



INITIAL STUDY/MITIGATED NEGATIVE DECLARATION



# CANYON LOOP TRAIL IMPROVEMENT PROJECT

PUBLIC REVIEW DRAFT • OCTOBER 2020

**Michael Baker**  
INTERNATIONAL



PUBLIC REVIEW DRAFT INITIAL STUDY/  
MITIGATED NEGATIVE DECLARATION

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## **Canyon Loop Trail Improvement Project**

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LEAD AGENCY:

**City of Diamond Bar**  
21810 Copley Drive  
Diamond Bar, CA 91765  
**Contact: Mr. Ryan Wright**  
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# **INITIAL STUDY AND APPENDICES ON CD**



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## **1.0 INTRODUCTION**

The proposed Canyon Loop Trail Improvement Project (herein referenced as the “project”) involves the addition of trail improvements along the Canyon Loop Trail within the Summitridge Park Trail System; refer to Section 2.0, *Project Description*. Following a preliminary review of the proposed project, the City of Diamond Bar (City) has determined that it is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). Pursuant to CEQA Guidelines Section 15378, a “project” is defined as the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following:

- An activity directly undertaken by any public agency, including, but not limited to, public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700;
- An activity undertaken by a person which is supported in whole or in part through public agency contacts, grants, subsidies, loans, or other forms of assistance from one or more public agencies; or
- An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

This Initial Study addresses the direct, indirect, and cumulative environmental effects of the project, as proposed.

### **1.1 STATUTORY AUTHORITY AND REQUIREMENTS**

In accordance with Sections 15051 and 15367 of the California Code of Regulations (CCR), the City is identified as the Lead Agency for the proposed project. Under CEQA (Public Resources Code Section 21000-21177) and pursuant to Section 15063 of the CCR, the City is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration (or Mitigated Negative Declaration). Such determination can be made only if “there is no substantial evidence in light of the whole record before the Lead Agency” that such impacts may occur (Section 21080[c], Public Resources Code).

The environmental documentation, which is ultimately selected by the City in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits, and other discretionary approvals would be required.

### **1.2 PURPOSE**

CEQA Guidelines Section 15063 identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- Identification of the environmental setting;

- Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- Discussion of ways to mitigate significant effects identified, if any;
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

### **1.3 CONSULTATION**

Pursuant to CEQA Guidelines Section 15063(g), as soon as the Lead Agency (in this case, the City) has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, in order to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study, the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

### **1.4 INCORPORATION BY REFERENCE**

The following references were utilized during preparation of this Initial Study and are incorporated into this document by reference. These documents are available for review at the City of Diamond Bar, located at 21810 Copley Drive, Diamond Bar, California 91765.

- *Diamond Bar General Plan 2040 (December 2019)*. The *Diamond Bar General Plan 2040* (General Plan) is a dynamic policy document intended to guide the long-term development within Diamond Bar. The General Plan reflects the community's values and desires, as expressed in a broad vision for the future through 2040, and addresses important issue, such as land use and urban design, economic development, circulation, resource conservation, public facilities and services, safety, public health, and sustainability. The General Plan consists of the following elements: Land Use and Economic Development; Community Character and Placemaking; Circulation; Resource Conservation; Public Facilities and Services; Public Safety; and Community Health and Sustainability.
- *Diamond Bar Environmental Impact Report 2040 (State Clearinghouse No. 2018051066) (November 2019)*. The *Diamond Bar Environmental Impact Report 2040* (General Plan EIR) evaluates the environmental impacts associated with the adoption of the General Plan. The General Plan EIR concluded that the General Plan would result in significant and unavoidable impacts related to air quality, historic resources, parks and recreation, and transportation (vehicle miles traveled). All other environmental impacts would not involve significant and unavoidable impacts following implementation of recommended mitigation, *Diamond Bar Municipal Code* requirements, and relevant General Plan policies.
- *Diamond Bar Municipal Code (codified through Ordinance No. 01(2019), enacted January 15, 2019)*. The *Diamond Bar Municipal Code* (Municipal Code) includes the City's regulatory, penal, and administrative ordinances. Municipal Code Title 22, *Development Code* (Development Code), is the City's main tool to implement the General Plan. The purpose of the Development Code is to implement the policies of the General Plan by classifying and regulating the uses of land and structures within the City. In addition, the

Development Code is adopted to protect and promote the public health, safety, and general welfare of residents, and preserve and enhance the aesthetic quality of Diamond Bar.

- *Diamond Bar Parks and Recreation Master Plan (July 2011)*. The *Diamond Bar Parks and Recreation Master Plan* (Park Master Plan) updates the previous 1998 Park Master Plan and provides a conceptual master plan for Summitridge Park that outlines opportunities for the development of future facilities within the park. The Park Master Plan acts as the planning tool for City staff to reference when making recommendations for future growth and implementation strategies associated with the City's parks and recreational facilities. Overall, the Parks Master Plan provides direction to continue the orderly and consistent planning, acquisition, development, and administration of the parks and recreation programming in the City.



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## **2.0 PROJECT DESCRIPTION**

### **2.1 PROJECT LOCATION**

Regionally, the project site is located within the City of Diamond Bar (City), in the southeastern portion of Los Angeles County; refer to Exhibit 2-1, Regional Vicinity. Surrounding jurisdictions include the cities of Industry and Walnut and the unincorporated community of Rowland Heights to the west, Pomona to the north, Chino Hills to the east, and Brea and unincorporated Los Angeles County to the south.

The project site is the existing Canyon Loop Trail situated within the central portion of the City and is part of the Summitridge Park Trail System. The 1.29-linear mile trail is located within Assessor's Parcel Number (APN) 8701-059-904; refer to Exhibit 2-2, Site Vicinity. Regional access to the project site is provided via State Route 60 (SR-60) and State Route 57 (SR-57) to the west.

### **2.2 ENVIRONMENTAL SETTING**

As shown on Exhibit 2-3, Summitridge Park Trail System, the Summitridge Park Trail System encompasses three trail routes: the Ridge Route, Canyon Loop Trail, and Grand View Route. The Canyon Loop Trail is located in the central portion of the trail system with Ridge Route to the north and Grand View Route to the south. The Canyon Loop Trail can be further distinguished into the North Canyon and South Canyon Loops that make up the full loop trail. The trail is currently unpaved with two existing benches located along the eastern end of the North Canyon Loop and one bench on the eastern end of the South Canyon Loop. Trailhead and wayfinding signs are located on the east and west sides of the loop. A Southern California Edison easement and three towers with overhead wires traverse the North Canyon Loop.

The trail undergoes varying topography, ranging in elevation from approximately 970 to 1,275 feet above mean sea level (amsl), sloping uphill from west to east with the highest elevation located along the easternmost portion of the South Canyon Loop. The Summitridge Park Trail System area is characterized by undeveloped open space dominated by Venturan coastal sage scrub, oak woodland, and walnut woodland plant communities. Prickly pear cactus is also present throughout the area and sightings of special-status coastal California gnatcatcher (*Polioptila californica californica*) and cactus wren (*Campylorhynchus brunneicapillus*) have been documented in the immediate vicinity of the Canyon Loop Trail.

Trail users of the Summitridge Park Trail System are able to access the three trails, including the Canyon Loop Trail, via two trailhead access points at Summit Ridge Park to the south or via access points on the eastern and western end of the trail system from residential neighborhood roadways, including Peak Court, Wynnewood Drive, Dare Court, and Clear Creek Canyon Road.

#### **2.2.1 EXISTING GENERAL PLAN DESIGNATION AND ZONING**

Based on the *Diamond Bar General Plan 2040* (General Plan) and *City of Diamond Bar Zoning Map* (Zoning Map), the project site is designated Open Space and zoned Low Density Residential (RL).

#### **2.2.2 SURROUNDING LAND USES**

Surrounding land uses in proximity to the project site are primarily comprised of open space and residential uses as described below.





Source: Google Earth Pro, 2020.

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**Site Vicinity**

**Exhibit 2-2**



**Legend :**

-  Existing Trail Resting Stop / View Area
-  Existing Bench Location
-  Existing Trail Head Access Point
-  Ridge Route
-  Canyon Loop Trail
-  Grand View Route
-  Existing trail steps per city standards

Source: City of Diamond Bar, 2011.

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## Summitridge Park Trail System

**Exhibit 2-3**

- North: Ridge Route and open space, including steep undeveloped hillsides are present to the north of the project site. These areas are designated Open Space and zoned RL.
- East: Open space and single-family residential uses are located to the east of the Canyon Loop Trail. These areas are designated Open Space and Low Density Residential and zoned RL.
- South: Grand View Route, open space, and recreational uses (Diamond Bar Center and Summit Ridge Park) are located to the south of the project site. These areas are designated Open Space, Public Facility, and Park, and zoned RL.
- West: Single-family and multifamily residential and commercial uses are located to the west of the Canyon Loop Trail. These areas are designated Low Density Residential, Medium Density Residential, and General Commercial, and zoned Low Medium Density Residential, Medium High Density Residential, and Regional Commercial.

## **2.3 PROJECT BACKGROUND**

The City's Capital Improvement Program (CIP) serves as a plan for the provision of public improvements, special projects, and ongoing maintenance programs, including park improvements. As part of the CIP, the Diamond Bar City Council appropriated funds to improve the existing Canyon Loop Trail with the intent to realign the trail, improve drainage, re-grade cross slopes, and provide recreational amenities. Consistent with the General Plan Public Facilities and Services Element and *Diamond Bar Parks and Recreation Master Plan* (PMP), the project is intended to provide enhanced recreational opportunities for residents and visitors. The PMP details recommended improvements in the Summitridge Park Trail System, including trailhead access points and signage, benches and trash receptacles, stairs, and footbridges. Improvements desired by the community include level pads and benches at scenic viewpoints along the three trails within the Summitridge Park Trail System. As detailed below, the project proposes several of the recommended and desired trail improvements along the Canyon Loop Trail.

On July 16, 2019, the City Council awarded a contract to a landscape architecture firm, Richard Fisher Associates (RFA), for the conceptual design of such improvements. In October 2019, RFA provided the City with a conceptual trail improvement plan that includes trail realignment, stairs, retaining walls, and small shade shelters with benches primarily along the South Canyon Loop of the trail.

## **2.4 PROJECT CHARACTERISTICS**

As shown on Exhibit 2-4, Conceptual Trail Improvement Plan, the project proposes several trail improvement features along the Canyon Loop Trail. Existing amenities along the trail are limited to two benches along the North Canyon Loop and one bench on the eastern end of the South Canyon Loop. Proposed improvements include the following:

- The existing trail along most of the South Canyon Loop would be widened to approximately five feet and remain a natural, unpaved surface;
- Gabion retaining walls would be provided in five areas along the South Canyon Loop to stabilize soils and reduce erosion;
- Stairs with handrails and cobblestone swales would be provided in six areas along the South Canyon Loop to facilitate ease of access and safety and improve drainage;
- Six drainage crossings are proposed along the South Canyon Loop to improve drainage and reduce erosion;
- Two shade structures with benches and trash receptacles would be provided along the South Canyon Loop and one shade structure with benches and trash receptacles would be provided along the North Canyon Loop at identified view points;

- Lodge pole fences with “Trail Closed” signs mounted on the fences would be installed in five areas along the South Canyon Loop to restrict trail users from entering informal trail areas off the existing Canyon Loop trail;
- A perforated bench is proposed on the west end of the South Canyon Loop;
- A wayfinding sign would be installed on the eastern and western end of the Canyon Loop Trail;
- Interpretive signage in various locations that promote awareness of the presence of sensitive biological habitat and species (including the coastal California gnatcatcher and cactus wren), and indicate that the trail was implemented in a manner to minimize impacts to biological resources; and
- Long-term, routine maintenance of the project components above.

Most of the trail improvements would occur along the South Canyon Loop with minor improvements along the North Canyon Loop; refer to Exhibit 2-4.

## **2.5 CONSTRUCTION/PHASING**

Construction of the proposed trail improvements is anticipated to occur in a single phase with a duration of four months, beginning in spring 2021.

## **2.6 PERMITS AND APPROVALS**

The City and other applicable agency approvals required for project implementation would include, but are not limited to, the following:

### City of Diamond Bar

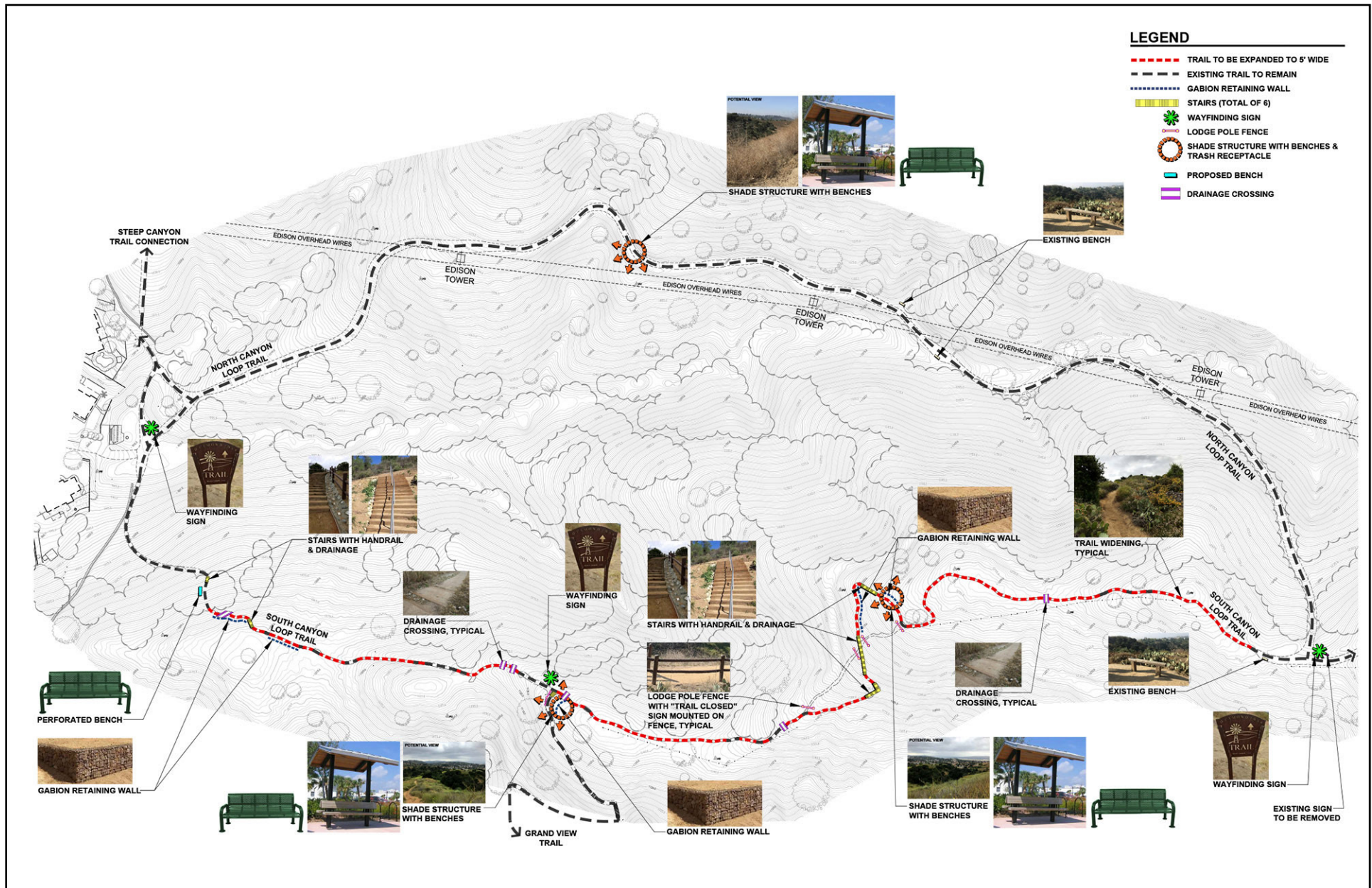
- California Environmental Quality Act Clearance
- Approval of Conceptual Design Plan

### U.S. Fish and Wildlife Service

- Incidental Take Permit

### Los Angeles Regional Water Quality Control Board

- National Pollutant Discharge Elimination System Construction General Permit



Source: Richard Fisher Associates, 2020.

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# CANYON LOOP TRAIL IMPROVEMENT PROJECT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION **Conceptual Trail Improvement Plan**

**Exhibit 2-4**



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## 3.0 INITIAL STUDY CHECKLIST

### 3.1 BACKGROUND

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | <b>Project Title:</b> Canyon Loop Trail Improvement Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2.  | <b>Lead Agency Name and Address:</b><br>City of Diamond Bar<br>Parks and Recreation Department<br>21810 Copley Drive<br>Diamond Bar, CA 91765                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3.  | <b>Contact Person and Phone Number:</b><br>Mr. Ryan Wright, Parks and Recreation Director<br>909.839.7061                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 4.  | <b>Project Location:</b> The project site is the existing Canyon Loop Trail situated within the central portion of the City and is part of the Summitridge Park Trail System. The 1.29-linear mile trail is located within Assessor's Parcel Number (APN) 8701-059-904.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 5.  | <b>Project Sponsor's Name and Address:</b><br>City of Diamond Bar<br>Parks and Recreation Department<br>21810 Copley Drive<br>Diamond Bar, CA 91765                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 6.  | <b>General Plan Designation:</b> The project site is designated Open Space by the <i>Diamond Bar General Plan 2040</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 7.  | <b>Zoning:</b> The project site is zoned Low Density Residential (RL) by the <i>City of Diamond Bar Zoning Map</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 8.  | <b>Description of the Project:</b><br>Refer to <u>Section 2.4, <i>Project Characteristics</i></u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 9.  | <b>Surrounding Land Uses and Setting:</b><br>Refer to <u>Section 2.2.2, <i>Surrounding Land Uses</i></u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 10. | <b>Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).</b><br>Refer to <u>Section 2.6, <i>Permits and Approvals</i></u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 11. | <b>Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?</b><br>In compliance with Assembly Bill (AB) 52, the City distributed letters to applicable Native American tribes to notify tribes of the opportunity to consult with the City regarding the proposed project. The letters were distributed by certified mail on July 2, 2020. The tribes had 30 days to respond to the City's request for consultation. Refer to <u>Section 4.18, <i>Tribal Cultural Resources</i></u> . |

### 3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or “Less Than Significant Impact with Mitigation Incorporated,” as indicated by the checklist on the following pages.

|   |                                    |   |                                    |
|---|------------------------------------|---|------------------------------------|
| ✓ | Aesthetics                         |   | Mineral Resources                  |
|   | Agriculture and Forestry Resources | ✓ | Noise                              |
|   | Air Quality                        |   | Population and Housing             |
| ✓ | Biological Resources               |   | Public Services                    |
| ✓ | Cultural Resources                 |   | Recreation                         |
|   | Energy                             |   | Transportation                     |
| ✓ | Geology and Soils                  | ✓ | Tribal Cultural Resources          |
|   | Greenhouse Gas Emissions           |   | Utilities and Service Systems      |
|   | Hazards and Hazardous Materials    |   | Wildfire                           |
|   | Hydrology and Water Quality        | ✓ | Mandatory Findings of Significance |
|   | Land Use and Planning              |   |                                    |

### 3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines* and used by the City of Diamond Bar in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study’s preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development’s impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- No Impact. The development will not have any measurable environmental impact on the environment.

- *Less Than Significant Impact.* The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- *Less Than Significant Impact With Mitigation Incorporated.* The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- *Potentially Significant Impact.* The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.



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## 4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study/Environmental Checklist. Explanations are provided for each item.

### 4.1 AESTHETICS

| <i>Would the project:</i>                                                                                                                                                                                                                                                                                                                                                   | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Have a substantial adverse effect on a scenic vista?                                                                                                                                                                                                                                                                                                                     |                                | ✓                                                         |                              |           |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?                                                                                                                                                                                                                    |                                |                                                           |                              | ✓         |
| c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? |                                | ✓                                                         |                              |           |
| d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?                                                                                                                                                                                                                                                      |                                |                                                           |                              | ✓         |

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

**Less Than Significant Impact With Mitigation Incorporated.** A scenic vista is generally defined as a view of undisturbed natural lands exhibiting a unique or unusual feature that comprises an important or dominant portion of the viewshed.<sup>1</sup> Scenic vistas may also be represented by a particular distant view that provides visual relief from less attractive views of nearby features. Other designated Federal and State lands, as well as local open space or recreational areas, may also offer scenic vistas if they represent a valued aesthetic view within the surrounding landscape of nearby features.

According to the General Plan EIR, scenic vistas in the City include those afforded from the circulation network as well as of and from open spaces, local hillsides and ridges, and distant views of the San Gabriel Mountains. Based on this definition, City-designated scenic resources encompass the project site and its surrounding open space area (i.e., Summitridge Park and Summitridge Park Trail System). The Canyon Loop Trail is visible from other trails within the Summitridge Park Trail System, including Ridge Route to the north and Grand View Route to the south, trail access points in local residential neighborhoods to the east and west, and the Diamond Bar Center located north of Summitridge Park. The project site is not located adjacent to any major circulation roadways. The nearest major roadway identified in Figure 4-1, *Circulation Diagram*, of the General Plan is Diamond Bar Boulevard, located approximately 0.3-mile west of the project site. Views of the existing trail from Diamond Bar Boulevard are obstructed by existing hills, residences, and elevation changes.

During project construction, vegetation removal, clearing, grading, and trail widening activities would be visible to viewers from nearby trails, however, would likely be obstructed from surrounding land uses given the elevational changes in the hillside and existing tree lines. Although views towards the project site may be temporarily altered by

<sup>1</sup> A viewshed is the geographical area which is visible from a particular location.

construction activities, project construction would occur over a short duration (approximately four months) and would not result in any significant public view blockage of other City-designated scenic resources in the area, including the entire Summitridge Park Trail System. To further reduce short-term impacts to visual character and quality, the project would be required to implement Mitigation Measure AES-1. Mitigation Measure AES-1 would require project construction materials, heavy-duty equipment, and debris piles be staged in designated construction staging areas. Compliance with Mitigation Measure AES-1 would ensure the project's construction-related impacts to scenic vista are reduced to less than significant levels.

At project completion, the Canyon Loop Trail would be improved with new trail amenities and features, such as widened paths, gabion retaining walls, stairs with handrails and cobblestone swales, drainage crossings, shade structures with benches, signs, and lodge pole fences. The project would enhance the existing visual character and quality of the Canyon Loop Trail and would not adversely impact scenic vistas in the project area. Long-term project impacts would be less than significant in this regard.

**Mitigation Measures:**

AES-1 To minimize construction-related impacts to scenic vistas and the visual character and quality of the project area, the project contractor shall ensure that all construction materials, heavy-duty equipment, and debris piles are staged and screened from public view in a designated construction staging area. Staging areas shall be approved and subject to periodic field inspections by the City of Diamond Bar Parks and Recreation Department, or responsible designee(s).

