Draft

Environmental Impact Report

for the

Village South Specific Plan

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ES.1 INTRODUCTION

This document is a Draft Environmental Impact Report (EIR) with respect to the proposed Village South Specific Plan (Project) and has been prepared by the City of Claremont (City) to comply with the California Environmental Quality Act (CEQA).

CEQA requires that projects subject to an approval action by a public agency of the State of California, and that are not otherwise exempt or excluded, undergo an environmental review process to identify and evaluate potential impacts. Section 15050 of the CEQA Guidelines states that environmental review shall be conducted by the Lead Agency, defined in CEQA Guidelines Section 15367 as the public agency with principal responsibility for approving a project. The Project is subject to approval actions by the City, which is therefore Lead Agency for CEQA purposes.

In accordance with CEQA Guidelines Section 15123, this section of the Draft EIR provides a brief description of the Project; identifies significant effects and proposed mitigation measures or alternatives that would reduce or avoid those effects; and describes areas of controversy and issues to be resolved.

ES.2 OVERVIEW OF THE PROPOSED PROJECT

Project Objectives

Section 15124(b) of the CEQA Guidelines states that "the statement of objectives should include the underlying purpose of the project." The underlying purpose of the Project is to establish a new land use framework for the Project area that would achieve the following objectives: Expand the Village; Shape New Development; Create a Diverse Mix of Uses; Ensure Active Mobility; Create High Quality Design; and provide for Straightforward Implementation.

Project Location

The Project encompasses 24 acres within the City of Claremont that are bounded by Indian Hill Boulevard on the east, Arrow Highway on the south, Bucknell Avenue on the west, and Santa Fe Street on the north, as well as the parcels immediately fronting the east side of Indian Hill Boulevard between Arrow Highway and Santa Fe Street.

Project Characteristics

The Project would establish a new framework for private development and public space in order to further the goals of the City to create an extension of the existing historic Village. The Project emphasizes sustainability, walkability, and a development code that would shape the character buildings. The Plan Area is generally organized into three area. The Village South Core consists of the northerly third and is centered around the historic Vortox building, which is to be adaptively reused. This area would provide a Village environment. The Village South Flex area in the center of the Project would create a transition, with some commercial ground floors, townhomes, and a new community gathering space. The southern portion of the Project would be the Village South Edge, which would create a transitional form between the Village and the neighborhoods beyond.

For the purposes of this EIR, the Project has been assumed to enable a development capacity of 1,000 residential units; 100,000 square feet of retail space; 45,000 square feet of office; and a 50-room hotel.

ES.3 ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6(a) of the CEQA Guidelines requires an EIR to "describe the range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives."

The City considered a No Project Alternative, that would continue land use and development activity within the Project are under the existing regulatory framework, and two alternative Specific Plan concepts: a Conventional Development Alternative and a Commercial TOD Alternative. These alternatives would create variances in impact levels but would not avoid any of the significant effects of the Project. Furthermore, they would not achieve the City's objectives as successfully as the Project.

ES.4 AREAS OF KNOWN CONTROVERSY

The State CEQA Guidelines¹ require that a Draft EIR identify areas of controversy known to the Lead Agency, including issues raised by other agencies and the public. The level of development accommodated by the plan has been an area of controversy at public meetings.

ES.5 ISSUES TO BE RESOLVED

The State CEQA Guidelines² require that an EIR present issues to be resolved by the lead agency. These issues include the choice between alternatives and whether or how to mitigate potentially significant impacts. The major issues to be resolved by the City regarding the proposed Project are whether the proposed Project or an alternative should or should not be approved.

¹ California Public Resources Code, tit. 14, sec. 15123.

² California Public Resources Code, tit. 14, sec. 15123(b)(3).

ES.6 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The following is a summary of the environmental impacts associated with implementation of the proposed Project and the mitigation measures that have been identified in the EIR to avoid or lessen the severity of potentially significant impacts.

Aesthetics

The Project is within a Transit Priority Area and has been crafted to result in positive aesthetic urban form As such, the Project would have a less than significant Aesthetic impact.

Air Quality

The potential construction and operational emissions associated with the build out of the Project were modeled and compared against South Coast Air Quality Management District thresholds. No significant Air Quality impacts were identified.

Cultural Resources

Several historic structures were identified within the Project area. If redeveloped, the Vortox building would be adaptively reused. However, future development under the Project could result in the demolition of residences within the Project area that have been identified as historic. The removal of these residences would be a significant and unavoidable impacts on cultural resources. CEQA requires that all feasible mitigation be undertaken even if it does not mitigate below a level of significance. Therefore, the following mitigation shall be incorporated into the Project:

MM-CUL-1 Prior to obtaining a building permit for any project that would modify a structure included on the City Register, the applicant of such project shall retain a qualified consultant to prepare a Historical Resource Documentation Report for the structure and shall demonstrate that all modifications will be designed and implemented in compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995) and/or the State Historical Building Code, as appropriate.

Prior to demolition of any structure deemed to be historic, the project applicant shall complete Historic American Building Survey (HABS) level documentation. The intent is to preserve an accurate record of historic property that can be used in research and other preservation activities. HABS documentation shall provide the appropriate level of visual documentation and written narrative based on the importance of the resource, as determined in consultation with Planning Division staff.

Energy

The potential energy consumption associated with the build out of the Project was calculated. The Project would comply with current State green building code and the City's energy and sustainability policies. No significant Energy impacts were identified.

Geology /Soils

The Project is located in a seismically active region. However, development within the Project would comply with current State building codes and would therefore not expose people to greater risk from seismic activity or unstable soils. No significant Geology or Soil impacts were identified.

Greenhouse Gas Emissions

The Project would lead to the development of a mixed-use, walkable neighborhood in close proximity to transit. As such, the Project is aligned with State, regional and City strategies that are aimed to reduce Greenhouse Gas Emissions. The Project would also comply with State and City energy and sustainability building codes and policies. No significant Greenhouse Gas Emissions impacts were identified.

Hazards & Hazardous Materials

The demolition of existing buildings and ground disturbance for construction has the potential to uncover subsurface contaminants present as a result of former uses of the site. The potential hazards cannot be fully evaluated until redevelopment commences; therefore, impacts are potentially significant. To mitigate the potential for significant impacts resulting from undetermined subsurface contaminants, the following measures shall be incorporated into the Project:

MM-HAZ-1 At such time as development is proposed within any portion of the Specific Plan, the Applicant shall prepare and provide to the City a detailed Phase I environmental site assessments to identify if specific areas that will require additional investigation and sampling.

If warranted, soil sampling shall be conducted in locations with high potential for presence of Title 22 metals, TPH, SVOCs, and VOCs, as well as lead related to lead-based paint and OCP from the application of termiticides.

If concentrations of contaminants are found to be above residential California Human Health Screening Levels (CHHSL), soil remediation and health and safety measures required by the applicable regulatory agencies [e.g., California Department of Toxic Substances (DTSC), Los Angeles Regional Water Quality Control Board (LARWQCB), etc.] shall be implemented by the Project Applicant during construction, which will be included in a Soils Management Plan and a Health and Safety Plan, as applicable.

MM-HAZ-2 The underground storage tanks associated with the former Hibbard Auto Center and Chevron Service Station shall be removed under the oversight of the Los Angeles County Department of Public Works Environmental Programs Division prior to redevelopment of either site.

Hydrology & Water Quality

The Project would lead to redevelopment of an existing urban area with new development that would comply with all applicable hydrology and water quality regulations. As such, significant impacts were identified.

Land Use / Planning

The Project is intended to further the Land Use policy goals of the City of Claremont. The Project would have less than significant land use and planning impacts.

Noise

The level of noise associated with development assumed under the Project was estimated. Construction activity within the Project has the potential to result in significant noise impacts. As such, the following mitigation is included in this EIR:

- **MM N-1** Prior to the issuance of grading permits, the Project Applicant or their designee shall develop a Construction Noise Reduction Plan to minimize construction noise at nearby noise sensitive receptors. The Construction Noise Reduction Plan shall be developed in coordination with a certified acoustical consultant and the Project construction contractors, and shall be approved by the City of Claremont. The Construction Noise Reduction Plan shall outline and identify noise complaint measures, best management construction practices, and equipment noise reduction measures. The Construction Noise Reduction Plan shall include, but is not limited to, the following actions:
 - Construction equipment shall be properly maintained per manufacturers' specifications and fitted with the best available noise suppression devices (i.e., mufflers, silencers, wraps, etc.).
 - Noise construction activities whose specific location on the Project Site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck

idling) shall be conducted as far as feasibly possible from the nearest noise sensitive land uses.

- If feasible, schedule grading activities so as to avoid operating numerous pieces of heavy-duty off-road construction equipment (e.g., backhoes, dozers, excavators, loaders, rollers, etc.) simultaneously in close proximity to the boundary of properties of off-site noise sensitive receptors surrounding the Project Site to reduce construction noise levels by approximately 5 to 10 dB.
- Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on power equipment to reduce construction noise by 10 dB or more.
- Where feasible, temporary barriers, including but not limited to, sound blankets on existing fences and walls, or freestanding portable sound walls, shall be placed as close to the noise source or as close to the receptor as possible and break the line of sight between the source and receptor where modeled levels exceed applicable standards. Noise barriers may include, but is not necessarily limited to, using appropriately thick wooden panel walls (at least 0.5-inches think). Such barriers shall reduce construction noise by 5 to 10 dB at nearby noise-sensitive receptor locations. Alternatively, field-erected noise curtain assemblies could be installed around specific equipment sites or zones of anticipated mobile or stationary activity. The barrier material is assumed to be solid and dense enough to demonstrate acoustical transmission loss that is at least 10 dB or greater than the estimated noise reduction effect. These suggested barrier types do not represent the only ways to achieve the indicated noise reduction in dB; they represent examples of how such noise attenuation might be attained by this measure.
- Implement noise compliant reporting. A sign, legible at a distance of 50 feet, shall be
 posted at the Project construction site, providing a contact name and a telephone
 number where residents can inquire about the construction process and register
 complaints. This sign will indicate the dates and duration of construction activities. In
 conjunction with this required posting, a noise disturbance coordinator will be
 identified to address construction noise concerns received. The contact name and the
 telephone number for the noise disturbance coordinator will be posted on the sign.
 The coordinator will be responsible for responding to any local complaints about
 construction noise and will notify the County to determine the cause and implement
 reasonable measures to the complaint, as deemed acceptable by the City.

Population / Housing

The Project provides for focused development to accommodate a portion of the forecasted growth for the city of Claremont. The Project would have less than significant population and housing impacts.

Executive Summary

Public Services

The Project provides development that is included in the growth forecasts used for planning purposes by service providers in the city of Claremont. The Project would have less than significant public service impacts.

Transportation

The Project is within a Transit Priority Area for which transportation impacts would be presumed to be less than significant.

In order to ensure that construction impacts would not have a significant adverse effect on the safe functioning of the circulation system, the following mitigation shall be imposed on future development within the Project:

MM- TRAF-1 Construction Management Plan

A detailed Construction Management Plan, including street closure information, a detour plan, haul routes, and a staging plan, will be prepared and submitted to the City for review and approval for each phase of the Specific Plan's development to formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Specific Plan Area and shall include, but not be limited to, the following elements, as appropriate:

- Advance, bilingual notification of adjacent property owners and occupants of upcoming construction activities, including durations and daily hours of operation.
- Prohibition of construction worker or equipment parking on adjacent streets. Specific off-site or on-site parking facilities must be identified and secured prior to the issuance of building permits.
- Temporary pedestrian, bicycle, and vehicular traffic controls during all construction activities adjacent to public ROW to ensure traffic safety and to improve traffic flow on public roadways. These controls shall include, but not be limited to, flag people trained in pedestrian and bicycle safety.
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets.
- Potential sequencing of construction activity to reduce the amount of constructionrelated traffic on arterial streets.

- Containment of construction activity within the Specific Plan Area boundaries.
- Prohibition of construction-related vehicle/equipment parking on surrounding public streets.
- Coordination with Metro to address any construction near the rail ROW.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers shall be implemented as appropriate.
- Scheduling of construction-related deliveries, haul trips, etc., so as to occur outside the commuter peak hours to the extent feasible.

Tribal Cultural Resources

The potential for impacts to Tribal Cultural Resources is associated with the ground disturbance during construction. The following mitigation measure shall be incorporated into the Project to reduce the potential for impacts from inadvertent discovery of Tribal Cultural Resources:

MM-TCR-1 At such time as development is proposed within the Specific Plan area that include site excavation for subterranean levels or structures shall, the City shall consult with the Gabrieleño Band of Mission Indians-Kizh Nation to determine the need for monitoring of construction-related ground disturbance activities. If monitoring occurs, the monitor shall complete logs on a daily basis. The logs will provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. In addition, the monitor shall provide insurance certificates, including liability insurance, for any archaeological resource(s) encountered during grading and excavation activities pertinent to the provisions outlined in the California Environmental Quality Act, California Public Resources Code Division 13, Section 21083.2 (a) through (k). The on-site monitoring shall end when the Project Site grading and excavation activities are completed, or when the Tribal Representatives and monitor have indicated that the site has a low potential for archeological resources. All archaeological resources unearthed by the Project construction activities shall be evaluated by a qualified archaeologist and an approved Native American Monitor. Upon discovery of any archaeological resource, construction activities in the immediate vicinity of the find shall be ceased until the find can be assessed. If the resources are Native American in origin, the Tribe shall coordinate with the landowner regarding the treatment and curation of these resources.

If any human skeletal material or related funerary objects are discovered during ground disturbance, the Native American Monitor will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The Monitor will then notify the

construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If Native American, the coroner will notify the NAHC as mandated by State law who will then appoint a Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the Project and keeping the remains in situ and protected. If the Project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the Qualified Archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes 4 or more burials, the location is considered a cemetery and a separate treatment plan shall be created. The Project Applicant shall consult with the Tribe regarding avoidance of all cemetery sites. Once complete, a final report of all activities is to be submitted to the NAHC.

Utilities / Service Systems

The Project would allow for future development that is within the forecasted growth used by utility providers for planning purposes. No significant effects would occur.

1.1 PURPOSE OF THIS REPORT

The subject of this Draft Environmental Impact Report (EIR) is the proposed Village South Specific Plan (proposed Project). In accordance with the California Environmental Quality Act (CEQA), all projects requiring a discretionary approval by a public agency within the State of California are required to undergo review to identify and evaluate the potential environmental impacts associated with implementation of the project. A Specific Plan is considered a project under CEQA. Therefore, this EIR has been prepared to evaluate the potential effects of the Project in conformance with CEQA and the CEQA Guidelines.

By law, cities in California must develop a General Plan that articulates the city's goals and policies. As per Government Code Section 65450, a city may adopt Specific Plans to implement aspects of the General Plan. The provisions of Section 65450 require that a Specific Plan be consistent with the adopted General Plan and that all subsequent subdivision, development, public works projects, and zoning regulations with the Specific Plan area must be consistent with the Specific Plan. If adopted by the City, the Project would become the primary means of regulating and directing future development within the Specific Plan area.

