

Mitigation Monitoring and Reporting Program

PROJECT NAME: City of Carlsbad Trails Master Plan

PROJECT NO: GPA 2017-0001

APPROVAL DATE/RESOLUTION NUMBER(S): _____

The following environmental mitigation measures were incorporated into the Conditions of Approval for this project in order to mitigate identified environmental impacts to a level of insignificance. A completed and signed checklist for each mitigation measure indicates that this mitigation measure has been complied with and implemented, and fulfills the City of Carlsbad's (city) monitoring requirements with respect to Assembly Bill 3180 (Public Resources Code Section 21081.6).

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
BIO-1	<p>Project-Specific Biological Surveys. Prior to approval of any development for Trails Master Plan projects 1D, 2C, 5B, 5C, 6A, 7A (west of I-5), 7D, 8B, 9D, and 10B, a project-specific biological survey shall be conducted by the city to verify potential direct and indirect impacts to sensitive biological resources.</p> <p>Prior to approval of any development for Trails Master Plan projects 7B, 7C, 7H, 9A, 9C, 12D, 12E, 12I, and 12J, a biological survey shall be conducted by the private applicant or other public agency developing the trail to verify potential direct and indirect impacts to sensitive biological resources.</p> <p>Trails Master Plan projects 1B, 1C, 2A, 5A, 10C, 10D, 12F, 12H, and 13A shall be contained within disturbed and developed areas associated with the existing utility roadbed or dirt trail footprints. In the unexpected event that these trails cannot be restricted to the existing disturbed and developed areas, then prior to approval of any development for these trails, a project-specific biological survey shall be conducted by the city to verify potential direct and indirect impacts to sensitive biological resources.</p>	<p>Project-specific biological survey to be conducted by city: 1D, 2C, 5B, 5C, 6A, 7A (west of I-5), 7D, 8B, 9D, and 10B</p> <p>Project-specific biological survey to be conducted by private applicant or other public agency: 7B, 7C, 7H, 9A, 9C, 12D, 12E, 12I, and 12J</p> <p>Trails to be contained within disturbed and developed areas associated with the existing utility roadbed footprints: 1B, 1C, 2A, 5A, 10C, 10D, 12F, 12H, and 13A</p>	Project	Parks & Recreation, Biological Monitor			

Explanation of Headings

Type = Project, ongoing, cumulative.

Monitoring Dept. = Department, or Agency, responsible for monitoring a particular mitigation measure.

Shown on Plans = When mitigation measure is shown on plans, this column will be initialed and dated.

Verified Implementation = When mitigation measure has been implemented, this column will be initialed and dated.

Remarks = Area for describing status of ongoing mitigation measure, or for other information.

Legend

PLN Planning Division

ENG Land Development Engineering Division

BLDG Building Division

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
BIO-1 cont.	<p>Project-specific biological surveys shall field-verify existing habitat on and immediately adjacent to planned trails; identify potential opportunities for alternative trail siting to avoid sensitive biological resources; and identify opportunities for incorporating setbacks and buffers from sensitive biological resources that will be avoided.</p> <p>If, after completion of project-specific biological surveys, the trails can be designed to avoid impacts to sensitive biological resources and incorporate appropriate buffers, then no additional actions with respect to biological resources shall be required.</p> <p>If, after completion of project-specific biological surveys, the trails cannot be designed to avoid impacts to sensitive biological resources and incorporate appropriate buffers, then a project-specific biological technical report shall be prepared to support additional environmental review of the trails. The report shall document the results of the project-specific surveys and implement mitigation measures BIO-2 through BIO-8, as applicable, and/or propose additional project-specific mitigation for impacts where measures proposed herein do not apply.</p>						
BIO-2	<p>Rare Plant Surveys and Mitigation. If the project-specific studies identify potential impacts to suitable habitat for sensitive plant species, then, as applicable, the city, private applicant, or other public agency shall perform rare plant surveys (i.e., focused surveys for sensitive plants) to determine the presence or absence of sensitive plants within potential impact areas. The city, private applicant, or other public agency shall avoid sensitive plants to the greatest extent feasible to successfully implement the Trails Master Plan and demonstrate consistency with the city’s HMP requirements. Impacts to habitat occupied by sensitive plant species shall be mitigated in accordance with mitigation measure BIO-4.</p>	Projects identified under BIO-1 where the project-specific study identified potential impacts to suitable habitat for sensitive plant species	Project	Parks & Recreation, Biological Monitor			