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

**No Impact.** According to the General Plan EIR, there are no adopted State scenic highways within Diamond Bar. Although a portion of State Route 57 (SR-57) within the City's planning area is eligible for official scenic highway designation, the site is not visible from SR-57 due to elevational changes and obstructing residential and commercial structures. Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

**c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

**Less Than Significant Impact With Mitigation Incorporated.** While the Canyon Loop Trail is adjacent to nearby urban uses (i.e., residential neighborhoods, Diamond Bar Center, and Summitridge Park), the Summitridge Park Trail System, including the project site, can be characterized as a non-urbanized area given its existing trails, hillsides, and natural open space areas. As such, the following analysis evaluates the project's potential to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Public views of the project site include those afforded from public sidewalks within the nearby residential communities, adjacent trails in the Summitridge Park Trail System (Ridge Route to the north and Grand View Route to the south), and the Diamond Bar Center and Summitridge Park to the south.

**Construction-Related Impacts**

Short-term construction activities along the trail would be visible from neighboring residential uses to the east and west of the project site. However, intervening topography would screen neighboring uses from the majority of the project's

proposed construction activities and construction-related visual impacts would be temporary. The project would also implement Mitigation Measure AES-1 to further reduce temporary construction-related impacts to visual character and quality. Mitigation Measure AES-1 requires project construction materials, heavy-duty equipment, and debris piles be staged and screened in designated staging areas. Compliance with Mitigation Measure AES-1 would ensure construction-related impacts to visual character/quality of the project area are reduced to less than significant levels.

### **Operational Impacts**

On a long-term (operational) basis, a project is generally considered to have a significant visual/aesthetic impact if it substantially changes the character of the project site such that it becomes visually incompatible or visually unexpected when viewed in the context of its surroundings. As noted above in Response 4.1(a), the proposed trail improvements would enhance the visual character of the existing trail with gabion retaining walls, stairs, drainage crossings, shade structures with benches, signs, and lodge pole fences. Additionally, these improvements are typical amenities of recreational trails and would facilitate access and safety, improving drainage, and reducing erosion in the project area. Thus, the project's potential to substantially degrade the existing visual character or quality of public views of the site and its surroundings would be less than significant.

**Mitigation Measures:** Refer to Mitigation Measure AES-1.

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

**No Impact.** There are two primary sources of light: light emanating from building interiors that pass through windows and light from exterior sources (i.e., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Light introduction can be a nuisance to adjacent uses and diminish the view of the clear night sky. There are no existing lighting sources along the Canyon Loop Trail. Light and glare in the project vicinity are primarily associated with adjacent residential neighborhoods, including vehicular headlights, street lights, and private residences.

Project construction could involve temporary glare impacts as a result of construction equipment and materials. However, based on the project's limited construction duration and scope of activities, these sources of glare would not be substantial. Further, pursuant to Municipal Code Section 8.12.720, *Construction Noise*, all construction activities associated with the proposed project shall be limited to the hours between 7:00 a.m. and 7:00 p.m. on weekdays and on Saturdays. As such, construction activities would not occur during nighttime and would not require nighttime lighting.

The project does not include light fixtures that could generate new sources of lighting along the trail. No new sources of light or glare would occur at project completion. Thus, long-term impacts in this regard would not occur.

**Mitigation Measures:** No mitigation measures are required.

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## 4.2 AGRICULTURE AND FORESTRY RESOURCES

| <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</i> | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?                                                                                                                        |                                |                                                           |                              | ✓         |
| b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?                                                                                                                                                                                                                                                                                  |                                |                                                           |                              | ✓         |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 122220(g)), timberland as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?                                                                            |                                |                                                           |                              | ✓         |
| d. Result in the loss of forest land or conversion of forest land to non-forest use?                                                                                                                                                                                                                                                                                  |                                |                                                           |                              | ✓         |
| e. Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?                                                                                                                                                                         |                                |                                                           |                              | ✓         |

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

**No Impact.** Based on the California Department of Conservation's Important Farmland Finder, the project site is not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.<sup>1</sup> The project site is currently utilized as a recreational trail and no active agricultural uses occur on-site. Project implementation would improve existing amenities on the trail and would not change the site's current land use. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** The project site is zoned Low Density Residential (RL) and is not covered under an existing Williamson Act contract.<sup>2</sup> Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

<sup>1</sup> California Department of Conservation, *Farmland Mapping and Monitoring Program, California Important Farmland Finder*, <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed May 22, 2020.

<sup>2</sup> California Department of Conservation, *State of California Williamson Act Contract Land*, 2017.

- c) ***Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 122220(g)), timberland as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?***

**No Impact.** The project site is zoned RL and is not occupied or used for forest land, timberland, or timberland production. Further, project implementation would not result in the rezoning of forest land, timberland, or timberland zoned timberland production. No impact would occur.

**Mitigation Measures:** No mitigation measures are required.

- d) ***Result in the loss of forest land or conversion of forest land to non-forest use?***

**No Impact.** Refer to Response 4.2(c). No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

- e) ***Involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?***

**No Impact.** Refer to Responses 4.2(a) through 4.2(d). No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

### 4.3 AIR QUALITY

| <i>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</i> | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Conflict with or obstruct implementation of the applicable air quality plan?                                                                                                                                               |                                |                                                           | ✓                            |           |
| b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?                             |                                |                                                           | ✓                            |           |
| c. Expose sensitive receptors to substantial pollutant concentrations?                                                                                                                                                        |                                |                                                           | ✓                            |           |
| d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?                                                                                                             |                                |                                                           | ✓                            |           |

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

**Less Than Significant Impact.** The project is located within the South Coast Air Basin (Basin), which is governed by the South Coast Air Quality Management District (SCAQMD). The Federal Clean Air Act requires the SCAQMD to reduce emissions of criteria pollutants for which the Basin is in nonattainment: ozone (O<sub>3</sub>), coarse particulate matter (PM<sub>10</sub>), and fine particulate matter (PM<sub>2.5</sub>).<sup>1</sup> O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are considered criteria pollutants, since they are three of several prevalent air pollutants known to be hazardous to human health.

The SCAQMD prepared the *2016 Air Quality Management Plan for the South Coast Air Basin* (2016 AQMP) to reduce emissions of criteria pollutants for which the Basin is in non-attainment. The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017 and incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Southern California Association of Governments' (SCAG's) *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (2016-2040 RTP/SCS), and updated emission inventory methodologies for various source categories. According to SCAQMD's *1993 CEQA Air Quality Handbook* (CEQA Air Quality Handbook), the following two main criteria must be addressed in order to determine consistency with the 2016 AQMP.

**Criterion 1:**

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

**a) Would the project result in an increase in the frequency or severity of existing air quality violations?**

Since the consistency criteria identified under the first criterion pertain to pollutant concentrations, rather than to total regional emissions, an analysis of the project's pollutant emissions relative to localized pollutant concentrations is used as the basis for evaluating project consistency. As discussed in Response 4.3(c), localized concentrations of carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) would be less than significant. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations. Because reactive organic gasses (ROG) are not a criteria pollutant, there is no

<sup>1</sup> An area designated as "nonattainment" for an air pollutant is an area that does not achieve national and/or State ambient air quality standards for that pollutant.

ambient standard or localized threshold for ROG<sub>s</sub>. Due to the role ROG plays in O<sub>3</sub> formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

**b) *Would the project cause or contribute to new air quality violations?***

As discussed in Response 4.3(b), the proposed project would result in emissions that are below SCAQMD thresholds. Therefore, the proposed project would not have the potential to cause or affect a violation of the ambient air quality standards and would result in a less than significant impact.

**c) *Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?***

As discussed in Response 4.3(c), the proposed project would result in less than significant impacts with regard to localized concentrations during project construction. Further, the project would not generate additional operational emissions compared to the existing conditions. As such, the proposed project would not delay the timely attainment of air quality standards or AQMP emissions reductions.

**Criterion 2:**

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether or not the proposed project exceeds the assumptions utilized in preparing the forecasts presented in the AQMP. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

**a) *Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?***

A project is consistent with the AQMP in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2016 AQMP, three sources of data form the basis for the projections of air pollutant emissions: *Diamond Bar General Plan 2040* (General Plan), SCAG's *Growth Management* Chapter of the *Regional Comprehensive Plan and Guide* (RCPG), and SCAG's 2016-2040 RTP/SCS. The 2016-2040 RTP/SCS also provides socioeconomic forecast projections of regional population growth. As a part of the City's Capital Improvement Program (CIP), the project would improve the existing Canyon Loop Trail by realigning and widening the trail, improving drainage, and providing additional recreation amenities; refer to Section 2.0, *Project Description*. The proposed Canyon Loop Trail improvements would not change the site's existing General Plan land use designation and zoning; therefore, the proposed project would be consistent the General Plan; refer to Section 4.11, *Land Use and Planning*. Furthermore, the project does not involve any uses that would increase population beyond what is considered in the General Plan and, therefore, would not affect county-wide plans for population growth at the project site. Thus, the proposed project is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the RCPG. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the County; these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into the 2016 AQMP, it can be concluded that the proposed project would be consistent with the projections.

***b) Would the project implement all feasible air quality mitigation measures?***

The proposed project would result in less than significant air quality impacts. Compliance with all feasible emission reduction measures identified by the SCAQMD would be required as identified in Response 4.3(b). As such, the proposed project meets this AQMP consistency criterion.

***c) Would the project be consistent with the land use planning strategies set forth in the AQMP?***

The project proposes several trail improvements features along the existing Canyon Loop Trail, refer to Exhibit 2-4, Conceptual Trail Improvement Plan. The project would not conflict with the General Plan land use assumptions. According to the General Plan and *City of Diamond Bar Zoning Map*, the project site is designated Open Space and zoned Low Density Residential (RL). The proposed project is consistent with these designations, and project implementation would not induce substantial population growth either directly or indirectly; refer to Section 4.14, Population and Housing. Therefore, the proposed project is consistent with the 2016 AQMP and impacts would be less than significant in this regard.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality in the Basin. The proposed project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards. As discussed above, the proposed project's long-term influence would also be consistent with the goals and policies of the 2016 AQMP and is, therefore, considered consistent with the SCAQMD's 2016 AQMP.

**Mitigation Measures:** No mitigation measures are required.

***b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?***

**Less Than Significant Impact.**

**Criteria Pollutants**

Carbon Monoxide (CO). Carbon monoxide (CO) is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of CO.

Ozone (O<sub>3</sub>). O<sub>3</sub> occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" O<sub>3</sub> layer) extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays. "Bad" O<sub>3</sub> is a photochemical pollutant, and needs volatile organic compounds (VOCs), NO<sub>x</sub>, and sunlight to form; therefore, VOCs and NO<sub>x</sub> are O<sub>3</sub> precursors. To reduce O<sub>3</sub> concentrations, it is necessary to control the emissions of these O<sub>3</sub> precursors. Significant O<sub>3</sub> formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O<sub>3</sub> concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O<sub>3</sub> in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O<sub>3</sub> (in the troposphere) can adversely affect the human respiratory system and other

tissues.  $O_3$  is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of  $O_3$ . Short-term exposure (lasting for a few hours) to  $O_3$  at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide ( $NO_2$ ). Nitrogen dioxide ( $NO_2$ ), often used interchangeably with  $NO_x$ , is a reddish-brown gas that can cause breathing difficulties at elevated levels.  $NO_x$  are a family of highly reactive gases that are a primary precursor to the formation of ground-level  $O_3$  and react in the atmosphere to form acid rain. Peak readings of  $NO_2$  occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations).  $NO_2$  can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to  $NO_2$  concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to  $NO_2$  may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter ( $PM_{10}$ ).  $PM_{10}$  refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter.  $PM_{10}$  arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms.  $PM_{10}$  scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, the California Air Resources Board (CARB) adopted amendments to the Statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter ( $PM_{2.5}$ ). Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal  $PM_{2.5}$  standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the U.S. Environmental Protection Agency (EPA) announced new  $PM_{2.5}$  standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards. On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal  $PM_{2.5}$  standards. On June 20, 2002, CARB adopted amendments for Statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the Statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging. Lastly, on March 7, 2017, CARB released its revised 2016 State Strategy for the State Implementation Plan (State SIP Strategy), describing the proposed commitment to achieve the reductions necessary from mobile sources, fuels, and consumer products to meet federal ozone and  $PM_{2.5}$  standards over the next 15 years.

Sulfur Dioxide ( $SO_2$ ). Sulfur dioxide ( $SO_2$ ) is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with sulfur oxides ( $SO_x$ ). Exposure of a few minutes to low levels of  $SO_2$  can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). Volatile organic compounds (VOC's) are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form  $O_3$  to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

VOCs are a criteria pollutant since they are a precursor to O<sub>3</sub>, which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG (see below) interchangeably.

Reactive Organic Gases (ROG). Similar to VOC, reactive organic gases (ROG) are also precursors in forming O<sub>3</sub> and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROG is a criteria pollutant since they are a precursor to O<sub>3</sub>, which is a criteria pollutant. As stated, the SCAQMD uses the terms ROG and VOC interchangeably.

## Short-Term (Construction) Emissions

### Construction Emissions

Primary components of the construction process would involve grading of the trail to widen it and construction of the retaining walls, staircase, drainage crossings, and shade structures. Construction of the proposed project is anticipated to commence in Spring 2021 and last for approximately four months, ending in August 2021. Soil would be balanced on-site during the construction activities. Table 4.3-1, Construction Air Emissions, provides the construction emissions associated with the project. Emitted pollutants would include ROG, CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to and from the site. Exhaust emission factors for typical diesel-powered heavy equipment are based on the California Emissions Estimator Model version 2016.3.2 (CalEEMod) program defaults. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The analysis of daily construction emissions has been prepared utilizing CalEEMod. Refer to Appendix A, Air Quality/Greenhouse Gas/Energy Data, for the CalEEMod outputs and results.

**Table 4.3-1**  
**Maximum Short-Term Construction Emissions**

| Emissions Source                                                                                                                                                                                                                                                                                                                                              | Pollutant (pounds/day) <sup>1,2</sup> |                 |              |                 |                  |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------|--------------|-----------------|------------------|-------------------|
|                                                                                                                                                                                                                                                                                                                                                               | ROG                                   | NO <sub>x</sub> | CO           | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <b>Construction Emissions</b>                                                                                                                                                                                                                                                                                                                                 |                                       |                 |              |                 |                  |                   |
| Year 1                                                                                                                                                                                                                                                                                                                                                        | 2.06                                  | 17.25           | 16.15        | 0.03            | 2.71             | 1.75              |
| <b>Maximum Daily Emissions</b>                                                                                                                                                                                                                                                                                                                                | <b>2.06</b>                           | <b>17.25</b>    | <b>16.15</b> | <b>0.03</b>     | <b>2.71</b>      | <b>1.75</b>       |
| SCAQMD Thresholds                                                                                                                                                                                                                                                                                                                                             | 75                                    | 100             | 550          | 150             | 150              | 55                |
| <b>Is Threshold Exceeded?</b>                                                                                                                                                                                                                                                                                                                                 | <b>No</b>                             | <b>No</b>       | <b>No</b>    | <b>No</b>       | <b>No</b>        | <b>No</b>         |
| Notes: ROG = reactive organic gas; NO <sub>x</sub> = nitrous oxide; CO = carbon monoxide; SO <sub>2</sub> = sulfur dioxide; PM <sub>10</sub> = coarse particulate matter; PM <sub>2.5</sub> = fine particulate matter                                                                                                                                         |                                       |                 |              |                 |                  |                   |
| 1. Emissions were calculated using CalEEMod, version 2016.3.2.                                                                                                                                                                                                                                                                                                |                                       |                 |              |                 |                  |                   |
| 2. Modeling assumptions include compliance with SCAQMD Rule 403 which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. |                                       |                 |              |                 |                  |                   |
| Source: Refer to <u>Appendix A</u> for detailed model input/output data.                                                                                                                                                                                                                                                                                      |                                       |                 |              |                 |                  |                   |

As depicted in [Table 4.3-1](#), construction-related emissions would not exceed the established SCAQMD thresholds for criteria pollutants. During construction activities, the project would also be required to comply with standard SCAQMD regulations, such as Rule 402 and 403. A less than significant construction impact would occur.

#### Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways (typically during demolition and construction activities). Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from grading, excavation and construction is expected to be short-term and would cease upon project completion. These short-term impacts, however, would not be significant for the reasons discussed below.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM<sub>10</sub> generated as a part of fugitive dust emissions. PM<sub>10</sub> poses a serious health hazard alone or in combination with other pollutants. PM<sub>2.5</sub> is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. PM<sub>2.5</sub> is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO<sub>x</sub> and SO<sub>x</sub> combining with ammonia. PM<sub>2.5</sub> components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

The project would implement all required SCAQMD dust control techniques (i.e., daily watering) and adhere to SCAQMD Rules 402 and 403 (which require watering of inactive and perimeter areas, track out requirements, etc.), to reduce PM<sub>10</sub> and PM<sub>2.5</sub> concentrations. As provided in [Table 4.3-1](#), total PM<sub>10</sub> and PM<sub>2.5</sub> emissions would not exceed the SCAQMD thresholds during construction.

#### Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report* (August 2000), serpentinite and ultramafic rocks are not known to occur within the project area. Thus, there would be no impact in this regard.

#### **Long-Term (Operational) Emissions**

The project proposes several trail improvements features along the existing Canyon Loop Trail, refer to [Exhibit 2-4, Conceptual Trail Improvement Plan](#). The project would not generate additional traffic trips when compared to existing

conditions or create additional operational emissions. Further, the project is anticipated to result in beneficial long-term air quality effects, as it would result in improved connectivity in the project area for alternative modes of transportation and would promote the City's General Plan goal of maintaining open space. As a result, the project would not generate substantial operational emissions. Thus, impacts in this regard would be less than significant.

### **Air Quality Health Impacts**

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age and gender]). In particular, O<sub>3</sub> precursors, VOCs and NO<sub>x</sub>, affect air quality on a regional scale. Health effects related to O<sub>3</sub> are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

As noted in the Brief of Amicus Curiae by the SCAQMD (April 6, 2015) for the *Sierra Club vs. County of Fresno*, the SCAQMD acknowledged it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD) (April 13, 2015) for the *Sierra Club vs. County of Fresno*, SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that health effects quantification from O<sub>3</sub>, as an example is correlated with the increases in ambient level of O<sub>3</sub> in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient O<sub>3</sub> levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO<sub>x</sub> and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O<sub>3</sub> levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O<sub>3</sub>-related health impacts caused by NO<sub>x</sub> or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Thus, as the project would not exceed SCAQMD thresholds for construction emissions, and operational air emissions would not change from existing conditions, the project would have a less than significant impact for air quality health impacts.

### **Conclusion**

As summarized above, the project's short-term construction emissions would be below the SCAQMD thresholds and would result in a less than significant impact. Furthermore, the project would not result in significant long-term air quality impacts, as emissions would not change from existing conditions. Thus, the project's construction and operational emissions would not contribute to a cumulatively considerable air quality impact for nonattainment criteria pollutants in the Basin. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

#### **c) *Expose sensitive receptors to substantial pollutant concentrations?***

**Less Than Significant Impact.** Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has

identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest residential property is located approximately 80 feet west of the proposed project construction limits.

### Localized Significance Thresholds

Localized Significance Thresholds (LST) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects. The SCAQMD provides the LST lookup tables for one, two, and five-acre projects emitting CO, NO<sub>x</sub>, PM<sub>2.5</sub>, or PM<sub>10</sub>. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The project is located within Sensitive Receptor Area (SRA) 10, Pomona/Walnut Valley.

Based off the CalEEMod results, the project would disturb less than an acre over 45 days (less than an acre per day); therefore, the LST thresholds for one acre were conservatively utilized for the construction LST analysis. It is noted that an operational LST analysis was not prepared, as the project operational emissions would not change from existing emissions. As noted above, the closest sensitive receptor to the project site is a residential property located approximately 80 feet (or 24 meters) to the west of the project's construction limits. This sensitive land uses may be potentially affected by air pollutant emissions generated during on-site construction activities. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. As the nearest sensitive use is approximately 24 meters away, the LST values of 25 meters were conservatively utilized. Table 4.3-2, Localized Significance of Emissions, shows the construction-related emissions for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> compared to the LST's for SRA 10, Pomona/Walnut Valley. As shown in Table 4.3-2, the short term (approximately four months) construction emissions would not exceed the LST's for SRA 10. Therefore, localized significance impacts from construction would be less than significant.

**Table 4.3-2**  
**Localized Significance of Emissions**

| Source <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Emissions (pounds/day) <sup>1</sup> |              |                  |                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------|------------------|-------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NO <sub>x</sub>                     | CO           | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Year 1 <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 11.00                               | 10.70        | 0.32             | 0.60              |
| <b>Maximum Daily Emissions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>11.00</b>                        | <b>10.70</b> | <b>0.32</b>      | <b>0.60</b>       |
| <i>SCAQMD Localized Significance Threshold<sup>3</sup></i>                                                                                                                                                                                                                                                                                                                                                                                                                     | 103                                 | 612          | 4                | 3                 |
| <b>Thresholds Exceeded?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>No</b>                           | <b>No</b>    | <b>No</b>        | <b>No</b>         |
| Notes: NO <sub>x</sub> = nitrous oxide; CO = carbon monoxide; PM <sub>10</sub> = coarse particulate matter; PM <sub>2.5</sub> = fine particulate matter                                                                                                                                                                                                                                                                                                                        |                                     |              |                  |                   |
| 1. Modeling assumptions include compliance with SCAQMD Rule 403 which requires properly maintaining mobile and other construction equipment; replacing ground cover in disturbed areas quickly; watering exposed surfaces three times daily; covering stockpiles with tarps; watering all haul roads twice daily; and limiting speeds on unpaved roads to 15 miles per hour.                                                                                                   |                                     |              |                  |                   |
| 2. Year 1 (2021) grading phase emissions present the worst-case scenario for PM <sub>10</sub> , and PM <sub>2.5</sub> and building construction phase emissions present the worst-case scenario for NO <sub>x</sub> , CO                                                                                                                                                                                                                                                       |                                     |              |                  |                   |
| 3. The Localized Significance Threshold was determined using Appendix C of the SCAQMD's <i>Final Localized Significant Threshold Methodology</i> guidance document for NO <sub>x</sub> , CO, PM <sub>10</sub> , and PM <sub>2.5</sub> . The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (the thresholds for one acre was utilized), the distance to sensitive receptors (25 meters), and Source Receptor Area 10. |                                     |              |                  |                   |
| Source: Refer to <u>Appendix A</u> for detailed model input/output data.                                                                                                                                                                                                                                                                                                                                                                                                       |                                     |              |                  |                   |

## **Carbon Monoxide Hotspots**

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.). The SCAQMD requires a quantified assessment of CO hotspots when a project increases the volume-to-capacity ratio (also called the intersection capacity utilization [ICU]) by 0.02 (two percent) for any intersection with an existing level of service LOS D or worse. Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, these hot spots are typically produced at intersections.

