Table 5.2-5. The preserved habitat areas on the site would all be within the boundaries of the MHPA Boundary Line Adjustment (BLA) dedicated to the City in

fee title. Acceptance of land dedicated in fee title is subject to approval by the City's Park and Recreation Open Space.

Sensitive Wildlife

MM-BIO-2: Standard City Construction Measures

Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, mitigation for general impacts to biological resources would be incorporated via standard measures including general mitigation measures, biological protections during construction, (includes monitoring, preconstruction meetings, and development of a Biological Condition Monitoring Exhibit, etc.) as described below. These Biological Resources Protection requirements shall be depicted on the construction documents verbatim and implemented accordingly.

Biological Resource Protection During Construction

I. Prior to Construction

A. **Biologist Verification** - The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City's Biological Guidelines (2012), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.

B. **Preconstruction Meeting** - The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.

C. **Biological Documents** - The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per the City's Biology Guidelines, MSCP, ESL Ordinance, project permit conditions; CEQA; endangered species acts (ESAs); and/or other local, state or federal requirements.

D. **Biological Construction Mitigation/Monitoring Exhibit** (**BCME)** - The Qualified Biologist shall present a BCME, which includes the biological documents in "C" above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including U.S. Fish and Wildlife Service protocol), timing of surveys, wetland buffers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City Assistant Deputy Director (ADD)/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.

E. **Avian Protection Requirements** - To avoid any direct impacts to Cooper's hawk, rufous-crowned sparrow, and coastal California gnatcatcher or any species identified as listed, candidate, sensitive, or special status in the MSCP, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of nesting for these three sensitive bird species on the proposed area of disturbance. The preconstruction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the preconstruction survey to the City's DSD for review and approval prior to initiating any construction activities. If nesting activities for any of the above-mentioned sensitive bird species are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable state and federal law (i.e., appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section or Resident Engineer, and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

F. **Resource Delineation** - Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora and fauna species, including nesting Cooper's hawk, rufous-crowned sparrow, and coastal California gnatcatcher) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.

G. **Education** – Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).

II. During Construction

A. **Monitoring** – All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the preconstruction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record

(CSVR). The CSVR shall be e-mailed to the MMC on the first day of monitoring, the first week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.

B. **Subsequent Resource Identification** – The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on-site (e.g., flag plant specimens for avoidance during access, etc.). If active nests for Cooper's hawk, rufous-crowned sparrow, and coastal California gnatcatcher, or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.

III. Post Construction Measures

A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.

Cultural/Historical Resources

Historic Resources

MM-HIST-1: Archaeological Monitoring

I. Prior to Permit Issuance

A. Entitlements Plan Check

1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

B. Letters of Qualification have been submitted to ADD

1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.

2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.

3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.

2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.

B. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.

   a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.

2. Identify Areas to be Monitored

   a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.

   b. The AME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).

3. When Monitoring Will Occur

    a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.

    b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.

III. During Construction

A. Monitor(s) Shall be Present During Grading/Excavation/Trenching

1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.

2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.

3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.

4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process

1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging,

trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.

2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.

3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance

1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.

   a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.

   b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) which has been reviewed by the Native American consultant/monitor, and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. Note: If a unique archaeological site is also an historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.

   c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

A. Notification

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.

2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

B. Isolate discovery site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains.

2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance.

3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.

C. If Human Remains ARE determined to be Native American

1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, ONLY the Medical Examiner can make this call.

2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.

3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.

4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.

5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:

    a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR;

    b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance, THEN

    c. To protect these sites, the landowner shall do one or more of the following:

        (1) Record the site with the NAHC;

        (2) Record an open space or conservation easement; or

        (3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by PRC 5097.98. The document shall be indexed as a notice under the name of the owner.

    d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.

D. If Human Remains are NOT Native American

1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.

2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).

3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the

applicant/landowner, any known descendant group, and the San Diego Museum of Man.