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
BIO-2 cont.	Trails Master Plan projects with the potential to impact narrow endemic species identified in Table 10 (page D-112) of the city’s Habitat Management Plan (HMP) shall meet required conservation standards, which includes 100 percent conservation of narrow endemic plant populations within the city’s HMP proposed preserve system, and at least 80 percent conservation of populations outside of the proposed preserve system (see HMP page D-90, D.6 Measures to Minimize Impact on HMP Species and Mitigation Requirements). Trails potentially impacting narrow endemic species shall be redesigned to meet the required conservation standards of the city’s HMP.						
BIO-3	<p>Focused Wildlife Species Surveys and Mitigation. If the project-specific studies identify potential impacts to suitable habitat for sensitive wildlife species, then, as applicable, the city, private applicant, or other public agency shall perform focused surveys for sensitive wildlife species to determine the presence or absence of sensitive wildlife within potential impact areas. The city, private applicant, or other public agency shall avoid sensitive wildlife species to the greatest extent feasible to successfully implement the Trails Master Plan and demonstrate consistency with the city’s HMP requirements. Impacts to habitat occupied by sensitive wildlife species shall be mitigated in accordance with mitigation measure BIO-4.</p> <p>Trails Master Plan projects with the potential to impact least Bell’s vireo, southwestern willow flycatcher, and Harbison’s dun skipper butterfly shall implement the required specific measures identified in the city’s HMP to meet conservation standards for these species.</p>	Projects identified under BIO-1 where the project-specific study identified potential impacts to suitable habitat for sensitive wildlife species	Project	Parks & Recreation, Biological Monitor			

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
BIO-4	<p>Compensatory Mitigation. If the project-specific studies identify unavoidable impacts to sensitive natural communities, including sensitive Habitat Group types identified in the city’s HMP, then, as applicable, the city, private applicant, or other public agency shall mitigate impacts in accordance with the mitigation ratios and requirements specified in Table 11 (page D-113) of the city’s HMP, and for projects within the Coastal Zone, the additional Coastal Zone Standards listed on pages D-114 through D-121 of the city’s HMP. These additional standards in the Coastal Zone would include a creation component that achieves the city’s no net loss standards. Impacts to Habitat Groups D, E, and F from city projects shall be mitigated by debiting the appropriate acreage from the Lake Calavera Mitigation Bank. Mitigation may be out-of-kind in accordance with allowances for city projects. Impacts to Habitat Groups A, B, and C shall be mitigated in-kind at the ratios stated in Table 11 of the HMP (e.g., creation, restoration, and/or enhancement).</p>	Projects identified under BIO-1 where the project-specific study identified unavoidable impacts to sensitive natural communities	Project	Parks & Recreation, Biological Monitor			
BIO-5	<p>Avoidance of Impacts to Nesting Birds and Raptors. To prevent impacts to nesting birds, including raptors, protected under the federal Migratory Bird Treaty Act and California Fish and Game Code, the city shall enforce the following:</p> <p>Prior to construction activities requiring the removal, pruning, or damage of any trees, shrubs, and man- made structures (e.g., buildings, bridges, etc.) during the general breeding season, that being from January 15 to September 15, as applicable, the city, private applicant, or other public agency shall retain a qualified biologist to perform a pre-construction survey to determine if there are any active nests within the impact areas. The surveys shall take place no more than 7 days prior to the start of construction for a particular project component.</p> <p>If any active raptor nests are located on or within 500 feet of the areas planned for construction, or if any active passerine (songbird) nests are located on or within 300 feet of the areas planned for</p>	Projects with construction activities that require the removal, pruning, or damage of any trees, shrubs, and man- made structures (e.g., buildings, bridges, etc.) during the general breeding season	Project	Parks & Recreation, Biological Monitor			

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
BIO-5 cont.	<p>construction, as applicable, the city, private applicant, or other public agency shall retain a qualified biologist to flag and demarcate the locations of the nests and monitor construction activities. No construction activities shall occur until it is determined by a qualified biologist that the nests are no longer active and all nestlings have fledged the nest or until the end of the general breeding season, unless noise attenuation measures are implemented which reduces construction noise below 60 dBA L_{EQ} (1 hour) within 500 feet of the breeding habitat occupied by the listed species. A qualified biologist shall confirm, in writing, that no disturbance to active nests or nesting activities would occur as a result of construction activities. Documentation from a qualified biologist consistent with these requirements shall be submitted to the city for review and approval. A note to this effect shall be placed on the construction plans.</p>						
BIO-6	<p>Orange Construction Fencing. If it is confirmed through the implementation of mitigation measure BIO-1 that project construction would occur immediately adjacent to sensitive habitat areas and/or habitat potentially suitable for sensitive species, as applicable, the city, private applicant, or other public agency shall retain a qualified biologist to supervise the installation of temporary orange construction fencing, which clearly delineates the edge of the approved limits of grading and clearing, and the edges of environmentally sensitive areas that occur beyond the approved limits. This fencing shall be installed prior to construction, and maintained for the duration of construction activity. Fencing shall be installed in a manner that does not impact habitats to be avoided.</p> <p>If work occurs beyond the fenced or demarcated limits of impact, all work shall cease until the problem has been remedied and mitigation identified. Temporary orange fencing shall be removed upon completion of construction of the project. Implementation of this measure shall be verified by the city prior to and concurrent with construction.</p>	<p>Projects identified under BIO-1 where the project-specific study identified where construction would occur immediately adjacent to sensitive habitat areas and/or habitat potentially suitable for sensitive species</p>	Project	Parks & Recreation, Biological Monitor			