The project proposes several trail improvements features along the existing Canyon Loop Trail. These improvements would not alter the existing use and would not add additional vehicle trips when compared to existing conditions. Thus, the project would not increase the ICU of nearby intersections and therefore would not warrant a CO hotspot analysis. A less than significant impact would occur in this regard.

## **Localized Air Quality Health Impacts**

As evaluated above, the project's air emissions would not exceed the SCAQMD's LST thresholds and CO hotspots would not occur as a result of the proposed project. Therefore, the project would not exceed the most stringent applicable Federal or State ambient air quality standards for emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>. It should be noted that the ambient air quality standards are developed and represent levels at which the most susceptible persons (children and the elderly) are protected. In other words, the ambient air quality standards are purposefully set in a stringent manner to protect children, elderly, and those with existing respiratory problems. Thus, the project would not result in localized air quality health impacts.

**Mitigation Measures:** No mitigation measures are required.

### **d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

**Less Than Significant Impact.** According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project involves improvements to the existing Canyon Loop Trail and does not include any uses identified by the SCAQMD as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations (CCR), Title 13, sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would reduce the detectable odors from heavy-duty equipment exhaust. Any project odor impacts to the existing adjacent land uses and the closest nearby sensitive receptors (80 feet to the west) would be short-term and not substantial as these odors would quickly dissipate due to the prevailing meteorology, the volatility of the emissions, and the distance to nearby sensitive receptors. Furthermore, any construction or project odors would be required to comply with SCAQMD Rule 402. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.



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## 4.4 BIOLOGICAL RESOURCES

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

The information presented in this analysis is based on the following technical studies; refer to Appendix B, *Biological Resources Reports*:

- Michael Baker International, *Results of a Biological Resources Assessment of the Canyon Loop Trail Improvement Project – City of Diamond Bar, Los Angeles County, California* (Biological Resources Assessment), dated July 10, 2020; and
- Michael Baker International, *Results of Coastal California Gnatcatcher and Cactus Wren Focused Surveys for the Canyon Loop Trail Improvement Project in the City of Diamond Bar, Los Angeles County, California* (Focused Bird Survey Report), dated August 7, 2020.

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

**Less Than Significant Impact With Mitigation Incorporated.** A Biological Resources Assessment was prepared for the project and included a habitat assessment to survey existing biological conditions on and surrounding the project site. In addition to the habitat assessment, the California Department of Fish and Wildlife's (CDFW) California Natural

Diversity Database (CNDDDB) Rarefind 5 and U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) database were queried for reported locations of listed and special-status plant and wildlife species as well as special-status vegetation communities in the U.S. Geologic Survey (USGS) 7.5-minute Baldwin Park, San Dimas, Ontario, La Habra, Yorba Linda, and Prado Dam quadrangles. The California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants supplied information regarding the distribution and habitats of plants in the project vicinity. The habitat assessment assessed the ability of the plant communities found on-site to provide suitable habitat for relevant special-status plant and wildlife species. According to the Biological Resources Assessment, the survey area, defined as the project site plus a 500-foot buffer, generally consists of natural vegetation with relatively undisturbed soils.

Further, a Focused Bird Survey Report was prepared for coastal California gnatcatcher (*Poliioptila californica californica*; a Federally Threatened Species and CDFW Species of Special Concern [SSC]) and cactus wren (*Campylorhynchus brunneicapillus*). The surveys were conducted between May 26 and July 1, 2020 in accordance with the *Coastal California Gnatcatcher (Poliioptila californica californica) Presence/Absence Survey Guidelines* and survey guidelines for cactus wren. A total of six surveys were conducted in patches of suitable habitat for these species within 500 feet of the project site, similar to the habitat assessment, with the goal of mapping occurrences and territories of coastal California gnatcatchers and cactus wrens and, if possible, mapping nesting locations.

### **Special-Status Plant Species**

A total of 41 special-status plant species have been recorded in the USGS Baldwin Park, San Dimas, Ontario, La Habra, Yorba Linda, and Prado Dam, California 7.5-minute quadrangles by the CNDDDB, IPaC, and CNPS Online Inventory. One special-status plant species was observed during the field survey, southern California black walnut (*Juglans californica*).

Based on the results of the field survey and a review of specific habitat preferences, distributions, and elevation ranges, it was determined that the survey area has a moderate potential to support Catalina mariposa-lily (*Calochortus catalinae*); and a low potential to support chaparral sand-verbena (*Abronia villosa* var. *aurita*), California androsace (*Androsace elongata* ssp. *acuta*), western spleenwort (*Asplenium vespertinum*), Braunton's milk-vetch (*Astragalus brauntonii*), Nevin's barberry (*Berberis nevinii*), Plummer's mariposa-lily (*Calochortus plummerae*), intermediate mariposa-lily (*Calochortus weedii* var. *intermedius*), Lewis' evening-primrose (*Camissoniopsis lewisii*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), paniculate tarplant (*Deinandra paniculata*), many-stemmed dudleya (*Dudleya multicaulis*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), aparejo grass (*Muhlenbergia utilis*), Hubby's phacelia (*Phacelia hubbyi*), south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*), Brand's star phacelia (*Phacelia stellaris*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), Engelmann oak (*Quercus engelmannii*), and Coulter's matilija poppy (*Romneya coulteri*). All remaining special-status plant species identified by the CNDDDB, IPaC, and CNPS databases are not expected to occur within the survey area.

To ensure proper avoidance of special-status plant species, Mitigation Measure BIO-1 requires a qualified botanist to conduct a focused rare plant survey in areas with suitable habitat to determine presence or absence of special-status plant species prior to construction and during the appropriate blooming periods. If individual or populations of special-status plant species are found within the areas proposed for disturbance, measures to avoid and minimize impacts would be required in accordance with 2018 CDFW and/or 2001 CNPS guidelines. Although not expected, if State- and/or Federally-listed plant species are present and avoidance is infeasible, consultation with the CDFW and/or USFWS would be required and Incidental Take Permits (ITPs) from the CDFW and/or USFWS would be required prior to the commencement of project activities.

## Special-Status Wildlife Species

A total of 66 special-status wildlife species have been recorded in the USGS Baldwin Park, San Dimas, Ontario, La Habra, Yorba Linda, and Prado Dam, California 7.5-minute quadrangles by the CNDDDB and IPaC. Four special-status wildlife species were observed during the habitat assessment and subsequent focused bird surveys: Cooper's hawk (*Accipiter cooperii*; a CDFW Watch List (WL) species), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; a CDFW WL species), coastal whiptail (*Aspidoscelis tigris stejnegeri*; a CDFW SSC), and coastal California gnatcatcher (a Federally Threatened Species and CDFW SSC).

Based on the results of the field surveys and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the survey area has a high potential to support sharp-shinned hawk (*Accipiter striatus*; a CDFW WL species), red-diamond rattlesnake (*Crotalus ruber*; a CDFW SSC), and American peregrine falcon (*Falco peregrinus anatum*; a CDFW Fully Protected (FP) Species); a moderate potential to support merlin (*Falco columbarius*; a CDFW WL species); and a low potential to support southern California legless lizard (*Anniella stebbinsi*; a CDFW SSC), golden eagle (*Aquila chrysaetos*; a CDFW FP and WL species), California glossy snake (*Arizona elegans occidentalis*; a CDFW SSC), long-eared owl (*Asio otus*; a CDFW SSC), orange-throated whiptail (*Aspidoscelis hyperythra*; a CDFW WL species), Crotch bumble bee (*Bombus crotchii*; a State Candidate Endangered species), Vaux's swift (*Chaetura vauxi*; a CDFW SSC), northern harrier (*Circus hudsonius*; a CDFW SSC), white-tailed kite (*Elanus leucurus*; a CDFW FP species), willow flycatcher (*Empidonax traillii*; a State Endangered species), southwestern willow flycatcher (*Empidonax traillii extimus*; a Federally and State Endangered species), California horned lark (*Eremophila alpestris actia*; a CDFW WL species), western mastiff bat (*Eumops perotis californicus*; a CDFW SSC), loggerhead shrike (*Lanius ludovicianus*; a CDFW SSC), western red bat (*Lasiurus blossevillei*; a CDFW SSC), San Diego desert woodrat (*Neotoma lepida intermedia*; a CDFW SSC), coast horned lizard (*Phrynosoma blainvillii*; a CDFW SSC), summer tanager (*Piranga rubra*; a CDFW SSC), coast patch-nosed snake (*Salvadora hexalepis virgulata*; a CDFW SSC), and yellow warbler (*Setophaga petechia*; a CDFW SSC). Some of these species, including Vaux's swift, willow flycatcher, southwestern willow flycatcher, and yellow warbler would only potentially occur as migrants briefly stopping over on their way north or south. All remaining special-status wildlife species identified by the CNDDDB and IPaC are not expected to occur within the survey area.

Because the project proposes to widen much of the South Canyon Loop to a width of five feet, vegetation removal of habitat that could be suitable for special-status wildlife species with the potential to occur in the survey, or in some cases is already known to support (i.e., coastal California gnatcatcher), can occur. Due to regional significance, coastal California gnatcatcher and cactus wren are described in further detail below.

### Coastal California Gnatcatcher (CAGN)

CAGN is a Federally threatened species with restricted habitat requirements, being an obligate resident of sage scrub habitats, particularly, those that are dominated by California sagebrush. This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It ranges from Ventura County south to San Diego County and northern Baja California and is less common in sage scrub with a high percentage of tall shrubs. CAGN prefers habitat with more low-growing vegetation. California gnatcatchers breed between mid-February and the end of August, with peak activity from mid-March to mid-May. Population estimates indicate that there are approximately 1,600 to 2,290 pairs of California gnatcatcher remaining. Declines are attributed to loss of sage scrub habitat due to development, as well as cowbird nest parasitism. While Federally-designated Critical Habitat for CAGN is not located within or directly adjacent to the survey area (refer to Biological Resources Assessment Figure 7, *Critical Habitat*), the survey area provides abundant suitable habitat for CAGN, with known populations occurring in the area. In addition, multiple breeding pairs of CAGNs are known to be present within the survey area.

As detailed in the Focused Bird Survey Report, CAGN is a rare and local resident in the coastal slope of Los Angeles and San Bernardino counties. Populations are somewhat widespread but persistent in the project vicinity in Los Angeles County, spanning across the Chino Hills, San Jose Hills, and Puente Hills. In San Bernardino County, which

is located immediately to the east of the project site, CAGN persists in only four or five populations in the entire county, including in Chino Hills State Park. Farther to the south, CAGN is reasonably common in the foothills of the Santa Ana Mountains in Orange County. However, as stated, the project site is not located within USFWS-designated Critical Habitat for CAGN.

Results of the Focused Bird Survey Report mapped a minimum of five CAGN territories within the biological study area; refer to Figure 4, *Coastal California Gnatcatcher Results*, of the Focused Bird Survey Report. Four nests were found in two of the territories, one of which successfully led to chicks fledging. Of the minimum five territories, four territories (Territories 1, 3, 4, and 5) had chicks fledge in them. The boundaries of Territories 3 and 5 expanded over time due to post-breeding dispersal, with Territory 5 potentially undergoing two separate instances of dispersal to two areas where no CAGN had been previously detected. Refer to Focused Bird Survey Report Table 2, *CAGN Survey Results*, for a more detailed summary of CAGN activity in each territory during the surveys.

#### Coastal Cactus Wren (CCACW)

Cactus wren is a somewhat common avian species found within arid and semi-arid regions of southern California. The subspecies coastal cactus wren (*C. b. sandiegensis*), or CCACW, is found within a very limited range of southern California and is designated by CDFW as a SSC. CCACW have a range that extends from extreme northwestern Baja California north at least through the coastal lowlands of San Diego County. The actual northern limit of its range is uncertain because of the lack of specimens from northwestern San Diego County and most of Orange County. However, observations made in the field based on differences in song and visual assessments suggest southern Orange County to approximately the vicinity of State Route 74 (Ortega Highway) is the northern limit of CCACW. CCACW are mainly restricted to thickets of chollas (*Cylindropuntia prolifera*) or prickly-pear cacti (i.e., *Opuntia littoralis*, *O. oricola*) large enough to protect from predation. Suitable habitat conditions are normally found on south-facing slopes, at bases of hillsides, or in dry washes. Territories have been recorded as occurring at elevations below 1,500 feet and averaging three acres in size. The survey area provides an abundance of undisturbed coast prickly pear scrub habitat that is essential nesting habitat for this species. Although multiple territories of cactus wren were observed on-site, the survey area is well outside the known range for the coastal *sandiegensis* subspecies, which ends around State Route 74 based on CDFW mapping. As such, this local subspecies found on-site is likely *C. b. anthonyi*.

Similar to CAGN, cactus wren is a rare and local resident on the coastal slope of Los Angeles and San Bernardino counties. In Los Angeles County, the species is better off but declining, with populations known from the Chino Hills, San Jose Hills, Puente Hills, and foothills of the San Gabriel Mountains. In adjacent San Bernardino County, the only known populations are in the upper Santa Ana River wash near Redlands/Mentone/Highland and near the confluence of Cajon and Lytle Creeks, both far from the survey area. This species is much more common in Orange County in the foothills of the Santa Ana Mountains and less so in the San Joaquin Hills. Cactus wren in Los Angeles County are considered to be of the non-sensitive subspecies *C.b. anthonyi*, although it should be noted that many of the birds on the coast, including the ones in the survey area, show characteristics, such as the extent of white barring in the tail feathers, typically associated with the sensitive CCACW.

According to the Focused Bird Survey Report, a total of five cactus wren territories were mapped during the focused surveys; refer to Figure 5, *Cactus Wren Results*, of the Focused Bird Survey Report. No attempts were made to find cactus wren nests, although one nest was incidentally found outside of any apparently active territories. Although no nests were found in the territories, all five territories fledged young. Of these, Territory 5 is the only one that had an obvious instance of post-breeding dispersal into a new area during the surveys, with all other families utilizing the same territories that they had evidently nested in. Refer to Focused Bird Survey Report Table 3, *Cactus Wren Survey Results*, for a more detailed summary of cactus wren activity in each territory during the surveys.

## Conclusion

Based on the results of the Focused Bird Survey Report, at least five CAGN and five cactus wren territories were found to be present within the 500-foot survey area. Four CAGN pairs and all five cactus wren pairs successfully fledged young in 2020 as evidenced by firsthand observations during the surveys. Many of the territories were directly adjacent to, crossed over, or were at least in close proximity to proposed trail improvement areas. Of the nests that were found, the closest nest (CAGN Territory 2, Nest 1) was approximately 70 feet from the Canyon Loop Trail.

Of the various proposed trail improvements, the project proposes to widen segments of the South Canyon Loop in the southern half of the survey area. This would result in loss of suitable habitat for sensitive species, particularly for CAGN. Based on the project plans, the proposed trail widening segment is approximately 1,942 feet (or approximately 0.4-mile). Based on field observations, this segment of the South Canyon Loop would be widened an additional one to two feet from its current width to a total of five feet.

As stated, the cactus wren observed on-site is not believed to be the sensitive CCACW protected by the CDFW as a SSC. However, loss of vegetation directly supporting known populations of CAGN would constitute “take” under Section 9 of the Federal Endangered Species Act (ESA) and would require an ITP under Section 10(a)(1)(B) of the Federal ESA. As such, Mitigation Measure BIO-2 requires the City to obtain an ITP and submit a low-effect habitat conservation plan (HCP) to the USFWS to permit removal of habitat suitable for and/or used by CAGN on-site. Avoidance and minimization measures that may be required in a low-effect HCP for this project, subject to consultation with the USFWS, include, but are not limited to, preconstruction nesting surveys for CAGN and avoidance of any active nests or scheduling of work outside of the gnatcatcher nesting season, environmental training of all personnel who would be removing vegetation, biological monitoring during initial vegetation removal, closing and restoration of any extraneous trail sections to recreational use, and on-site restoration and preservation of coastal sage scrub communities within the survey area (i.e. in the vicinity of the impacts).

To avoid indirect impacts and take of CAGN or cactus wren, it is recommended that all project-related construction occur outside of the general CAGN and cactus wren breeding season (February 15 – September 15). Timing project-related construction activities to be outside of this window of time would avoid impacts to CAGN or cactus wren nests. If it is not possible to construct the project outside of this time period, Mitigation Measure BIO-3 would require a nesting bird clearance survey be conducted within seven days prior to the start of construction activities within a 500-foot buffer from the project site. The survey should be conducted by a qualified biologist with demonstrable experience identifying CAGN and cactus wren nesting behavior and finding their nests, and who has been approved by the USFWS to conduct CAGN surveys. If an active nest is found during the survey, no project-related construction would be allowed within 500 feet of an active CAGN nest or 300 feet of an active cactus wren nest, or within an alternative safe distance as determined by the qualified biologist, until the nest is no longer active.

Further, to reduce potential impacts to other nesting birds, Mitigation Measure BIO-4 would require a pre-construction nesting bird survey if construction cannot occur outside of the general avian nesting season (January 1 through August 31). If an active nest is found, a “no-disturbance” buffer is required around the active nest. The size of the “no-disturbance” buffer should be determined based on the judgement of the qualified biologist and level of activity and sensitivity of the species. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the “no-disturbance” buffer may occur following an additional survey by the qualified biologist to search for any new nests in the restricted area.

Upon implementation of Mitigation Measures BIO-2 through BIO-4, impacts to special-status wildlife species would be less than significant.

**Mitigation Measures:**

- BIO-1 Prior to construction and during the appropriate blooming periods for special-status plant species with the potential to occur within the survey area, a qualified botanist shall conduct a focused rare plant survey in areas with suitable habitat to determine presence or absence of special-status plant species. The surveys shall be floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity), and shall be inclusive of, at a minimum, the areas proposed for trail improvements and those immediately surrounding those areas. The results of the survey shall be documented in a letter report. If individual or populations of special-status plant species are found within the areas proposed for disturbance, measures to avoid and minimize impacts shall be recommended. The surveys and reporting shall follow 2018 California Department of Fish and Wildlife (CDFW) and/or 2001 California Native Plant Society guidelines.

Although not expected, if State- and/or Federally-listed plant species are present and avoidance is infeasible, consultation with the U.S. Fish and Wildlife Service (USFWS) and/or CDFW shall be required and an Incidental Take Permit(s) from the USFWS and/or CDFW shall be obtained prior to the commencement of project activities.

- BIO-2 In consultation with the U.S. Fish and Wildlife Service (USFWS), the City of Diamond Bar Parks and Recreation Department shall obtain an Incidental Take Permit and prepare a low-effect habitat conservation plan (HCP) to permit removal of habitat suitable for and/or used by sensitive wildlife species, particularly coastal California gnatcatchers (*Poliophtila californica californica*) known to occur on-site.

Avoidance and minimization measures that may be required in a low-effect HCP for the proposed project, subject to consultation with the USFWS, include, but are not limited to, preconstruction nesting surveys for coastal California gnatcatcher and avoidance of any active nests or scheduling of work outside of the gnatcatcher nesting season, environmental training for all construction personnel, biological monitoring during initial vegetation removal, closing and restoration of any extraneous trail sections to recreational use, and on-site restoration and preservation of coastal sage scrub communities within the survey area (i.e., in the vicinity of the impacts).

- BIO-3 If project-related construction activities are initiated during the nesting season for coastal California gnatcatcher (CAGN; *Poliophtila californica californica*) and cactus wren (CACW; *Campylorhynchus brunneicapillus*) (February 15th through September 15th), a nesting bird clearance survey shall be conducted within seven days prior to the start of construction within a 500-foot buffer of the project site. The survey shall be conducted by a qualified biologist with demonstrable experience identifying CAGN and CACW nesting behavior and finding their nests, and who has been approved by the U.S. Fish and Wildlife Service (USFWS) to conduct a CAGN survey. If an active CAGN or CACW nest is found during the survey, no project-related construction shall be allowed within 500 feet of an active CAGN nest or 300 feet of an active CACW nest, or within an alternative safe distance as determined by the qualified biologist based on topography, visual shielding, nest progress, and the type of construction and associated disturbance, until the active nest has been determined by the qualified biologist to have failed or to have successfully gone to completion (i.e., the nestlings have fledged and are no longer reliant on the nest). Results of the nesting bird clearance survey, shall be compiled in a memorandum and submitted to the City and the USFWS for project records.

- BIO-4 If project-related activities are to be initiated during the general avian nesting season (January 1st through August 31st), a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than three days prior to the start of any vegetation removal or ground-disturbing activities. The qualified biologist shall survey all suitable nesting habitat within the project's development footprint, and areas within a biologically-defensible buffer zone surrounding the project's development footprint. If no

active nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures would be required.

If an active nest is found, the bird species shall be identified and a “no-disturbance” buffer shall be established around the active nest. The size of the “no-disturbance” buffer shall be determined based on the judgement of the qualified biologist and level of activity and sensitivity of the species. The qualified biologist shall periodically monitor any active nests to determine if project-related activities occurring outside the “no-disturbance” buffer disturb the birds and if the buffer should be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the “no-disturbance” buffer may occur following an additional survey by the qualified biologist to search for any new nests in the restricted area.

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

**Less Than Significant Impact With Mitigation Incorporated.** According to the Biological Resources Assessment, the CNDDDB identified seven special-status vegetation communities recorded within the vicinity of the survey area. Two of the seven special-status vegetation communities were observed during the field survey: California walnut woodland and southern coast live oak riparian forest. As shown on Figure 5, *Vegetation Communities and Other Land Uses*, of the Biological Resources Assessment, Disturbed California Walnut Groves habitat is located within the northern portion of the survey area, and Coast Live Oak Woodland and Forest habitat is located in the central, eastern, and southern portions of the survey area. The proposed trail improvements would occur on or directly adjacent to the existing trail path and thus, would not substantially impact these sensitive vegetation communities in the survey area. Further, Mitigation Measures BIO-1 through BIO-4 would require a qualified biologist to conduct focused rare plant surveys and nesting bird clearance surveys, and the City to prepare and implement a low-effect HCP and obtain an ITP from the USFWS prior to project construction to ensure project activities do not adversely impact special-status plant, wildlife, and/or vegetation communities. Thus, impacts in this regard would be less than significant.

**Mitigation Measures:** Refer to Mitigation Measures BIO-1 through BIO-4.

- c) ***Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

**No Impact.** There are three agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (Corps) Regulatory Division regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA). Of the State agencies, the CDFW regulates activities under Sections 1600 et seq. of the CFGC, and the Regional Water Quality Control Board (Regional Board) regulates activities pursuant to Section 401 of the CWA and/or Section 13263 of the California Porter-Cologne Water Quality Control Act.