V. Night and/or Weekend Work

A. If night and/or weekend work is included in the contract

1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.

2. The following procedures shall be followed.

a. No Discoveries

In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8AM of the next business day.

b. Discoveries

All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.

c. Potentially Significant Discoveries

If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV-Discovery of Human Remains shall be followed.

d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.

B. If night and/or weekend work becomes necessary during the course of construction

1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.

2. The RE, or BI, as appropriate, shall notify MMC immediately.

C. All other procedures described above shall apply, as appropriate.

VI. Post Construction

A. Preparation and Submittal of Draft Monitoring Report

1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.

    a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.

    b. Recording Sites with State of California Department of Parks and Recreation

       The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.

2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.

3. The PI shall submit revised Draft Monitoring Report to MMC for approval.

4. MMC shall provide written verification to the PI of the approved report.

5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

B. Handling of Artifacts

1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued

2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.

3. The cost for curation is the responsibility of the property owner.

C. Curation of artifacts: Accession Agreement and Acceptance Verification

1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.

2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

3. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5.

D. Final Monitoring Report(s)

1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.

2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

AIR QUALITY

Sensitive Receptors (Construction)

MM-AIR-1a: Arsenic Testing Protocol in Areas Requiring Blasting

Geocon shall obtain periodic random samples from select air-track borehole spoils or the ground surface over the course of the blasting program. The number of samples shall vary and be based on judgement depending on the size of the shot. The samples shall be assigned for analysis of arsenic using U.S. Environmental Protection Agency Test Method 6010B with a reporting limit of 1.0 milligram per kilogram. The sampling shall be performed under the direct supervision of Geocon's Project Manager and Professional Geologist.

MM-AIR-1b: Blasting Dust Mitigation Plan

The following protocols shall be performed to minimize the generation of visible dust during the hard rock blasting events:

- The areas shall be heavily watered prior to the planned blasting. The amount of water applied shall depend on the size of the shot and composition of the materials exposed at the top of the shot (i.e., topsoil vs. hard rock).
- A water truck shall be dedicated to pre-wet the ground surface.
- Detergent, if necessary, shall be added to the water truck to reduce the surface tension of the water and promote soaking into the surface materials. The water used shall be confined to the area of the shot and not be allowed to migrate out of the work limits. Confinement of the water shall be achieved through use of earthen berms, ditches, or other containment features that shall prevent migration of the water outside the work area.
- Once the boreholes are loaded with blasting agent, a final soaking shall occur just prior to the shot.

D. PREVIOUS MITIGATION (1998 EIR)

Transportation/Circulation

The project would be subject to conditions of approval consistent with the MMRP for the 1998 EIR. Specifically, prior to the issuance of any building permit, the project is required to be in conformance with the Black Mountain Ranch Transportation Phasing Plan.

Air Quality

The 1998 EIR incorporated mitigation measures that would reduce fugitive dust impacts from construction activity. Dust control during construction and grading operations would be regulated in accordance with the rules of the San Diego Air Pollution Control District. The following measures would reduce fugitive dust impacts:

1. All unpaved construction areas would be sprinkled with water or other acceptable San Diego County Air Pollution Control District (SDAPCD) dust control agents during dust-generating activities to reduce dust emissions. Additional watering or acceptable Air Pollution Control District dust control agents would be applied during dry weather or windy days until dust emissions are not visible.
2. Trucks hauling dirt and debris would be covered to reduce windblown dust and spills.
3. On dry days, dirt and debris spilled onto paved surfaces would be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites would be cleaned daily of construction-related dirt in dry weather.

4. On-site stockpiles of excavated material would be covered or watered.

To reduce construction-related vehicle emissions, ride share opportunities would be encouraged and construction vehicle access would be limited to roads determined in a temporary traffic construction management plan. In addition, construction staging areas would be as far away from existing or completed residences as possible.

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Chapter 13
Individuals and Preparers Consulted

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