As stated in the State CEQA Guidelines, an EIR is an informational document intended to inform public agency decision makers and the public generally of any significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. Public agencies shall consider the information in the EIR, along with other information that may be presented to the agency, prior to approving the Project.

CEQA defines "Lead Agency" as the public agency with primary responsibility for approving a project and thus has primary responsibility for ensuring compliance with the CEQA process. The City of Claremont (City) is the "Lead Agency" pursuant to CEQA. CEQA requires the Lead Agency to prepare, process, and consider the information contained in an EIR prior to taking any discretionary action on a project.

Through its preliminary review of the Project, the City determined the Project may have a significant impact on the environment and, therefore, prepared this EIR. A primary purpose of an EIR is to provide decision-makers and the public with information regarding the potential environmental effects associated with the Project; identify methods to reduce or eliminate significant direct, indirect and cumulative Project impacts; and to detail reasonable Project alternatives that would reduce any identified significant impacts.

1.0 Introduction

This EIR considers the actions associated with the Project to determine the short-term and long-term effects associated with the implementation of the Specific Plan. This EIR discusses both the direct and indirect impacts of this Project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects. This document analyzes the environmental effects of the Project to the degree of specificity appropriate to the actions allowed by the Specific Plan, as required under Section 15146 of the State CEQA Guidelines. While Section 15146(b) of the CEQA Guidelines states that the EIR evaluating a plan need not be as detailed as that for a specific construction project, CEQA guidelines 15182 allows for certain development projects that are consistent with the Specific Plan to be exempt from further CEQA review. As such, this EIR identifies potentially significant impacts resulting from construction and operation of the development that is consistent with the Specific Plan and provides mitigation measures to reduce or avoid significant effects.

1.2 CEQA PROCESS

A principal objective of CEQA is that the environmental review process be a public one. In meeting this objective, the EIR must inform members of the public, decision makers, and technically oriented reviewers of the physical impacts associated with a proposed project. To this end, this EIR has been written to make it more understandable for nontechnically oriented reviewers while providing the technical information necessary for City personnel to proceed with the processing of the Project.

The CEQA Guidelines outline a process for environmental review that includes a series of steps that must be completed prior to a final decision on the Project.

A Notice of Preparation (NOP) was prepared and distributed in July 2019. A public scoping meeting was held on July 29, 2019 in the City Council Chambers of the City of Claremont. The Project as described in the NOP was an earlier iteration of the Specific Plan. The plan has been refined in response to the scoping process and other community input. However, as the plan is substantially the same in concept and scope, no new NOP is necessary.

CEQA requires that the Lead Agency provide the public and agencies the opportunity to review and comment on the DEIR. The DEIR will be circulated for a 45-day review and comment period, starting December 4, 2020, and ending January 18, 2020. Copies of this Draft EIR have been sent to the State Clearinghouse, responsible agencies, and agencies that commented on the NOP. The Notice of Availability, with directions on how to access the DEIR, has been sent to all other interested parties that have requested notice. The EIR has been provided to all parties who have previously requested copies and has been made available for public review at the Planning Department in City Hall and on the City's website at:

https://www.ci.claremont.ca.us/government/departments-divisions/planning-division/ceqadocuments.

After completion of the review period, a Final EIR will be prepared that includes responses to comments submitted on the DEIR and any necessary corrections or additions to the DEIR. The Final EIR will be made available to agencies and the public prior to the City making a determination on the Project. Once the Final EIR is complete, the City may prepare Findings of Fact pursuant to CEQA Guidelines Section 15091 and issue a Notice of Determination pursuant to CEQA Guidelines Section 15094, the final step in the CEQA process.

1.3 ORGANIZATION OF THIS REPORT

A description of the organization of this EIR and the content of each section is provided below to assist the reader in using this EIR as a source of information about the Project.

Executive Summary, contains a brief summary of the Project; potential significant effects with proposed mitigation measures; alternatives; areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and issues to be resolved.

Section 1.0: Introduction, contains introductory information on the CEQA process and organization of the EIR.

Section 2.0: Project Description, presents a detailed description of the Project.

Section 3.0: Environmental Setting, describes the existing conditions within the Project area as a baseline against which potential impacts are evaluated.

Section 4.0: Evaluation of Impacts, contains analysis of the impacts of the Project and identifies mitigation measures where appropriate.

Section 5.0: Other CEQA Considerations discusses other topics identified in Sections 15126.4 and 15126.6 of the State CEQA Guidelines.

Section 6.0: Alternatives, discusses and analyzes alternatives to the Project in accordance with the requirements of CEQA.

Section 7.0: Effects Found Not To Be Significant, provides a description of topics that were not analyzed in detail yet determined not to be significant.

Appendices to this EIR include technical information, studies and other materials used in the preparation of this EIR.

As stated in Section 15124 of the CEQA Guidelines, the Project Description of an EIR must contain the location and boundaries of the project; a statement of the project objectives sought; a general description of the project's characteristics; and a brief description of the intended uses of the EIR. This Section identifies such required information.

2.1 LOCATION AND BOUNDARIES

The Project is within the City of Claremont (City), which is located within the Pomona valley in the eastern portion of Los Angeles County (County). The Project encompass approximately 24 gross acres south of the existing, historic Claremont Village, and includes the block bounded by Indian Hill Boulevard, Arrow Highway, Bucknell Avenue, and Santa Fe Street, as well as the parcels immediately fronting the east side of Indian Hill Boulevard between Arrow Highway and Santa Fe Street, excluding the Claremont Villas Senior Apartments, as shown in **Figure 2-1: Project Location**. Additionally, the Plan area includes the public rights of way of Indian Hill Boulevard, Arrow Highway, Bucknell Avenue, Santa Fe Street, and Green Street adjacent to parcels included within the Plan Area.

2.2 OBJECTIVES

The Claremont Village and surroundings have grown steadily over the past few decades. At the same time, key land uses in the Plan Area are ripe for change. For example, the Hibbard Auto Center on Indian Hill Boulevard has ceased operations. In addition, the County Metropolitan Transit Authority (METRO) Gold Line light rail is being extended eastward from Azusa to Claremont. The City, with support from METRO, has prepared the Village South Specific Plan to integrate these changes with a community-based vision of the future.

The Project is a regulatory plan that provides objective development standards, objective design review metrics, and design guidelines for parcels in the Plan Area in order to support predictable development within this extension of Claremont's historic Village. Claremont has a vision of a human scaled town center in which residents can pursue a wide range of daily activities within vibrant public realm and minimal reliance on the automobile. As such, the City's planning efforts are based on the following set of guiding principles: Vital Mix of Uses; Complete Street Network; Human-Scale Design; Walkable Block Structure; Village-Scale Architecture; Pedestrian-Oriented Frontages; Strong Local Landscape; Shared Parking; Sustainable Design; Community Health; and Historic Preservation.



SOURCE: Sargent Town Planning - 2020



FIGURE **2-1**

Project Location

Building on these principles, the primary goals of the Project are:

- 1. Expand the Village, by continuing to grow the value and success of the existing Village, by providing an expanded customer base of nearby residents with walkable connections, and by creating new development of similar character.
- 2. Shape New Development through standards and guidelines for residential, commercial and mixeduse development as well as for public streets and open spaces.
- 3. Create a Diverse Mix of Uses by defining land uses and development intensities that encourage market-based, mixed-use development
- 4. Ensure Active Mobility by providing a high quality, comfortable, and safe pedestrian and bicycling environment
- 5. Create High Quality Design through development standards and design guidelines that reflect the vision of Claremont and protect historic structures.
- 6. Straightforward Implementation strategies and processes that encourage orderly development

2.3 PLAN CHARACTERISTICS

The Project defines a conceptual urban framework of walkable blocks, complete streets and humanscale public spaces that reflect the patterns of the historic Village. The Project then adds land use and development standards that encourage a mix of uses, building types and architecture. The Project allows for design characteristics and configurations that are the physical manifestation of the goals, planning principles, and community priorities that form the objectives of the Project. Highly customized development standards have been prepared. The final development that occurs within the Project area will result from an iterative process involving property owners and developers as well as City's staff and appointed commissions. Proposed development within the Plan area would proceed through either a "VSSP Master Development Permit" process, or through a "VSSP Development Permit" based on specific thresholds, with regard to project magnitude, as defined in the Plan. All new buildings will be required to provide active, attractive ground-floor frontages that shape and enliven the streetscapes and other public spaces. The form and character of all new buildings will be reflective of the essential character and quality of the historic Village, incorporating contemporary building materials, methods, and technologies to make such development feasible in a 21st century context.

The Plan Area is generally organized into three "Urban Character Areas" – The Village South Core, Village South Flex, and Village South Edge, as shown in **Figure 2-2: Specific Plan Urban Character**.



SOURCE: Sargent Town Planning - 2020



FIGURE 2-2

Specific Plan Urban Character

The Village South Core consists of the northerly third of the super-block west of Indian Hill - centered around the historic Vortox building, which is to be adaptively reused as an anchor feature of the Core. The Village South Core would provide an active, pedestrian-oriented Village environment, with shops, restaurants and other active commercial uses similar to the Village area north of the rail line. Buildings fronting Indian Hill Boulevard would be predominantly one and two-stories in scale with some three-story buildings. Buildings heights would increase to predominantly 3 and 4 stories to the west, with some buildings being as high as 5 stories.

Village South Flex is intended as a transitional area from the urban commercial core of Village South to its more suburban edges. Flexible, "commercial-ready" ground floors and frontages are incentivized in this area. These generally taller ground-floor spaces are designed to accommodate direct-access residential units (such as townhouses and live-work units entered directly from semi-private stoops and dooryards) the near-term, and/or additional shops, restaurants, and other permitted commercial uses, should the market for such uses exceed that available in the Village South Core. The area would also feature a new, central community gathering space.

The Village South Edge (and the southerly third of the super-block fronting on Arrow Highway) provides a transition from the "drivable suburban" character of the surrounding neighborhoods to the "walkable urban" character of the Village. Uses are quite flexible along these edges, and may include office buildings, townhouses, apartment buildings, mixed-use buildings and retail buildings, with corner lots prioritized for ground floor commercial rather than ground floor housing. The Plan describes a "Neighborhood-Scale Overlay" for these edges to ensure that new development emphasizes compatibility with the scale and character of the Village and Claremont's historic neighborhoods.

The Project places a strong emphasis on sustainability in the broadest sense of term – highlighting the Plan Area's close proximity to the Village proper, Claremont's consortium of Colleges, and regionally-serving transit; requiring urban development patterns that promote walkability and reduce auto-dependence and VMT; integrating storm-water management within the Project's robust public-realm network, and incentivizing building technologies that reduce dependence on non-renewable resources.

A component of the Project is the "Village South Development Code" which details the standards and guidelines to shape the design, character and uses of buildings and site improvements. Development standards of the Project include permitted uses, placement, massing, height, frontages, open space, parking, signages, and street design. The current zoning of the Plan Area is a mixture of Commercial Highway, Commercial Professional and Business Industrial Park. These allow for a mixture of 1, 2 and 3 story buildings – including some housing if the City chooses to grant a Conditional Use Permit. The Project would replace these zones with a single "Village South Zone" – a form-based zone with specific requirements for the subdivision and organization of the Plan Area into a network of walkable "Village-Scale" blocks; standards and guidelines for the design and configuration of the resulting public realm

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network; and special overlays that further shape and organize Building Frontage(s), Buildings Height, and Building Character within the Plan Area.

As part of the implementation of the Project, the current superblock on the west side of Indian Hill Boulevard would be subdivided and reorganized into multiple smaller-scaled blocks through the westward extension of Green Street to Watson Drive, and the provision of an additional east west connection north of Green Street labelled on the plan as "New" Santa Fe Street between Indian Hill Boulevard and Bucknell Drive. Likewise, public realm improvements along Indian Hill Boulevard would support new development along the properties on the east side of the street. The block structure and pedestrian connectivity of the Village South public realm network is intended to continue and expand the high-quality patterns and characteristics established in the historic Village. Furthermore, the Project calls for the development of customized "complete streets" standards that balance the prioritization of pedestrian safety and comfort with reasonable accommodation of automobiles.

The policies, standards, requirements, and procedures provided in the Project would supersede any conflicting provisions of the Claremont Municipal Code (CMC), including the Zoning Ordinance of the City of Claremont (Title 15 to the CMC). Any subsequent tract or parcel maps, development agreements, local public work projects, zoning text or map amendments, and any action requiring ministerial or discretionary approval related to Village South must be consistent with the Village South Specific Plan. In addition, development plans would need to meet sustainability criteria including the most recent Passive Design Handbook by the California Sustainability Alliance, sustainable landscape and stormwater runoff design recommendations in the Urban Street Stormwater Guide published by the National Association of City Transportation Officials (NACTO); solar panels; and bicycle facilities.

2.4 DEVELOPMENT POTENTIAL

As described above, the Project creates a framework for future development within the Plan Area. For the purposes of CEQA analysis, the following use-mix and development intensity is assumed to be the potential outcome of the Project. Of possible development scenarios for the Plan Area, this represents the most intense, yet feasible buildout, is considered the maximum development capacity for analysis purposes, and is presented in **Table 2-1: Assumed Project Buildout** below.

Table 2-1 Assumed Project Buildout				
Land Use	Quantity			
Residential	1,000 units			
Retail	100,000 square feet			
Office	45,000 square feet			
Hotel	50 keys/40,000 square feet			

In order to evaluate this potential development, the following assumptions have been made:

- Parcels north of the new Santa Fe Street could accommodate 212 new residential units, a 50-room hotel, 30,000 square feet of office space and 45,000 square feet of retail uses.
- Parcels south of the new Santa Fe Street and north of the extension of Green Street could accommodate 372 new residential units, 15,000 square feet of office space and 40,000 square feet of retail uses.
- South of the extension of Green Street could accommodate 389 new residential units and 10,000 square feet of retail uses.
- Parcels on the east side of Indian Hill Boulevard could accommodate 27 new residential units and 5,000 square feet of retail uses

2.5 INTENDED USES OF THIS EIR

In addition to adopting the proposed Specific Plan, the City will consider a General Plan Amendment to change the land use designation to a new Village South Specific Plan (VSSP) Zone and to establish regulatory frontage and building height overlays as well as other amendments to the Municipal Code and Zoning Map to ensure consistency. As per CEQA Guidelines 15002, these actions qualify as a Project under CEQA, and therefore require environmental review. In accordance with section 21002.1 of CEQA, the purpose of this EIR is to provide the City, serving as the lead agency, information on: the potentially significant environmental impacts that would result from implementation of these action.

As a Program EIR, defined in Section 15168 of the CEQA Guidelines, this EIR evaluates the broad environmental effects with the expectation that the analysis will be adequate for much of the future development that occurs within the Specific Plan Area, with the acknowledgement that subsequent, project-specific environmental review may be required for particular aspects of projects at the time of project implementation. Furthermore, pursuant to CEQA guidelines 15182, projects that are consistent with this specific plan would be exempt from further CEQA review.

2.0-7

Section 15125 of the CEQA Guidelines requires that an EIR include a description of the existing environment. This section provides a general overview of the environmental setting of the Project. Additional information on existing conditions is provided as relevant within each Environmental Impacts and Analysis subsection.

