

# Appendix M

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## Mitigation, Monitoring, and Reporting Program

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# MITIGATION, MONITORING, AND REPORTING PROGRAM

## Sunbow Sectional Planning Area Plan Amendment for the Sunbow II, Phase 3 Project EIR

*Prepared for:*

**City of Chula Vista**

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# Mitigation Monitoring and Reporting Program

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## Introduction

California Public Resources Code, Section 21081.6, requires that, upon certification of an Environmental Impact Report, “the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.”<sup>1</sup>

This Mitigation Monitoring and Reporting Program has been developed in compliance with Section 21081.6 of the California Public Resources Code and Section 15097 of the California Environmental Quality Act Guidelines,<sup>2</sup> and includes the following information:

- A list of mitigation measures
- The timing for implementation of the mitigation measures
- The party responsible for implementing or monitoring the mitigation measures
- The date of completion of monitoring

The City of Chula Vista must adopt this Mitigation Monitoring and Reporting Program, or an equally effective program, if it approves the proposed Sunbow Sectional Planning Area Plan Amendment for the Sunbow II, Phase 3 Project (project) with the mitigation measures that were adopted or made conditions of project approval.

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<sup>1</sup> California Public Resources Code, Sections 21000–21189. California Environmental Quality Act (CEQA), as amended.

<sup>2</sup> 14 CCR 15000–15387 and Appendices A–N. Guidelines for Implementation of the California Environmental Quality Act, as amended.

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<b>Biological Resources</b>			
<b>MM-BIO-1:</b> The Applicant shall include an irrevocable offer of dedication (IOD) to the City of Chula Vista on the first final map for 62.16 acres of onsite Preserve land within Preserve Management Area 3, Subunits 3-1a, 3-1b, and 3-1c of the Chula Vista Central City Preserve lands. The MSCP Preserve land shall be conserved, maintained, and managed by the City of Chula Vista or its designee in perpetuity as directed in the Chula Vista Central City Preserve Area-Specific Management Directives (ASMDs) for Preserve Management Area 3 (PMA 3) (RECON Environmental, April 26, 2004) and funded by the Sunbow Preserve Community Facilities District (No. 98-3). The City of Chula Vista Preserve Habitat Manager shall be responsible for the long-term Preserve management activities identified in the Central City Preserve ASMD. Said IOD for the 62.16 acres Proposed MSCP Preserve shall include 48.95 acres to mitigate for significant habitat impacts to 7.79 acres of native grassland, 8.55 acres of Diegan coastal sage scrub, and 55.61 of non-native grassland as well as the following sensitive species significant impacts: Coastal California Gnatcatcher- occupied Diegan coastal sage scrub to mitigate for significant direct impacts to coastal California gnatcatcher occupied habitat; Otay Tarplant- 0.34 acre of Otay tarplant occupied habitat (i.e., native grassland) to mitigate for direct impacts to 0.34 acre of Otay tarplant occupied habitat that currently supports 836 Otay tarplant individual plants; Orcutt's Bird's-beak- Orcutt's bird's-beak habitat (i.e., Diegan coastal sage scrub) to mitigate for significant direct impacts to onsite Diegan coastal sage scrub that currently supports 91 Orcutt's bird's-beak individual plants; Decumbent Goldenbush Decumbent goldenbush habitat (i.e., Diegan coastal sage scrub and native grassland), that includes at least 289 decumbent goldenbush individual plants) to mitigate for significant direct impacts to onsite native grassland and Diegan coastal sage scrub that currently supports 289	Prior to construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