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
BIO-7	<p>Non-Native Invasive Inspection and Removal. As part of the city’s routine maintenance inspections and where trails occur within or immediately adjacent to HMP Preserve areas, the city shall inspect trail edges for sign of non-native invasive plant species listed on the California Invasive Plant Inventory prepared by the California Invasive Plant Council (Cal-IPC 2006). If non-native invasive plant species are confirmed present within these areas, the city shall coordinate with the HMP Preserve Manager to determine the specific actions and responsibilities for treatment and removal. The specific actions and responsibilities will be performed in accordance with long-term management directives and requirements prescribed for the affected HMP Preserve area. Where such directives and requirements have not been prescribed and cannot be provided by the HMP Preserve Manager, they shall include the following, at a minimum:</p> <ul style="list-style-type: none"> a. The least toxic method that effectively removes the weeds shall be used. The preferred method would not use chemicals. This can be accomplished through hand weeding along the linear elements of the trail. Other non-chemical means includes mowing before seeds are set. b. If herbicides must be used for non-native invasive removal, at the direction of the Preserve Manager, invasive plants shall be treated with herbicides and left in place or removed and disposed of at an approved off-site location, such as the Waste Management facility at 5960 Reef Circle, Carlsbad, California. This would be performed in accordance with the city’s Integrated Pest Management (IPM) plan, updated in November 2017. The updated plan emphasizes the initial use of organic pesticides, limiting the use of chemical pesticides where children and the general public congregate, and when pests cannot be managed by other methods, using USEPA-level pesticides in a targeted manner and only if deemed necessary to protect public safety or economic loss. 	Where trails occur within or immediately adjacent to HMP Preserve areas.	Project	Parks & Recreation, Biological Monitor			

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
BIO-7 cont.	<ul style="list-style-type: none"> c. Herbicides may only be applied by a licensed pesticide applicator under the supervision of the HMP Preserve Manager or qualified biologist retained by the city. d. A qualitative assessment of non-native plant species coverage shall be completed by the HMP Preserve Manager or qualified biologist retained by the city at the end of the year during which the treatment activities took place. e. Living, non-native plant species coverage at the location of the treatment area must be demonstrated not to exceed 10 percent of the total treatment area. f. If coverage exceeds 10 percent, then at the direction of the HMP Preserve Manager, the treatment activities shall be repeated the following year. 						
BIO-8	<p>Jurisdictional Delineation, Permitting, and Compensatory Mitigation. If the project-specific studies identify potential impacts to waters and wetlands potentially subject to regulatory agency jurisdictions (i.e., U.S. Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB], and California Department of Fish and Wildlife [CDFW] jurisdictions), including riparian habitat and federally-protected wetlands, then, as applicable, the city, private applicant, or other public agency shall perform a formal jurisdictional delineation to determine the presence or absence of jurisdictional waters and wetlands within potential impact areas. The city, private applicant, or other public agency shall avoid jurisdictional waters and wetlands to the greatest extent feasible to successfully implement the Trails Master Plan. If impacts to jurisdictional waters and wetlands cannot be avoided, then the city, private applicant, or other public agency shall notify the appropriate regulatory agencies, secure required permits, and implement compensatory mitigation in coordination with the regulatory agencies and the city’s HMP. Compensatory mitigation shall occur at a minimum 1:1 ratio at an on- and/or off-site location through one or a combination of preservation, creation, restoration, and/or enhancement actions approved by the regulatory agencies.</p>	Projects identified under BIO-1 where the project-specific study identified potential impacts to waters and wetlands potentially subject to regulatory agency jurisdictions	Project	Parks & Recreation, Biological Monitor			