One jurisdictional drainage feature is situated near the center of the survey area, in the canyon between the two loops of the existing Canyon Loop Trail that are proposed for improvements; refer to Figure 5, *Vegetation Communities and Other Land Uses*, of the Biological Resources Assessment. This feature is ephemeral, likely carrying flows only during rain events. It crosses the trail system twice but only as sheet flow, with no culvert passage evident under the trails. Some sparse mulefat (*Baccharis salicifolia*), which grows near a water source, is present on the western end of the drainage before it crosses the trail and flows down a pipe riser. However, the drainage is otherwise generally a dry ditch flowing under a coast live oak (*Quercus agrifolia*) canopy, with a weedy understory. This drainage does not qualify as waters of the U.S. under the Corps but would still qualify as waters of the State under the regulatory authority of the Regional Board and as a jurisdictional streambed under CDFW. Nevertheless, since no trail improvements are

proposed to occur within the drainage feature, regulatory permits from these agencies are not required, and no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact With Mitigation Incorporated.** Wildlife corridors and linkages are key features for wildlife movement between habitat patches. Wildlife corridors are generally defined as those areas that provide opportunities for individuals or local populations to conduct seasonal migrations, permanent dispersals, or daily commutes, while linkages generally refer to broader areas that provide movement opportunities for multiple keystone/focal species or allow for propagation of ecological processes (e.g., for movement of pollinators), often between areas of conserved land.

The survey area is not located within any wildlife corridors, habitat conservation plans, reserves, or preserves according to the *Los Angeles County General Plan* or the *Diamond Bar General Plan 2040*. The survey area is surrounded by a mixture of developed and undeveloped land on all sides and is located in relatively close proximity to major regional open space areas including the Chino Hills, Puente Hills, and Tonner Canyon. Wildlife movement into or out of the site is likely reduced by the presence of residential development surrounding the survey area, but it is still possible that mammals may use the survey area minimally to move between local open spaces such as those mentioned above.

Additionally, the survey area contains suitable habitat, such as coast live oaks, walnut groves, chaparral, and shrubs, including the bare ground and disturbed areas, to support a variety of nesting bird species. Potentially occurring common native birds are not protected by the Federal or California ESA, however many native species are protected under the Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act, and Fish and Wildlife Code Sections 3503, 3503.5, 3511, and 3513, which prohibit take, possession, or destruction of birds, their nests, or eggs (in particular, raptor species). Construction activities associated with the project could potentially impact nesting birds, including CAGN and CACW, within the project's development footprint and immediate vicinity, which could result in a potentially significant impact. Therefore, implementation of Mitigation Measures BIO-3 and BIO-4 would require pre-construction nesting bird clearance surveys if construction cannot occur outside of the general avian nesting season (January 1st through August 31st) or CAGN and CACW-specific nesting season (February 15th through September 15th). In the event that active nests are discovered, a "no-disturbance" buffer would be required under such active nests and no construction would be allowed to occur within the buffer until a qualified biologist has determined the nest is no longer active. Project impacts in this regard would be reduced to less than significant levels with mitigation incorporated.

**Mitigation Measures:** Refer to Mitigation Measures BIO-3 and BIO-4.

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

**Less Than Significant Impact.** Chapter 22.38, *Tree Preservation and Protection*, of the Municipal Code protects native oak, walnut, sycamore, and willow trees; trees of significant historical value; any trees required to be preserved or relocated as a condition of approval for a discretionary permit; any tree required to be planted as a condition of approval for a discretionary permit; and a stand of trees, the nature of which makes each tree dependent upon the others for survival.

Both coast live oak and southern California black walnuts located on-site are protected under Chapter 22.38 of the Municipal Code. If the proposed trail improvements would require removal or pruning of any on-site coast live oak or

southern California black walnuts, an application for a tree removal and/or tree pruning permit would be required prior to construction activities, which may also require the preparation and submittal of an arborist report. Thus, compliance with Chapter 22.38 of the Municipal Code would ensure the project does not conflict with the City's tree preservation policies, and impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** According to the Biological Resources Assessment, the project site is not located within the boundaries of any Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, the proposed project would not conflict with any conservation plans and no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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## 4.5 CULTURAL RESOURCES

| <i>Would the project:</i>                                                                                                     | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5?      |                                |                                                           |                              | ✓         |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5? |                                | ✓                                                         |                              |           |
| c. Disturb any human remains, including those interred outside of formal cemeteries?                                          |                                |                                                           | ✓                            |           |

The information presented in this analysis is based on the *Cultural Resources Assessment for the Canyon Loop Trail Project, City of Diamond Bar, Los Angeles County, California* (Cultural Resources Assessment), prepared by Cogstone (dated July 2020); refer to [Appendix C, Cultural Resources Assessment](#).

**a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5?**

**No Impact.** The Cultural Resources Assessment included a field survey and a record search of the California Historical Resources Inventory System (CHRIS) at the South Central Coast Information Center (SCCIC). The CHRIS record search was conducted to identify previously recorded cultural resources and previously conducted cultural resources studies within a 0.5-mile radius of the project site. Sources of the record search include the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). A search of the Sacred Lands File (SLF) was also requested through the Native American Heritage Commission (NAHC). Additionally, the record search included a review of available historic-era maps and aerial photographs.

The results of the record search indicated that nine studies have been completed previously within the project site, and ten additional cultural resource investigations have been completed previously within a 0.5-mile radius of the project site. The project site is also within the study area of five overview reports that discuss large portions of Los Angeles County. The results of these studies indicate that two cultural resources have been previously recorded within a 0.5-mile radius. However, no cultural resources have been previously recorded within the project site. The two cultural resources include P-19-002805/CA-LAN-2805, a prehistoric lithic site located between 0.25- and 0.5-mile from the project area, and P-19-101010, a prehistoric isolate consisting of a mano located 0.25-mile from the project area.

Additionally, the pedestrian field survey consisted of walking the Canyon Loop Trail and observing conditions on either side of the trail where accessible. One cultural isolate (2020-07-02-LF-01) was observed during the field survey, consisting of remnants of an automobile along the eastern portion of the trail. The resource is two sections of the same vehicle spread about 60 meters apart. The first section, located further downslope to the northwest, is most of the vehicle chassis with the car dashboard still intact. The chassis extends to the rear bumper, which is also intact, however the car's cabin has been detached and is located upslope approximately 60 yards to the southwest. The dashboard consists of a portion of the steering column (no steering wheel), the glove box port and other instrumentation port, and chrome dashboard accent. A portion of the front vehicle frame extends downslope into existing vegetation; it is unclear whether the hood and front bumper are still intact. Part of the body is visible and is painted a dull, baby blue color. The rear bumper is present and has a slightly rusted chrome plating. The second half of the vehicle consists of the rear portion of the cabin and trunk. Visible portions of the body have the same dull, baby blue paint color. The trunk

lid is rusted, but mostly intact and slightly ajar. The rest of the body section not obscured by vegetation appears to be the passenger side rear quarter panel and possibly the passenger side panel as well. Surrounding vegetation growth indicates the vehicle has been there for an extended period of time. Based on the shape of the rear quarter panel fender and style of the dashboard and glove box, it is likely an early 1950s Chevrolet Deluxe. Refer to Figures 10, *Automobile trunk and rear quarter panel/fender, view east*, and Figure 11, *Dashboard remnants of vehicle, facing northeast*, of the Cultural Resources Assessment for photographs of the cultural isolate.

Cultural isolates are rarely significant. In this case, the isolate consists of two large portions of an automobile with associated smaller fragments. Given that Chevrolet Deluxe were mass produced in the 1950s, there are examples of this vehicle in working condition today, and this example has lost its original integrity, this cultural isolate does not yield important new information to the historical understanding of the project area or cultural isolate. The resource was documented in a California Department of Parks and Recreation (DPR) 523 series forms and is included in Appendix E, *DPR 523 Form*, of the Cultural Resources Assessment. However, this cultural isolate (2020-07-02-LF-01) is recommended as not eligible for listing on the NRHP or CRHR, and no further cultural resources evaluation is warranted.

As such, given that no historic resources are located within the project site, project implementation would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact With Mitigation Incorporated.** As detailed in the Cultural Resources Assessment, no archaeological remains or prehistoric cultural resources were identified within the project site during the field survey. However, based on the results of the records search, the project site is anticipated to have moderate sensitivity for archaeological resources.

Primary components of the proposed trail improvements involve grading of the trail to widen it and construction of several retaining walls, staircases, drainage crossings, and shade structures. Thus, project construction has the potential to adversely impact previously undiscovered archaeological resources along and adjacent to the existing trail. In the unlikely event that archaeological resources are encountered during ground-disturbing construction activities, Mitigation Measure CUL-1 would require all project construction efforts to halt until an archaeologist examines the find, evaluates the archaeological significance of the find, and recommends a course of action. With implementation of Mitigation Measure CUL-1, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines, and impacts would be reduced to less than significant levels.

**Mitigation Measures:**

CUL-1 If previously unidentified cultural resources are encountered during ground-disturbing activities, work in the immediate area shall halt and a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology, shall be contacted by the City of Diamond Bar Parks and Recreation Director, or designated designee, immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources (CRHR) eligibility. If the discovery proves to be eligible for the CRHR and cannot be avoided by project activities, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources. In the event that an identified cultural resource is of Native American origin, the qualified archaeologist shall consult with the City of

Diamond Bar Parks and Recreation Department staff to implement Native American consultation procedures.

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

**Less Than Significant Impact.** The project site is an existing, unpaved trail within the Summitridge Park Trail System, and is surrounded predominantly by undeveloped open space. The trail undergoes varying topography, ranging in elevation from approximately 970 to 1,275 feet above mean sea level, sloping uphill from west to east. Given the topography and existing use, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during ground-disturbing activities. Nevertheless, if human remains are found, those remains would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5-7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the “most likely descendant.” If human remains are found during ground-disturbing activities, activities must stop in the vicinity of the find and any area that is reasonably suspected to overlay adjacent remains until the County Coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with existing State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts in this regard would be considered less than significant.

**Mitigation Measures:** No mitigation measures are required.

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## 4.6 ENERGY

| <i>Would the project:</i>                                                                                                                                                         | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? |                                |                                                           | ✓                            |           |
| b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?                                                                                     |                                |                                                           | ✓                            |           |

### REGULATORY FRAMEWORK

#### Diamond Bar General Plan 2040

The Community Health and Sustainability Element of the *Diamond Bar General Plan 2040* (General Plan) addresses the ways in which the City's physical environment can influence the long-term health and sustainability of the community, including the topics of environmental justice, active lifestyles, social connection, public health and human services, and climate change. The Community Health and Sustainability Element of the General Plan focuses on the relationship between the City's Climate Action Plan (CAP) and subsequent General Plan goals and policies to meet the City's greenhouse gas (GHG) reduction goals. Included in the General plan and CAP GHG reduction goals are goals to help the City promote energy efficiency and conservation within the community. The following goals and policies from the General Plan Community Health and Sustainability Element would be applicable to the project:

#### Goals

*CHS-G-13* Promote energy efficiency and conservation in the community.

#### Policies

*CHS-P-35* Use the City's CAP as a platform when outlining and implementing measures to improve energy conservation and increase renewable energy use in existing and new development.

*CHS-P-40* Require the inclusion, where feasible, of provisions for energy-efficient modes of transportation and fixed facilities that establish public transit, bicycle, and pedestrian modes as safe, efficient, and desirable alternatives.

*CHS-P-43* Explore participating in new high efficiency technology programs such as LED lighting for City facilities, safety lighting in parks and other public spaces, and LED street lighting conversion for all City-owned street lights.

### SIGNIFICANCE CRITERIA

#### CEQA Guidelines Appendix F

Appendix F of the CEQA Guidelines is an advisory document that assists environmental document preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The

analysis in Response 4.6(a) relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- **Criterion 1:** The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- **Criterion 2:** The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- **Criterion 3:** The effects of the project on peak and base period demands for electricity and other forms of energy.
- **Criterion 4:** The degree to which the project complies with existing energy standards.
- **Criterion 5:** The effects of the project on energy resources.
- **Criterion 6:** The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the project's energy usage is presented and addresses **Criterion 1**. The discussion on construction-related energy use focuses on **Criteria 2, 4, and 5**. The discussion on operational energy relates to **Criteria 2 through 6**.

- a) ***Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

**Less Than Significant Impact.**

**Project-Related Sources of Energy Consumption**

This analysis focuses on three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle trips associated with new development and for project construction. The analysis of operational electricity/natural gas usage is based on the California Emissions Estimator Model version 2016.3.2 (CalEEMod) modeling results for the project, which quantifies energy use for occupancy. The results of the CalEEMod modeling are included in Appendix A, Air Quality/GHG/Energy Data. The amount of construction fuel consumption was estimated using the California Air Resources Board's (CARB's) Emissions Factor 2017 (EMFAC2017) computer program which provides projections for typical daily fuel usage in Los Angeles County. The estimated construction fuel consumption is based on the project's construction equipment list timing/phasing and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips.

The proposed project would widen the South Canyon Loop of the existing Canyon Loop Trail, as well as construct improvements such as retaining walls, stairs, draining crossings, wayfinding signs, shade structures, and benches. The project would not result in increased vehicle trips to and from the project site and therefore would not result in operational vehicle-related energy consumption. The project's primary source of energy consumption (i.e., vehicle fuel consumption) would occur from the use of construction equipment on-site and mobile trips to and from the project site by construction workers and vendors during construction. The project's estimated construction energy consumption is summarized in Table 4.6-1, Construction Energy Consumption. As shown in Table 4.6-1, the project's construction fuel consumption would increase Los Angeles County's consumption by 0.0008 percent (**CEQA Appendix F – Criterion 1**).

**Table 4.6-1**  
**Construction Energy Consumption**

| Energy Type                                                                                                                                                                                                                                                                     | Project Annual Energy Consumption <sup>1,2</sup> | Los Angeles County Annual Energy Consumption <sup>3</sup> | Percentage Increase Countywide <sup>3</sup> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------|---------------------------------------------|
| <b>Fuel Consumption</b>                                                                                                                                                                                                                                                         |                                                  |                                                           |                                             |
| Construction (Heavy-Duty Diesel Vehicle) Fuel Consumption <sup>4</sup>                                                                                                                                                                                                          | 4,185 gallons                                    | 535,546,509 gallons                                       | 0.0008%                                     |
| Notes:                                                                                                                                                                                                                                                                          |                                                  |                                                           |                                             |
| 1. As modeled in CalEEMod version 2016.3.2.                                                                                                                                                                                                                                     |                                                  |                                                           |                                             |
| 2. The project would not involve new buildings, increased vehicular trips, and result in minimal electricity and natural gas consumption compared to existing conditions. As such, the project would not result in annual energy, natural gas, or operational fuel consumption. |                                                  |                                                           |                                             |
| 3. The project increases in automotive fuel consumption are compared with the projected Countywide fuel consumption in 2021, as calculated from the California Air Resources Board EMFAC2017.                                                                                   |                                                  |                                                           |                                             |
| 4. Project fuel consumption calculated based on CalEEMod results.                                                                                                                                                                                                               |                                                  |                                                           |                                             |
| Refer to Appendix A for assumptions used in this analysis.                                                                                                                                                                                                                      |                                                  |                                                           |                                             |

### Construction-Related Energy Consumption

Project construction would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, and construction. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. As indicated in Table 4.6-1, the project's fuel consumption from construction would be approximately 4,185 gallons, which would increase fuel use in the County by 0.0008 percent. As such, construction would have a nominal effect on the local and regional energy supplies (**CEQA Appendix F – Criterion 2**).

Some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**CEQA Appendix F – Criterion 4**).

Significant reductions in energy inputs for construction materials can be achieved by selecting green building materials composed of recycled materials that require less energy to produce than non-recycled materials.<sup>1</sup> The integration of green building materials can help reduce environmental impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these building industry source materials.<sup>2</sup> The project-related incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable

<sup>1</sup> California Department of Resources Recycling and Recovery, *Green Building Materials*, <https://www.calrecycle.ca.gov/greenbuilding/materials#Material>, accessed July 8, 2020.

<sup>2</sup> Ibid.

construction sites in the region or State. Therefore, fuel energy and construction materials consumed during construction would not represent a significant demand on energy resources (**CEQA Appendix F - Criterion 5**).

Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. A less than significant impact would occur in this regard.

### Operational Energy Consumption

As a trail improvement project, project operations would not involve new buildings or uses which would introduce new permanent stationary or mobile sources of emissions within the project area compared to existing conditions. The project would not result in increased vehicular trips to and from the project site and would not generate new operational emissions. The project would not result in the inefficient, wasteful, or any consumption of building energy. A less than significant impact would occur in this regard (**CEQA Appendix F – Criterion 2 through Criterion 6**).

**Mitigation Measures:** No mitigation measures are required.

#### **b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?**

**Less Than Significant Impact.** The City's Community Health and Sustainability Element of the General Plan lists goals and policies to help the City reduce its energy usage. Table 4.6-2, Project Energy Use General Plan Consistency Analysis, shows the project's consistency with the applicable General Plan energy efficiency Goals and Policies. As shown in Table 4.6-2, the project would be consistent with the General Plan Goal CHS-G-13; as well as Policies CHS-P-35, CHS-P-40, and CHS-P-43. Therefore, the project would help promote the energy efficiency Goal and Policies found within the General Plan and would not conflict with State or local plans for renewable energy or energy efficiency. Further, As discussed in Response 4.6(a), project operations would not result in increased operational electricity, natural gas, or operational fuel consumption compared to existing conditions. Therefore, the proposed project would result in a less than significant impacts associated with renewable energy or energy efficiency plans.

**Table 4.6-2**  
**Project Energy Use General Plan Consistency Analysis**

| General Plan Goals and Policies                                                                                                                                                                                                                             | Consistency Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Goal CHS-G-13:</b> Promote energy efficiency and conservation in the community.                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <i>Policy CHS-P-35:</i> Use the City's CAP as a platform when outlining and implementing measures to improve energy conservation and increase renewable energy use in existing and new development.                                                         | <b>Consistent.</b> As discussed in <u>Section 4.8, Greenhouse Gas Emissions</u> , the project would be consistent with the City's CAP Policies and Actions. As such, the project would be consistent with this General Plan Policy.                                                                                                                                                                                                                                                                                                                                                                        |
| <i>Policy CHS-P-40:</i> Require the inclusion, where feasible, of provisions for energy-efficient modes of transportation and fixed facilities that establish public transit, bicycle, and pedestrian modes as safe, efficient, and desirable alternatives. | <b>Consistent.</b> The project consists of trail improvements to the Canyon Loop Trail. These improvements include widening the trail, improving draining, and providing recreational amenities (shade structures, staircase, etc.); refer to <u>Section 2.0</u> . The widening of the trail, shade structures, and staircase would help the Canyon Loop Trail become more walkable and would incentivize nearby residents to utilize the trail. These trail improvements would help the City promote energy-efficient modes of transportation and thus would be consistent with this General Plan Policy. |

**Table 4.6-2 [cont'd]**  
**Project Energy Use General Plan Consistency Analysis**

| General Plan Goals and Policies                                                                                                                                                                                                                                  | Consistency Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>Policy CHS-P-43:</i> Explore participating in new high efficiency technology programs such as LED lighting for City facilities, safety lighting in parks and other public spaces, and LED street lighting conversion for all City-owned street lights.</p> | <p><b>Consistent.</b> The project consists of trail improvements to the Canyon Loop Trail. These improvements include shade structures, benches, signs, and stairs with handrails; refer to <u>Section 2.0</u>. The project improvements to the Canyon Loop Trail would not conflict with the City's goal of incorporating high efficiency safety lighting in parks and other public places. As such, the project would be consistent with this General Plan Policy.</p> |
| <p>Source: City of Diamond Bar, <i>Diamond Bar General Plan 2040</i>, adopted December 17, 2019.</p>                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

**Mitigation Measures:** No mitigation measures are required.

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## 4.7 GEOLOGY AND SOILS

| <i>Would the project:</i>                                                                                                                                                                                                                                                              | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:                                                                                                                                                         |                                |                                                           |                              |           |
| 1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. |                                |                                                           |                              | ✓         |
| 2) Strong seismic ground shaking?                                                                                                                                                                                                                                                      |                                |                                                           | ✓                            |           |
| 3) Seismic-related ground failure, including liquefaction?                                                                                                                                                                                                                             |                                |                                                           |                              | ✓         |
| 4) Landslides?                                                                                                                                                                                                                                                                         |                                |                                                           | ✓                            |           |
| b. Result in substantial soil erosion or the loss of topsoil?                                                                                                                                                                                                                          |                                |                                                           | ✓                            |           |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?                                                      |                                |                                                           | ✓                            |           |
| d. Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001), creating substantial direct or indirect risks to life or property?                                                                                                                 |                                |                                                           | ✓                            |           |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?                                                                                                   |                                |                                                           |                              | ✓         |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?                                                                                                                                                                              |                                | ✓                                                         |                              |           |

a) ***Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***

1) ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

**No Impact.** Southern California, including the project area, is subject to the effects of seismic activity due to the active faults that traverse the area. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone. According to the General Plan EIR, there are no active faults within the City and the project site is not situated within an Alquist-Priolo Earthquake Fault Zone. As such, the proposed trail improvements would not increase the potential for human loss, injury, or death as a result of fault rupture. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

**2) Strong seismic ground shaking?**

**Less Than Significant Impact.** The southern California region has numerous active seismic faults that can result in potential earthquake and seismic-related hazards. Seismic activity poses two types of potential hazards for people and structures, categorized either as primary or secondary hazards. Primary hazards are caused by the direct interaction of seismic energy with the ground. Examples include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Secondary hazards are consequences of the shaking, such as ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires.

According to the General Plan EIR, although there are no active faults within the City, there are four potentially active local faults in the area, including the Whittier-Elsinore, San Jose, Central Avenue, and Walnut Creek faults, which have the potential to cause local hazardous damage in Diamond Bar. Further, the Whittier-Elsinore fault, located approximately six miles southwest of the project site, is classified as an Alquist-Priolo Earthquake Fault Zone and is capable of generating substantial ground shaking (e.g., earthquakes with a magnitude of 7 or higher).

The proposed project involves trail improvements along an existing trail and would not affect subsurface geology or the probability of a seismic event, nor would it include the development of any habitable structures or other facilities that could experience substantial hazards during a seismic event. Additionally, the design and construction of the proposed trail improvements would be required to comply with the California Building Code and Title 15, *Building and Construction Safety*, of the Municipal Code. Compliance with the existing seismic safety requirements of the California Building Code and Title 15 of the Municipal Code, would minimize risks pertaining to seismic ground shaking the event of an earthquake. Impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

**3) Seismic-related ground failure, including liquefaction?**

**No Impact.** Liquefaction and seismically-induced settlement or ground failure is generally related to strong seismic shaking events where the groundwater table occurs at a relatively shallow depth (generally within 50 feet of the ground surface) or where lands are underlain by loose, cohesionless deposits. Liquefaction generally results in the loss of shear strength of a soil, which occurs due to the increase of pore water pressure caused by the rearrangement of soil particles induced by shaking or vibration. During liquefaction, soil strata typically behave similar to a heavy fluid. According to Figure 3.6-4, *Liquefaction and Landslide Hazards*, of the General Plan EIR, the project site is not located within a liquefaction zone. As such, no impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

**4) Landslides?**

**Less Than Significant Impact.** According to the Figure 3.6-4, *Liquefaction and Landslide Hazards*, of the General Plan EIR, a small portion of the project site is located within an earthquake-induced landslide zone. However, the proposed project would involve trail improvements and would not involve the construction of habitable structures or a change in land use that could result in substantial risks to landslides. Rather, the proposed improvements include retaining walls, cobblestone swales, and drainage crossings, which would help stabilize soils and reduce soil erosion, thereby decreasing landslide hazards in the project area. As such, less than significant impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact.** Construction activities could potentially result in soil erosion or loss of topsoil due to ground-disturbing activities required to install the trail improvements. However, due to the scope and duration (four months) of project construction, substantial soil erosion or loss of topsoil is not anticipated. Further, the proposed improvements include retaining walls, cobblestone swales, and drainage crossings, which would help stabilize soils and reduce erosion compared to existing conditions.