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decumbent goldenbush individual plants; and San Diego Viguiera- San Diego viguiera habitat (i.e., Diegan coastal sage scrub) that includes at least 2,979 San Diego viguiera individual plants) to mitigate for significant direct impacts to onsite Diegan coastal sage scrub that currently supports 5,958 San Diego viguiera individual plants.			
<b>MM-BIO-2:</b> Prior to initiation of construction related activities including clearing and grubbing or prior to vegetation/ground disturbance or prior to site mobilization activities or issuance of a grading permit, the Applicant shall submit documentation to the City demonstrating that the Applicant has contracted with a qualified biologist(s) to monitor the project construction activities and avoid any inadvertent impacts to sensitive biological and ensure complete avoidance of jurisdictional resources. Each qualified biologist shall have demonstrated expertise with the sensitive habitats, special status species of the project region. The qualified biologist(s) shall monitor the installation of the construction temporary fencing and/or flagging, silt fencing, and other best management practices (BMPs) along the construction limits prior to construction activities. The qualified biologist shall be present full-time during all initial vegetation clearing and grubbing activities, and potentially on a less frequent basis during grading activities to ensure construction remains within the approved project development area. The Applicant shall report results of biological monitoring activities to the City on a regular basis through the preparation and submission of summary monitoring reports.	Prior to and during construction	City of Chula Vista	
<b>MM-BIO-3:</b> Prior to the issuance of any land development permits including for clearing and grubbing or grading, the Applicant shall prepare a Restoration Plan prepared by a qualified biologist to mitigate for impacts to sensitive plant species consisting of Otay tarplant, Orcutt's bird's-beak, decumbent goldenbush, and San Diego County viguiera consistent with the Habitat Restoration and Sensitive Plant	Prior to construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
Specifies Mitigation Plan (Merkel & Associates, Inc. 2021, Appendix D). The Applicant shall implement the 5-year maintenance and monitoring activities consistent with the Conceptual Restoration Plan to the satisfaction of the Development Services Director (or their designee). The revegetation plan must be prepared by a qualified City approved biologist familiar with the City's MSCP Subarea Plan and must include, but not be limited to, an implementation plan; appropriate seed mixtures and planting method; irrigation method; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The Project Applicant shall be required to prepare and implement the revegetation plan subject to the oversight and approval of the Development Services Director (or their designee). NOTE: Since the revegetation is critical to approving the MSCP Boundary Line Adjustment, the applicant will be required to enter into a Secured Agreement with the City and will be required to provide a cash deposit.			
<b>MM-BIO-4:</b> To avoid any direct impacts to nesting coastal California gnatcatcher, all vegetation clearing, grubbing and grading activities within gnatcatcher occupied habitat (i.e., Diegan coastal sage scrub) shall be conducted outside of the gnatcatcher breeding season (February 15 to August 15).	Prior to and during construction	City of Chula Vista	
<b>MM-BIO-5:</b> Prior to initiating any construction related activities requiring a clearing and grubbing or grading permit, the Applicant shall delineate coastal California gnatcatcher occupied habitat located adjacent to the proposed project development area during the breeding season (February 15 to August 15) by orange biological fencing or comparable materials to ensure that no work shall occur within these habitats. In addition, a minimum 300-foot buffer and on-site noise reduction/attenuation techniques shall be incorporated, as appropriate to avoid impacts to breeding gnatcatcher from elevated construction noise levels. The City Development	Prior to and during construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
Services Director (or their designee) shall have the discretion to modify the buffer width depending on site-specific conditions. Noise monitoring may be required to ensure that the elevated construction noise levels are appropriately attenuated at the edge of occupied habitat to a level that is not expected to adversely affect nesting bird behavior (i.e., not to exceed an hourly average of 60 A-weighted decibels (dBA) or ambient at the edge of occupied habitat).			
<b>MM-BIO-6:</b> Prior to initiating any construction related activities requiring a clearing and grubbing or grading permit, the Applicant shall delineate least Bell's vireo occupied habitat by orange biological fencing or comparable to avoid direct impact to vireo within occupied habitat located adjacent to the proposed project during the breeding season (March 15 to September 15). In addition, a minimum 300-foot buffer and on-site noise reduction/attenuation techniques shall be incorporated, as appropriate to avoid impacts to breeding vireo from elevated construction noise levels. The City Development Services Director (or their designee) shall have the discretion to modify the buffer width depending on site-specific conditions. Noise monitoring may be required to ensure that the elevated construction noise levels are appropriately attenuated at the edge of occupied habitat to a level that is not expected to adversely affect nesting bird behavior (i.e., not to exceed an hourly average of 60 dBA or ambient at the edge of occupied habitat).	Prior to and during construction	City of Chula Vista	
<b>MM-BIO-7:</b> To avoid any direct impacts to migratory birds and/or raptors protected under the federal Migratory Bird Treaty Act and California Fish and Game Code Sections 3503 and 3513, removal of habitat that supports active nests on the proposed area of disturbance should occur outside of the breeding season for these species. The breeding season is defined as January 15–August 31 for raptor species and February 15–August 15 for other non-raptor birds (excluding listed species). If removal of habitat on the proposed area of	Prior to construction	City of Chula Vista	



Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<p>disturbance must occur during the breeding season, then prior to initiating any construction related activities requiring a clearing and grubbing or grading permit, the Applicant shall retain a City-approved biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds (including nesting birds) on the proposed area of disturbance. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, and the results must be submitted to the City for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan, as deemed appropriate by the City, shall be prepared and include proposed measures to be implemented to ensure that disturbance of breeding activities are 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 mitigation monitor shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.</p> <p>To reduce potential impacts to burrowing owl during construction, the City-approved biologist shall perform pre-construction inspection of potential habitat, and, at minimum, twice weekly inspections be performed while rough grading is ongoing. All pre-construction survey efforts shall be conducted prior to any project activities that could result in habitat disturbance to soil, vegetation or other sheltering habitat for burrowing owl. If any burrowing owls or sign of burrowing owls are detected, the Wildlife Agencies (jointly, CDFW and USFWS) shall be contacted; efforts shall be made to determine the breeding status of the species on site, and whether it is safe at that point to exclude burrowing owls from occupied burrows. Active or passive relocation methods shall only be employed with concurrence by CDFW and USFWS.</p>			

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<b>MM-BIO-8:</b> Prior to approval of the first final map, the Applicant shall submit a Landscape Master Plan for the entire project which shall demonstrate compliance with the proposed fence and wall plan for the project. The proposed fence and wall plan shall include appropriate fencing and barriers (e.g., vegetation) where applicable to shield human presence and deter human intrusion into the Preserve.	Prior to construction	City of Chula Vista	
<b>MM-BIO-9:</b> Concurrent with design review and prior to issuance of a building permit for any development located adjacent to the Preserve, the Applicant shall prepare, a lighting plan and photometric analysis for review and approval the Development Services Director (or their designee). The lighting plan shall illustrate the location of the proposed lighting standards and type of shielding measures. Low-pressure sodium lighting shall be used, if feasible, and shall be subject to the approval of the Development Services Director (or their designee).	Prior to construction	City of Chula Vista	
<b>MM-BIO-10:</b> Prior to approval of the first final map, the Applicant shall submit a Landscape Master Plan for the entire project which shall demonstrate compliance with the proposed plant palette for the project. The proposed plant palette shall prohibit invasive non-native plant species on the California Exotic Pest Plant Council List of Exotic Pest Plants of Greatest Ecological Concern in California that could spread into the adjacent Preserve. No invasive non-native plant species shall be introduced into areas immediately adjacent to the preserve. All slopes immediately adjacent to the Preserve shall be planted with native species that reflect the adjacent native habitat. Further, the proposed plant palette shall be consistent with the plant list contained in the "Wildland/Urban Interface: Fuel Modification Standards," and provided as Appendix L of the Subarea Plan, must be reviewed and utilized to the maximum extent practicable when developing landscaping plans in areas adjacent to the Preserve.	Prior to construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<b>MM-BIO-11:</b> To avoid habitat degradation to the adjacent Preserve lands, project irrigation shall be contained to the project development and fuel modification zones and shall not drain or overspray resulting in potential erosion/sedimentation, spread of invasive plant species, and/or non-native species such as Argentine ants.	During operation	City of Chula Vista	
<b>MM-BIO-12:</b> Prior to initiating any construction related activities requiring a clearing and grubbing or grading permit, the Applicant shall demonstrate how the project would avoid or minimize applicable inadvertent impacts during construction. To ensure the avoidance and minimization of impacts to biological resources during construction the following construction BMPs shall be implemented: <ul style="list-style-type: none"> <li>a. Prior to ground disturbance, all permanent and temporary disturbance areas shall be clearly delineated by orange construction fencing and the identification of environmentally sensitive areas with flagging and/or fencing.</li> <li>b. To minimize disturbance of areas outside the project site, all construction and operation vehicle traffic shall be restricted to established roads, construction areas, and other designated areas. These areas shall be included in pre-construction surveys and, to the extent possible, shall be established in locations disturbed by previous activities to prevent further impacts.</li> <li>c. Construction and operation vehicles shall observe appropriate safe speed limits and adhere to safety practices.</li> <li>d. Dust suppression shall occur during construction activities when necessary to meet air quality standards and protect biological resources.</li> <li>e. No vehicles or equipment shall be refueled or undergo maintenance within 100 feet of a jurisdictional waters feature. Spill kits shall be maintained on the site in sufficient quantity to accommodate at least three complete vehicle tank failures of 50 gallons each. Any</li> </ul>	Prior to construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<p>vehicles driven or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of contaminated fluids.</p> <p>f. All general trash, food-related trash items (wrappers, cans, bottles, food scraps, cigarettes, etc.), and other human-generated debris scheduled to be removed shall be stored in animal-proof containers and removed from the site on a regular basis (weekly during construction, and at least monthly during operations). No deliberate feeding of wildlife shall be allowed.</p> <p>g. Use of chemicals, fuels, lubricants, or biocides shall comply with all local, state, and federal regulations. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation. Use of first-and second- generation rodenticides shall not be permitted except for the limited use of zinc phosphide, or a rodenticide approved by the City, and only after other means of pest control (e.g. rodent traps) have proven to be ineffective.</p>			