3.1 LOCATION

The City of Claremont (the City) is located approximately 30 miles east of the City of Los Angeles at the eastern edge of Los Angeles County. The City is bordered by the City of Pomona to the south, City of La Verne to the west, the City of Upland to the east, and the San Gabriel Mountains to the north.

The City is traversed by the I-210 Foothill Freeway and the 1-10 San Bernardino Freeway as well as the Metrolink San Bernardino Line running in the Santa Fe Railroad right of way. Major east-west thoroughfares providing access include Arrow Highway, Foothill Boulevard (Historic Route 66), and Baseline Road. Major north-south thoroughfares include Towne Avenue, Mountain Avenue, Indian Hill Boulevard, College Avenue, Claremont Boulevard, and Monte Vista Avenue.

The Project area is bounded by Indian Hill Boulevard, Arrow Highway, Bucknell Avenue, and Santa Fe Street, as well as the parcels immediately fronting the east side of Indian Hill Boulevard between Arrow Highway and Santa Fe Street.

3.2 EXISTING LAND USES

The City of Claremont contains a population of approximately 36,500 and is known for the Claremont Colleges, its historic downtown Village, and its residential neighborhoods.

The Project area is located to the south of the existing Village. The entire Plan Area is approximately 24 acres, of which 17.4 acres is privately-owned parcels and the balance is the public rights-of-way. The Project area includes 34 parcels containing 18 commercial structures, 21 residences and approximately 1.2 acres of vacant land. Commercial uses include Vortox Air Technology, King Precision Glass, the former Hibbard Auto Center, a Chevron gas station, and other small commercial offices.

To the west of the Project area is the Keck Graduate Institute campus and a business park. To the north is a railroad right of way beyond which is the Claremont Village. To the east and south are residential neighborhoods that include a mix of single and multi-family structures.

3.3 PLANNING FRAMEWORK

The State of California mandates that every city and county adopt a general plan as its blueprint for the future. The City of Claremont adopted its current General Plan in 2006 with the concept of sustainability as its guiding principle. As defined in the General Plan, sustainability is defined broadly to include environmental, economic, fiscal, social and political sustainability. The City has also adopted a Sustainable City Plan that created a detailed framework for Claremont to implement its vision of becoming a sustainable City.

The General Plan Land Use map designates the Project area as a mix of Business Park, Commercial and Professional Office. The current zoning of the Village South Plan Area is a mixture of Commercial Highway, Commercial Professional and Business Industrial Park. These allow for a mixture of 1, 2 and 3 story buildings – including housing if the City chooses to grant a Conditional Use Permit.

3.4 PUBLIC FACILITIES AND SERVICES

The City provides police services through the Claremont Police Department. The City maintains 21 parks and sports fields with 2,534 acres of public parkland. The City also provides trash collection and recycling services to all residents and businesses in Claremont.

Fire Protection Services are provided by the Los Angeles County Fire Department.

Public educational in the City is provided by the Claremont Unified School District (CUSD). CUSD educates over 7,000 students in seven elementary schools, one, an intermediate school, and a high school.

Water services to the City is provided by Golden State Water Company; wastewater is handled by the Los Angeles County Sanitation Districts.

Metrolink and Metro rail utilize the rail line through Claremont. There is an existing Metrolink stop and a planned Metrorail station. Foothill Transit provides bus service, connecting Claremont with neighboring communities.

The purpose of the following sections is to inform decision makers and the public about the potential for environmental effects as a result of the Project. The range of topics presented within this Section is derived from Appendix G of the State CEQA Guidelines. Each topical section is organized under the following headings:

- Thresholds of Significance: The criteria by which the effects are measured. The City uses the questions contained in the CEQA Guidelines, Appendix G, as thresholds.
- Environmental Setting: A brief summary of existing physical conditions and the regulatory framework in place.
- Impact Analysis: An evaluation of how the change from existing conditions that would result from the Project relates to the Thresholds of Significance. Construction, operation, and cumulative impacts are considered.
- Mitigation Measures: Whenever potentially significant impacts are identified, mitigation measures are provided that would avoid or minimize these impacts.

4.1.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to aesthetics are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

Except as provided in Public Resources Code Section 21099, would the project:

- 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?

4.1.2 ENVIRONMENTAL SETTING

Existing Conditions

The Specific Plan Area encompasses approximately 24 gross acres south of the existing, historic Claremont Village. There are no designated scenic vistas or scenic highways within the surrounding area. Views of the San Gabriel Mountains are present along the north south roadways such as Indian Hill Boulevard. Intervening development blocks views from of the mountains along east-west roadways.

The north portion of the Specific Plan Area consist of business park uses. The central portion of the specific plan area consists of commercial uses. Office/professional uses occur in the south and east portions of the Specific Plan Area. The northern portion of the site is occupied by manufacturing firms – Vortox Air Technology and King Precision Glass – and a former an automobile dealership. The southern and eastern portions of the Specific Plan Area contain residences and small business offices.

Surrounding Land Uses

The surrounding area includes the Keck Graduate Institute (KGI) campus immediately west of the Specific Plan Area; the Vista and Oakmont residential neighborhoods to the south and east; and the existing Village to the north.

4.1 Aesthetics

Light and Glare

Within the Specific Plan Area, existing light sources generally include buildings and lighting along roadways and parking lots. Interior light emanating from a structure, exterior light sources such as security lighting, or lighting to illuminate features for safety or decorative purposes may be visible within the existing landscape.

Sunlight reflecting off of a reflective surface can result in glare effects and unsafe visual conditions that may interfere with the vision of motorists operating vehicles in the proximity or that may otherwise generally degrade scenic views. Existing levels of nighttime light and daytime glare are consistent with an urban village level of development. Within the Specific Plan Area, existing light sources generally include buildings and lighting along roadways and parking lots. Structures within the Specific Plan Area do not exhibit highly reflective materials.

Regulatory Framework

State of California

Public Resources Code (PRC) §21099(d) states that "Aesthetic and parking impacts of a residential, mixeduse residential, or employment center project on an infill site within a transit priority area (TPA) shall not be considered significant impacts on the environment." PRC Section 21099 defines a "transit priority area" as an area within 0.5 mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." PRC Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." PRC Section 21099 defines an "employment center project" as "a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and that is located within a transit priority area. PRC Section 21099 defines an "infill site" as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

Caltrans

The California Department of Transportation (Caltrans) State Scenic Highway System includes a list of state designated scenic highways and highways which are eligible for the state scenic highway designation. Currently, there are no state scenic highways officially designated within the City of Claremont.

4.1 Aesthetics

City of Claremont

The City's General Plan recognizes the importance of community character and the City uses design guidelines to maintain the ambiance, streetscape and feel that reflect the values of the community. The General Plan identifies concepts that support the aesthetic character of the City. These concepts are also evident in the City's zoning code which includes design guidelines for different zoning districts.

4.1.3 IMPACT ANALYSIS

Project Impacts

a.

Would the project have a substantial adverse effect on a scenic vista?

Scenic vistas near the Specific Plan Area are dominated by the hillsides and lower slopes of the San Gabriel Mountains to the north. According to the City of Claremont's Hillside Ordinance, "The ordinance provides the framework for allowing residential development in the hillsides within concentrated areas where the terrain is flatter and easier to develop." The Project Site will not be in a hillside area within Claremont. The project is not located within the hillside portion of Claremont and would not block views of the San Gabriel Mountains. Views of the hillsides and mountains to the north as well as other topographic features to the south will continue to be available from vantage points along Indian Hill Boulevard. Views of the hillsides and the distant San Bernardino Mountains and other topographic features to east are blocked by existing urban development. The project would have a less than significant impact on a scenic vista and no mitigation is required.

b.

Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings and historic buildings within a state scenic highway?

As mentioned above, the Caltrans State Scenic Highway System includes a list of state designated scenic highways and highways which are eligible for the state scenic highway designation. Currently, there are no state scenic highways officially designated within the City of Claremont.¹ Therefore, the project would not substantially damage scenic resources, including, but not limited to trees, rock outcroppings and historic buildings within a state scenic highway.

Caltrans, California State Scenic Highway System Map, https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983, accessed October 5, 2020.

4.1 Aesthetics

In non-urbanized areas, would the project 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?

The Project is within 0.5 miles of the Claremont Metro station and therefore qualifies as a Transit Priority Area. The Project designates the property within the Specific Plan for residential, mixed-use residential, or employment center uses. The Project consists of urban infill is zoned for commercial uses and the Project will have a floor area ratio greater than 0.75 on a lot located within an urban area. As such, PRC Section 21099 applies to the Project. Therefore, based on Public Resources Code (PRC) §21099(d), aesthetic impacts of the Specific Plan would be less than significant.

Additionally, future development within the Specific Plan Area would be developed in accordance with the land use and development standards contained the Village South Specific Plan. The Project is based on the same guiding principles that guide the existing regulatory context of the City. The Specific Plan explicitly states that Provide development standards and design guidelines for high quality, eclectic architecture and landscaping reflective of the historic character and quality of central Claremont. The design guidelines would ensure that the architecture of new buildings would be comparable to the exiting Village. This would be accomplished through massing, articulation and fenestration. Building heights would vary throughout the plan area. Furthermore, streetscapes, paseos, plazas, courts and other public and semi-public open spaces would match the standard of character and quality set by the Village and would include the addition of a wide variety of large canopy trees along streets and within public spaces. This framework of design standards and building forms that reflects the vision of Claremont as described in the General Plan and would create a cohesive visual character that connects the Project with the Village. As such, the Project would not adversely affect the aesthetic character of the area and impacts would be less than significant.

d.

c.

Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Lighting will be used on the property for nighttime illumination of the area. The project has minimal potential to create a new source of lighting, given that the site is already developed with standards consistent with those of an urban village, despite its underused and/or vacant portions. Views would not be affected because outdoor lighting will comply with the Claremont Municipal Code. The City of Claremont General Plan states streetlights and safety lights at signalized intersections provide for public safety. The City created a Landscape and Lighting District Program in 1990 to help cover the cost of street

4.1-4

lighting as well as landscaping within public rights-of-way. Through adherence to applicable Claremont standards, the project would not generate excessive light or glare. Impacts would be less than significant and no mitigation is required.

Cumulative Impacts

The Project is intended to expand Claremont's existing Village with new uses that are designed to be compatible with the existing Village. The Project sits between the existing Claremont village, residential neighborhoods and the Keck Graduate Institute. The development of the Project would create a connection between these areas. As such, the cumulative effect of the Project would not be adverse.

4.1.4 MITIGATION

As impacts would be less than significant, no mitigation is necessary

4.2.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to air quality are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

Would the project:

- 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?

4.2.2 ENVIRONMENTAL SETTING

Existing Conditions

Criteria Air Pollutants

The criteria air pollutants that are most relevant to current air quality planning and regulation in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD), include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb). In addition, volatile organic compounds (VOC) and toxic air contaminants (TACs) are a concern in the SCAB, but are not classified under Ambient Air Quality Standards (AAQS). The characteristics of each of these pollutants are briefly described below.

The State AAQS and their attainment status in the SCAB for each of the criteria pollutants are summarized in **Table 4.2-1: Ambient Air Quality Standards and Attainment Status**. The term "nonattainment area" is used to refer to an air basin in which one or more ambient air quality standards are exceeded. Under federal and State standards, the SCAB is currently designated as nonattainment for O₃ and PM₁₀.

		California		Federal	
Pollutant	Averaging Period	Standards	Attainment Status	Standards	Attainment Status
07070 (0)	1-hour	0.09 ppm (180 μg/m³)	Nesetteinsent	_	• Nonattainment
Ozone (O3)	8-hour	0.070 ppm (137 μg/m³)	Nonattainment	0.070 ppm (137 μg/m³)	
	Annual Arithmetic mean	0.03 ppm (57 μg/m³)	- Attainment -	0.053 ppm (100 μg/m³)	Unclassified/ Attainment
Dioxide (NO ₂)	1-hour	0.18 ppm (339 μg/m³)		0.100 ppm (188 μg/m³)	
Carbon	8 hours	9.0 ppm (10 mg/m ³)	- Attainment	9 ppm (10 mg/m³)	Unclassified/ Attainment
Monoxide (CO)	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)	
Sulfur Dioxide	1 hour	0.25 ppm	Attainment	0.075 ppm	Attainment
(SO ₂)	24 hour	0.04 ppm	Attainment	—	
	30-day average	1.5 μg/m³	_	—	- Unclassified/ Attainment
Lead (Pb)	Rolling 3-month average	_	Attainment	0.15 μg/m³	
Respirable	24 hour	50 µg/m³		150 μg/m³	Nonattainment
Particulate Matter (PM10)	Annual arithmetic mean	20 µg/m³	Nonattainment	_	
24 ł	24 hours	_		35 μg/m³	
Matter (PM _{2.5})	Annual arithmetic mean	12 μg/m³	Attainment	12 μg/m ³	Attainment

Table 4.2-1 Ambient Air Quality Standards and Attainment Status

 Source:
 California Air Resources Board website at: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf (accessed May 2020) and CARB, "Area Designations Maps/State and National," http://www.arb.ca.gov/desig/adm/adm.htm (last reviewed December 28, 2018).

 Note:
 ppm = parts per million.

Ozone (O₃)

 O_3 is a highly reactive and unstable gas that is formed when reactive organic gases (ROGs), sometimes referred to as VOC, and nitrogen oxides (NOx), byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

Individuals exercising outdoors, children, and people with preexisting lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible sub-groups for ozone effects. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission and mortality rates have also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in high ozone communities.

Ozone exposure under exercising conditions is known to increase the severity of the observed responses mentioned above. Animal studies suggest that exposures to a combination of pollutants that include ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

Carbon Monoxide (CO)

CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with oxygen transport by competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

Reduction in birth weight and impaired neurobehavioral development has been observed in animals chronically exposed to CO resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels. These include pre-term births and heart abnormalities. Additional research is needed to confirm these results.

Nitrogen Dioxide (NO₂)

NO₂ is a reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO). NO₂ is also a byproduct of fuel combustion. Population-based health studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposures to NO₂ at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO₂ in healthy individuals. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

In animals, exposure to levels of NO_2 considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of O_3 and NO_2 .

A detailed discussion of the health effects of NO_2 is provided in the SCAQMD Final 2016 Air Quality Management Plan.¹

Particulate Matter (PM₁₀ and PM_{2.5})

A consistent correlation between elevated ambient respirable and fine particulate matter (PM₁₀ and PM_{2.5}) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks, and the number of hospital admissions has been observed in different parts of the US and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life span, and an increased mortality from lung cancer.

Daily fluctuations in fine-particulate-matter concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of PM₁₀ and PM_{2.5}.

¹ *SCAQMD, Final 2016 Air Quality Management Plan*, Appendix I: Health Effects, accessed May 2020, https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-qualitymanagement-plan/final-2016-aqmp/appendix-i.pdf?sfvrsn=14.

Sulfur Dioxide (SO₂)

SO₂ is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, as well as from chemical processes occurring at chemical plants and refineries. When SO₂ oxidizes in the atmosphere, it forms sulfates (SO₄). Collectively, these pollutants are referred to as sulfur oxides (SOx).