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
CUL-1	<p>Project-level Cultural Resources Record Search & Consultation. Prior to approval of any development for Trails Master Plan projects 1A, 1B, 1C, 1D, 2A, 2C, 5A, 5B, 5C, 6A, 7A (west of I-5), 7D, 7E, 7G, 8A, 8B, 9D, 10A, 10B, 10C, 10D, 12A, 12F, 12H, and 13A, a project-specific cultural resources record search and consultation with the appropriate organizations, California Native American tribes, and individuals shall be conducted by the city as part of the environmental review process.</p> <p>Prior to approval of any development for Trails Master Plan projects 7B, 7C, 7H, 9A, 9C, 12D, 12E, 12I, and 12J, a project-level cultural resources record search and consultation with the appropriate organizations, California Native American tribes, and individuals shall be conducted as part of the environmental review process by the private applicant or other public agency.</p> <p>The results of the record search and consultation shall determine whether or not project-level surveys are required to be conducted, pursuant to mitigation measure CUL-2.</p>	1A, 1B, 1C, 1D, 2A, 2C, 5A, 5B, 5C, 6A, 7A (west of I-5), 7D, 7E, 7G, 8A, 8B, 9D, 10A, 10B, 10C, 10D, 12A, 12F, 12H, 12I, 12J, and 13A	Project	Parks & Recreation			
CUL-2	<p>Project-level Cultural Resources Site Survey. If it is determined through the project-level record search and consultation conducted as part of mitigation measure CUL-1 that cultural resources are known to exist or have the potential to occur within the alignment or immediate vicinity of an individual project within the Trails Master Plan, a cultural resource survey shall be conducted. If significant cultural resources or Tribal Cultural Resources are observed or suspected to occur beneath the surface, an assessment shall be prepared to document the resources per current acceptable professional archaeological standards, and to identify measures to reduce potential impacts. If potential impacts to Tribal Cultural Resources are anticipated, then consultation with the appropriate California Native American tribe shall be conducted to identify measures to reduce potential impacts. Measures to reduce potential</p>	Projects identified under CUL-1 where the project-level record search identified cultural resources that are known to exist or have the potential to occur within the alignment or immediate vicinity of the project	Project	Parks & Recreation			

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
CUL-2 cont.	impacts to Tribal Cultural Resources may include CUL-3 and CUL-4 below, but are not limited to these measures, and shall be addressed in a pre-excavation agreement with the appropriate California Native American tribe.						
CUL-3	Construction Monitoring. For those projects where cultural resources were identified through the project-level site survey conducted as part of mitigation measure CUL-2 and monitoring is an appropriate measure to reduce potential impacts, a qualified archaeologist and Native American monitor shall conduct monitoring of the project site during all grading and other ground-disturbing activities related to construction activities. General archaeological and Native American monitoring of soil disturbances shall be conducted as applicable within each portion of the project identified in the project-level survey as potentially containing sensitive cultural resources. In the event that cultural resources are discovered during project construction, all earth disturbing work within the vicinity of the resource(s) must be temporarily suspended or redirected until a qualified archaeologist and Native American monitor have evaluated the nature and significance of the find, pursuant to mitigation measure CUL-4. After the find has been appropriately addressed, work in the area may resume.	Projects where cultural resources were identified through the project-level site survey conducted as part of CUL-2	Project	Parks & Recreation			
CUL-4	Resource Recovery Procedures. Treatment of any cultural resources discovered during site preparation shall comply with the city's Cultural Resource Guidelines. Determination of the significance of the cultural resource(s) and development and implementation of any data recovery program or alternative measures shall be conducted in consultation with interested Native American tribes. All Native American human remains and associated grave goods shall be returned to their most likely descendent and repatriated in accordance with state and federal regulations. The final disposition of archaeological artifacts that are not considered Tribal Cultural Resources by the appropriate California Native American Tribe shall be offered to an institution staffed by qualified professionals, as may	Projects where cultural resources are discovered during site preparation	Project	Parks & Recreation			

MITIGATION MEASURE		Applicable Trail Segments	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
CUL-4 cont.	be determined by the City Planner. Artifacts include material recovered from all phases of work, including the initial survey, testing, indexing, data recovery, and monitoring. A cultural resource monitoring report identifying all materials recovered shall be filed with the South Coast Information Center, and a copy submitted to the City Planner upon project completion. Disposition of artifacts that are considered Tribal Cultural Resources shall be governed by the pre-excavation agreement previously executed with the appropriate California Native American tribe.						
PALEO-1	Prior to approval of any project which may involve ground disturbance in areas which have a moderate to high potential for paleontological resources, a paleontological resource assessment shall be conducted to determine the potential for significant paleontological resources to occur. If significant paleontological resources could be impacted, excavation in the area suspected to contain paleontological resources shall be monitored by a qualified paleontologist. If significant resources are encountered, they shall be recovered and conveyed to an appropriate repository.	Any project which may involve ground disturbance in areas which have a moderate to high potential for paleontological resources	Project	Parks & Recreation			