<p><b>MM-BIO-13:</b> Prior to issuance of a grading permit, prior to vegetation clearing, grubbing, grading, or any ground disturbing activities, the Applicant shall submit evidence to the City that the Applicant has retained qualified biologists to prepare a Worker Environmental Awareness Program that shall be presented to all construction personnel and employees before any ground-disturbing activities commence at the project site and shall be continued through the construction phase for all new construction personnel. The program shall consist of a brief presentation going over the on-site sensitive biological resources and compliance with project impact and open space boundaries, and applicable environmental laws and requirements with all personnel involved in the project. This presentation shall explain to</p>	Prior to construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
construction personnel how best to avoid impacts sensitive resources during construction. The program shall include a description of all special status species potentially on the project site and their habitat needs; an explanation of the status of the species and their protection under the state and federal regulations; specific mitigation measures applicable to listed and other special status species; permit conditions, and the penalties for violation of applicable laws. The program shall also explain to construction personnel how to avoid impacts to jurisdictional waters, including wetlands. The program shall include a map and description of jurisdictional waters on the site to be avoided and measures to implement to ensure the protection and avoidance of jurisdictional waters.			
<b>MM-BIO-14:</b> Prior to initiating any construction related activities requiring a clearing and grubbing or grading permit, the Applicant shall prepare a revegetation plan for the temporary impact areas within the 25-foot grading buffer in the Minor Amendment Area that utilizes a native erosion control hydroseed mix acceptable to the City and the Wildlife Agencies (U.S. Fish and Wildlife Service and California Department of Fish and Wildlife) to ensure soil stability and prevent subsequent erosion. The revegetation plan must be prepared by a qualified City approved biologist familiar with the City's MSCP Subarea Plan and must include, but not be limited to, an implementation plan; appropriate seed mixtures and planting method; irrigation method; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The Project Applicant shall be required to prepare and implement the revegetation plan subject to the oversight and approval of the Development Services Director (or their designee). The proposed project MSCP BLA and Minor Amendment would require implementation of the following mitigation measure.	Prior to construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<b>MM-BIO-15:</b> Prior to initiating any construction related activities requiring a clearing and grubbing or grading permit, the Applicant shall receive approval by the City and Wildlife Agencies for the MSCP BLA. The Applicant shall be required to implement conditions associated with the BLA subject to the oversight and approval of the Development Services Director (or their designee).	Prior to construction	City of Chula Vista	
<b>MM-BIO-16:</b> Prior to initiating any construction related activities requiring a clearing and grubbing or grading permit, the Applicant shall receive approval by the City and Wildlife Agencies for the MSCP Minor Amendment. The Applicant shall be required to implement conditions associated with the Minor Amendment subject to the oversight and approval of the Development Services Director (or their designee).	Prior to construction	City of Chula Vista	
<b><i>Cultural and Tribal Cultural Resources</i></b>			
<b>MM-CUL-1:</b> a. Prior to beginning construction activities, the project archaeologist and Native American representative shall attend any pertinent preconstruction meetings with the construction manager and/or grading contractor in order to provide recommendations and answer questions relating to the archaeological monitoring program. The project archaeologist shall be familiar with the cultural inventory conducted for the current project and shall be prepared to introduce any pertinent information concerning expectations and probabilities of discovery during ground-disturbing activities. Prior to the initiation of construction, the cultural consultant shall acquire all evaluation information and the draft evaluation report, if a report was prepared. b. Both an archaeological monitor familiar with local resources and a Native American monitor shall be present full time during the initial disturbance of soil with potential to contain cultural deposits. All areas of	Prior to and during construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<p>initial project-related subsurface disturbance shall be assumed to have the potential to contain cultural deposits. Monitoring of initial ground disturbance shall not exceed a depth of 5 feet (1.5 meters) unless cultural resources are identified or if, through direct inspection of subsurface exposures by the project Archaeologist, an area is observed to have the potential to support the presence of archaeological deposits at greater depths. Cultural resources monitoring may be reduced from initial full-time monitoring to periodic spot checks, or discontinued if appropriate, once the project archaeologist determines that there is little or no risk of encountering cultural material.</p> <p>c. Daily archaeological and Native American monitoring logs shall be prepared. Logs shall include monitor names and affiliations, a description of general activities observed, cultural discoveries, as well as comments or concerns as applicable.</p> <p>d. In the event of an archaeological discovery, and when requested by the archaeological monitor or Native American monitor, the resident contractor will divert, redirect, or temporarily halt ground disturbing activities in the area of discovery or impacts to allow for preliminary inspection of potentially significant archaeological resources or impacts. The significance of the discovered resources or impacts shall be determined by the archaeologist, in consultation with the City of Chula Vista (City). For significant cultural resources, a Research Design and Data Recovery Program shall be prepared and carried out to mitigate impacts before grading activities in the area of discovery shall be allowed to resume.</p> <p>e. The project archaeologist shall be responsible for ensuring that all cultural materials collected will be cleaned, catalogued, and curated permanently with an appropriate institution; that a letter of acceptance from the curation institution has been submitted to the City;</p>			