A few minutes of exposure to low levels of SO₂ can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. Asthmatics' acute exposure to SO₂ increases their resistance to air flow and reduces their breathing capacity, which leads to severe breathing difficulties. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO₂.

Animal studies suggest that despite the fact that SO_2 is a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off cells lining the respiratory tract.

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO₂ levels. In these studies, efforts to separate the effects of SO₂ from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.

Most of the health effects associated with fine particles and SO₂ are also associated with SO₄. Both mortality and morbidity effects have been observed with an increase in ambient SO₄ concentrations. However, efforts to separate the effects of SO₄ from the effects of other pollutants have generally not been successful. Clinical studies of asthmatics exposed to sulfuric acid suggest that adolescent asthmatics are possibly a subgroup susceptible to acid aerosol exposure. Animal studies suggest that acidic particles, such as sulfuric acid aerosol and ammonium bisulfate, are more toxic than nonacidic particles like ammonium sulfate. Whether effects are attributable to acidity or to particles remains unresolved.

Lead (Pb)

Pb occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne Pb in the SCAB. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so the majority of such combustion emissions are associated with off-road vehicles, such as racecars and some aircraft. However, because leaded gasoline was emitted in large amounts from vehicles when leaded gasoline was used for on-road motor vehicles, Pb is present in many urban soils and can be resuspended in the air. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and the use of secondary lead smelters. Pb is also found in lead-based paint, which is considered health hazard for people, especially children. From the turn of the century through

the 1940s, paint manufacturers used lead as a primary ingredient in many oil-based paints. Use of lead in paint decreased, but was still used until 1978 when it was banned from residential use. Remodeling, renovations, or demolition activities in older buildings could disturb lead-based paint surfaces.

Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence levels. In adults, increased lead levels are associated with increased blood pressure.

Lead poisoning can cause anemia, lethargy, seizures, and death. It appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early-age environmental exposure, and elevated blood lead levels can occur due to the breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of lead because of previous environmental lead exposure of their mothers.

Volatile Organic Compounds (VOCs)

VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide (CO₂), carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. VOC emissions often result from the evaporation of solvents in architectural coatings. Reactive organic gases (ROG) are any reactive compounds of carbon, excluding methane, CO, CO₂ carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. ROG emissions are generated from the exhaust of mobile sources.² Both VOC and ROGs are precursors to ozone and the terms can be used interchangeably.³

Toxic Air Contaminants (TACs)

TACs refer to a diverse group of "non-criteria" air pollutants that can affect human health but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed previously, but because their effects tend to be local rather than regional. TACs are classified as carcinogenic and noncarcinogenic, where carcinogenic TACs can cause cancer and noncarcinogenic TAC can cause acute and chronic impacts to different target organ systems (e.g., eyes, respiratory, reproductive, developmental, nervous, and cardiovascular).

² SCAQMD, Appendix A: Calculation Details for CalEEMod (October 2017), accessed May 2020, http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6.

³ Both VOC and ROGs are both precursors to ozone so they are summed in the CalEEMod report under the header ROG. For the purposes of comparing the ROG value to a VOC significance threshold, the terms can be used interchangeably.

4.2 Air Quality

The California Air Resources Board (CARB) and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a TAC in California.⁴ Diesel Particulate Matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the State as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 microns [μm]), including a subgroup of ultrafine particles (ultrafine particles have a diameter less than 0.1 μm). Collectively, these particles have a large surface area, which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and cancer-causing substances.

Exposure to DPM may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. DPM levels and resultant potential health effects may be higher near heavily-traveled roadways with substantial truck traffic or near industrial facilities. According to CARB, DPM exposure may lead to the following adverse health effects: (1) aggravated asthma; (2) chronic bronchitis; (3) increased respiratory and cardiovascular hospitalizations; (4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease.⁵

To provide a perspective on the contribution that DPM has on the overall Statewide average ambient air toxics potential cancer risk, CARB evaluated risks from specific compounds using data from CARB's ambient monitoring network. CARB maintains a 21-site air toxics monitoring network that measures outdoor ambient concentration levels of approximately 60 airborne toxins. CARB has determined that, of the top ten inhalation risk contributors, DPM contributes approximately 68 percent of the total potential cancer risk.⁶

Local Air Quality

For evaluation purposes, SCAQMD has divided its territory into 36 Source Receptor Areas (SRA) with operating monitoring stations in most of the SRAs. These SRAs are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within each geographical area.

The Project Site is located in the SCAB. The SCAQMD air quality monitoring station closest to the site is the Pomona Station, 924 N. Garey Avenue, Pomona, which monitors hourly ozone and nitrogen dioxide. Upland Station 1350 San Bernardino Road in Upland monitors CO, PM₁₀, PM_{2.5} and NO₂. The Riverside-

⁴ The complete list of such substances is located at www.arb.ca.gov/toxics/id/taclist.htm.

⁵ California Air Resources Board (CARB), Diesel and Health Research, accessed May 2020, https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

⁶ SCAQMD, "Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV)." (May 2015), accessed May 2020, http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf.
Rubidoux Station at 5888 Mission Boulevard in Riverside monitors SO₂. The air quality trends from these stations are used to represent the ambient air quality in the Project area. The ambient air quality data in **Table 4.2-2: Air Quality Monitoring Summary** shows that NO₂, SO₂, and CO levels are within the applicable State and federal standards.

Air Pollutant	Average Time (Units)	2016	2017	2018
	State Max 1 hour (ppm)	0.127	0.147	0.112
	Days > CAAQS threshold (0.09 ppm)	20	18	7
Ozone (O ₃)	Max 8 hour (ppm)	0.092	0.114	0.092
	Days > NAAQS threshold (0.070 ppm)	26	35	10
	Days > CAAQS threshold (0.07 ppm)	29	38	11
	Max 1 hour (ppm)	1.7	1.9	1.7
	Days > CAAQS threshold (20 ppm)	0	0	0
Corbon Monovido (CO)*	Days > NAAQS threshold (35 ppm)	0	0	0
Carbon Monoxide (CO)	Max 8 hours (ppm)	1.3	1.4	1.2
	Days > CAAQS threshold (9.0 ppm)	0	0	0
	Days > NAAQS threshold (9.0 ppm)	0	0	0
	Max 1 hour (ppm)	0.071	0.064	0.059
	Days > CAAQS threshold (0.18 ppm)	0	0	0
Nitrogen dioxide (NO ₂)*	Annual arithmetic average concentration (ppm)	0.16	0.015	0.014
	Days > CAAQS threshold (0.030 ppm)	0	0	0
	Days > NAAQS threshold (0.053 ppm)	0	0	0
	Max 24 hour (ppm)	0.001	0.001	0.001
Sulfur dioxide (SO ₂)*	Days > CAAQS threshold (0.04 ppm)	0	0	0
	Days > NAAQS threshold (0.14 ppm)	0	0	0
	Annual arithmetic average concentration (ppm)	0.0002	0.0002	0.0002
	Days > CAAQS threshold (9.0 ppm)	0	0	0
	Days > NAAQS threshold (9.0 ppm)	0	0	0
	Max 24 hour (µg/m³)	184.0	106.5	156.6
	Days > CAAQS threshold (50 μ g/m ³)	6	9	7
Particulate matter (PM ₁₀)	Days > NAAQS threshold (150 μg/m ³)	1	0	1
	Annual arithmetic average concentration ($\mu g/m^3$)	26.3	32.8	33.4
	Exceeded > CAAQS threshold (20 μ g/m ³)	Yes	Yes	Yes
	Max 24 hour (μg/m ³)	44.9	53.2	47.9
	Days > NAAQS threshold (35 μg/m ³)	5	7	3
Fine particulate matter (PM _{2.5})	Annual arithmetic average concentration (μ g/m 3)	17.6	14.5	12.6
	Exceeded > CAAQS threshold (12 μ g/m ³)	Yes	Yes	Yes
	Exceeded > NAAQS threshold (15 μ g/m ³)	Yes	No	No

Table 4.2-2 Air Quality Monitoring Summary

Source: California Air Resources Board, "Top 4 Summary," https://www.arb.ca.gov/adam/topfour/topfour1.php.

Notes: * Data obtained from SCAQMD, Historical Data By Year, https://www.aqmd.gov/home/air-quality/air-quality-data-studies/historicaldata-by-year.

> = exceeds; CAAQS = California Ambient Air Quality Standard; max = maximum; mean = annual arithmetic mean; μg/m3 = micrograms per cubic meter; N/A = no data; NAAQS = National Ambient Air Quality Standard; ppm = parts per million.

As detailed in **Table 4.2-2**, the State 1-hour O₃ standard was exceeded 22 to 47 times per year in the past three years.

Existing Project Site Emissions

The Project is within the City of Claremont, which is located within the Pomona valley in the eastern portion of Los Angeles County. The predominant land uses within the Project Site include a vacant automobile sales lot, residential uses, an auto service station, two light industrial uses, offices, and service commercial businesses. A mix of single- and multifamily residential uses are present along portions of Indian Hill Boulevard, Arrow Highway and Bucknell Avenue. Approximately 80,000 square feet of industrial uses and six (6) single family residential uses and 10,000 square feet of office uses would be removed as part of the Project. **Table 4.2-3: Existing Maximum Operational Emissions**, provides the air quality emissions of those existing uses. As shown, the existing uses do not emit significant quantities of "Criteria Air Pollutants".

	VOC	NOx	СО	SOx	PM 10	PM2.5
Source			pounds/d	ау		
Area	2	<1	1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	1	6	16	<1	5	1
Total	3	6	17	<1	5	1
SCAQMD threshold	75	100	550	150	150	55
Threshold exceeded?	No	No	No	No	No	No

Table 4.2-3 Existing Maximum Operational Emissions

Source: CalEEMod. Refer to Air Quality Output Sheets in Appendix B.

CO = carbon monoxide; NOx = nitrogen oxides; PM₁₀ = particulate matter less than 10 microns; PM_{2.5} = particulate matter less than 2.5 microns; VOC = volatile organic compounds; SOx = sulfur oxides.

Regulatory Framework

State of California

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both State and federal air pollution control programs within California. In this capacity, CARB conducts research, sets State AAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial

equipment. It also sets fuel specifications to further reduce vehicular emissions and the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the State. The CAAQS include more stringent standards than the NAAQS. Criteria pollutants that are in nonattainment under the CAAQS include O_3 and PM_{10} .

Air Quality and Land Use Handbook

CARB published the *Air Quality and Land Use Handbook*⁷ on April 28, 2005, to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions.

Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural road with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 50 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13 of the California Code of Regulations, Section 2485)

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling⁸ measure includes regulations that pertain to air quality emissions. Specifically, Section 2485 states that during construction, the idling of all diesel-fueled commercial vehicles weighing more than 10,000 pounds shall be limited to 5 minutes at any location. In addition, Section 93115 in Title 17 of the California Code of Regulations (CCR)⁹ states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

⁷ CARB, Air Quality and Land Use Handbook: A Community Health Perspective (April 2005), https://www.arb.ca.gov/ch/handbook.pdf.

⁸ CARB, Section 2485 in Title 13 of the CCR, https://www.arb.ca.gov/msprog/truck-idling/13ccr2485_09022016.pdf.

⁹ CARB, Final Regulation Order: Amendments to the Airborne Toxic Control Measure For Stationary Compression Ignition Engines (May 19, 2011), https://www.arb.ca.gov/diesel/documents/FinalReg2011.pdf.

California Air Resources Board (CARB)

CARB Rule 2449, General Requirements for In-Use Off-Road Diesel-Fueled Fleets

Requires off-road diesel vehicles to limit nonessential idling to no more than 5 consecutive minutes.¹⁰

CARB Rule 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

CARB Rule 2485 requires commercial vehicles weighing more than 10,000 pounds to limit nonessential idling to no more than 5 consecutive minutes.¹¹

Local

South Coast Air Quality Management District

SCAQMD shares responsibility with CARB for ensuring that all State and federal ambient air quality standards are achieved and maintained over an area of approximately 10,743 square miles. This area includes the South Coast Air Basin and portions of the Salton Sea and Mojave Desert Air Basins, all of Orange County, and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. It does not include the Antelope Valley or the non-desert portion of western San Bernardino County.

SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the Air Basins. SCAQMD, in coordination with the SCAG, is also responsible for developing, updating, and implementing the AQMP for the Air Basins. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the national and/or California ambient air quality standards.

SCAQMD approved the 2016 AQMP on March 3, 2017. The 2016 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2016 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. The AQMP also includes an update on the current air quality status of the SCAB. The SCAB is designated as a nonattainment area for the federal 2008 and 1997 8-hour ozone standards as well as the federal 2006 24-hour PM₁₀ standard. The Coachella Valley monitored data also shows that it will meet the PM₁₀ NAAQS, pending SCAQMD documentation submittal and subsequent USEPA approval of days flagged for high-wind exceptional events. However, USEPA has requested that SCAQMD conduct additional monitoring in the southeastern portion of the Coachella Valley before a re-designation can be considered.

¹⁰ CARB, Final Regulation Order: Regulation for In-Use Off-Road Diesel-Fueled Facts, accessed May 2020, https://ww3.arb.ca.gov/msprog/ordiesel/documents/finalregorder-dec2011.pdf

¹¹ SCAQMD, Rule 1113 Architectural Coating (amended September 6, 2013).

The 2016 AQMP does not include new modeling efforts for PM_{10} ; since the mid-1990s, peak 24-hour average PM_{10} concentrations have not exceeded the current federal standard (150 µg/m3) other than on days with windblown dust from natural events, which can be excluded upon USEPA concurrence. Regardless, the USEPA has requested additional ambient monitoring prior to consideration of redesignation.

SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the Air Basins by various stationary, area, and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board, which limit the emissions that can be generated by various uses/activities and that identify specific pollution reduction measures, which must be implemented in association with various uses and activities. These rules not only regulate the emissions of the federal and State criteria pollutants but also TACs and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among the SCAQMD rules applicable to the proposed Project are Rule 403 (Fugitive Dust), Rule 403.1 (Supplemental Fugitive Dust Control Requirements For Coachella Valley Sources), and Rule 1113 (Architectural Coatings). Rule 403 requires the use of stringent best available control measures to minimize PM₁₀ emissions during grading and construction activities. Rule 403.1 requires active operations within a Blowsand Zone stabilize new man-made deposits of bulk material and requires a fugitive dust control plan for construction projects. Rule 1113 will require reductions in the VOC content of coatings, with a substantial reduction in the VOC content limit for flat coatings to 50 grams per liter (g/L) in July 2008.¹² Additional details regarding these rules and other potentially applicable rules are presented as follows.

Rule 403 (Fugitive Dust). This rule requires fugitive dust sources to implement Best Available Control Measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. This may include application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites. SCAQMD Rule 403 is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust (see also Rule 1186).

Rule 1113 (Architectural Coatings). This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

¹² SCAQMD, Rule 1113 Architectural Coating (amended September 6, 2013).

Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters). This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NOx emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.