The project would also be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which would require preparation of a Stormwater Pollution Prevention Plan (SWPPP) for approval by the Santa Ana Regional Water Quality Control Board prior to construction. The SWPPP would require implementation of best management practices (BMPs) to minimize sedimentation from stormwater runoff and winds; refer to Section 4.10, Hydrology and Water Quality. Further, the project would also be subject to the South Coast Air Quality Management District's (SCAQMD) Rule 403, which establishes requirements for dust control during construction activities. Thus, following conformance with NPDES Construction General Permit requirements and SCAQMD Rule 403, impacts concerning substantial soil erosion and loss of topsoil would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact.** Refer to Responses 4.7(a)(3), 4.7(a)(4), and 4.7(d) regarding project impacts related to liquefaction, landslides, and expansive soils.

**Lateral Spreading**

The General Plan EIR defines lateral spreading as lateral displacement of gently sloping, saturated soil masses as a result of earthquake-induced liquefaction. The magnitude of lateral spreading displacement depends on earthquake magnitude, distance between the site and the seismic event, thickness of the liquefied layer, ground slope, average particle size of the materials comprising the liquefied layer, and the standard penetration rates of the materials.

According to the United States Department of Agriculture, the project site is underlain by Gaviota Chumash Rock outcrop complex (20 to 55 percent slopes), with minimal (five percent) clay content.<sup>1</sup> As the project site mainly consists of steep slopes and sandy soil, lateral spreading is not anticipated to occur on-site.

**Subsidence**

Subsidence occurs when a large portion of land is displaced or compressed vertically, typically due to human activities, such as the withdrawal of groundwater, oil, or natural gas. No groundwater, oil, or natural gas extraction occurs on-site or in the project vicinity. Thus, the potential for subsidence to occur on-site is low.

**Collapse**

Soil collapse is a phenomenon where the soils undergo a significant decrease in volume upon increase in moisture content, with or without an increase in external loads. Buildings, structures, and other improvements may be subject to excessive settlement-related distress when compressible soils or collapsible soils are present. As stated above, the

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<sup>1</sup> United States Department of Agriculture, Natural Resources Conservation Service Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed July 10, 2020.

project site mainly consists of sandy soil with minimal clay content and is currently a hard packed unpaved trail. The potential for soil collapse is low.

Additionally, the project would not involve the construction of habitable structures or a change in land use that could result in substantial geologic risks associated with lateral spreading, subsidence, or collapse. The proposed trail improvements are minimal and would not exacerbate any existing geologic hazards in the project area. Further, the proposed trail improvement features design and construction would comply with the California Building Code and Title 15 of the Municipal Code regulations pertaining to grading and construction. Compliance with these regulations would minimize the potential for hazards due to lateral spreading, subsidence, or collapse. Given that the proposed project consists of a trail improvements and would not introduce new habitable structures, impacts related to unstable soils would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact.** Expansive soils are those that undergo volume changes as moisture content fluctuates, swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement, and distorting structural elements. According to the United States Department of Agriculture, the project site is underlain by Gaviota Chumash Rock outcrop complex (20 to 55 percent slopes). Components of this soil type are generally “very low” in water storage and “high” in drainage and runoff; thus, it is not typically considered expansive. Further, construction of the proposed trail improvements would be required to comply with the California Building Code and Title 15 of the Municipal Code. Compliance with these regulations would minimize the potential for hazards due to expansive soils. Impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** No septic tanks or alternative wastewater systems would be constructed as part of the project. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

- f) ***Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

**Less Than Significant Impact With Mitigation Incorporated.** According to the General Plan EIR, there is one vertebrate fossil locality within the City, located approximately 2.8 miles northeast of the project site. Further, according to the General Plan, shallow excavations into younger Quaternary Alluvium deposits (mainly in low lying terrain areas such as Brea Canyon and San Jose Creek) are not likely to yield paleontological resources, and deeper excavations that extend down into older Quaternary deposits or into the Puente Formation would have the potential to encounter paleontological resources. The proposed trail improvements would involve grading to minimal depths, primarily for the trail widening along the South Canyon Loop and installation of stairs and gabion retaining walls. As the project would not involve substantial grading, paleontological resources are not expected to be encountered during construction. Nonetheless, in the unlikely event that paleontological resources are encountered during project construction, Mitigation Measure GEO-1 would require all project construction activities to halt until a paleontologist identifies the paleontological significance of the find and recommends a course of action. Thus, following implementation of Mitigation Measure GEO-1, impacts would be less than significant.

**Mitigation Measures:**

- GEO-1      If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Diamond Bar Community Development Director. With direction from the Community Development Director, a paleontologist certified by the County of Los Angeles shall evaluate the find prior to resuming grading in the immediate vicinity of the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of the identified resources.

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## 4.8 GREENHOUSE GAS EMISSIONS

| <i>Would the project:</i>                                                                                                          | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?        |                                |                                                           | ✓                            |           |
| b. Conflict with an applicable plan, policy, or regulations adopted for the purpose of reducing the emissions of greenhouse gases? |                                |                                                           | ✓                            |           |

### GLOBAL CLIMATE CHANGE

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 420 million metric tons of carbon dioxide equivalent (MMT $\text{CO}_2\text{e}$ ) per year.<sup>1</sup> Methane ( $\text{CH}_4$ ) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of  $\text{CO}_2$ ,  $\text{CH}_4$ , and nitrous oxide ( $\text{N}_2\text{O}$ ) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that  $\text{CO}_2$  concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global  $\text{CO}_2$  concentrations increased from a pre-industrialization period concentration of 280 ppm to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of March 2020, the highest monthly average concentration of  $\text{CO}_2$  in the atmosphere was recorded at 416 ppm.<sup>2</sup>

### REGULATORY FRAMEWORK AND SIGNIFICANCE CRITERIA

#### Federal

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent ( $\text{CO}_2\text{e}$ )<sup>3</sup> concentration is required to keep global mean warming below 2 degrees Celsius ( $^{\circ}\text{C}$ ), which in turn is assumed to be necessary to avoid dangerous climate change.

<sup>1</sup> California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2017*, [https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2017/ghg\\_inventory\\_trends\\_00-17.pdf](https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf), accessed July 8, 2020.

<sup>2</sup> Scripps Institution of Oceanography, *Carbon Dioxide Concentration at Mauna Loa Observatory*, <https://scripps.ucsd.edu/programs/keelingcurve/>, accessed July 8, 2020.

<sup>3</sup> Carbon Dioxide Equivalent ( $\text{CO}_2\text{e}$ ) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

## State

Various Statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then the California Air Resources Board (CARB) should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Executive Order S-3-05. Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Senate Bill 32. Signed into law on September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030.

CARB Scoping Plan. On December 11, 2008, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce GHG emissions by 174 million metric tons (MT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 million MT CO<sub>2</sub>e under a business as usual (BAU)<sup>4</sup> scenario. This is a reduction of 42 million MT CO<sub>2</sub>e, or almost ten percent, from 2002 to 2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.

The Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. The measures described in the Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive

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<sup>4</sup> "Business as Usual" refers to emissions that would be expected to occur in the absence of GHG reductions; refer to <http://www.arb.ca.gov/cc/inventory/data/bau.htm>. Note that there is significant controversy as to what BAU means. In determining the GHG 2020 limit, CARB used the above as the "definition." It is broad enough to allow for design features to be counted as reductions.

Order S-3-05, and observes that “a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal.”

In December 2017, CARB approved the *California’s 2017 Climate Change Scoping Plan (2017 Scoping Plan): The Strategy for Achieving California’s 2030 Greenhouse Gas Target*. This update focuses on implementation of a 40 percent reduction in GHGs by 2030 compared to 1990 levels. To achieve this, the updated 2017 Scoping Plan draws on a decade of successful programs that addresses the major sources of climate changing gases in every sector of the economy.

## **Regional**

### ***South Coast Air Quality Management District Thresholds***

At this time, there is no absolute consensus in the State of California among CEQA lead agencies regarding the analysis of global climate change and the selection of significance criteria. In fact, numerous organizations, both public and private, have released advisories and guidance with recommendations designed to assist decision-makers in the evaluation of GHG emissions given the current uncertainty regarding when emissions reach the point of significance. Lead agencies may elect to rely on thresholds of significance recommended or adopted by State or regional agencies with expertise in the field of global climate change.

The SCAQMD has formed a GHG CEQA Significance Threshold Working Group (Working Group) to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting No. 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.<sup>5</sup>

With the tiered approach, the project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. For all non-industrial projects, the SCAQMD is proposing a screening threshold of 3,000 metric tons carbon dioxide equivalent (MTCO<sub>2e</sub>) per year. SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three options. Under the Tier 4 first option, the SCAQMD initially outlined that the project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. However, the Working Group did not provide a recommendation for this approach. Under the Tier 4 second option, the Working Group folded this into the third option. Under the Tier 4 third option, the project would be excluded if it was below an efficiency-based threshold of 4.8 MTCO<sub>2e</sub> per service population (SP) per year or 3.0 MTCO<sub>2e</sub> per SP for post-2020 projects.<sup>6</sup> Tier 5 would exclude projects that implement off-site mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

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<sup>5</sup> The most recent SCAQMD GHG CEQA Significance Threshold Working Group meeting was held on September 2010.

<sup>6</sup> The project-level efficiency-based threshold of 4.8 MTCO<sub>2e</sub> per SP per year is relative to the 2020 target date. The SCAQMD has also proposed efficiency-based thresholds relative to the 2035 target date to be consistent with the GHG reduction target date of SB 375. GHG reductions by the SB 375 target date of 2035 would be approximately 40 percent. Applying this 40 percent reduction to the 2020 targets results in an efficiency threshold for plans of 4.1 MTCO<sub>2e</sub> per SP per year and an efficiency threshold at the project level of 3.0 MTCO<sub>2e</sub>/year.

## Local

### ***Diamond Bar General Plan 2040***

The Community Health and Sustainability Element of the *City of Diamond 2040 General Plan* (General Plan) describes the City's goals in reducing the rapid effects of climate change. The Community Health and Sustainability Element of the General Plan focuses on the relationship between the City's Climate Action Plan (CAP) and subsequent General Plan Goals and Policies to meet the City's GHG reduction goals. The following Goals and Policies from the Community Health and Sustainability Element would be applicable to the project:

#### Goals

**CHS-G-11** Promote initiatives that enhance sustainability by reducing the community's greenhouse gas (GHG) emissions, protecting natural open spaces which provide CO<sub>2</sub> sequestration, and fostering green development patterns, buildings, sites, and landscapes.

#### Policies

**CHS-P-55** Encourage the protection and enhancement of areas identified as healthy functioning ecosystems that provide the ecological, cultural, public health and safety, and economic value of ecosystem services, or benefits.

**CHS-P-57** Encourage water conservation, drought-tolerant landscaping and the use of greywater and reclaimed and recycled water, where appropriate, with a view to reducing water use.

### ***City of Diamond Bar Climate Action Plan***

The City's CAP was adopted on December 17, 2019 and is designed to provide discrete actions to operationalize the General Plan policies that help with GHG reduction. The CAP outlines Diamond Bar's overall strategy to reduce GHG emissions and identifies specific implementation measures the City will undertake and quantifies their impacts, in order to comply with State directives for reducing GHGs. AB 32 and the 2017 Scoping Plan seek to bring California to a low carbon future, reducing emissions to no more than six MTCO<sub>2</sub>e per capita by 2030 and no more than two MTCO<sub>2</sub>e per capita by 2050. The AB 32 Scoping Plan also directs local governments to assist the state in meeting California's emissions goals.

The GHG emission targets proposed for the City's CAP are based on the goals established by EO S-3-05 and SB 32, following the CAP guidelines established in the 2017 Scoping Plan. The horizon year for analysis in the proposed CAP is 2040, corresponding with the General Plan update horizon. Thus, the CAP will include targets of six MTCO<sub>2</sub>e per capita per year by 2030 and four MTCO<sub>2</sub>e per capita per year by 2040 (derived from the Scoping Plan target of two MTCO<sub>2</sub>e per capita per year in 2050). It provides a community-based policy framework to address community-wide GHG emissions sources. Specifically, the CAP is designed to:

- Translate high-level objectives and quantified goals into a realistic, understandable set of implementation actions;
- Demonstrate that significant reductions in GHG emissions are attainable through local actions;
- Inspire community members to work collectively to achieve these reductions;
- Dovetail with General Plan policies that are required to address climate change impacts and adaptation, including those for land use, transportation, building design, and infrastructure; and
- Provide a predictable approach to mitigation strategies for the compliance of future development projects with CEQA.

To be conservative, the City's adopted CAP target threshold of four MTCO<sub>2</sub>e per capita (i.e. service population for projects) per year for the year 2040 was adopted for this analysis. This threshold was adopted to show project compliance with the General Plan buildout year of 2040 and is the lowest threshold listed in the CAP.

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

**Less Than Significant Impact.** Project-related GHG emissions would include emissions from construction activities. Construction-related emissions have been quantified and compared to the CAP GHG threshold. The project's anticipated GHG emissions are identified in Table 4.8-1, Estimated Greenhouse Gas Emissions. GHG emissions for the proposed project were estimated using the California Emissions Estimator Model version 2016.3.2 software (CalEEMod). CalEEMod is a statewide model designed to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation, and water use.

**Table 4.8-1  
Estimated Greenhouse Gas Emissions**

| Source                                                                                                                                                                                                                                                                                                                                                                                                                      | CO <sub>2</sub>                          | N <sub>2</sub> O    |                                                       | CH <sub>4</sub>     |                                                       | Total<br>Metric<br>Tons of<br>CO <sub>2</sub> e |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------|-------------------------------------------------------|---------------------|-------------------------------------------------------|-------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                             | Metric<br>tons/year                      | Metric<br>tons/year | Metric<br>tons of<br>CO <sub>2</sub> e <sup>1,2</sup> | Metric<br>tons/year | Metric<br>tons of<br>CO <sub>2</sub> e <sup>1,2</sup> |                                                 |
| <b>Construction Emissions<sup>2,4</sup></b>                                                                                                                                                                                                                                                                                                                                                                                 |                                          |                     |                                                       |                     |                                                       |                                                 |
| Year 1                                                                                                                                                                                                                                                                                                                                                                                                                      | 53.09                                    | 0.01                | 0.33                                                  | 0.00                | 0.00                                                  | 53.42                                           |
| <i>Total Emissions<sup>2</sup></i>                                                                                                                                                                                                                                                                                                                                                                                          | 53.09                                    | 0.01                | 0.33                                                  | 0.00                | 0.00                                                  | 53.42                                           |
| Total Emissions (amortized over 30 years) <sup>2,5</sup>                                                                                                                                                                                                                                                                                                                                                                    | 2.79                                     | <0.00               | 0.02                                                  | 0.00                | 0.00                                                  | 2.81                                            |
| Project Emissions per Capita/year <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                              | 2.81 MTCO <sub>2</sub> e per capita/year |                     |                                                       |                     |                                                       |                                                 |
| CAP Threshold                                                                                                                                                                                                                                                                                                                                                                                                               | 4.0 MTCO <sub>2</sub> e per capita/year  |                     |                                                       |                     |                                                       |                                                 |
| Is Threshold Exceeded?                                                                                                                                                                                                                                                                                                                                                                                                      | No                                       |                     |                                                       |                     |                                                       |                                                 |
| Notes:                                                                                                                                                                                                                                                                                                                                                                                                                      |                                          |                     |                                                       |                     |                                                       |                                                 |
| 1. CO <sub>2</sub> Equivalent values calculated using the U.S. Environmental Protection Agency Website, <i>Greenhouse Gas Equivalencies Calculator</i> , <a href="https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator">https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator</a> , accessed October 11, 2018.                                                                                   |                                          |                     |                                                       |                     |                                                       |                                                 |
| 2. Totals may be slightly off due to rounding. Due to rounding, the results given by the equation calculations used in the Greenhouse Gas Equivalencies Calculator may not return the exact results shown in CalEEMod.                                                                                                                                                                                                      |                                          |                     |                                                       |                     |                                                       |                                                 |
| 3. The project consists of trail improvements to the Canyon Loop Trail. Since it is unknown how many individuals would access this trail in a year, an extremely conservative service population of one was selected. It is anticipated that more than one individual would use the canyon loop trail within a year and thus project emissions would be lower than the calculated 1.78 MTCO <sub>2</sub> e per capita/year. |                                          |                     |                                                       |                     |                                                       |                                                 |
| 4. The project consists of many trail improvements; refer to <u>Section 2.0, Project Description</u> . These trail improvements would not change or increase the existing operational emissions, as the improvements would not include additional water, solid waste, energy, or mobile sources or uses.                                                                                                                    |                                          |                     |                                                       |                     |                                                       |                                                 |
| 5. The project construction emissions were amortized over a 19-year period (2021 to 2040) to show the yearly project emissions in correlation with the General Plan Horizon year 2040 and the 2040 CAP Threshold.                                                                                                                                                                                                           |                                          |                     |                                                       |                     |                                                       |                                                 |
| Source: Refer to <u>Appendix A, Air Quality/GHG/Energy Data</u> for detailed model input/output data.                                                                                                                                                                                                                                                                                                                       |                                          |                     |                                                       |                     |                                                       |                                                 |

Construction of the project would emit GHG emissions as indicated in Table 4.8-1. In total, project construction would result in approximately 53.42 MTCO<sub>2</sub>e (2.81 MTCO<sub>2</sub>e over 19 years). It was conservatively assumed that the service population or "capita" of the project is one individual. Thus, the project would emit 2.81 MTCO<sub>2</sub>e per capita per year (2.81 MTCO<sub>2</sub>e divided by one individual). This is highly conservative as significantly more than one individual is likely to use the Canyon Loop trail within a year, which would lower the project's yearly per capita emissions. As such, the project would not exceed the CAP's threshold of four MTCO<sub>2</sub>e per capita per year for the year 2040.

The trail improvements would not include additional operational area, water, solid waste, or energy uses. Furthermore, the trail improvements would not cause an increase of mobile trips compared to existing conditions. Therefore, operational GHG emissions generated by the project over the long-term would be nominal. Overall, GHG emissions generated by construction and operation of the project would be minimal and less than the City's CAP threshold. Therefore, impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact.** On December 17, 2019, the City adopted its 2040 General Plan and CAP. The City's CAP includes community-wide policies and actions to reduce the City's GHG emissions; in-line with the 2017 Scoping Plan. This includes emission thresholds to help the City meet the 2017 Scoping Plan GHG emission targets for the years 2030 and 2040. Table 4.8-2, Project CAP Consistency Analysis, discusses how the project would comply with the goals and policies found within the City's CAP. In addition, the CAP GHG reduction policies and actions are directly correlated with the General Plan Goals and Policies. Therefore, a project's compliance with the CAP would mean the project complies with the General Plan, and vice versa. Furthermore, as described above, the project would not exceed the CAP's 2040 GHG threshold. As shown in Table 4.8-2 the project would be consistent with the City's CAP Policies and Goals. Thus, a less than significant impact would occur in this regard.