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<p>that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material will be identified as to species; and that specialty studies are completed, as appropriate. The project archaeologist shall make a good-faith effort to ensure that all archaeological material collected through previous work is appropriately curated with any material recovered through construction monitoring.</p> <p>f. If human remains are discovered, work shall halt in that area and procedures set forth in the California Public Resources Code (Section 5097.98) and State Health and Safety Code (Section 7050.5) shall be followed by the archaeological monitor after notification to the County Coroner by the project Archaeologist. If Native American remains are present, the County Coroner shall contact the Native American Heritage Commission to designate a Most Likely Descendant, who shall arrange for the dignified disposition and treatment of the remains.</p> <p>g. Within 3 months following the completion of monitoring, two copies of a monitoring results report (even if negative) and/or evaluation report, if applicable, that describes the results, analysis, and conclusions of the archaeological monitoring program (with appropriate graphics) shall be submitted to City.</p> <p>h. For significant archaeological resources encountered during monitoring, the Research Design and Data Recovery Program shall be included as part of the final evaluation monitoring report. Two copies of the final monitoring report for significant archaeological resources, if required, shall be submitted to the City. This final monitoring report should also incorporate a summary of the evaluation results and analyses previously conducted within the project area.</p> <p>i. The archaeologist shall be responsible for recording (on the appropriate CA DPR 523 Series forms) any significant or</p>			



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Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
potentially significant resources encountered during the archaeological monitoring program in accordance with Section 106 and the City's Cultural Resources Guidelines, and submittal of such forms to the South Coastal Information Center at San Diego State University with the final monitoring results report.			
<b>Geology and Soils</b>			
<p><b>MM-GEO-1: Paleontological Monitoring Program.</b> Prior to the issuance of grading permits, the applicant shall provide written confirmation to the City that a qualified paleontologist has been retained to carry out an appropriate mitigation program. (A qualified paleontologist is defined as an individual with an MS or PhD in paleontology or geology who is familiar with paleontological procedures and techniques.) A pre-grading meeting shall be held that shall include the paleontologist and the grading and excavation contractors.</p> <p>A paleontological monitor shall be on site at all times during the original cutting of previously undisturbed sediments of highly sensitive geologic formations (i.e., Otay Formation and San Diego Formation) to inspect cuts for contained fossils. (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.) The paleontological monitor shall work under the direction of a qualified paleontologist. The monitor shall be on site on at least a half-time basis during the original cutting of previously undisturbed sediments of moderately sensitive geologic formations (e.g., unnamed river terrace deposits and the Mission Valley Formation) to inspect cuts for contained fossils. However, neither of these rock units have been mapped within the project area of potential effect (APE) and are therefore not anticipated to be impacted during construction.</p> <p>The monitor shall be on site on at least a quarter-time basis during the original cutting of previously undisturbed sediments of low sensitivity geologic formations (e.g., Lindavista Formation</p>	Prior to and during construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<p>and Santiago Peak Volcanics [metasedimentary portion only]) to inspect cuts for contained fossils. However, these deposits have not been mapped within the project APE and are therefore not anticipated to be impacted during construction. The monitor shall periodically (every several weeks) inspect original cuts in deposits with an unknown resource sensitivity (i.e., Quaternary alluvium).</p> <p>In the event that fossils are discovered in unknown, low, or moderately sensitive formations, the Applicant shall increase the per-day field monitoring time. Conversely, if fossils are not discovered, the monitoring, at the discretion of the City's Deputy City Manager/Development Services Director or its designee, shall be reduced. A paleontological monitor is not needed during grading of rocks with no resource sensitivity (i.e., Santiago Peak Volcanics, metavolcanic portion).</p> <p>When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them. In most cases, this fossil salvage can be completed in a short period of time. However, some fossil specimens (such as a complete whale skeleton) may require an extended salvage time. In these instances, the paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for the recovery of small fossil remains such as isolated mammal teeth, it may be necessary in certain instances and at the discretion of the paleontological monitor to set up a screen-washing operation on the site.</p> <p>Prepared fossils along with copies of all pertinent field notes, photos, and maps shall be deposited in a scientific institution with paleontological collections such as the San Diego Natural History Museum. A final summary report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils.</p>			