City of Claremont

Local jurisdictions have the authority and responsibility to reduce air pollution through their police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air pollutant emissions resulting from its land use decisions. The City is also responsible for the implementation of transportation control measures as outlined in the AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation for significant air quality impacts by conditioning discretionary permits and monitors and enforces implementation of such mitigation. In accordance with CEQA requirements, the City does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the City and region would meet federal and State standards. Instead, the City relies on the expertise of the SCAQMD and utilizes the CEQA *Air Quality Handbook* as the guidance document for the environmental review of plans and development proposals within its jurisdiction. Consistency with the City's General Plan pertaining to air quality is provided below.

4.2.3 IMPACT ANALYSIS

Under CEQA, SCAQMD is a commenting agency on air quality within its jurisdiction or impacting its jurisdiction. Under the Federal CAA, SCAQMD has adopted federal attainment plans for O_3 and PM₁₀. SCAQMD reviews projects to ensure that they would not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan.

Daily Emissions Thresholds

SCAQMD has identified thresholds to determine the significance of both local air quality impacts and impacts to regional air quality for construction activities and project operation, as shown in **Table 4.2-4**: **Mass Daily Emissions Thresholds.**

	Construction	Operational
Pollutant	pounds/da	у
Volatile Organic Compounds (VOC)	75	55
Nitrogen dioxide (NOx)	100	55
Carbon monoxide (CO)	550	550
Sulfur dioxide (SOx)	150	150
Respirable particulate matter (PM $_{10}$)	150	150
Fine particulate matter (PM _{2.5})	55	55

Table 4.2-4 Mass Daily Emissions Thresholds

Source: SCAQMD, CEQA Air Quality Handbook (November 1993), accessed May 2020, <u>https://www.aqmd.qov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf</u>

Localized Significance Thresholds

The local significance thresholds are based on the SCAQMD's Final *Localized Significance Threshold (LST) Methodology* (LST Methodology)¹³ guidance document for short-duration construction activities. The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project Site because of construction activities. The SCAQMD provides voluntary guidance on the evaluation of localized air quality impacts to public agencies conducting environmental review of projects located within its jurisdiction. Localized air quality impacts are evaluated by examining the on-site generation of pollutants and their resulting downwind concentrations. For construction, pollutant concentrations are compared to significance thresholds for particulates (PM₁₀ and PM_{2.5}), CO, and NO2. The significance threshold for PM₁₀ represents compliance with SCAQMD Rule 403 (Fugitive Dust). The threshold for PM_{2.5} is designed to limit emissions and to allow progress toward attainment of the AAQS. Thresholds for CO and NO2 represent the allowable increase in concentrations above background levels that would not cause or contribute to an exceedance of their respective AAQS.

The LST Methodology provides lookup tables of emissions that are based on construction projects of up to 5 acres in size. These LST lookup tables were developed to assist lead agencies with a simple tool for evaluating the impacts from small typical projects. Ambient conditions for Pomona/Walnut Valley, as recorded in SRA 10 by the SCAQMD, were used for ambient conditions in determining appropriate

¹³ South Coast Air Quality Management District, *Final Localized Significance Threshold (LST) Methodology*, (June 2003, rev. July 2008).

threshold levels. Thresholds for each criteria pollutant for construction activity and Project operation are listed in **Table 4.2-5: Localized Significance Thresholds**.

	Construction	Operational
Pollutant	pound	ds/day
Nitrogen dioxide (NO2)	236	236
Carbon monoxide (CO)	1,566	1,566
Respirable particulate matter (PM10)	12	3
Fine particulate matter (PM _{2.5})	7	2

Table 4.2-5 Localized Significance Thresholds

Notes: Based on a distance to sensitive receptors of 25 meters (82 feet). SCAQMD's Localized Significance Threshold (LST) Methodology for CEQA Evaluations guidance document provides that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. LST values for 1.5-acre site.

CO Hotspot

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the proposed Project are above or below State and federal CO standards. If the Project causes an exceedance of either the State 1-hour or 8-hour CO concentrations, the Project would be considered to have a significant local impact. If ambient levels already exceed a State or federal standard, then project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 parts per million (ppm) or more, or 8-hour CO concentrations by 0.45 ppm or more pursuant to SCAQMD Rule 1303(b).

Cumulative

SCAQMD's *CEQA Air Quality Handbook* identifies several methods to determine the cumulative significance of land use projects (i.e., whether the contribution of a project is cumulatively considerable). However, SCAQMD no longer recommends the use of these methodologies. Instead, SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds identified previously also can be considered cumulatively considerable.¹⁴ SCAQMD neither recommends quantified

^{14 &}quot;White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions," SCAQMD Board Meeting, September 5, 2003, Agenda No. 29, Appendix D, D-3.

analyses of the emissions generated by a set of cumulative development projects, nor provides thresholds of significance to be used to assess the impacts associated with these emissions.

Methodology

Air pollutant emissions associated with the proposed Project would result from construction and operation of the proposed development. Specific analysis methodologies for all proposed Project-related sources of air emissions are discussed below.

Emissions Inventory Modeling

The California Emissions Estimator Model, known as CalEEMod, is the CARB–approved computer program model recommended by SCAQMD for use in the quantification of air quality emissions. CalEEMod was developed under the auspices of SCAQMD, with input from other California air districts. CalEEMod utilizes widely accepted models for emissions estimates combined with appropriate data that can be used if site-specific information is not available. For example, CalEEMod incorporates USEPA-developed emission factors; CARB's on-road and off-road equipment emission models, such as EMFAC and OFFROAD;¹⁵ and studies commissioned by other California agencies, such as the California Energy Commission and CalRecycle.

CalEEMod provides a platform to calculate both construction emissions and operational emissions from a land use development project. Emission sources covered by CalEEMod model include the following:

- One-time construction emissions associated with demolition, grading, utility installation, building, application of architectural coatings (e.g., paint), and paving from emission sources that include both off-road construction equipment and on-road mobile equipment associated with workers, hauling, and the delivery of construction materials to the Project Site. Construction emissions associated with dust control and disposal of waste at landfills are also included in the CalEEMod model.
- Operational emissions associated with the occupancy of development, such as on-road mobile vehicle traffic generated by the land uses; off-road emissions from landscaping equipment; energy (i.e., electricity and natural gas) and water usage in the buildings; and emissions from painting operations. The disposal of solid waste generated during the postconstruction use of the buildings is also included in the CalEEMod model.

¹⁵ EMFAC is an emissions factor model used to calculate emissions rates from on-road vehicles (e.g., passenger vehicles; haul trucks). OFFROAD is an emissions factor model used to calculate emission rates from off-road mobile sources (e.g., construction equipment). CalEEMod version 2016.3.2 utilizes CARB's 2014 version of EMFAC.

CalEEMod version 2016.3.2 was used to quantify the proposed Project's air quality pollutants. Proposed Project development would generate air pollutants from a number of individual sources during both construction and postconstruction (operational) use of the buildings and related activities.

Construction Emissions

Construction of the Project has the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment and through vehicle trips generated from workers and haul trucks traveling to and from the Project Site. In addition, fugitive dust emissions would result from soilhandling activities. Mobile-source emissions, primarily NOx, would result from the use of construction equipment, such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions.

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. CalEEMod is based on outputs from the CARB off-road emissions model (OFFROAD) and the CARB on-road vehicle emissions model (EMFAC), which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles. The input values used in this analysis are based on conservative assumptions in CalEEMod, with appropriate, Project-specific adjustments based on equipment types and expected construction activities. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity.

Operational Emissions

Operation of the Project has the potential to generate criteria pollutant emissions through vehicle trips traveling to and from the Project Site. In addition, emissions would result from area sources on site, such as natural gas combustion, landscaping equipment, and use of consumer products.

Operational emissions were estimated using the CalEEMod software, which was used to forecast the daily regional emissions from area sources that would occur during long-term Project operations. In calculating mobile-source emissions, CalEEMod calculates the emissions associated with on-road mobile sources associated with residents, workers, customers, and delivery vehicles visiting the proposed land uses.

For air quality emissions related to mobile uses, the net specific plan daily trips of 7,509 forecasted for all blocks was divided by the quantity of the proposed land use to identify the weekday daily trip rate. The

Saturday and Sunday trip rates were assumed to be the weekday rate adjusted by multiplying the ratio of the CalEEMod default rates for those days.

Localized Significance Emissions

Localized air quality impacts are evaluated by examining the on-site generation of pollutants and their resulting downwind concentrations. Emissions were estimated using the CalEEMod software. The LST mass rate look-up tables are applicable to the following pollutants only: NOx, CO, PM₁₀, and PM_{2.5}. LSTs are derived based on the location of the activity (i.e., the source/receptor area); the emission rates of NOX, CO, PM_{2.5}, and PM₁₀; and the distance to the nearest exposed individual. The location of the activity and the distance to the nearest exposed individual. The location of site photos, or site visits.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

Consistency with the Air Quality Management Plan

A consistency determination with regard to the SCAQMD's AQMP plays an important role in local agency project review by linking local planning and individual projects to the AQMP. In accordance with the procedures established in the SCAQMD's *CEQA Air Quality Handbook*,¹⁶ the analysis below addresses the criteria identified by the SCAQMD to determine the proposed Project's consistency with SCAQMD and SCAG air quality related policies.

- Will the project result in any of the following:
 - Increase the frequency or severity of existing air quality violations?
 - Cause or contribute to new air quality violations?
 - Delay the timely attainment of the air quality standards or the interim emission reductions specified in the AQMP?
 - Will the project exceed the assumptions utilized in preparing the AQMP?
 - Is the project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based?
 - To what extent is project development consistent with the AQMP land use policies?

According to the South Coast Air Quality Management District's *CEQA Handbook*, the consistency determination based on the first criterion pertains to ambient pollutant concentrations, rather than to total regional emissions, thus, requiring an analysis of the proposed Project's pollutant emissions relative

¹⁶ SCAQMD, CEQA Air Quality Handbook (April 1993), p. 12-3.

to localized pollutant concentrations.¹⁷ A complete review of the proposed Project's potential impact on ambient pollutant concentrations during construction and operation is provided below.

Regional Emissions

It is mandatory for all construction projects in the SCAB to comply with SCAQMD Rule 403 for fugitive dust. Rule 403 control requirements include measures to prevent the generation of visible dust plumes. Measures include, but are not limited to, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system or other control measures to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project Site, and maintaining effective cover over exposed areas. In addition, SCAQMD Rule 1113 would limit the VOC content of architectural coatings. Thus, compliance with these SCAQMD rules would further reduce construction related regional emissions.

Project-generated, construction-related emissions of criteria air pollutants and precursors were modeled in accordance with SCAQMD-recommended methodologies. Exact project-specific data (e.g., construction schedule, equipment types and number requirements, and maximum daily acreage disturbed) were not available at the time of this analysis. Project-generated emissions were modeled based on the proposed land uses, projected daily trips and default CALEEMod settings and parameters attributable to the construction period and site location. In order to estimate worst-case conditions, construction of the entire Specific Plan was assumed to occur concurrently.

Table 4.2-6: Project Construction Diesel Equipment Inventory displays the construction equipment required for each activity. The forecast of emissions generated during Proposed Project construction is based on assumptions regarding the type and number of off-road equipment operating.

Phase	Off-Road Equipment Type	Amount	Daily Hours	Horsepower [HP] (Load Factor)
Demolition	Concrete/Industrial Saws	1	8	81 (0.73)
	Excavators	3	8	158 (0.38)
	Rubber Tired Dozers	2	8	247 (0.40)
	Rubber Tired Dozers	3	8	247 (0.40)
Site Preparation	Tractors/Loaders/Backhoes	4	8	97 (0.37)
Grading	Excavators	2	8	158 (0.38)

Table 4.2-6 Project Construction Diesel Equipment Inventory

17 South Coast Air Quality Management District, CEQA Air Quality Handbook, p. 12-3, 1993.

Phase	Off-Road Equipment Type	Amount	Daily Hours	Horsepower [HP] (Load Factor)
	Graders	1	8	187 (0.41)
	Rubber Tired Dozers	1	8	247 (0.40)
	Scrapers	2	8	367 (0.48)
	Tractors/Loaders/Backhoes	2	8	97 (0.37)
	Cranes	1	7	231 (0.29)
	Forklifts	3	8	89 (0.20)
Building Construction	Generator Sets	1	8	84 (0.74)
	Tractors/Loaders/Backhoes	3	7	97 (0.37)
	Welders	1	8	46 (0.45)
Architectural Coating	Air compressors	1	6	78 (0.48)
	Pavers	2	8	130 (0.42)
Paving	Paving Equipment	2	8	132 (0.36)
	Rollers	1	7	80 (0.38)

Refer to **Appendix B**, Section 3.0: Construction Detail, for equipment inventory information.

The maximum daily regional construction emissions are provided in **Table 4.2-7: Unmitigated Regional Maximum Construction Emissions**. These impacts would be temporary in nature, lasting only for the construction period, and would not have a long-term impact on the region's ability to meet State and federal air quality standards. As shown in **Table 4.2-7**, when modeled without regulatory compliance measures, construction emissions would not exceed SCAQMD daily regional thresholds and impacts would be less than significant.

Unmitigated Regional Maximum Construction Emissions						
	VOC	NOx	СО	SOx	PM ₁₀	PM2.5
Source	pounds/day					
Maximum	68	46	58	<1	20	12
SCAQMD threshold	75	100	550	150	150	55
Threshold exceeded?	No	No	No	No	No	No

Table 4.2-7

Source: CalEEMod. Refer to Air Quality Output Sheets in Appendix B.

CO = carbon monoxide; NOx = nitrogen oxides; $PM_{10} = particulate matter less than 10 microns$; $PM_{2.5} = particulate matter less than 2.5 microns$; VOC = volatile organic compounds; SOx = sulfur oxides.

On-road mobile vehicles, electricity, natural gas, water, landscape equipment, solid waste, and wastewater would generate the majority of emissions on-site. The primary source of long-term criteria air pollutant emissions would be from Project-generated vehicle trips. The maximum daily regional operational emissions are provided in Table 4.2-8: Unmitigated Regional Maximum Operational Emissions. As shown in Table 4.2-8, operational emissions of the proposed Specific Plan land uses would fall below the SCAQMD daily regional thresholds. Additionally, when taking into account the removal of the existing uses, the net operational emissions would further be reduced and regional operational emissions impacts would be less than significant.

	voc	NOx	со	SOx	PM 10	PM 2.5
Source			ро	unds/day		
Area	28	1	82	<1	<1	<1
Energy	1	7	4	<1	1	1
Mobile	9	45	108	<1	45	12
Total	38	53	195	1	46	12
SCAQMD Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Existing	3	6	17	<1	5	1
Net Total	35	47	178	1	41	12
SCAQMD Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Table 4.2-8Unmitigated Regional Maximum Operational Emissions

Source: CalEEMod. Refer to Air Quality Output Sheets in **Appendix B.**

Abbreviations: CO = carbon monoxide; NOx = nitrogen oxide; $PM_{10} = particulate matter less than 10 microns$; $PM_{2.5} = particulate matter less than 2.5 microns$; VOC = volatile organic compound; SCAQMD = South Coast Air Quality Management District; SOX = sulfur oxide.