**Table 4.8-2**  
**Project CAP Consistency Analysis**

| Policies and Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Consistency Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pedestrian Improvements and Increased Connectivity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| While most streets in the City have sidewalks, the suburban layout with winding roads and high-speed arterials with narrow sidewalks and spread out crossings can present a difficult pedestrian environment. The General Plan includes policies that create more walkable, livable neighborhoods by expanding the multi-modal transportation system and creating a safe, pedestrian-oriented environment                                                                                                                                                                                                                                                                                      | <b>Consistent.</b> The project consists of trail improvements to the Canyon Loop Trail. These improvements include widening the trail, improving draining, and providing recreational amenities (shade structures, staircase, etc.); refer to <u>Section 2.0</u> . The widening of the trail, shade structures, and staircase would help the Canyon Loop Trail become more walkable and would incentive nearby residents to utilize the trail. Thus, the project would meet the CAP and General Plan goal of becoming more walkable, with livable neighborhoods, and creating a safe, pedestrian-oriented environment. |
| The General Plan provides strategies for maximizing multi-modal accessibility to and connectivity within mixed use areas, including the Metrolink Station and new Town Center. Components of the strategy serve to improve connectivity between the proposed mixed use areas and the City's existing neighborhoods; provide new jobs, housing, and entertainment opportunities in compact, walkable environments; support multiple modes of transit, car travel, walking and bicycling; and increase accessibility to and from surrounding cities. The General Plan also includes a number of other improvements to enhance connectivity for bicycles, pedestrians, and transit in Diamond Bar | <b>Consistent.</b> As described above, the project would include improvements to the Canyon Loop trail which would incentive nearby residents of the City to utilize the trail. These improvements would enhance connectivity for pedestrians by providing a wider trail with more shade structures and would allow individuals to traverse a portion of the City (from Meandering Creek Drive on the western side to Peak Court on the eastern side), without the reliance of automobiles. Thus, the project would be consistent with this goal.                                                                      |

**Table 4.8-2 [cont'd]**  
**Project CAP Consistency Analysis**

| <b>Policies and Actions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Consistency Analysis</b>                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bikeway System Improvements</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| The City has made an effort to expand the ease of alternative transportation options for residents, recognizing both health and environmental benefits. The General Plan recommends the enhancement of the existing bicycle network with the implementation of 1.76 miles of new Class I and II, 22.95 miles of new Class III bike paths, and 22.95 miles of new Class IV bike paths. In total, the recommended enhancements will create a total of 45.58 miles of new bike paths, to result in a total of 48.3 miles of bike paths.                                                                                                                                                                                  | <b>Consistent.</b> The project would be consistent with this goal as the widening of the Canyon Loop Trail would allow for more bicycles to access the trail in a safe manner. Furthermore, the project would help promote the City's General Plan Goal CHS-G-11 by protecting a natural open space which provides CO <sub>2</sub> sequestration and is also a usable landscape for residents to cycle along.                        |
| <b>Traffic Calming</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| The General Plan includes policies for "calming" traffic to make streets safer and more comfortable for pedestrian travel. Traffic calming devices include roundabouts, corner bulb-outs, speed cushions, surface textures, raised pavement, road narrowing, and other devices that encourage people to drive more slowly or to walk or bike instead of using a vehicle, especially for short trips in and around residential neighborhoods.                                                                                                                                                                                                                                                                          | <b>Consistent.</b> The project would not include any additional mobile trips nor require additional roadway features to be created. As such the project would not conflict with the traffic calming goals found within the CAP. The project would also allow individuals to traverse a portion of the City (from Meandering Creek Drive on the western side to Peak Court on the eastern side), without the reliance of automobiles. |
| <b>Electric Vehicle Infrastructure</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| The General Plan recommends that the City establish requirements to provide dedicated parking and charging stations for electric vehicles and support the use of clean fuel and "climate friendly" vehicles by residents, businesses, and City government activities. The General Plan recommends Diamond Bar to seek funding opportunities for the installation of electric vehicle charging stations throughout the City and to convert the City fleet to zero emissions vehicles over time.                                                                                                                                                                                                                        | <b>Consistent.</b> The project would not include any additional parking or mobile trips and thus would not conflict with this CAP goal.                                                                                                                                                                                                                                                                                              |
| <b>Parking Facilities and Policies</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| To promote "right sizing" of parking facilities, the General Plan calls for the amendment of parking regulations in the Municipal Code to require lower parking minimums for developments with a mix of uses with different peak parking needs, as well as developments that implement enforceable residential parking demand reduction measures, such as parking permit and car share programs. Additional strategies recommended by the General Plan include consolidation of parking lots, preferential carpool parking, park-n-ride facilities, parking pricing, and bicycle parking. General Plan policies also encourage designing parking facilities to minimize impacts on pedestrian, bicycles, and transit. | <b>Consistent.</b> The project would not include any additional parking or mobile trips and thus would not conflict with this CAP goal.                                                                                                                                                                                                                                                                                              |
| <b>Transportation Improvements</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Transit service can provide an alternative to automobile travel and is a critical mode of transportation for those who cannot drive (such as the elderly, youth, or disabled) or do not have access to a vehicle. Given that the majority of Diamond Bar is of a suburban, low-density character, the General Plan prioritizes providing high-quality service between employment                                                                                                                                                                                                                                                                                                                                      | <b>Consistent.</b> The project consists of trail improvements to the Canyon Loop Trail, which does not include additional vehicle trips, and thus would not conflict with the transportation improvement goals found within the CAP.                                                                                                                                                                                                 |

**Table 4.8-2 [cont'd]**  
**Project CAP Consistency Analysis**

| Policies and Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Consistency Analysis |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <p>centers and mixed-use destinations along the spines of the City, supplemented with features such as park-n-rides and pedestrian and bicycle infrastructure to create multi-modal transportation nodes.</p> <p>This Chapter's policies also support Metrolink ridership by improving bus, bicycle, and pedestrian connections to the station and by introducing Transit-Oriented Mixed-Use development around the station. Coordination with Metrolink and Union Pacific Railroad (UPRR) to provide more frequent service to increase Metrolink's convenience and ridership amongst Diamond Bar residents would further increase transit ridership and reduce GHG emissions associated with automobile usage.</p> |                      |
| Source: City of Diamond Bar, <i>Climate Action Plan 2040</i> , adopted December 17, 2019.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |

**Mitigation Measures:** No mitigation measures are required.

## 4.9 HAZARDS AND HAZARDOUS MATERIALS

| <i>Would the project:</i>                                                                                                                                                                                                                                                           | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?                                                                                                                                             |                                |                                                           | ✓                            |           |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?                                                                                     |                                |                                                           | ✓                            |           |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?                                                                                                                     |                                |                                                           |                              | ✓         |
| d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?                                                      |                                |                                                           |                              | ✓         |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? |                                |                                                           |                              | ✓         |
| f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?                                                                                                                                                           |                                |                                                           |                              | ✓         |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?                                                                                                                                             |                                |                                                           |                              | ✓         |

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

**Less Than Significant Impact.** Short-term construction activities for the proposed project would not involve the routine transport, use, or disposal of hazardous materials. With the exception of utilizing gasoline, diesel fuels, and solvents for construction equipment, no other hazardous materials would be transported to or from the project site, or be utilized in the construction process. Fuels and solvents for construction would be stored and utilized pursuant to existing regulatory requirements. Therefore, short-term construction impacts would be less than significant in this regard.

As a recreational trail facility, the project would not involve the routine transport, use, or disposal of hazardous materials during long-term operations. Project implementation would improve existing amenities on the trail and would not change the project site's current land use. No habitable structures or new land uses requiring hazardous materials would be constructed. Thus, implementation of the proposed project would result in less than significant impact in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact.**

**Short-Term Construction Impacts**

One of the means through which human exposure to hazardous substances could occur is through accidental release. Incidents that result in an accidental release of hazardous substances into the environment can cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. Human exposure of contaminated soil, soil gas, or water can have potential health effects based on a variety of factors, such as the nature of the contaminant and the degree of exposure.

During project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials anticipated during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law. Upon compliance with all applicable regulations, impacts in this regard would be less than significant.

**Long-Term Operational Impacts**

As noted in Response 4.9(a), project implementation would improve existing amenities on the Canyon Loop Trail and would not change the project site's current land use. Therefore, the project would not involve a change in use which would create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Long-term impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** There are no existing or proposed schools located within 0.25-mile of the project site. The nearest school is the Pantera Elementary School, located approximately 0.5-mile to the northeast at 801 Pantera Drive. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board to compile and update a regulatory sites listing (per the criteria of the Section). The California Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the Health and Safety Code. Section 65962.5 requires the local enforcement agency,

as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations (CCR), to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.<sup>1</sup> As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** The closest public airport to the project site is the Brackett Field Airport, located approximately 5.8 miles to the north in the City of La Verne. According to the *Brackett Field Airport Land Use Compatibility Plan*, the Brackett Field Airport influence area extends approximately 2.7 miles from the airport runways.<sup>2</sup> Given the distance to the project site, no impacts associated with airport safety or noise hazards would occur.

**Mitigation Measures:** No mitigation measures are required.

- f) ***Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

**No Impact.** The proposed trail improvement project would not impair emergency access in the site vicinity. Similar to existing conditions, emergency access to the site at project completion would be provided via multiple points of access within the Summitridge Park Trail System and via adjacent roadways in the residential neighborhoods to the east and west of the Canyon Loop Trail. Through widening and improvement of the trail, access and mobility would be improved, resulting in a beneficial impact in this regard. As such, project implementation would not substantially impair an adopted emergency response plan or emergency evacuation plan and no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

- g) ***Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?***

**No Impact.** The project involves trail improvement features, such as widening trail segments, installing shelters and benches, and constructing retaining walls, fences, stairs, and drainage crossings, and would not introduce any new habitable structures or facilities that could expose people or structures to significant risk of loss, injury or death involving wildland fires. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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<sup>1</sup> California Environmental Protection Agency, *Cortese List Data Resources*, <http://calepa.ca.gov/SiteCleanup/CorteseList/>, accessed June 1, 2020.

<sup>2</sup> Los Angeles County Airport Land Use Commission, *Brackett Field Airport Land Use Compatibility Plan*, [http://planning.lacounty.gov/assets/upl/project/brackett\\_alucp\\_final.pdf](http://planning.lacounty.gov/assets/upl/project/brackett_alucp_final.pdf), December 9, 2015.

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## 4.10 HYDROLOGY AND WATER QUALITY

| <i>Would the project:</i>                                                                                                                                                                                            | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?                                                                            |                                |                                                           | ✓                            |           |
| b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?                                |                                |                                                           |                              | ✓         |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would: |                                |                                                           |                              |           |
| 1) Result in substantial erosion or siltation on- or off-site?                                                                                                                                                       |                                |                                                           | ✓                            |           |
| 2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?                                                                                           |                                |                                                           | ✓                            |           |
| 3) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?                               |                                |                                                           | ✓                            |           |
| 4) Impede or redirect flood flows?                                                                                                                                                                                   |                                |                                                           | ✓                            |           |
| d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?                                                                                                                  |                                |                                                           |                              | ✓         |
| e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?                                                                                              |                                |                                                           | ✓                            |           |

**a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?***

**Less Than Significant Impact.** As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES permit program is administered by the California Regional Water Quality Control Board (RWQCB). There are nine RWQCBs, which are responsible for development and enforcement of water quality objectives and implementation plans. The project site is located in the jurisdiction of the Los Angeles RWQCB.

Impacts related to water quality typically range over three different periods: 1) during the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest; 2) following construction, prior to the establishment of ground cover, when the erosion potential may remain relatively high; and 3) following completion of the project, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

### Short-Term Construction

The proposed project involves trail improvements along the existing Canyon Loop Trail. Construction activities associated with the project have the potential to produce minimal quantities of typical pollutants such as nutrients,

heavy metals, toxic chemicals, and waste materials. Impacts to stormwater quality may occur from construction, and increased pollutant loadings could occur immediately off-site.

The proposed project would be required to comply with the requirements of a Construction General Permit under the NPDES program. A Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is required to contain a site map that depicts the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project site. The SWPPP is also required to include best management practices (BMPs) proposed to minimize stormwater runoff and overall water quality.

The project's construction activity would be subject to the NPDES General Construction Permit, as discussed above, because it involves vegetation removal, clearing, grading, and disturbances to the ground, and a construction site with soil disturbance greater than 1.0 acre. The project would be required to obtain applicable permits from the Los Angeles RWQCB pertaining to waste discharge requirements. More specifically, as part of project's compliance with NPDES requirements, the City would be required to submit a Notice of Intent to the Los Angeles RWQCB providing notification of intent to comply with the General Construction Permit. The SWPPP is required to outline the erosion, sediment, and non-stormwater BMPs proposed to minimize the discharge of pollutants at the construction site. These BMPs would include measures to contain runoff from vehicle washing at the construction site, prevent sediment from disturbed areas from entering the storm drain system using structural controls (e.g., sand bags at inlets), and cover and contain stockpiled materials to prevent sediment and pollutant transport. Implementation of the BMPs would ensure runoff and discharges during the project's construction activities do not violate applicable water quality standards. Compliance with NPDES requirements would reduce short-term construction-related impacts in this regard to a less than significant level.

### **Long-Term Operations**

The project site is unpaved and generally drains from east to west into Diamond Bar Creek, which drains into the San Jose Creek, then San Gabriel River, San Pedro Bay, and ultimately, the Pacific Ocean. The project proposes improvements such as gabion retaining walls, stairs with handrails and cobblestone swales, and drainage crossings, all of which would help reduce soil erosion and loss of topsoil along the trail compared to existing conditions. The project would maintain the trail in its natural surface condition, and no substantive change in the amount of impervious surface would occur. Therefore, the project would reduce stormwater runoff and improve associated water quality. Long-term operational impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

**b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

**No Impact.** The project involves trail improvements along an existing trail and would not introduce any new uses that would substantially decrease groundwater supplies or interfere substantially with groundwater recharge. At project completion, the existing trail would remain unpaved and groundwater recharge and percolation into the earth would continue to occur, similar to existing conditions. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

- c) ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would:***

- 1) ***Result in substantial erosion or siltation on- or off-site?***

**Less Than Significant Impact.** The proposed project would not result in a substantial alteration to existing drainage patterns. As stated in Response 4.10(a), the project would comply with the requirements of the Construction General Permit under the NPDES program, which would require the preparation and implementation of a SWPPP and associated BMPs to minimize erosion and siltation during construction activities.

Further, at project completion, the trail would be improved with gabion retaining walls, stairs with cobblestone swales, and drainage crossings, among other improvements, which would stabilize soils, reduce erosion, and improve drainage in the project area. As such, project implementation would not substantially alter the existing drainage pattern on-site in a manner that would result in substantial erosion or siltation on- or off-site. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

- 2) ***Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

**Less Than Significant Impact.** Refer to Responses 4.10(a) and 4.10 (c)(1).

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact.** Refer to Responses 4.10(a) and 4.10(c)(1). The project does not propose any new uses that could create or contribute runoff water into existing stormwater drainage systems in the project area. Similar to existing conditions, the trail would remain unpaved at project completion. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

- 4) ***Impede or redirect flood flows?***

**Less Than Significant Impact.** Refer to Responses 4.10(a), 4.10 (c)(1), and 4.10(c)(3).

**Mitigation Measures:** No mitigation measures are required.

**d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

**No Impact.**

**Flood Hazard**

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the project area, the project site is located outside of the 100-year flood hazard area.<sup>1</sup> As such, no impacts would occur in this regard.

**Tsunami**

A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. The project site is located approximately 26 miles inland from the Pacific Ocean and is approximately 1,000 feet above mean sea level so as not to be subject to tsunami impacts. As such, no impacts would occur in this regard.

**Seiche**

A seiche is a standing wave in an enclosed or partially enclosed body of water. The project site is not located near any lakes or other major bodies of enclosed water. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

**e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less Than Significant Impact.** As stated, the project site is located within the jurisdiction of the Los Angeles RWQCB. The *Water Quality Control Plan – Los Angeles Region* (Basin Plan) establishes water quality standards for water quality standards for compliance in the Los Angeles Basin, including the City, and is the basis for the Los Angeles RWQCB's regulatory programs. As discussed in Response 4.10(a), the project's impacts associated with water quality would be less than significant. As such, the project would not conflict with or obstruct implementation of the Basin Plan.

The 2014 Sustainable Groundwater Management Act (SGMA) requires local public agencies and groundwater sustainability agencies in high- and medium-priority basins to develop and implement groundwater sustainability plans (GSPs) or prepare an alternative to a GSP. The project site is not located within a SGMA-designated priority basin.<sup>2</sup> Therefore, there is no groundwater sustainability plan applicable for the project. As indicated in Response 4.10(b), the proposed project would not substantially deplete groundwater supplies or interfere with groundwater recharge. As such, the project would not conflict with or obstruct implementation of a sustainable groundwater management plan. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

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<sup>1</sup> Federal Emergency Management Agency, *Flood Insurance Rate Map #06071C9330H*, August 28, 2008, <https://msc.fema.gov/portal/search#searchresultsanchor>, accessed July 14, 2020.

<sup>2</sup> California Department of Water Resources, *SGMA Basin Prioritization Dashboard*, <https://gis.water.ca.gov/app/bp2018-dashboard/p1/>, accessed July 14, 2020.

## 4.11 LAND USE AND PLANNING

| <i>Would the project:</i>                                                                                                                                                              | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Physically divide an established community?                                                                                                                                         |                                |                                                           |                              | ✓         |
| b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? |                                |                                                           |                              | ✓         |

### a) *Physically divide an established community?*

**No Impact.** The proposed project involves trail improvements along the existing Canyon Loop Trail within the Summitridge Park Trail System. The improvements would facilitate on-site access/mobility and safety, improve drainage, and reduce erosion. No new land uses would be introduced that could have the potential to physically divide an established community. Nearby established residential communities to the east and west of the Canyon Loop Trail would not be impacted by the trail improvements. As such, development of the proposed project would not physically divide an established community, and no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

### b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

**No Impact.** The project site is designated and zoned by the General Plan and Zoning Map as Open Space and Low Density Residential (RL), respectively. As the project would not change the use on-site, the project would be consistent with the site's existing land use designation and zoning, and would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impacts would result in this regard.

**Mitigation Measures:** No mitigation measures are required.

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## 4.12 MINERAL RESOURCES

| <i>Would the project:</i>                                                                                                                                             | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                |                                |                                                           |                              | ✓         |
| b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? |                                |                                                           |                              | ✓         |

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

**No Impact.** The California Department of Conservation's Surface Mining and Reclamation Act of 1975 (SMARA) identifies a range of Mineral Resource Zones (MRZs) within California based on geologic and economic factors that identify the potential importance of mineral deposits in a particular area. According to the California Geological Survey, the project site is identified as MRZ-3, which identifies areas containing mineral deposits, the significance of which cannot be evaluated from available data.<sup>1</sup> Based on the General Plan EIR, no mineral resources are identified in the City's planning area. No mineral extraction operations currently occur at or nearby the project site. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** Refer to Response 4.12(a), above.

**Mitigation Measures:** No mitigation measures are required.

<sup>1</sup> California Geological Survey, *Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the Claremont-Upland Production -Consumption (P-C) Region, Los Angeles and San Bernardino Counties, California, Special Report 202 – Plate 1*, [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR\\_202/](ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_202/), 2007.



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## 4.13 NOISE

| <i>Would the project result in:</i>                                                                                                                                                                                                                                                                       | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?                                                            |                                | ✓                                                         |                              |           |
| b. Generation of excessive groundborne vibration or groundborne noise levels?                                                                                                                                                                                                                             |                                |                                                           | ✓                            |           |
| c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? |                                |                                                           |                              | ✓         |

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear deemphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level ( $L_{eq}$ ), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level ( $L_{dn}$ ). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions.

Two of the primary factors that reduce levels of environmental sounds are increasing the distance between the sound source to the receiver and having intervening obstacles such as walls, buildings, or terrain features between the sound source and the receiver. Factors that act to increase the loudness of environmental sounds include moving the sound source closer to the receiver, sound enhancements caused by reflections, and focusing caused by various meteorological conditions.

## REGULATORY FRAMEWORK

### State

The State Office of Planning and Research (OPR) *General Plan Noise Element Guidelines* (2017) include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. Table 4.13-1, Noise and Land Use Compatibility, shows the compatibility of various land uses with a range of environmental noise levels in terms of the Community Noise Equivalent Level (CNEL).

**Table 4.13-1**  
**Noise and Land Use Compatibility**

| Land Use Category                                                                                                                                                                                                                                                                                                                                   | Community Noise Exposure (L <sub>dn</sub> or CNEL, dBA) |                          |                       |                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------|-----------------------|----------------------|
|                                                                                                                                                                                                                                                                                                                                                     | Normally Acceptable                                     | Conditionally Acceptable | Normally Unacceptable | Clearly Unacceptable |
| Residential - Low Density, Single-Family, Duplex, Mobile Homes                                                                                                                                                                                                                                                                                      | 50 - 60                                                 | 55 - 70                  | 70-75                 | 75-85                |
| Residential - Multiple Family                                                                                                                                                                                                                                                                                                                       | 50 - 65                                                 | 60 - 70                  | 70 - 75               | 70 – 85              |
| Transient Lodging - Motel, Hotels                                                                                                                                                                                                                                                                                                                   | 50 - 65                                                 | 60 - 70                  | 70 - 80               | 80 – 85              |
| Schools, Libraries, Churches, Hospitals, Nursing Homes                                                                                                                                                                                                                                                                                              | 50 - 70                                                 | 60 - 70                  | 70 - 80               | 80 – 85              |
| Auditoriums, Concert Halls, Amphitheaters                                                                                                                                                                                                                                                                                                           | NA                                                      | 50 - 70                  | NA                    | 65 – 85              |
| Sports Arenas, Outdoor Spectator Sports                                                                                                                                                                                                                                                                                                             | NA                                                      | 50 - 75                  | NA                    | 70 – 85              |
| Playgrounds, Neighborhood Parks                                                                                                                                                                                                                                                                                                                     | 50 - 70                                                 | NA                       | 67.5 - 75             | 72.5 – 85            |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries                                                                                                                                                                                                                                                                                          | 50 - 70                                                 | NA                       | 70 - 80               | 80 – 85              |
| Office Buildings, Business Commercial and Professional                                                                                                                                                                                                                                                                                              | 50 - 70                                                 | 67.5 - 77.5              | 75 - 85               | NA                   |
| Industrial, Manufacturing, Utilities, Agriculture                                                                                                                                                                                                                                                                                                   | 50 - 75                                                 | 70 - 80                  | 75 - 85               | NA                   |
| NA: Not Applicable                                                                                                                                                                                                                                                                                                                                  |                                                         |                          |                       |                      |
| Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.                                                                                                                                         |                                                         |                          |                       |                      |
| Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice. |                                                         |                          |                       |                      |
| Normally Unacceptable – New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.                                                                                   |                                                         |                          |                       |                      |
| Clearly Unacceptable – New construction or development should generally not be undertaken.                                                                                                                                                                                                                                                          |                                                         |                          |                       |                      |
| Source: State of California Office of Planning and Research, <i>General Plan Guidelines</i> , October 2017.                                                                                                                                                                                                                                         |                                                         |                          |                       |                      |

### Local

#### ***Diamond Bar General Plan 2040***

The *Diamond Bar General Plan 2040* (General Plan) Public Safety Element includes the following goals and policies applicable to the proposed project:

#### Goals

**PS-G-10:** Protect public health and welfare by enforcing the City's noise ordinance, and impose mitigation measures on future development and uses to prevent significant degradation of the future acoustic environment.

#### Policies

**PS-P-45:** Use the noise and land use compatibility matrix (Table 7-1; Table 4.13-2) and Projected Noise Contours map (Figure 7-12) as criteria to determine the acceptability of a given proposed land use, including the improvement/construction of streets, railroads, freeways, and highways.

**PS-P-48:** Maintain interior and exterior noise-related development standards through the Diamond Bar Noise Control Ordinance.

**PS-P-49:** Ensure that detailed site-specific noise analysis, including the identification of noise mitigation measures, be prepared for all development proposals located where project noise exposure would be other than normally or conditionally acceptable as specified in Table 7-1 (Table 4.13-2). With mitigation, development should meet the allowable exterior and interior noise exposure standards established in the Noise Control Ordinance.

**PS-P-50:** Evaluate the land use compatibility of any proposed development project prior to approval to avoid locating loud developments near noise sensitive receptors. When walls over six feet in height are necessary to mitigate noise, a berm/ wall combination with heavy landscaping, a terraced wall heavily landscaped, or other similar innovative wall design technique shall be used to minimize visual impacts.

Table 4.13-2, General Plan Land Use/Noise Compatibility Matrix, identifies the General Plan's acceptable interior and exterior noise standards for various land use categories within the City.