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<b>Greenhouse Gas Emissions</b>			
<b>MM-GHG-1: Greenhouse Gas Emissions Reduction Measures.</b> The following GHG emissions reduction measures shall be implemented: <ul style="list-style-type: none"> <li>• Off-road construction equipment with engines rated at 75 horsepower or greater shall meet at a minimum Tier 3 standard.</li> <li>• Install purple pipes to provide reclaimed water for outdoor water use.</li> <li>• Install low-flow water fixtures such as low-flow toilets, faucets, showers, etc.</li> <li>• Two parking spaces shall be pre-wired for electric vehicle (EV) capable and designated as preferential parking spaces shall be provided for carpool, shared, electric, and hydrogen vehicles.</li> <li>• 718 parking garages shall be pre-wired to be EV capable.</li> <li>• Energy-efficient lighting shall be used for all street, parking, and area lighting associated with the proposed project, including all on-site and off-site lighting.</li> <li>• Energy-efficient design practices, such as high-performance glazing, Energy Star compliant systems and appliances, radiant heat roof barriers, insulation on all pipes, programmable thermostats, and sealed ducts, shall be implemented.</li> <li>• Native species and drought-tolerant species shall be used for a minimum of 50% of the ornamental plant palette in non-turf areas to minimize water demand.</li> <li>• Recycling of construction debris and waste shall be ensured through administration by an on-site recycling coordinator and presence of recycling/separation areas. Exceed the City of Chula Vista's Construction and Demolition Debris Waste Management Plan's 65% diversion of construction and demolition waste.</li> </ul>	During construction and operation	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

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<ul style="list-style-type: none"> <li>• Install cool roofs that meet the U.S. Green Building Council standards with a greater solar reflectivity to help conserve energy.</li> <li>• Install 1,462-kilowatt solar photovoltaic system meeting the minimum 2019 Title 24 standards.</li> <li>• Install bicycle racks.</li> <li>• The project shall plant 600 trees and 40 acres of shrubs.</li> </ul>			
<b>Public Services/Recreation</b>			
<b>MM-PS-1:</b> Prior to the issuance of each building permit for any residential dwelling units, the applicant shall pay a Public Facilities Development Impact Fee (PFDIF) in accordance with the fees in effect at the time of building permit issuance and phasing approved in the Supplemental Public Facilities Finance Plan, unless stated otherwise in a separate development agreement.	Prior to construction	City of Chula Vista	
<b>MM-PS-2:</b> Prior to the issuance of a building permit, the applicant shall provide evidence or certification by the Chula Vista Elementary School District (CVESD) and the Sweetwater Union High School District (SUHSD) that any fee charge, dedication or other requirement levied by the school district(s) has been complied with or that the district(s) has determined the fee, charge, dedication or other requirements do not apply to the construction or that the applicant has entered into a school mitigation agreement. School facility mitigation fees shall be in accordance with the fees in effect at the time of building permit issuance.	Prior to construction	City of Chula Vista	
<b>MM-PS-3:</b> No earlier than issuance of certificate of occupancy, the applicant shall pay the Park Benefit Fee, as outlined in the project's Development Agreement, equal to the City's Park Acquisition and Development (PAD) Fee Update pursuant to Chula Vista Municipal Code Section 17.10. The final Park Benefit Fee amount shall be determined based on the number and type of residential units constructed and the PAD fee rates in effect as of the effective date of the project's	Prior to construction	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
Development Agreement. To create this Park Benefit Fee, the City will waive the parkland dedication and development requirements set in Chapter 17.10 of the Chula Vista Municipal Code, including the Parkland Acquisition and Public Facilities Development fees, and Quimby Act fees. The Park Benefit Fee shall satisfy the project's park obligations and may be utilized by the City to acquire or develop parkland, as the City determines appropriate and in the best interest of the City.			