Localized Emissions

Ambient pollutant concentrations standards are forecasted for all criteria pollutants during proposed Project construction. The maximum localized construction and operational emissions are provided in **Table 4.2-9: Localized Construction and Operational Emissions**. These estimates assume the maximum area that would be disturbed during construction on any given day during Project buildout. Additionally, localized construction emissions include compliance with SCAQMD Rule 403 which is required to reduce impacts related to fugitive dust from the construction site. The proposed Project would result in a significant construction and operation health impact if concentration impacts would exceed these

thresholds and standards.¹⁸ As shown in **Table 4.2-6**, the daily maximum localized construction and operational emissions would not exceed the SCAQMD daily significance thresholds for all criteria pollutants and impacts would be less than significant, and thus would not constitute a significant human health effect at off-site sensitive receptors.

Localized Construction and Operational Emissions				
	NOx	СО	PM10	PM2.5
Source		On-Site Emissio	ons (pounds/day)	
Construction				
Total maximum emissions	40	31	5	2
LST threshold	236	1,566	12	7
Threshold Exceeded?	No	No	No	No
Operational				
Project area/energy emissions	8	87	1	1
LST threshold	236	1,566	3	2
Threshold Exceeded?	No	No	No	No

Table 4.2-9Localized Construction and Operational Emissions

Source: CalEEMod. Refer to Air Quality Output Sheets in **Appendix B**, Sections 3.1 through 3.7, for maximum on-site emissions during both the summer and winter seasons.

Notes: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

CO = carbon monoxide; NOx = nitrogen oxide; PM₁₀ = particulate matter less than 10 microns; PM_{2.5} = particulate matter less than 2.5 microns.

Localized Health

At the State level, CARB is primarily responsible for reducing emissions from motor vehicles and consumer products. SCAQMD has authority over most area sources and all point sources. Approximately 90 percent of NOx and 75 percent of VOC emissions from the 2012 inventory are from sources primarily under CARB and USEPA control. Conversely, 56 percent of SOx emissions and 66 percent of the directly emitted PM_{2.5} emissions are from sources under SCAQMD control.¹⁹ NOx and VOC are important precursors to ozone and PM_{2.5} formation, and SOx along with directly emitted PM_{2.5}, contribute to the region's PM_{2.5} nonattainment challenges. This illustrates that actions at the local, State, and federal level are needed to ensure the region attains the federal ambient air quality standards.

¹⁸ SCAQMD, "Final Localized Significance Methodology."

¹⁹ SCAQMD, *Final 2016 AQMP, Table 3-1a,* March 2017, accessed April 2019, http://www.aqmd.gov/docs/defaultsource/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016aqmp/final2016aqmp.

The peak daily operational regional emissions for the proposed Project would not result in exceedance over the SCAQMD's significance thresholds. To provide additional context to the proposed Project emissions, SCAQMD's *2016 AQMP* provides 162.4 tons per day (324,800 pounds) of VOC, and 293.1 tons per day (586,200 pounds) of NOx emissions basin-wide for the baseline year of 2012.²⁰ Consumer products remain as high-emitting categories over time, with consumer products accounting 87 percent of total VOC inventory in 2012 to 91 percent in 2031. Conversely, the Project would result in less than 0.01 percent of the emissions modeled in the AQMP.

Since SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by criteria pollutant emissions, a general description of the adverse health impacts resulting from the pollutants at issue is the extent of what can be provided at this time. See above description of general adverse health impacts resulting from criteria pollutants (refer to subheading Criteria Air Pollutants of this section). Therefore, consistent with the California Supreme Court's Friant Ranch decision, the above information provides details regarding the potential health effects from the proposed Project's less than significant criteria pollutant emissions. The analysis adequately explains why it is not scientifically feasible at this time to substantively connect the proposed Project's air quality impacts to likely health consequences.

 Delay the timely attainment of the air quality standards or the interim emission reductions specified in the AQMP?

As shown in **Table 4.2-9** above, temporary emissions of criteria pollutants would not exceed the localized construction and operation SCAQMD thresholds and, therefore, the proposed Project would not exceed any of the State and federal air quality standards and result in less than significant health-related impacts. Thus, the proposed Project would not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP and would therefore be consistent with this criterion.

Will the project exceed the assumptions utilized in preparing the AQMP?

Determining whether the proposed Project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with the population, housing, and employment growth projections; (2) the inclusion of mitigation measures; and (3) the appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis of each of these three criteria.

²⁰ SCAQMD, *Final 2016 AQMP, Figure 3-1*, March 2017, accessed April 2019, http://www.aqmd.gov/docs/defaultsource/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016aqmp/final2016aqmp.

4.2 Air Quality

 Is the project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based?

With respect to the first criterion for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016 RTP/SCS regarding population, housing, and employment growth. A project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment growth assumptions that were used in the development of the AQMP. In the case of the 2016 AQMP, SCAG's 2016 RTP/SCS form the basis of the projections of air pollutant emissions.

The 2016 RTP/SCS provides socioeconomic forecast projections of regional population growth for 14 subregions. 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 specific area; these are used by SCAG in all phases of implementation and review.

According to SCAG, the City of Claremont had a resident population of 36,200 in 2016 and a forecasted 39,800 in 2045. Additionally, employment population was forecasted to increase from 18,800 in 2016 to 20,200 in 2045.²¹ According to the population count generated by CalEEMod, the projected increase of 2,690 residents resulting from full build out of the Specific Plan and anticipated increase in housing stock would be within the total population increase projected for the City between 2020 and 2045. The increase in population would represent approximately 75% of the total growth forecast from SCAG. Although the increase in population would represent a greater share of the overall City than in past years, this would be by design and would represent a desirable shift in growth patterns from auto-dependent, low density detached homes to a mixed-use in close proximity to jobs, services and transit. The purpose of the Specific Plan is to focus development in those areas that are already developed with services, particularly within the TOD areas, thereby relieving the pressure for new development in areas of the City that are less developed. Because SCAG's projections form the basis of the 2016 AQMP, it can be concluded that the proposed Project would be consistent with the demographic projections incorporated into the AQMP and is consistent with this criterion. Refer to **Section 4-07** of this Draft EIR, for additional information regarding consistency with the RTP/SCS.

– Does the project include air quality mitigation measures?

As shown in **Tables 4.2-7** through **4.2-9** above, construction and operational emissions would not exceed SCAQMD's regional and localized thresholds. As such, mitigation measures would not be required.

²¹ Southern California Association of Governments, *Connect SoCal Technical Report Draft for Public Review and Comment,* accessed September 2020, https://www.connectsocal.org/Documents/Draft/dConnectSoCal_Demographics-And-Growth-Forecast.pdf

However, the proposed Project would be required to comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located with the SCAB. Therefore, compliance with SCAQMD Rule 403 that would further reduce fugitive dust emissions was included in CalEEMod as a regulatory compliance measure:

Control Efficiency of PM₁₀. During construction, methods and techniques should be applied to various operations or equipment when appropriate to reduce estimated emissions related to particulate matter. This includes replacing ground cover in disturbed areas as quickly as possible, yielding an emission reduction efficiency of 15 – 49 percent.²²

In addition, SCAQMD Staff recommends that the Lead Agency require the use of Tier 4 construction equipment of 50 horsepower or greater during construction. In the event that Tier 4 construction equipment is unavailable or unfeasible, alternative, and applicable strategies include equipment retrofits with Best Available Control Technology (BACT) devices, but not limited to, a CARB-certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least an 85 percent reduction in particulate matter emissions.²³

 Construction Equipment Controls. During construction, all off-road construction equipment greater than 50 horsepower shall meet USEPA Tier 3 emission standards with Level 3 DPF to minimize emissions of NOx and particulate matter associated with diesel construction equipment.

However, as shown in **Table 4.2-7** above, when modeled without regulatory compliance measures, construction emissions would not exceed SCAQMD daily regional thresholds. Therefore, compliance with the use Tier 4 construction equipment and Level 3 DPFs would further reduce emissions levels that are below daily regional thresholds.

- To what extent is project development consistent with the AQMP land use policies?

The determination of AQMP consistency is primarily concerned with the long-term influence of the proposed Project on air quality in the SCAB. The proposed Project represents infill development that is generally consistent with the City's land use and zoning designation for a mix of residential, office and retail uses. Furthermore, the Project would be walkable, transit-oriented, and mixed-use, thereby reducing vehicle miles traveled. The Project is also within the SCAG growth projections for the City of Claremont. As such, the Project is consistent within the land use policies of the AQMP. Therefore, the proposed Project

²² SCAQMD, CEQA Handbook, Tables 11-4, page 11-15, and A11-9-A, page A11-77, accessed April 2020, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-sample-constructionscenario-report.pdf.

²³ CARB, *Diesel Off-Road Equipment Measure–Workshop*, page 17, November 16 – 17, 2004, accessed May 2020, https://ww3.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf.

would not have a significant long-term impact on the region's ability to meet State and federal air quality standards. The proposed Project would comply with all applicable SCAQMD rules and regulations to further reduce pollutant concentration emissions, as listed in the SCAQMD Rule Book.²⁴ Thus, the proposed Project's long-term influence on air quality would be consistent with the goals and policies of the AQMP and is, therefore, considered consistent with this criterion.

Consistency with City of Claremont General Plan

 Table 4.2-10: General Plan Consistency Analysis evaluates the consistency of the proposed Project with applicable Claremont General Plan Policies pertaining to air quality.

General Plan Goals and Targets	General Plan Consistency Analysis
Goal 5-18: Reduce the amount of air pollution of airshed	emissions from mobile and stationary sources and enhance the
Policy 5.18.1 : Enhance pedestrian and bike facilities within the City and encourage alternative modes of transportation	Consistent . The proposed Project includes pedestrian areas, specifically within the parks in the center of the Project Site. A major focus of the Specific Plan is to transform the existing street network from current substandard conditions to Claremont Village level streets, which include extensive pedestrian amenities including small, human-scaled blocks, wide sidewalks, landscaped parkways with ample street trees, bulbed-out intersections, enhanced crosswalks, and pedestrian oriented building frontages. Additionally, the proposed Project includes bike rack areas for residents and patrons to the retail uses on site.
Policy 5-18.3 : Promote the use of fuel-efficient heating and cooling equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces, and boiler units.	Consistent. The proposed Project would be designed to be compliant with CALGreen standards and Title 24 California Code of Regulations. This would mandate that low-energy appliances and fuel-efficient HVAC systems are installed as part of the proposed Project. In addition, the Specific Plan incentivizes green building technology by providing credits in the Objective Design Review Matrix that will be used to evaluate all future projects developed in the plan area.
Policy 5.18-5 : Continue to require the planting of street trees along City streets and inclusion of trees and landscaping for all development projects to help improve airshed and minimize urban heat island effects.	Consistent. The Project includes landscaping consisting of street trees and internal trees to provide shade. Specifically, Green Street will be characterized by wide landscaped parkways, broad-canopy shade trees, comfortable sidewalks, mid-block crossings at the Central Plaza/Paseo, and building frontages. The landscaping plan would be reviewed and approved by the City prior to final site plan approval and during Design Review.
Policy 5.18-6 : Encourage small businesses to utilize clean, innovative technologies to reduce air pollution.	Consistent . Proposed retail space would be encouraged (by the City of Claremont) to participate in green principles that are consistent with the objectives of the proposed Project and quantified in the Plan's Objective Design Review Matrix.

Table 4.2-10General Plan Consistency Analysis

²⁴ http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book.

General Plan Goals and Targets	General Plan Consistency Analysis
Policy 5.18-7 : Implement principles of green building.	Consistent . This project would be required to adhere to "Green" building practices that meet the California Building Energy Efficiency Standards and CALGreen Building Standards (California Code of Regulations Title 24, Parts 6 and 11) to reduce the impact on the environment, decrease energy costs, and create healthier living through improved indoor air quality and safer building materials. Title 24 sets forth building standard requirements including, but not limited to, planning and site design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, waste reduction, indoor air quality and pollutant control, thermal comfort, and provisions for bicycle and electric vehicle parking. All new development within the Project Site is required to meet the rigorous standards of Title 24. Each new building would be inspected for compliance and would include an operation manual to help end-users maintain and effectively use the sustainable building features provided.
Policy 5.18.8 : Support jobs/housing balance within the community so more people can both live and work with the community. To reduce vehicle trips, encourage people to telecommute or work out of home or in local satellite offices.	Consistent . A primary goal of the proposed Project is to help meet the high market demand for high quality housing in eastern Los Angeles County and to meet the City's housing needs to support forecast population growth. The project would include a variety of attached, medium density residential units mixed with office and retail uses in a location that is adjacent to Claremont's primary job centers in the Village, the Claremont Colleges and the adjacent business park. This dense mix of uses adjacent the City's job center is also located in close proximity to transit, which will further reduce the need for single occupant vehicle trips.
Goal 5-19: Reduce the amount of fugitive dust r	eleased into the atmosphere
Policy 5-19.1 : Support programs and policies of the South Coast Air Quality Management District regarding restrictions on grading operations at construction projects.	Consistent . As described in the analysis below, the proposed Project would comply with programs, policies and air quality emissions threshold limits of the South Coast Air Quality Management District. Best Management Practices and standard conditions would be implemented during construction site grading operations to ensure activities are compliant with the South Coast Air Quality Management District.
Policy 5-19.2 : Cooperate with local, regional, State, and federal jurisdictions to control fugitive dust from stationary, mobile and area sources.	Consistent . The proposed Project would be required to comply with SCAQMD Rule 403 to control fugitive dust, which is anticipated to reduce peak daily fugitive dust and particulate matter emissions to below the SCAQMD threshold of 150 lbs/day.
Policy 5-19.3 : Enforce regulations that do not allow vehicles to transport aggregate or similar material upon a roadway unless the material is stabilized or covered, in accordance with State law and South Coast Air Quality Management District regulations.	Consistent . Construction best management practices would be implemented during Project construction activities. A standard BMP requires all vehicles transporting aggregate materials to and from the Project Site to be covered. The construction contractor would be required to post such conditions and would be on site during Project construction to make sure such rules are followed.

Source: Claremont General Plan Open Space, Parkland, Conservation and Air Quality Element (2009).

b. Would the project expose sensitive receptors to substantial pollutant concentrations?

Implementation of the Proposed Project could expose sensitive receptors to elevated air pollutant concentrations during construction and operation-related activities, specifically carcinogenic or toxic air contaminants as well as elevated air concentrations of CO, NO2, PM₁₀, PM_{2.5}, and SO2. The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project Site because of construction activities. As shown in **Table 4.2-9** above, localized construction and operational emissions would not exceed SCAQMD daily thresholds for NOx, CO, PM₁₀ and PM_{2.5}. Therefore, additional screening for TACs, specifically from DPM would not be required and health impacts would be less than significant.

The SCAQMD recommends an evaluation of potential localized CO impacts when a project causes the LOS at a study intersection to worsen from C to D, or if a project increases the V/C ratio at any intersection rated D or worse by 2 percent or more.