**Table 4.13-2**  
**General Plan Land Use/Noise Compatibility Matrix**

| Land Use Categories                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Maximum Exterior Community Noise Equivalent Level (CNEL) or Day-Night Level (Ldn), dB <sup>1</sup> |                          |                       |                      | Maximum Interior CNEL |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------|-----------------------|----------------------|-----------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Normally Acceptable                                                                                | Conditionally Acceptable | Normally Unacceptable | Clearly Unacceptable |                       |
| Rural, Single-Family, Multiple Family Residential                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 50 - 55                                                                                            | 55 - 65                  | 65 - 75               | 75 - 85              | 40                    |
| School Classrooms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 50 - 55                                                                                            | 55 - 65                  | 65 - 75               | 75 - 85              | 40                    |
| School Playgrounds                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 50 - 60                                                                                            | N/A                      | 60 - 75               | 75 - 85              | N/A                   |
| Libraries                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50 - 60                                                                                            | 60 - 70                  | 70 - 80               | 80 - 85              | 40                    |
| Hospitals, Convalescent Facilities Living Areas                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 50 - 60                                                                                            | 60 - 70                  | 70 - 80               | 80 - 85              | 40                    |
| Hospitals, Convalescent Facilities Sleeping Areas                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 50 - 60                                                                                            | 60 - 65                  | 65 - 75               | 75 - 85              | 35                    |
| Recreation: Quiet, Passive Areas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 50 - 55                                                                                            | 55 - 65                  | 65 - 85               | N/A                  | 40                    |
| Recreation: Noisy, Active Areas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 50 - 65                                                                                            | N/A                      | 65 - 75               | 75 - 85              | N/A                   |
| Commercial and Industrial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50 - 65                                                                                            | 65 - 70                  | 70 - 80               | 80 - 85              | N/A                   |
| Office Areas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 50 - 65                                                                                            | 65 - 70                  | 70 - 80               | 80 - 85              | 45                    |
| N/A: Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                    |                          |                       |                      |                       |
| Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. Outdoor areas are suitable for normal outdoor activities for this land use.                                                                                                                                                                                                                                     |                                                                                                    |                          |                       |                      |                       |
| Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air-conditioning, will normally suffice.                                                                                                                                                                         |                                                                                                    |                          |                       |                      |                       |
| Normally Unacceptable – New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.                                                                                                                                                                                                                                                 |                                                                                                    |                          |                       |                      |                       |
| Clearly Unacceptable – New construction or development should generally not be undertaken.                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                    |                          |                       |                      |                       |
| Nature of the Noise environment where the CNEL or Ldn level is:                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                    |                          |                       |                      |                       |
| <ul style="list-style-type: none"> <li>Below 55 dB: relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within ¼ mile.</li> <li>55-65 dB: most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.</li> <li>65-75 dB: very noisy urban areas near arterials, freeways or airports.</li> <li>75+ dB: extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.</li> </ul> |                                                                                                    |                          |                       |                      |                       |

**Table 4.13-2 [cont'd]**  
**General Plan Community Noise Compatibility Matrix**

| Land Use Categories                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Maximum Exterior Community Noise Equivalent Level (CNEL) or Day-Night Level (Ldn), dB <sup>1</sup> |                          |                       |                      | Maximum Interior CNEL |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------|-----------------------|----------------------|-----------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Normally Acceptable                                                                                | Conditionally Acceptable | Normally Unacceptable | Clearly Unacceptable |                       |
| Notes: N/A: Not Applicable<br>1. The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day was averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 pm and 10:00 pm and a 10-decibel penalty on noise between 10:00 pm and 7:00 am of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.<br>Source: City of Diamond Bar, <i>Diamond Bar General Plan 2040</i> , adopted December 17, 2019. |                                                                                                    |                          |                       |                      |                       |

### **Diamond Bar Municipal Code**

The *Diamond Bar Municipal Code* (Municipal Code) regulations with respect to noise are included in Municipal Code Section 8.12, Division 3, *Noise Control*. Applicable noise restrictions are discussed below:

*Section 8.12.380(4) – Exemption from exterior noise standards. The following activities are exclusively regulated by the prohibitions of subdivision III of this division:*

- a. *Construction;*
- b. *Stationary nonemergency signaling devices;*
- c. *Emergency signaling devices;*
- d. *Refuse collection vehicles;*
- e. *Residential air conditioning or refrigeration equipment; and*
- f. *Forced-air blowers.*

### *Subdivision III. – Specific Noise Restrictions*

#### *Section 8.12.720. – Construction Noise*

- (a) *Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited.*
- (b) *Noise restrictions at affected structures. The contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in the following schedule:*
  - (1) *At residential structures, the following:*
    - a. *Mobile equipment. Maximum noise levels for nonscheduled, intermittent, short-term operation (less than ten days) of mobile equipment:*

|                                                                     | Single-family Residential | Multifamily Residential | Semi-residential/Commercial |
|---------------------------------------------------------------------|---------------------------|-------------------------|-----------------------------|
| Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.    | 75 dBA                    | 80 dBA                  | 85 dBA                      |
| Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays | 60 dBA                    | 64 dBA                  | 70 dBA                      |

- b. *Stationary equipment. Maximum noise level for repetitively scheduled and relatively long-term operation (periods of ten days or more) of stationary equipment:*

|                                                                     | Single-family Residential | Multifamily Residential | Semi-residential/Commercial |
|---------------------------------------------------------------------|---------------------------|-------------------------|-----------------------------|
| Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.    | 60 dBA                    | 65 dBA                  | 70 dBA                      |
| Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays | 50 dBA                    | 55 dBA                  | 60 dBA                      |

- (c) *All mobile or stationary internal-combustion-engine powered equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order.*

Municipal Code regulations associated with vibrations are included in Municipal Code Section 8.12.840, *Vibration*.

*Section 8.12.840 – Vibration. Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of one to 100 Hertz.*

## EXISTING CONDITIONS

The project site is designated as Open Space in the General Plan. Surrounding sensitive receptors in proximity of the project site include single-family residential uses located to the east and west. The nearest residential property is located approximately 80 feet west of the proposed project construction limits. The existing noise environment is predominately characterized by neighborhood noise and vehicle traffic.

- a) ***Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

**Less Than Significant Impact With Mitigation Incorporated.** It is difficult to specify noise levels which are acceptable to everyone, what is annoying to one individual may be acceptable to another. However, standards usually address the needs of most of the general population and can be based on documented complaints in response to documented noise levels or based on studies of the ability of people to sleep, talk, or work under various noise conditions. All such studies recognize that individual responses vary considerably.

## Short-Term (Construction) Impacts

Construction activities are generally temporary and have a short duration, resulting in periodic increases in the ambient noise environment. The project's construction activities would span a four-month period, beginning spring 2021. Typical noise levels generated by construction equipment are shown in Table 4.13-3, Maximum Noise Levels Generated by Construction Equipment. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment).

**Table 4.13-3**  
**Maximum Noise Levels Generated by Construction Equipment**

| Type of Equipment                                                                                                                                                                                 | Acoustical Use Factor <sup>1</sup> | L <sub>max</sub> at 50 Feet (dBA) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------|
| Concrete Saw                                                                                                                                                                                      | 20                                 | 90                                |
| Concrete Mixer Truck                                                                                                                                                                              | 40                                 | 79                                |
| Concrete Saw                                                                                                                                                                                      | 20                                 | 90                                |
| Backhoe                                                                                                                                                                                           | 40                                 | 78                                |
| Dozer                                                                                                                                                                                             | 40                                 | 82                                |
| Truck                                                                                                                                                                                             | 40                                 | 88                                |
| Paver                                                                                                                                                                                             | 50                                 | 77                                |
| Roller                                                                                                                                                                                            | 20                                 | 80                                |
| Tractor                                                                                                                                                                                           | 40                                 | 84                                |
| Note:                                                                                                                                                                                             |                                    |                                   |
| 1. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation. |                                    |                                   |
| Source: Federal Highway Administration, <i>Roadway Construction Noise Model (FHWA-HEP-05-054)</i> , January 2006.                                                                                 |                                    |                                   |

The proposed project would widen the South Canyon Loop of the existing Canyon Loop Trail, as well as construct improvements such as retaining walls, stairs, draining crossings, wayfinding signs, shade structures, and benches. Residential properties are located to the east and west of the project site. The closest residential uses, located on Meandering Creek Drive, are situated approximately 80 feet from construction of the wayfinding sign, 230 feet from grading activities associated with retaining wall/stair improvements, and 280 feet from grading activities associated with trail widening. The remaining proposed improvements (i.e., retaining walls, stairs, draining crossings, wayfinding signs, shade structures, and benches) would occur further than 280 feet from the nearest sensitive receptor. It is anticipated that the wayfinding sign would be installed with hand tools (e.g., shovel and clamshell digger). As such, construction activities associated with installation of the wayfinding sign would not generate perceptible noise levels at the nearest sensitive receptor. Construction noise modeling was performed using the Roadway Construction Noise Model (RCNM) developed by the Federal Highway Administration (FHWA). This program enables the prediction of construction noise levels for a variety of construction operations. This program was used to identify construction noise levels at nearby sensitive uses. Table 4.13-4, *Construction Noise Levels by Construction Activity*, shows the highest noise levels generated during each phase of construction.

**Table 4.13-4**  
**Construction Noise Levels by Construction Activity**

| Construction Activity                                                                                                                                             | Distance from Construction Activity <sup>1</sup> | Estimated Noise Level at Nearest Receptor (dBA) <sup>2</sup> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------|
| Grading                                                                                                                                                           | 230                                              | 56.8                                                         |
| Grading                                                                                                                                                           | 280                                              | 55.1                                                         |
| Notes:                                                                                                                                                            |                                                  |                                                              |
| 1. Distance from nearest residential use to proposed construction activities are based on site plans.                                                             |                                                  |                                                              |
| 2. Estimated noise levels account for the existing solid masonry walls at the nearby residential receptors.                                                       |                                                  |                                                              |
| Source: Federal Highway Administration, <i>Roadway Construction Noise Model (FHWA-HEP-05-054)</i> , January 2006; refer to <u>Appendix D, <i>Noise Data</i></u> . |                                                  |                                                              |

As shown in Table 4.13-4, the highest noise levels are predicted to occur during the grading phase when construction noise levels could reach 56.8 dBA at the nearest residential uses. Pursuant to Municipal Code Section 8.12.720, the City prohibits construction noise exceeding 60 dBA during daytime hours (i.e., between the hours of 7:00 a.m. and 7:00

p.m. on weekdays and Saturday, and at no time on Sundays or Federal holidays) for single-family residential uses.<sup>1</sup> As depicted in Table 4.13-4, construction noise levels would not exceed 60 dBA at the nearest sensitive receptors. Further, the construction duration would be short-term in nature (i.e., 4 months) and would not occur over an extended period of time. Notwithstanding, implementation of Mitigation Measure NOI-1 would ensure that construction-related noise levels at nearby residents are reduced to the maximum extent practicable. Mitigation Measure NOI-1 requires several best practices to reduce construction noise levels at nearby receptors, including requiring construction equipment to be furnished with properly operating and maintained mufflers and other State-required noise attenuation devices, among others. A less than significant impact would occur in this regard.

### **Long-Term (Operational) Impacts**

Operation of the proposed project would not introduce any new noise-generating sources. Under existing conditions, employees visit the site to perform inspections and maintenance. Following project construction, the routine maintenance and inspection visits would continue. There would not be an increase in vehicular trips to the project area beyond what currently occurs. Therefore, no long-term noise impacts would result with implementation of the proposed project.

#### **Mitigation Measures:**

NOI-1 Prior to the initiation of construction, the City of Diamond Bar Director of Public Works, or authorized agents (such as the City's Public Works Manager/Assistant City Engineer) acting within the scope of the particular duties delegated to them, shall ensure that all project plans and specifications stipulate that:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State-required noise attenuation devices.
- A construction notice shall be mailed to residents within a 500-foot radius of the project and shall indicate the dates and duration of construction activities, as well as provide a City of Diamond Bar staff contact name and a telephone number where residents can inquire about the construction process and register complaints.
- Construction haul routes shall be designed to avoid noise sensitive uses to the maximum extent feasible (e.g., residences etc.).
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
- Construction equipment staging areas shall be located away from adjacent sensitive receptors.
- Pursuant to City of Diamond Bar Municipal Code Section 8.12.720, all construction activities associated with the proposed project shall be limited to the hours between 7:00 a.m. and 7:00 p.m. on weekdays and on Saturdays. Construction on Sundays and Federal holidays shall be prohibited.

#### **b) *Generation of excessive groundborne vibration or groundborne noise levels?***

**Less Than Significant Impact.** Project construction can generate varying degrees of groundborne vibration, depending on the construction equipment used and the type of activity. Construction equipment operation would

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<sup>1</sup> Although Municipal Code Section 8.12.720 allows nighttime construction noise levels up to 50 dBA for single-family residential uses, the project does not propose nighttime construction.

generate groundborne vibrations which decrease with distance from the source. The effect on buildings located near the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Ground-borne vibrations from construction activities rarely reach levels that damage structures.

The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Consistent with the FTA's *Transit Noise and Vibration Impact Assessment Manual* (September 2018), Municipal Code Section 8.12.840 has stipulated that no ground vibration shall be allowed that produces a peak particle velocity (PPV) greater than or equal to 0.01 inches-per-second (inch/second) at or beyond the property boundary of the source. Table 4.13-5, Typical Vibration Levels for Construction Equipment, identifies typical vibration levels for construction equipment.

**Table 4.13-5**  
**Typical Vibration Levels for Construction Equipment**

| Equipment                                                                                                                                                                                                                                                                                                                           | Approximate peak particle velocity at 230 feet (inch/second) | Approximate peak particle velocity at 280 feet (inch/second) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Loaded trucks                                                                                                                                                                                                                                                                                                                       | 0.0032                                                       | 0.0020                                                       |
| Small bulldozer/Tractors                                                                                                                                                                                                                                                                                                            | 0.0001                                                       | 0.0001                                                       |
| Notes:<br>1. Calculated using the following formula:<br>$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$ where: PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance<br>PPV (ref) = the reference vibration level at 25 feet in in/sec<br>D = the distance from the equipment to the receiver |                                                              |                                                              |
| Source: Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Manual</i> , September 2018.                                                                                                                                                                                                               |                                                              |                                                              |

As illustrated in Table 4.13-5, based on the FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.0001 to 0.0032 inch/second PPV at 230 feet from the source of activity and 0.0001 to 0.0020 inch/second PPV at 280 feet from the source of activity. As such, vibration levels during project construction would not exceed the City's 0.01 inch/second PPV threshold.

In addition, according to the FTA's *Transit Noise and Vibration Impact Assessment Manual* (September 2018), ground-borne noise occurs when vibration radiates through a building interior and creates a low-frequency sound, often described as a rumble. The proposed project does not include train operations or equipment with the potential to generate groundborne vibration. A less than significant impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** The project is not located within an airport land use plan and there are no public or private airports or airstrips within two miles of the project site. The nearest airport to the project site is the Brackett Field Airport, located

approximately 5.8 miles to the north in the City of La Verne. Thus, project implementation would not expose people residing or working in the project area to excessive noise levels. No impact would occur.

**Mitigation Measures:** No mitigation measures are required.

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#### 4.14 POPULATION AND HOUSING

| <i>Would the project:</i>                                                                                                                                                                                           | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Induce substantial population unplanned growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? |                                |                                                           | ✓                            |           |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?                                                                                     |                                |                                                           |                              | ✓         |

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

**Less Than Significant Impact.** The proposed project would not involve the construction of any homes, businesses, or other uses that would result in direct or indirect population growth. Short-term temporary construction jobs would be created during construction and installation of the proposed trail improvements. However, given the temporary nature of the construction process and limited duration of construction (up to four months), it is anticipated that local construction workers would be employed and no new workers would relocate to Diamond Bar. Routine maintenance of the trail during project operations would also be conducted by existing City park staff and/or hired landscaping contractors. As such, less than significant impacts pertaining to unplanned population growth would occur.

**Mitigation Measures:** No mitigation measures are required.

- b) ***Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

**No Impact.** As no housing is present on-site, the project would not displace residents or housing, necessitating the construction of replacement housing elsewhere. No impact would occur.

**Mitigation Measures:** No mitigation measures are required.



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## 4.15 PUBLIC SERVICES

| <i>Would the project:</i>                                                                                                                                                                                                                                                                                                                                                                                                   | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: |                                |                                                           |                              |           |
| 1) Fire protection?                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                                           |                              | ✓         |
| 2) Police protection?                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                           |                              | ✓         |
| 3) Schools?                                                                                                                                                                                                                                                                                                                                                                                                                 |                                |                                                           |                              | ✓         |
| 4) Parks?                                                                                                                                                                                                                                                                                                                                                                                                                   |                                |                                                           | ✓                            |           |
| 5) Other public facilities?                                                                                                                                                                                                                                                                                                                                                                                                 |                                |                                                           |                              | ✓         |

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

### 1) ***Fire protection?***

**No Impact.** The Los Angeles County Fire Department (LACoFD) provides fire and emergency medical services for the City. The LACoFD has three fire stations within Diamond Bar; the project site is served by Station 120 located at 1051 Grand Avenue, approximately 0.6-mile west of the site. The proposed trail improvements would not increase demand for fire protection and emergency medical services and thus, would not result in adverse physical impacts associated with the construction of any new or physically altered fire protection facilities. Additionally, no habitable structures or other land uses capable of substantially increasing the need for fire protection services are proposed. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

### 2) ***Police protection?***

**No Impact.** The City contracts with the Los Angeles County Sheriff's Department (LASD) for police protection services. The LASD has more than 20 full-time personnel assigned to serve Diamond Bar. The Walnut/Diamond Bar Sheriff's Station is located approximately 2.65 miles to the northeast of the project site at 21695 East Valley Blvd in the City of Walnut. The proposed trail improvements would not increase the need for additional police protection services or involve construction of any new or physically altered police protection facilities. Further, no habitable structures or other land uses capable of substantially increasing the need for police protection services are proposed. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

**3) Schools?**

**No Impact.** The project site is located within the Walnut Valley Unified School District (WVUSD). Implementation of the proposed project would not result in an increase in residential population and thus, would not impact existing capacities and resources at WVUSD schools and facilities; refer to Section 4.14, *Population and Housing*. As such, no impact is anticipated in this regard.

**Mitigation Measures:** No mitigation measures are required.

**4) Parks?**

**Less Than Significant Impact.** The Summitridge Park is located approximately 0.3-mile south of the project site. The proposed trail improvements along the Canyon Loop Trail could attract new recreational users to the trail and Summitridge Park. However, as the project would not result in a direct increase in population, any increased use of park facilities from new recreational users to the Summitridge Park Trail System would be nominal; refer to Section 4.14. Further, the proposed trail improvement project would enhance the existing Canyon Loop Trail by providing enhanced and new amenities for trail users. Proposed trail improvements, including shelters and benches, retaining walls, drainage crossings, fencing, and signage, would improve soil stability, reduce erosion, improve drainage, facilitate ease of access and safety, and reduce disturbance to informal trail areas. As such, a less than significant impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

**5) Other public facilities?**

**No Impact.** As detailed above in Responses 4.15(a)(1) through 4.15(a)(4), the proposed project would not result in any potentially significant impacts related to public services. The project does not involve construction of any new or physically altered public facilities, and no other public facilities are anticipated to be affected by the project. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

## 4.16 RECREATION

| <i>Would the project:</i>                                                                                                                                                                                      | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? |                                |                                                           | ✓                            |           |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?                        |                                |                                                           | ✓                            |           |

- a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

**Less Than Significant Impact.** Refer to Response 4.15(a)(4). Impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

**Less Than Significant Impact.** As detailed in Section 2.4, Project Characteristics, proposed trail improvements along the Canyon Loop Trail include widening portions of the trail; constructing retaining walls, stairs, drainage crossings, and fences; and installing new shade structures with benches and trash receptacles, perforated benches, and wayfinding signs. The proposed improvements would improve soil stability, reduce erosion, improve drainage, facilitate ease of access and safety, and reduce disturbance to informal trail areas. The project's potential environmental impacts associated with the proposed trail improvements are analyzed throughout this Initial Study. Compliance with applicable laws, ordinances, and regulations would ensure project impacts are reduced to less than significant levels in this regard.

**Mitigation Measures:** No mitigation measures are required.

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## 4.17 TRANSPORTATION

| <i>Would the project:</i>                                                                                                                                        | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?         |                                |                                                           | ✓                            |           |
| b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?                                                                            |                                |                                                           | ✓                            |           |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? |                                |                                                           | ✓                            |           |
| d. Result in inadequate emergency access?                                                                                                                        |                                |                                                           |                              | ✓         |

**a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?***

**Less Than Significant Impact.** The proposed trail improvements would occur along the existing Canyon Loop Trail and would not impact nearby roadways, transit, bicycle, or pedestrian facilities.

### Roadways

Construction activities would occur over approximately four months and include short-term traffic trips associated with the transfer of construction equipment, construction worker trips, and hauling trips for soil and construction material. Although construction traffic may have the potential to impact the local circulation system, the scope of construction activity at the site is expected to be limited and a relatively limited number of construction deliveries would occur. As detailed in Appendix A, Air Quality/Greenhouse Gas/Energy Data, grading activities would require approximately 10 worker trips per day and construction activities would require approximately 20 worker and vendor trips per day. Thus, short-term construction traffic associated with the project would not adversely impact the local roadway network. Construction activities also would not require any temporary lane closures on adjacent roadways. As such, impacts in this regard would be less than significant.

At project completion, the trail would be improved with new amenities but would operate similar to existing conditions. No new land uses are proposed that would generate additional vehicle trips. Therefore, long-term operational impacts would be less than significant.

### Transit, Bicycle, and Pedestrian Facilities

Given that the project site is an existing trail within the Summitridge Park Trail System, there are no transit, bicycle, or pedestrian (i.e., sidewalks) in the project area. As stated, the temporary construction activities would generate a nominal number of trips associated with construction worker trips and vendors trips, and would not require any lane closures that could impact adjacent transit, bicycle, or pedestrian facilities. At project completion, the trail would continue to operate similar to existing conditions and also would not impact transit, bicycle, or pedestrian facilities on adjacent roadways. Overall, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

**b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

**Less Than Significant Impact.** In accordance with Senate Bill 743, the City recently adopted the *City of Diamond Bar VMT Baselines and Thresholds of Significance* (VMT Thresholds) on July 21, 2020 per City Council Resolution No. 2020-30. The Vehicle Miles Traveled (VMT) Thresholds establish screening criteria and thresholds of significance in determining when a project would result in a significant transportation impact under CEQA. Based on the VMT Thresholds, land use projects with a VMT rate that exceeds 15 percent below the applicable baseline VMT rate would result in a significant project impact.

Short-term construction trips and associated VMT would be nominal, and primarily be limited to those associated with construction worker trips and vendor trips traveling to and from the project site. Due to the limited scope and duration of construction, it is not expected that significant impacts related to VMT would occur. As such, impacts in regard to short-term construction would be less than significant in this regard.

The proposed improvements along the Canyon Loop Trail would not involve any new land uses that would generate new vehicle trips and associated VMT. Additionally, the project would not generate any new trips for maintenance activities beyond existing conditions. Thus, operational impacts in this regard would be less than significant. Overall, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact.** The project involves improvements along an existing trail and would not result in hazards on surrounding roadways due to geometric design features or incompatible uses. Further, no new land uses are proposed that would be incompatible with its existing use as a recreational trail. Thus, impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

**d) Result in inadequate emergency access?**

**No Impact.** Refer to Response 4.9(f).

**Mitigation Measures:** No mitigation measures are required.

## 4.18 TRIBAL CULTURAL RESOURCES

| <i>Would the project:</i>                                                                                                                                                                                                                                                                                                                                                                                               | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:                          |                                |                                                           |                              |           |
| 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or                                                                                                                                                                                                                          |                                |                                                           |                              | ✓         |
| 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. |                                | ✓                                                         |                              |           |

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to “begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project.” Section 21074 of AB 52 also defines a new category of resources under CEQA called “tribal cultural resources.” Tribal cultural resources are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is either listed on or eligible for the California Register of Historical Resources (CRHR) or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

On February 19, 2016, the California Natural Resources Agency proposed to adopt and amend regulations as part of AB 52 implementing Title 14, Division 6, Chapter 3 of the California Code of Regulations, CEQA Guidelines, to include consideration of impacts to tribal cultural resources pursuant to Government Code Section 11346.6. On September 27, 2016, the California Office of Administrative Law approved the amendments to Appendix G of the CEQA Guidelines, and these amendments are addressed within this Initial Study.