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<b>Wildfire/Hazards and Hazardous Materials</b>			
<p><b>MM-WF-1:</b></p> <p><b>Site Access</b></p> <p>Site access, including fire lane, driveway, and entrance road widths, primary and secondary access, gates, turnarounds, dead end lengths, signage, aerial fire apparatus access, surface, and other requirements will comply with the requirements of the 2019 California Fire Code and the Chula Vista Fire Department (CVFD) Standards. Fire access will be reviewed and approved by CVFD prior to construction (see the FPP, Appendix H3, for additional details).</p> <p>The developer will provide information illustrating the new roads, in a format acceptable to the City, for updating of City maps.</p> <p><b>Ignition Resistant Construction</b></p> <p>All new structures within the Proposed Project will be constructed to at least the California Fire Code standard. Each of the proposed buildings will comply with the enhanced ignition-resistant construction standards of the 2019 CBC (Chapter 7A) and Chapter 5 of the Urban-Wildland Interface code, except where buildings require enhanced ignition resistance as part of an alternative material and method proposal. These requirements address roofs, eaves, exterior walls, vents, appendages, windows, and doors and result in hardened structures that have been proven to perform at high levels (resist ignition) during the typically short duration of exposure to burning vegetation from wildfires (see the FPP, Appendix H3, for additional details).</p> <p><b>Fire Protection Systems</b></p> <p>1. Water supply requirements specified in the California Fire Code (see FPP, Appendix H3, for additional details)</p>	During construction and operation	City of Chula Vista	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Date of Completion
<p>including for hydrants and interior sprinklers will be provided for the proposed project.</p> <p>2. Hydrants shall be located along fire access roadways and cul-de-sacs as determined by the CVFD Fire Marshal to meet operational needs. Hydrants will be consistent with CVFD Design Standards and provided every 500 feet (on-center).</p> <p>3. All structures within the Proposed Project will include interior sprinklers, per code requirements (see FPP, Appendix H3, for additional details). Sprinklers will be specific to each occupancy type and based on the most recent National Fire Protection Association (NFPA) 13, 13R, or 13D, requirements.</p> <p>4. All residential units shall have a fire alarm system be installed in accordance with NFPA 72, <i>Fire Protection Signaling System</i> and CVFD requirements. The fire alarm system will be supervised by a third-party alarm company. The system will be tested annually, or as needed, with test results provided to CVFD.</p> <p>Additionally, all residences will be equipped with residential smoke detectors and carbon monoxide detectors and comply with current CBC, CFC, and California Residential Code standards.</p> <p>All residential dwelling units shall have electric-powered, hard-wired smoke detectors with battery backup per CVFD.</p> <p><b>Defensible Space and Vegetation Management</b></p> <p>Fuel Modification Zones (FMZs) would be located on the perimeter of all structures and along both ingress/egress roadways to and from Olympic Parkway. All brush management zones and related fuel modification activities shall occur outside of the Preserve. FMZs shall be a minimum of 100 feet in width. A 100-foot-wide FMZ will be installed for lots abutting designated Preserve Lands to the north and west of the Project Site. To ensure long-term identification and</p>			

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<p>maintenance, each respective FMZ shall be identified by a permanent marker system meeting the approval of CVFD.</p> <p><b>Other Vegetation Management</b></p> <ol style="list-style-type: none"> <li>1. New roads will be subject to fuel modification zones with Zone 1 and/or Zone 2 standards described above. The combustible vegetation will be modified within 30 feet from each side of Streets A and B. Roadway-adjacent fuel modification does not preclude the planting of street trees in these fuel modification zones, as long as they are not found on the Prohibited Plant List (Appendix D of the FPP) and are included in the Approved Plant Palette (Appendix C of the FPP).</li> <li>2. Pre-Construction Requirements: <ul style="list-style-type: none"> <li>o Perimeter fuel modification areas must be implemented and approved by the CVFD prior to combustible materials being brought on site.</li> <li>o Existing flammable vegetation shall be reduced by 50% on vacant lots upon commencement of construction.</li> <li>o Dead fuel, ladder fuel (fuel which can spread fire from ground to trees), and downed fuel shall be removed, and trees/shrubs shall be properly limbed, pruned, and spaced per this plan.</li> </ul> </li> <li>1. Undesirable Plants. Certain plants are considered to be undesirable in the landscape due to characteristics that make them highly flammable. These characteristics can be physical (structure promotes ignition or combustion) or chemical (volatile chemicals increase flammability or combustion characteristics). The plants included in the Prohibited Plant List (Appendix D of Appendix H3, FPP) are unacceptable from a fire safety standpoint and will not be planted on the site or allowed to establish opportunistically within fuel modification zones or landscaped areas. No fuel modification zones are</li> </ol>			