Furthermore, the screening criteria for CO hotspots indicate that a project would have a less than significant impact if (1) it is consistent with the Congestion Management Program (CMP); (2) the Project would not increase traffic volumes at any intersection to greater than 44,000 vehicles per hour; and (3) the Project would not increase traffic volumes at any intersection to greater than 24,000 vehicles per hour where atmospheric mixing is limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway). As discussed in **Section 4-17: Transportation**, the proposed Project would generate 7,509 net daily trips. In addition, the Project would not increase traffic volumes at any intersection greater than 44,000 vehicles per hour, and 24,000 vehicles per hour where atmospheric mixing is limited. As such, the proposed Project would not produce the volume of traffic required to generate a CO hotspot in the context of the screening criteria above.

c. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

As shown in **Table 4.2-7** and **Table 4.2-8**, the construction and operation of the Project would result in emissions below the SCAQMD localized significance thresholds and adverse health impacts from criteria pollutants would be less than significant. Additionally, mandatory compliance with SCAQMD Rule 1113 would limit the number of VOCs in architectural coatings and solvents and compliance with SCAQMD Rule 403 and 403.1 would reduce particulate emissions during construction activities. Additionally, as shown in **Table 4.2-9**, the proposed Project is not expected to generate significant dust (particulate matter) emissions. SCAQMD does not consider odors generated from use of construction equipment and activities to be objectionable. For operational-phase odor impacts, before granting approval of a specific project

that would result in the siting of a new source of odor or exposure of a new receptor to existing or planned odor sources the City would need to consider odor impacts. Generally, this is addressed in the specific plan through the permitted use matrix that limits uses that typically generate objectionable odors, through the City's design review process, and further through ventilation requirements of the building code. Further, the Specific Plan does not permit wastewater treatment plants, landfills or transfer stations, composting facilities, confined animal facilities, food manufacturing, and chemical plants. As such, impacts related to odors would be considered less than significant.

d. Would the project 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?

The cumulative significance methodologies contained in the *CEQA Air Quality Handbook*, SCAQMD staff has suggested that the emissions-based thresholds be used to determine if a project's contribution to regional cumulative emissions is cumulatively considerable. Individual projects that exceed SCAQMD-recommended daily thresholds for project-specific impacts would be considered to cause a cumulatively considerable increase in emissions for those pollutants for which the SCAB is in nonattainment.

By applying SCAQMD's cumulative air quality impact methodology, implementation of the Project would not result in exceedance of regional thresholds during construction (refer to **Table 4.2-7**) and operation (refer to **Table 4.2-8**). The proposed Project's emissions would not contribute to existing violations of the criteria pollutants in exceedance (O_3 and PM_{10}) and are not considered significant for this reason. As such, the proposed Project's cumulative construction and operation related impacts would be less than significant.

4.2.4 MITIGATION

As shown in **Table 4.2-7** through **4.2-9**, construction and operational emissions would not exceed regional and localized thresholds. Impacts related to air quality would be less than significant, as such, no mitigation measures are required.

4.3.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to energy resources are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

Except as provided in Public Resources Code Section 21099, would the project:

- 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?

4.3.2 ENVIRONMENTAL SETTING

Existing Conditions

The primary forms of energy consumed in Claremont are electricity, natural gas and petroleum used for vehicles. Claremont is serviced by Southern California Edison (SCE) for electricity and for Southern California Gas Company (SoCalGas) natural gas. Petroleum fuels are generally purchased individually at various retail locations.

Table 4.3-1: Summary of Existing Annual Energy Use shows the current energy usage for the existing uses within the Specific Plan Area. As shown in **Table 4.3-1**, the existing uses currently consume 1,351,181 kilowatt-hours (kWh) per year, 1,716,948 thousand British thermal units (kBTU) per year, and 76,220 gallons of petroleum per year.

Summary of Existing Annual Lifetgy Ose				
Source	Units	Quantity		
Electricity				
Industrial	kWh/yr	888,000		
Single Family Residential	kWh/yr	49,250		
Office	kWh/yr	129,900		
Water Conveyance	kWh/yr	284,031		
Electricity Total	kWh/yr	1,351,181		
Natural Gas				
Industrial	kBTU/yr	1,448,000		
Single Family Residential	kBTU/yr	164,848		
Office	kBTU/yr	104,100		

Table 4.3-1 Summary of Existing Annual Energy Use

Natural Gas Total	kBTU/yr	1,716,948
Transportation Energy		
Diesel	Gallons/yr	10,862
Gasoline	Gallons/yr	65,358
Fuel Total	Gallons/yr	76,220

Source: Refer to Appendix D for detailed calculations.

Notes: kWh/yr = kilowatt-hours per year; kBtu/yr = thousand British Thermal Units per year.

Electricity and Natural Gas for the Project is total yearly operational usage. Mobile gasoline and diesel usage were calculated using CalEEMod output data

Regulatory Framework

California Building Standards (Title 24)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The current California Building Energy Efficiency Standards (Title 24 standards) are the 2019 Title 24 standards, which became effective on January 1, 2020. The 2019 Title 24 standards continue to improve upon the 2016 Title 24 standards for new construction of, and additions and alterations to, residential and nonresidential buildings which include efficiency improvements to the residential standards for attics, walls, water heating, and lighting, and efficiency improvements to the nonresidential standards include alignment with the American Society of Heating and Air-Conditioning Engineers (ASHRAE) 90.1-20173 national standards.

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, went into effect on January 1, 2017 and are updated regularly. The 2019 CALGreen Code includes mandatory measures for nonresidential development related to site development; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. For new multifamily dwelling units, the residential mandatory measures were revised to provide additional EV charging requirements, including quantity, location, size, single EV space, multiple EV spaces, and identification.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG reduction goals. SB 375 specifically required each Metropolitan Planning Organization (MPO) to prepare a "Sustainable Communities Strategy" (SCS) as part of its Regional Transportation Plan (RTP). The Specific

Plan Area is located within the planning jurisdiction of Southern California Association of Governments (SCAG). SCAG's first Sustainable Communities Strategy (SCS) was the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (2012-2035 RTP/SCS), which was adopted by SCAG in April 2012. SCAG has since adopted the 2016-2040 RTP/SCS. The goals and policies of the SCS are intended to reduce VMT and result in corresponding decreases in transportation-related fuel consumption by focusing on transportation and land use planning that include building infill projects, locating residents closer to where they work and play, and designing communities so there is access to high quality transit service.

Claremont Sustainable City Plan

The Claremont Sustainable City Plan creates a framework for Claremont to achieve a vision of becoming a sustainable city. The Sustainable City Plan features principles intended to guide the City in its daily decisions and operations. The Sustainable City Plan also includes targets for reduction in energy consumption and goals and actions for a more sustainable use of land. The Sustainable City Plan states that buildings in the U.S. account for 39% of total energy consumption and recognizes the importance of sustainable Land Use and smart growth at reducing energy usage from the built environment. Actions proposed to achieve this include incentivizing all new commercial construction over 20,000 square feet to be constructed to LEED Silver levels applying LEED neighborhood development design principles to new developments and promoting Mixed-Use and Transit-Oriented Neighborhoods where appropriate. Future development within the plan area will also be required to have solar energy systems. The primary sustainability advantage of the Village South Specific Plan is its vision to create a true transit-oriented, mixed use development. This vision will result in a future development pattern that creates an urban form that is highly energy efficient from a building perspective (smaller, attached residential units with new highly efficient construction) as well as from a transportation perspective (transit adjacency and a compact mix of uses that make walking, cycling and public transportation feasible travel modes). Additional energyrelated features including passive solar design and operable windows on upper floors will be incentivized within the plan.

4.3.3 IMPACT ANALYSIS

Project Impact

Construction

During construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control, and on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. As discussed below, construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment within the Specific Plan Area, construction worker travel to and from the Specific Plan Area, and delivery trips.

As shown in **Table 4.3-2: Summary of Energy Use During Construction**, a total of 169,203 kWh of electricity, 1,116,425 gallons of diesel fuel, and 681,886 gallons of gasoline is estimated to be consumed during construction. Project construction would occur over approximately six years and is expected to be completed by 2028.

Electricity

Electricity would be supplied to the Specific Plan Area by SCE distribution infrastructure and would be obtained from electrical lines in and around the Specific Plan Area. As shown in **Table 4.3-2**, a total of approximately 169,203 kWh of electricity is anticipated to be consumed during construction. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electrical equipment would be powered off so as to avoid unnecessary energy consumption. The estimated construction electricity usage represents approximately 2.1 percent of the Project's estimated annual operational demand, which, as discussed below, would be within the supply and infrastructure service capabilities of SCE.

Natural Gas

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would likely not be needed to support construction activities; thus, there would be little to no demand generated by construction.

Fuel Type	Quantity
Electricity (Water Conveyance)	169,203 kWh
Diesel	
On-Site Construction Equipment	375,755 gallons
Off-Site Motor Vehicles	740,670 gallons
Tota	l 1,116,425 gallons
Gasoline	
On-Site Construction Equipment	0 gallons
Off-Site Motor Vehicles	681,886 gallons
Tota	681,886 gallons

 Table 4.3-2

 Summary of Energy Use During Construction

Source: Refer to **Appendix D** for detailed calculations.

Petroleum-Based Fuels

The petroleum-based fuel use summary provided in **Table 4.3-2** represents the amount of transportation energy that could potentially be consumed during construction based on a conservative set of assumptions. As shown, on- and off-road vehicles would consume an estimated 1,116,425 gallons of diesel fuel and 681,886 gallons of gasoline throughout the Project's construction period. As the construction would be taking place over approximately six years, the totals above would result in a maximum of 186,071 gallons of diesel fuel and 113,648 gallons of gasoline consumed annually for a total of 299,719 gallons per year. The annual fuel consumption would fluctuate throughout the construction timeline based on the demands specific to each construction phase and market conditions. For purposes of comparison, the EIA forecasts a national oil supply of 19.9 mb/d in 2028, which equates to approximately 305,067 mg/y. The Project would account for approximately 0.0001 percent of the projected annual oil supply in 2028. By comparison, the County is forecasted to consume 3,863,838,163 gallons of gas and diesel per year in 2028.

Operation

During operation of the Project, energy would be consumed for multiple purposes associated with the proposed residential and commercial uses, including, but not limited to, heating/ventilating/air conditioning (HVAC); refrigeration; and lighting. Energy would also be consumed during operation of the Project in the form of water usage, solid waste disposal, and vehicle trips, among others. As shown in Table **4.3-3: Summary of Annual Energy Use During Operation**, the Project's net new energy demand would be approximately 8,052,110 kWh of electricity per year, 24,169,526 kBTU of natural gas per year, and 629,571 gallons of petroleum per year.

Source	Units	Quantity
Electricity		
Office	kWh/yr	584,550
Sit Down Restaurant	kWh/yr	1,589,040
Hotel	kWh/yr	550,308
Quality Restaurant	kWh/yr	353,120
Low Rise Apartments	kWh/yr	106,010
Mid Rise Apartments	kWh/yr	3,942,920
Retail	kWh/yr	553,500
Water Conveyance	kWh/yr	1,723,843
Project Total	kWh/yr	9,403,291
Existing	kWh/yr	1,351,181
Electricity Net Total	kWh/yr	8,052,110

Table 4.3-3Summary of Annual Energy Use During Operation

Natural Gas		
Office	kBTU/yr	468,450
Sit Down Restaurant	kBTU/yr	8,307,360
Hotel	kBTU/yr	1,740,950
Quality Restaurant	kBTU/yr	1,846,080
Low Rise Apartments	kBTU/yr	408,494
Mid Rise Apartments	kBTU/yr	13,047,900
Retail	kBTU/yr	67,240
Project Total	kBTU/yr	25,886,474
Existing	kBTU/yr	1,716,948
Natural Gas Net Total	kBTU/yr	24,169,526
Transportation Energy		
Diesel	Gallons/yr	117,733
Gasoline	Gallons/yr	588,058
Project Total	Gallons/yr	705,791
Existing	Gallons/yr	76,220
Fuel Net Total	Gallons/yr	629,571

Source: Refer to **Appendix D** for detailed calculations.

Notes: kWh/yr = kilowatt-hours per year; kBtu/yr = thousand British Thermal Units per year.

Electricity and Natural Gas for the Project is total yearly operational usage. Mobile gasoline and diesel usage were calculated using CalEEMod output data

These calculations incorporate regulatory requirements established by the California Building Code related to water and energy conservation and green building practices. Further, the Project's landscape plan would incorporate sustainable site design practices to reduce water consumption.

Electricity

As shown in **Table 4.3-3**, with compliance with Title 24 standards and applicable CALGreen requirements, buildout of the Project would result in a projected increase in the on-site demand for electricity, totaling 8,052,110 kWh or 8.1 gigawatt-hours (GWh) per year. The SCE estimates that electricity consumption during an average demand year within its planning area will be approximately 125,000 GWh annually by 2028.¹ The Project would account for approximately 0.006 percent of the 2028 daily average demand forecasted consumption in SCE's planning area. The SCE estimates that electricity consumption during a high demand year within its planning area will be approximately 130,000 GWh annually by 2028. The Project would account for approximately 0.006 percent of the 2028 daily average demand forecasted consumption in SCE's planning area will be approximately 130,000 GWh annually by 2028. The Project would account for approximately 0.006 percent of the 2028 daily high demand forecasted consumption in SCE's planning area.

¹ CEC, Demand Analysis Office, *California Energy Demand 2018-2030 Revised Forecast*, Accessed May 2020, https://efiling.energy.ca.gov/getdocument.aspx?tn=223244.

Natural Gas

As shown in **Table 4.3-3**, with compliance with Title 24 standards and applicable CALGreen requirements, buildout of the Project is projected to generate an on-site demand for natural gas totaling 24,169,526 kBTU per year or 23.3 million cubic feet (MMcf)² per year. Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimates natural gas supply within SoCalGas' planning area will be approximately 1,377,875 MMcf in 2028. The Project would account for approximately 0.002 percent of the 2028 annual forecasted supply in SoCalGas' planning area.

Petroleum-Based Fuels

During operation, traffic associated with the Project would result in the consumption of petroleum-based fuels due to vehicular travel to and from the Specific Plan Area. As shown in **Table 4.3-3**, the Project would consume a net total of 629,571 gallons of petroleum per year. For purposes of comparison, the EIA forecasts a national oil supply of 19.9 million mb/d in 2028, which equates to approximately 7,263 mb/y or 305,067 mg/y. The Project would account for approximately 0.0002 percent of the projected annual oil supply in 2028. By comparison, the County is forecasted to consume 3,863,838,163 gallons of gas and diesel per year in 2028. Therefore, the anticipated increase in consumption associated with one year of Project operation is approximately 0.02 percent of County gas and diesel use in 2028.

As shown above the Project's energy consumption would be within the demand forecasts for electricity, natural gas, and petroleum fuel. Moreover, all development within the Project area would be required to be constructed to the Building Codes, including Energy Efficiency Standards and Green Building Standards, that are applicable at the time of construction. The Green Building Standards are equivalent to the standards for a Leadership in Energy and Environmental Design (LEED) Silver rating, which achieves energy savings through efficient use of water, air, light, and materials.