- a) ***Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:***
- 1) ***Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).***

**No Impact.** According to the Cultural Resources Assessment, no historic resources listed or eligible for listing in a State or local register of historic resources are located within the project site. Thus, no impacts related to historic tribal cultural resources defined in Public Resources Code Section 5020.1(k) would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

- 2) ***A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

**Less Than Significant Impact with Mitigation Incorporated.** In compliance with AB 52, the City distributed letters notifying each tribe that requested to be on the City's list for the purposes of AB 52 of the opportunity to consult with the City regarding the proposed project; refer to Appendix E, AB 52 Documentation. The letters were distributed by certified mail on July 2, 2020. The tribes had 30 days to respond to the City's request for consultation. The Gabrieleno Band of Mission Indians – Kizh Nation responded on July 16, 2020 stating that the project is within the tribe's ancestral tribal territory and requested consultation. No other tribes responded within the 30 days.

Members of the Gabrieleno Band of Mission Indians – Kizh Nation, and City staff consulted on August 6, 2020. During the consultation, the Gabrieleno Band of Mission Indians – Kizh Nation provided confidential information relevant to tribal cultural resources that may exist within the project area, and identified concerns that the project may affect such resources during ground disturbing activities.

Based on feedback provided by the Gabrieleno Band of Mission Indians – Kizh Nation, the City developed a range of mitigation measures (TCR-1 through TCR-3) to minimize impacts to potential tribal cultural resources. With implementation of these mitigation measures, impacts to tribal cultural resources would be less than significant.

**Mitigation Measures:**

- TCR-1 Prior to the commencement of any ground disturbing activity at the project site, the City of Diamond Bar shall retain a Native American monitor. The Native American monitor shall be selected from a tribe that has requested that a monitor be present, and in which the project site is within their ancestral region of occupation. The Native American monitor shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined as activities that may include, but are not limited to, grubbing, tree removals, boring, grading, excavation, drilling, and trenching. The Native American monitor shall complete daily monitoring logs that shall provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when all ground-disturbing activities on the project site are completed, or when the Native American monitor has indicated that all upcoming ground-disturbing activities at the project site have little to no potential for impacting tribal cultural resources.
- TCR-2 In the event tribal cultural resources are discovered during project construction, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 50 feet) until the find can be assessed. All tribal cultural resources unearthed by project activities shall be evaluated by the Native American monitor and a qualified archaeologist if one is present. If the resources are Native American in origin, the affected tribe will retain it/them in the form and/or manner the tribe deems appropriate, for educational, cultural and/or historic purposes. Work may continue in other parts of the project site while evaluation and any required recovery activities take place. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include

implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

- TCR-3 In the event human remains are encountered during project construction, said remains shall require proper treatment in accordance with Health and Safety Code 7050.5, which dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the coroner shall contact, by telephone within 24 hours, the Native American Heritage Commission and Public Resources Code (PRC) 5097.98 shall be followed. PRC 5097.98 requires identification of the “most likely descendent,” and that remains are investigated and that appropriate recommendations are made for treatment of the remains.

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## 4.19 UTILITIES AND SERVICE SYSTEMS

| <i>Would the project:</i>                                                                                                                                                                                                                                                            | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? |                                |                                                           |                              | ✓         |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?                                                                                                                           |                                |                                                           |                              | ✓         |
| c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?                                                    |                                |                                                           |                              | ✓         |
| d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?                                                                                              |                                |                                                           | ✓                            |           |
| e. Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?                                                                                                                                                                   |                                |                                                           |                              | ✓         |

- a) ***Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication, the construction or relocation of which could cause significant environmental effects?***

**No Impact.** The project proposes trail improvements along the Canyon Loop Trail. The project does not propose any new land uses that would result in increased demand for water, wastewater treatment, storm drain, or dry utility services nor would it require the relocation or construction of new or expanded facilities. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

- b) ***Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?***

**No Impact.** The proposed trail improvements would not substantially increase water demand during construction or operational activities. Although a nominal amount of water may be used during construction (e.g., for dust control), these activities would be minimal and temporary in nature and would have no impact on the City's overall water supplies. No impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

- c) ***Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

**No Impact.** The project would not introduce a new land use that could generate additional wastewater beyond existing conditions. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

- d) ***Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

**Less Than Significant Impact.** The proposed project includes trail improvements and does not introduce any new land uses capable of generating solid waste beyond existing conditions. The project may require the disposal of debris during construction activities; however, construction debris associated with the project's trail improvements would be one-time and would not have the capability to substantially affect the capacity of regional landfills. Further, the proposed trash receptacles along the Canyon Loop Trail would improve litter collection along the trail and would not adversely impact the capacity of regional landfills. Thus, impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

- e) ***Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?***

**No Impact.** As stated, the project may generate a nominal amount of solid waste during construction activities, however, the proposed trail improvements would not generate any additional solid waste beyond existing conditions. As such, no impacts regarding conflict with Federal, State, and local solid waste management and reduction regulations would occur.

**Mitigation Measures:** No mitigation measures are required.

## 4.20 WILDFIRE

| <i>If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>                                                                                                                            | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan?                                                                                                                                                                           |                                |                                                           | ✓                            |           |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?                                                       |                                |                                                           | ✓                            |           |
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? |                                |                                                           |                              | ✓         |
| d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?                                                                            |                                |                                                           | ✓                            |           |

### a) ***Substantially impair an adopted emergency response plan or emergency evacuation plan?***

**Less Than Significant Impact.** The California Department of Forestry and Fire identifies the project site as a Very High Fire Hazard Severity Zone within a Local Responsibility Area (LRA).<sup>1</sup>

Pursuant to the Disaster Mitigation Act of 2000 (DMA 2000), the *Los Angeles County 2019 All-Hazard Mitigation Plan* (AHMP) was developed by the Los Angeles County Office of Emergency Management (OEM) to emphasize the need for State, tribal, and local entities to closely coordinate hazard mitigation planning and implementation efforts. Hazard mitigation efforts include identifying and profiling hazards, analyzing the people and facilities at risk, and developing mitigation actions to reduce or eliminate hazard risk. Implementation of the mitigation actions in the AHMP would include short- and long-term strategies that may involve planning, policy changes, programs, projects, and other activities. Although the AHMP planning area is for unincorporated Los Angeles County, the AHMP's risk assessment includes Supervisorial Districts 1 through 5, which includes the City of Diamond Bar (Supervisorial District 4).

Further, the Los Angeles County Operational Area designates disaster routes within the County, including Diamond Bar. According to the *Disaster Route Maps*, disaster routes in the City include State Route 60, State Route 57, Diamond Bar Boulevard, and Golden Springs Drive.<sup>2</sup>

As discussed in Response 4.9(f), the proposed trail improvement project would not impair emergency access in the site vicinity. Similar to existing conditions, emergency access to the site at project completion would be provided via multiple points of access within the Summitridge Park Trail System and via adjacent roadways in the residential neighborhoods to the east and west of the Canyon Loop Trail. As such, project implementation would not substantially impair an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant impact.

<sup>1</sup> California Department of Forestry and Fire, *Very High Fire Hazard Severity Zones in LRA As Recommended by CAL FIRE, Diamond Bar*, September 2011, [https://osfm.fire.ca.gov/media/5815/diamond\\_bar.pdf](https://osfm.fire.ca.gov/media/5815/diamond_bar.pdf), accessed May 28, 2020.

<sup>2</sup> Los Angeles County Public Works, *Disaster Route Maps – City of Diamond Bar*, <https://dpw.lacounty.gov/dsg/DisasterRoutes/map/Diamond%20Bar.pdf>, July 7, 2008.

**Mitigation Measures:** No mitigation measures are required.

- b) ***Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

**Less Than Significant Impact.** The project involves trail improvements, such as widening trail segments, installing shelters and benches, and constructing retaining walls, fences, stairs, and drainage crossings, and would not introduce any new habitable structures or facilities that could expose occupants to pollutant concentrations from wildfire or the uncontrolled spread of a wildfire. Existing slopes, prevailing winds, and other factors associated with wildfire risks also would not be exacerbated by project implementation. Thus, impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

- c) ***Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

**No Impact.** The project involves trail improvement features and does not propose the installation or maintenance of infrastructure that could exacerbate existing fire risks. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

- d) ***Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

**Less Than Significant Impact.** The project would not introduce any new habitable structures or facilities that could expose people or structures to significant risks related to downslope or downstream flooding or landslides. Rather, the project involves constructing retaining walls, drainage crossings, and stairs with cobblestone swales along the Canyon Loop Trail, among other trail amenities, that would stabilize soils, reduce erosion, and improve drainage on-site. As such, impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

## 4.21 MANDATORY FINDINGS OF SIGNIFICANCE

| <i>Would the project:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------|------------------------------|-----------|
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? |                                | ✓                                                         |                              |           |
| b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?                                                                                                           |                                | ✓                                                         |                              |           |
| c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?                                                                                                                                                                                                                                                                                                              |                                | ✓                                                         |                              |           |

- a) ***Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?***

**Less Than Significant Impact With Mitigation Incorporated.** As discussed in Section 4.4, Biological Resources, the project site generally consists of natural vegetation with relatively undisturbed soils. The proposed project has the potential to impact special-status plant and wildlife species, special-status vegetation communities, and wildlife migratory corridors. As such, Mitigation Measures BIO-1 through BIO-4 would reduce such impacts to less than significant levels. Specifically, these mitigation measures would require a qualified biologist to conduct focused rare plant surveys and nesting bird clearance surveys, and the City to prepare and implement a low-effect habitat conservation plan and obtain an Incidental Take Permit from the U.S. Fish and Wildlife Service prior to project construction to ensure project activities do not adversely impact biological resources. Upon implementation of Mitigation Measures BIO-1 through BIO-4, the project is not anticipated to reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

Additionally, as analyzed in Section 4.5, Cultural Resources, and Section 4.18, Tribal Cultural Resources, no historic, archaeological, or tribal cultural resources occur on-site. Should previously undiscovered cultural or tribal cultural resources or human remains be uncovered during project ground-disturbing activities, implementation of Mitigation Measures CUL-1 and TCR-1 through TCR-3 would reduce the project's potential effects to less than significant levels. Thus, the project would not eliminate important examples of major periods of California history or prehistory, and impacts in this regard would be less than significant.

- b) ***Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?***

**Less Than Significant Impact With Mitigation Incorporated.** Cumulative impacts can occur as a result of the interactions of environmental changes from multiple projects that affect the same resources, transportation network, watershed, air basin, noise environment, or other environmental conditions. Such impacts could be short-term and temporary from overlapping construction impacts, or long-term due to permanent land use changes.

As noted in Section 2.3, *Project Background*, the proposed project is consistent with the General Plan Public Facilities and Services Element and the *Diamond Bar Parks and Recreation Master Plan*, which details recommended improvements in the Summitridge Park Trail System. As such, the project would result in beneficial impacts in regard to recreational opportunities, safety, and access within the project area. The project would not result in substantial population growth within the area, either directly or indirectly; refer to Section 4.14, *Population and Housing*. While other projects and development in the project area (including further improvements in the Summitridge Park Trail System) are considered probable and foreseeable, environmental analysis of these future projects would be conducted on a project-by-project basis in accordance with CEQA. Although the project may incrementally affect other resources that were determined to be less than significant, the project's contribution to these effects is not considered “cumulatively considerable,” in consideration of the relatively nominal project impacts and required mitigation measures.

- c) ***Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?***

**Less Than Significant Impact With Mitigation Incorporated.** This Initial Study reviewed the proposed project's potential impacts related to aesthetics, air quality, geology and soils, greenhouse gases, hydrology/water quality, noise, hazards and hazardous materials, traffic, among other disciplines. As concluded in this Initial Study, the proposed project would result in less than significant impacts with implementation of the recommended mitigation measures. Therefore, the proposed project would not result in environmental impacts that would cause substantial adverse effects on human beings.

## 4.22 REFERENCES

The following references were utilized during preparation of this IS/MND. These documents are available for review at the City of Diamond Bar Parks and Recreation Department, 21810 Copley Drive, Diamond Bar, California 91765, or accessed at the indicated web page.

1. California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2017*, [https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2017/ghg\\_inventory\\_trends\\_00-17.pdf](https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf), accessed July 8, 2020.
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6. California Department of Resources Recycling and Recovery, *Green Building Materials*, <https://www.calrecycle.ca.gov/greenbuilding/materials#Material>, accessed July 8, 2020.
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9. California Geological Survey, *Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the Claremont-Upland Production -Consumption (P-C) Region, Los Angeles and San Bernardino Counties, California, Special Report 202 – Plate 1*, [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR\\_202/](ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_202/), 2007.
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13. City of Diamond Bar, *Diamond Bar Municipal Code*, codified through Ordinance No. 01(2019), enacted January 15, 2019.
14. City of Diamond Bar, *Diamond Bar Parks and Recreation Master Plan*, July 2011.
15. Cogstone, *Cultural Resources Assessment for the Canyon Loop Trail Project, City of Diamond Bar, Los Angeles County, California*, July 2020.

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19. Los Angeles County Airport Land Use Commission, *Brackett Field Airport Land Use Compatibility Plan*, [http://planning.lacounty.gov/assets/upl/project/brackett\\_alucp\\_final.pdf](http://planning.lacounty.gov/assets/upl/project/brackett_alucp_final.pdf), December 9, 2015.
20. Los Angeles County Public Works, *Disaster Route Maps – City of Diamond Bar*, <https://dpw.lacounty.gov/dsg/DisasterRoutes/map/Diamond%20Bar.pdf>, July 7, 2008.
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22. Michael Baker International, *Results of Coastal California Gnatcatcher and Cactus Wren Focused Surveys for the Canyon Loop Trail Improvement Project in the City of Diamond Bar, Los Angeles County, California*, August 7, 2020.
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*Logan Freeberg, GIS Supervisor*



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## **5.0 INVENTORY OF MITIGATION MEASURES**

### **AESTHETICS**

- AES-1 To minimize construction-related impacts to scenic vistas and the visual character and quality of the project area, the project contractor shall ensure that all construction materials, heavy-duty equipment, and debris piles are staged and screened from public view in a designated construction staging area. Staging areas shall be approved and subject to periodic field inspections by the City of Diamond Bar Parks and Recreation Department, or responsible designee(s).

### **BIOLOGICAL RESOURCES**

- BIO-1 Prior to construction and during the appropriate blooming periods for special-status plant species with the potential to occur within the survey area, a qualified botanist shall conduct a focused rare plant survey in areas with suitable habitat to determine presence or absence of special-status plant species. The surveys shall be floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity), and shall be inclusive of, at a minimum, the areas proposed for trail improvements and those immediately surrounding those areas. The results of the survey shall be documented in a letter report. If individual or populations of special-status plant species are found within the areas proposed for disturbance, measures to avoid and minimize impacts shall be recommended. The surveys and reporting shall follow 2018 California Department of Fish and Wildlife (CDFW) and/or 2001 California Native Plant Society guidelines.

Although not expected, if State- and/or Federally-listed plant species are present and avoidance is infeasible, consultation with the U.S. Fish and Wildlife Service (USFWS) and/or CDFW shall be required and an Incidental Take Permit(s) from the USFWS and/or CDFW shall be obtained prior to the commencement of project activities.

- BIO-2 In consultation with the U.S. Fish and Wildlife Service (USFWS), the City of Diamond Bar Parks and Recreation Department shall obtain an Incidental Take Permit and prepare a low-effect habitat conservation plan (HCP) to permit removal of habitat suitable for and/or used by sensitive wildlife species, particularly coastal California gnatcatchers (*Poliophtila californica californica*) known to occur on-site.

Avoidance and minimization measures that may be required in a low-effect HCP for the proposed project, subject to consultation with the USFWS, include, but are not limited to, preconstruction nesting surveys for coastal California gnatcatcher and avoidance of any active nests or scheduling of work outside of the gnatcatcher nesting season, environmental training for all construction personnel, biological monitoring during initial vegetation removal, closing and restoration of any extraneous trail sections to recreational use, and on-site restoration and preservation of coastal sage scrub communities within the survey area (i.e., in the vicinity of the impacts).

- BIO-3 If project-related construction activities are initiated during the nesting season for coastal California gnatcatcher (CAGN; *Poliophtila californica californica*) and cactus wren (CACW; *Campylorhynchus brunneicapillus*) (February 15th through September 15th), a nesting bird clearance survey shall be conducted within seven days prior to the start of construction within a 500-foot buffer of the project site. The survey shall be conducted by a qualified biologist with demonstrable experience identifying CAGN and CACW nesting behavior and finding their nests, and who has been approved by the U.S. Fish and Wildlife Service (USFWS) to conduct a CAGN survey. If an active CAGN or CACW nest is found during the survey, no project-related construction shall be allowed within 500 feet of an active CAGN nest or 300 feet of an active CACW nest, or within an alternative safe distance as determined by the qualified

biologist based on topography, visual shielding, nest progress, and the type of construction and associated disturbance, until the active nest has been determined by the qualified biologist to have failed or to have successfully gone to completion (i.e., the nestlings have fledged and are no longer reliant on the nest). Results of the nesting bird clearance survey, shall be compiled in a memorandum and submitted to the City and the USFWS for project records.

**BIO-4** If project-related activities are to be initiated during the general avian nesting season (January 1st through August 31st), a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than three days prior to the start of any vegetation removal or ground-disturbing activities. The qualified biologist shall survey all suitable nesting habitat within the project's development footprint, and areas within a biologically-defensible buffer zone surrounding the project's development footprint. If no active nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures would be required.

If an active nest is found, the bird species shall be identified and a "no-disturbance" buffer shall be established around the active nest. The size of the "no-disturbance" buffer shall be determined based on the judgement of the qualified biologist and level of activity and sensitivity of the species. The qualified biologist shall periodically monitor any active nests to determine if project-related activities occurring outside the "no-disturbance" buffer disturb the birds and if the buffer should be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the "no-disturbance" buffer may occur following an additional survey by the qualified biologist to search for any new nests in the restricted area.

## **CULTURAL RESOURCES**

**CUL-1** If previously unidentified cultural resources are encountered during ground-disturbing activities, work in the immediate area shall halt and a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology, shall be contacted by the City of Diamond Bar Parks and Recreation Director, or designated designee, immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources (CRHR) eligibility. If the discovery proves to be eligible for the CRHR and cannot be avoided by project activities, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources. In the event that an identified cultural resource is of Native American origin, the qualified archaeologist shall consult with the City of Diamond Bar Parks and Recreation Department staff to implement Native American consultation procedures.

## **GEOLOGY AND SOILS**

**GEO-1** If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Diamond Bar Community Development Director. With direction from the Community Development Director, a paleontologist certified by the County of Los Angeles shall evaluate the find prior to resuming grading in the immediate vicinity of the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of the identified resources.

## **NOISE**

- NOI-1 Prior to the initiation of construction, the City of Diamond Bar Director of Public Works, or authorized agents (such as the City's Public Works Manager/Assistant City Engineer) acting within the scope of the particular duties delegated to them, shall ensure that all project plans and specifications stipulate that:
- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State-required noise attenuation devices.
  - A construction notice shall be mailed to residents within a 500-foot radius of the project and shall indicate the dates and duration of construction activities, as well as provide a City of Diamond Bar staff contact name and a telephone number where residents can inquire about the construction process and register complaints.
  - Construction haul routes shall be designed to avoid noise sensitive uses to the maximum extent feasible (e.g., residences etc.).
  - During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
  - Construction equipment staging areas shall be located away from adjacent sensitive receptors.
  - Pursuant to City of Diamond Bar Municipal Code Section 8.12.720, all construction activities associated with the proposed project shall be limited to the hours between 7:00 a.m. and 7:00 p.m. on weekdays and on Saturdays. Construction on Sundays and Federal holidays shall be prohibited.

## **TRIBAL CULTURAL RESOURCES**

- TCR-1 Prior to the commencement of any ground disturbing activity at the project site, the City of Diamond Bar shall retain a Native American monitor. The Native American monitor shall be selected from a tribe that has requested that a monitor be present, and in which the project site is within their ancestral region of occupation. The Native American monitor shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined as activities that may include, but are not limited to, grubbing, tree removals, boring, grading, excavation, drilling, and trenching. The Native American monitor shall complete daily monitoring logs that shall provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when all ground-disturbing activities on the project site are completed, or when the Native American monitor has indicated that all upcoming ground-disturbing activities at the project site have little to no potential for impacting tribal cultural resources.
- TCR-2 In the event tribal cultural resources are discovered during project construction, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 50 feet) until the find can be assessed. All tribal cultural resources unearthed by project activities shall be evaluated by the Native American monitor and a qualified archaeologist if one is present. If the resources are Native American in origin, the affected tribe will retain it/them in the form and/or manner the tribe deems appropriate, for educational, cultural and/or historic purposes. Work may continue in other parts of the project site while evaluation and any required recovery activities take place. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include

implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

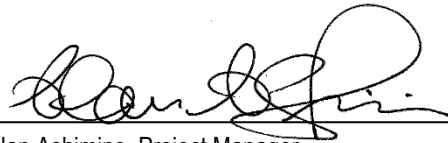
- TCR-3      In the event human remains are encountered during project construction, said remains shall require proper treatment in accordance with Health and Safety Code 7050.5, which dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the coroner shall contact, by telephone within 24 hours, the Native American Heritage Commission and Public Resources Code (PRC) 5097.98 shall be followed. PRC 5097.98 requires identification of the “most likely descendent,” and that remains are investigated and that appropriate recommendations are made for treatment of the remains.

## **6.0 CONSULTANT RECOMMENDATION**

Based on the information and environmental analysis contained in the Initial Study, we recommend that the City of Diamond Bar prepare a Mitigated Negative Declaration for the Canyon Loop Trail Improvement Project. We find that the proposed project could have a significant effect on a number of environmental issues, but that mitigation measures have been identified that reduce such impacts to a less than significant level. We recommend that the second category be selected for the City's determination (see Section 7.0, Lead Agency Determination).

October 2020

Date



Alan Ashimine, Project Manager  
Michael Baker International



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## 7.0 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

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

—

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 4 have been added. A MITIGATED NEGATIVE DECLARATION will be prepared.

✓

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

—

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

—

Signature:



Title:

Community Development Director

Printed Name:

Greg Gubman, AICP

Agency:

City of Diamond Bar

Date:

October 2, 2020



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