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<p>proposed within the MSCP areas, thus no vegetation within the MSCP will be removed.</p> <p>2. Tree Notes for Publicly Owned Areas.</p> <p>The project shall maintain all trees in publicly owned areas, per the project's FPP. These requirements include, but are not limited to (see Appendix H3 for additional details):</p> <ul style="list-style-type: none"> <li>All standard form (single trunk) trees to include a single strong central leader with no branches extending at an angle narrower than 30 degrees from the main trunk. If the tree does not display a single strong central leader, a tree may be approved if the Developer's arborist or landscape architect of record can demonstrate that a single strong central leader can be achieved through structural pruning.</li> <li>No grafted species that sucker from the base stock will be allowed as a street tree.</li> </ul> <p><b>1. Vacant Parcels and Lots</b></p> <p>The project shall comply with requirements of the project's FPP related to vacant parcels and lots. These requirements include, but are not limited to:</p> <ul style="list-style-type: none"> <li>Vegetation management would not be required on vacant lots until construction begins. However, perimeter FMZs must be implemented prior to commencement of construction utilizing combustible materials.</li> <li>Vacant lots adjacent to active construction areas/lots would be required to implement vegetation management if they are within 50 feet of the active construction area. Perimeter areas of the vacant lot would be maintained as a vegetation management zone extending 50 feet from roadways and adjacent construction areas.</li> <li>Prior to issuance of a permit for any construction, grading, digging, installation of fences, etc., on a vacant lot, the 50 feet at the perimeter of the lot is to be maintained as a vegetation management zone.</li> </ul>			

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<ul style="list-style-type: none"> <li>FMZ on slope L&amp;I does not have to be completed prior to construction starting, but all flammable vegetation and plants found on the Prohibited Plant List, needs to grubbed and graded or mowed prior to any construction.</li> </ul> <p><b>Fuel Modification Area Vegetation Maintenance</b></p> <p>All fuel modification area vegetation management shall be completed annually by May 1 of each year and more often as needed for fire safety, as determined by the CVFD.</p> <p><b>Annual Fuel Modification Area Vegetation Maintenance</b></p> <p>The property owner would obtain an FMZ inspection and report from a qualified CVFD-approved 3rd party inspector in May of each year certifying that vegetation management activities throughout the Project Site have been performed pursuant to this FPP. A copy of the annual inspection report would be provided to the proposed project homeowner association (HOA) and a copy made available to CVFD, if requested.</p> <p><b>Reduced Fuel Modification Zone Discussion</b></p> <p>Due to site constraints, it is not feasible to achieve a 100-foot FMZ width on the south side of the proposed development. This FPP incorporates additional fire protection measures as described in this mitigation measure that shall be implemented to compensate for potential fire related threats. These measures were customized for this site based on the analysis results and focus on providing functional equivalency for reduced defensible space.</p> <p><b>Landscape and Building Hardening.</b></p> <ol style="list-style-type: none"> <li>1. Provide exterior glazing in windows (and sliding glass doors, garage doors, or decorative or leaded glass doors) facing the open space areas to be dual pane with both</li> </ol>			

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<p>panes tempered glass, exceeding the fire-building code requirement.</p> <ol style="list-style-type: none"> <li>2. Ensure no eave overhangs and combustible construction in portion of yards facing natural open space areas.</li> <li>3. Install 1-hour rated walls (Type X- 5/8-inch thickness of gypsum) behind non-combustible covering (stucco, fiber cement siding) for a façade facing the open space areas to the east and south.</li> <li>4. Conduct a formal landscaping plan review for structures with a façade facing open space area. Landscape plans shall be reviewed and approved by the Chula Vista Fire Department.</li> <li>5. Annually hire a third-party inspector to evaluate whether designated fuel modification zone areas meet the requirements of the project Fire Protection Plan.</li> <li>6. Provide a non-combustible fire-rated 6-foot-tall masonry block or view wall at the property line on the south and east sides of the proposed project to provide a physical, non-combustible barrier that would deflect heat and flame and would capture ground-blowing embers before they reached the proposed project's developed areas.</li> </ol> <p>The proposed project's slopes to the south provide an opportunity to place a non-combustible, 6-foot-tall, heat-deflecting wall (or view wall with lower 1 to 2 feet block wall and upper 4 to 5 feet dual-pane, one pane tempered glazing) to provide additional deflection for these lots to compensate for the reduced fuel modification zones. The wall shall meet any of the following specifications:</p> <ul style="list-style-type: none"> <li>• Be constructed of multi-pane glazing with a minimum of one tempered pane meeting the requirements of Section 2406 Safety Glazing, or</li> <li>• Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or</li> </ul>			

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<ul style="list-style-type: none"><li>Be tested to meet the performance requirements of SFM Standard 12-7A-2.</li></ul> <b>Homeowner's Wildfire Education Program</b> <p>Per the FPP, the proposed project's residents shall be provided a proactive educational component disclosing the potential wildfire risk and this report's requirements as part of their purchase documents. Property owners shall be required to sign notice of receiving this information during escrow. This educational information must include maintaining the landscape and structural components according to the appropriate standards and embracing a "Ready, Set, Go" stance on evacuation.</p>			