The Project also creates a framework for development that would be compact, Mixed-Use, transitoriented, located in the City's job, housing, and services center and is therefore in line with the principles of good TOD design and LEED neighborhood development design. A guiding principle of the Project is environmental sustainability, which will be expressed through energy efficient design as well as building upon the intrinsically sustainable urban form and street pattern of the historic Claremont Village. A Transit Oriented Development is a "moderate to higher-density development, located within an easy walk of a major transit stop, generally with a mix of residential, employment and shopping opportunities designed for pedestrians without excluding the auto."³ As a well-conceived TOD, the Project would support a reduction in vehicle miles traveled, which would reduce the consumption of transportation fuel energy.

² The conversion of kBTU to million cubic feet uses the factor of 1 cf to 1.037 kBTU, then divided by 1,000,000.

³ California Department of Transportation, Statewide TransitOriented Development Study – Factors for Success in California, 2002.

Based on the above, the Project would neither result in wasteful, inefficient or unnecessary consumption of energy nor conflict with state or local plan for renewable energy or energy efficiency.

Cumulative Impact

The geographic area for energy services is regional in nature. SCE and SoCalGas forecast energy needs based on regional growth forecasts. As discussed in Section 4.9, Population and Housing, the Project is within the growth forecasts for the City of Claremont. The Project would also contribute to a reduction in average transportation energy consumption through the design of a walkable, transit-oriented communities. related projects. Therefore, the Project would not have a considerable contribution to cumulative energy impacts.

4.3.4 MITIGATION

As impacts would be less than significant, no mitigation is necessary.

Information in the following section is derived from the *Cultural Resource Assessment for the Village South Specific Plan Project*, that is contained in **Appendix C** of this DEIR.

4.2.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to agriculture and forestry resources are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

- a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 1506.5.(b)?
- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.(c)?
- c. Disturb any human remains, including those interred outside of formal cemeteries pursuant to § 15064.5.(d)?

4.2.2 ENVIRONMENTAL SETTING

Background

The Project is within the Pomona Valley on large alluvial fan complex that emanates from the south flanks of the San Gabriel Mountains and is within the northern part of the Peninsular Ranges. The Project area is less than one-half mile northwest of the San Jose Fault,¹ which forms the approximate structural boundary between the Peninsular Ranges and San Gabriel Mountain bedrock assemblages and is approximately one mile west of San Antonio Creek, a tributary of the Santa Ana River. The geology in the vicinity of the specific plan area includes Pre-Mesozoic to Cretaceous plutonic igneous rocks of the Peninsular Ranges Batholith; Paleozoic metamorphic rocks; Late Cenozoic terrestrial, marine, and volcanic deposits; and widespread Quaternary alluvial fan and valley deposits.

Recent archaeological studies within the surrounding area indicate that human occupation of the area dates back almost 10,000 years. Claremont is thought to sit along the fringes of territories traditionally belonging to the Serrano and Gabrielino Native American cultural groups. Tribal Cultural Resources are discussed in Section 4-12 of this DEIR.

In the late 1700s the King of Spain sent a party of missionaries to colonize California by creating missions up and down the coast. In 1771, Mission San Gabriel was founded in San Gabriel and the area of what is

¹ *Claremont General Plan*, Figure 6-1, Faults.

now Claremont was included in the mission lands. During the early 1800s most of what is now Claremont became part of Rancho San Jose. In the second half of the 1800s sections of the ranch were sold off and when the rail line was built through the area in 1887, town sites were laid out with the expectation that the railroad would create a population boom. The growth of Claremont was supported by the establishment of Pomona College, the first of The Claremont Colleges, and the introduction of citrus growing. The Colleges have increased their presence in Claremont; however, the citrus orchards were replaced by the mid-20th Century with residential neighborhoods.

Existing Conditions

The Project area is predominantly developed with commercial, light industrial and residential structures mostly dating from the early twentieth Century. Specifically, the Project area contains 21 structures of greater than 50 years in age, as listed below.

The following buildings, while historical in age are not known to be associated with any specific events or persons of historic significance, have not made a significant contribution to the development of the city of Claremont, nor do they occupy a key point in the character of the surrounding area. Furthermore, they are unremarkable examples of their architectural style. Therefore, these properties do not appear to be a historical resource for the purposes of CEQA:

- 177 S. Indian Hill Boulevard is a one-story commercial building constructed in 1956.
- 191 S. Indian Hill Boulevard is comprised of a split-level Mid-Century Modern style automobile dealership showroom constructed in 1959 and associated service buildings.
- 230 S. Indian Hill Boulevard is comprised of two one-story single-family bungalows constructed in 1947 and 1952.
- 240 S. Indian Hill Boulevard is a one-story single-family house constructed in 1948.
- 241 S. Indian Hill Boulevard is a one-story single-family house constructed in 1949 that has been converted into a commercial building.
- 250 S. Indian Hill Boulevard is comprised of two one-story single-family bungalows constructed in 1952 and 1953.
- 254 S. Indian Hill Boulevard is comprised of two one-story single-family Minimal Traditional style residences constructed in 1947 and 1953.
- 259 S. Indian Hill Boulevard is a one-story single-family Minimal Traditional style residence constructed in 1925 that has been converted into a commercial building.
- 180 Bucknell Avenue is a one to one and a half story split level industrial building constructed in 1956.
- 204 Bucknell Avenue is a two-story industrial building built in 1959.

- 244 Bucknell Avenue is a one-story single-family Ranch style house constructed in 1958.
- 260 Bucknell Avenue is comprised of a one-story Minimal Traditional style residence constructed in 1947 (north building) and a one-story Craftsman style residence constructed in 1926 (south building).

The following buildings are considered notable examples of their architectural style, appear to be in good condition, do not appear to have been significantly modified, and have been listed in the City Register. Therefore, these properties are considered historical resource for the purposes of CEQA:

- 121 S. Indian Hill Boulevard, known as the Vortox Building, is a Mission Revival style industrial property constructed in 1926, is a good example of early commercial architecture, and is considered a contributor to the historic Village district.
- The 1928 Vortox building at 121 South Indian Hill Boulevard is an important part of Claremont's economic, architectural and cultural history. It was initially built for the Vortox Manufacturing Company, which made air cleaners for agricultural equipment that was used in the Inland Valley's citrus industry. It has been continually occupied and operational by Vortox ever since. The façade of the primary Vortox building is a wonderful example of 1920s Spanish Revival and is well situated to tie together the old and new parts of the village, as well Claremont to its roots. The 3.6 acre site contains several buildings not all of which carry equal historic significance.
- 188 S. Indian Hill Boulevard is a one-story Craftsman style single-family residence constructed in 1917. It was listed on the City Register as representing an architectural type.
- 194 S. Indian Hill Boulevard is a one-story Spanish Colonial Revival style single family residence constructed in 1930. It was listed on the City Register as representing an architectural type.
- 233 S. Indian Hill Boulevard is a one-story single-family residence constructed in 1922 that has been converted into a commercial building. It was listed on the City Register as representing an architectural type.
- 253 S. Indian Hill Boulevard is a one-story Craftsman style single family residence constructed in 1925 that was later converted for commercial use. It was listed on the City Register as representing an architectural type.
- 433 W. Arrow Highway is a two-story Spanish Colonial Revival style single-family residence constructed in 1931 that has been converted to an office building. It was listed on the City Register as representing an architectural type.
- 445 W. Arrow Highway is a one-story Spanish Colonial Revival style single-family residence constructed in 1932 that has been converted to a commercial building. It was listed on the City Register as representing an architectural type.
- 449 W, Arrow Highway is a one-story single-family residence constructed in 1940 that has been converted to a multifamily residence. The changes made to the building have altered the integrity of materials, design, and workmanship. However, it was listed on the City Register as was having once

been the residence of "Deedle," though no further information regarding the identity of Deedle has been uncovered.

• 471 W. Arrow Highway is a one-story Spanish Colonial Revival style single-family residence constructed in 1930. It was listed on the City Register as representing an architectural type.

Regulatory Framework

National Historic Preservation Act

The National Historic Preservation Act of 1966 established the National Register of Historic Resources to recognize resources associated with the country's history and heritage. Structures and features must be at least 50 years old to be considered for listing on the National Register, barring exceptional circumstances. Criteria for listing on the National Register are significance in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that are any of the following:

- a. Associated with events that have made a significant contribution to the broad patterns of our history;
- b. Associated with the lives of persons significant in our past;
- c. Embodying the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; represent a significant and distinguishable entity whose components may lack individual distinction; and
- d. Have yielded, or may be likely to yield, information important in prehistory or history (Criterion D is usually reserved for archaeological and paleontological resources).

California Register of Historical Resources

The California Register of Historic Resources (CRHR) includes California State Historical Landmarks; eligible Points of Historical Interest; and resources listed, or formally determined eligible for listing, in the National Register. To be eligible for listing in the California Register, a resource must meet at least one of the following criteria:

- 1. Be associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
- 2. Be associated with the lives of persons important to local, California, or national history;
- 3. Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or
- 4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and must convey the reasons for their significance.

California Environmental Quality Act

State CEQA Guidelines Section 15064.5 defines a historical resource as: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR; (2) a resource included in a local register of historical resources, as defined in Public Resources Code (PRC) Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

Archaeological resources are defined in CEQA Section 21083.2, which states that a "unique" archaeological resource is an archaeological artifact, object, or site that has a high probability of meeting any of the following criteria:

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

Unique archaeological resources as defined in Section 21083.2 may require reasonable efforts to preserve resources in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. Additionally, the State CEQA Guidelines state that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (State CEQA Guidelines Section 15064.5(c)(4)).

Section 15064.5(e)(1) and (2) of the CEQA Guidelines provides the guidance with regard to the accidental discovery of human remains.

City of Claremont

In 1980, the City of Claremont created the Claremont Register of Structures of Historic and Architectural Merit (City Register). In order for a property to be listed on the City Register, it must be approved by the Architectural Commission and meet one or more of the following criteria:

- 1. Buildings, structures or places, including landscaping, are important key focal or pivotal points in the visual quality or character of an area, neighborhood or survey district; or
- 2. Structures are associated with historic figures; or
- 3. Structures represent an architectural type of period and/or represent the work of known architects, draftsmen, or builders; or
- 4. Structures illustrate the development of California locally or regionally; or
- 5. Buildings remain in good condition and illustrate a given period; or
- 6. Structures are unique in design or detail; or
- 7. Structures serve as examples of a period or style; or
- 8. Structures contribute to the architectural continuity of the street; or
- 9. Buildings appear to retain the integrity of their original design fabric.

4.2.3 IMPACT ANALYSIS

Project Impact

Cause a substantial adverse change in the significance of a historical resource pursuant to § 1506.5.(b)?

As described previously, 9 structures within the Project area were identified as historic resources. The Project involves the redevelopment of the Project area. Demolition or substantial alteration could alter the historic significance of these properties.

The Project explicitly seeks to extend the urban character of the Village south of the railroad tracks. To do so, it calls for the historic Vortox building to be adaptively reused in a way that retains and features its historic presence. Section 3.3 of the Specific Plan sets forth specific guidelines for the preservation and reuse of the Vortox buildings. The Project requires that changes to the primary Vortox building be designed to respect its distinctive exterior materials, features, and architectural style. Repair and maintenance activities would be subject to the most current edition of the California Building Code (CBC) and the use of the most recent edition of the California Historical Building Code, or any appropriate alternative, may be utilized if authorized by the Building Official. All existing openings (doors and windows)

a.
4.3 Cultural Resources

would remain, and any additional or restored openings should be consistent in materials and style. The existing high ceilings, exposed bowstring trusses, and large windows would be incorporated into any interior enhancements. Landscaping would be integrated with, and complimentary to the preserved buildings Any code required upgrades or retrofits would not change, obscure, damage, or destroy the character defining materials or features of the building. The Project would allow for the accessory structures to be demolished as they are not the primary character defining features and could be removed without affecting the historic significance. As such the Project would allow for development that would not have an adverse effect on the historical significance of the Vortox building.

As described previously, there are eight residential structures along Indian Hill Boulevard and Arrow Highway that are considered historic resources for the purposes of CEQA. Seven of these structures were listed on City's Historic Register as representative of an architectural style. One was listed for association with a historic, though obscure, figure. None are on the State Register. Several of them, particularly along Arrow Highway, have been modified from their original use to accommodate commercial uses. Nonetheless, the potential demolition of these structures would represent a significant impact. As such, mitigation has been included at the end of this section.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.(c)?

There are no known archaeological sites reported within the Project area and the portions of the Project area that have been previously disturbed are unlikely to yield intact archaeological deposits. The sediments underlying the Project area consist of alluvial fan deposits from San Antonio Canyon. These types of deposits are part of a high energy system deposited as a single stratum. Cultural material located at contacts between debris-flows would be subject to high-energy erosion and redeposition. As such, archaeological artifacts in this setting are unlikely to remain intact. Due to the degree of disturbance throughout the Project area, the Project's location within an alluvial fan deposit with high-energy erosion and redeposition, and the lack of archival identification of archeological resources with the Project area, the potential for the inadvertent discovery of unique archeological resources is considered low. As such, impact would be less than significant. Also noted is the mitigation described in **Section 4.12: Tribal Cultural Resources** would be implemented. No further mitigation is necessary.

c. Disturb any human remains, including those interred outside of formal cemeteries pursuant to § 15064.5.(d)?

There are no known human burials within the Project area. Construction of the future development enabled by the Project could uncover unknown subsurface resources. In the event of an accidental discovery or recognition of any suspected human remains, California State Health and Safety Code Section

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7050.5 dictates that no further excavation or disturbance of the site may occur until the County Coroner determines that no investigation of the cause of death is required. If human remains are encountered and determined to be Native American in origin, the mitigation described in **Section 4.12** would be implemented. No further mitigation is necessary.

Cumulative Impact

Potential impacts of the Project on cultural resources combined with the impacts of other reasonably foreseeable projects could contribute to a cumulative loss of cultural resources. Each development proposal within the Project and each related project proposed in the surrounding area would be required to comply with the requirements of CEQA, including regulatory requirements and the mitigation measures discussed below. These measures would ensure that the future development within the Project would not result in significant impacts on cultural resources and would likewise ensure that the Project would not have a considerable contribution to significant cumulative impacts.

4.2.4 MITIGATION

To address the potential impacts on historic resources, the following mitigation shall be incorporated into the Project:

MM-CUL-1 Prior to obtaining a building permit for any project that would modify a structure included on the City Register, the applicant of such project shall retain a qualified consultant to prepare a Historical Resource Documentation Report for the structure and shall demonstrate that all modifications will be designed and implemented in compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995) and/or the State Historical Building Code, as appropriate.

Prior to demolition of any structure deemed to be historic, the project applicant shall complete Historic American Building Survey (HABS) level documentation. The intent is to preserve an accurate record of historic property that can be used in research and other preservation activities. HABS documentation shall provide the appropriate level of visual documentation and written narrative based on the importance of the resource, as determined in consultation with Planning Division staff.

CEQA requires that all feasible mitigation be undertaken even if it does not mitigate below a level of significance. This mitigation would reduce impacts to the extent feasible. Nonetheless the potential demolition of the historic residential structures would be an unavoidable significant impact.

Additional mitigation to address potential impacts on subsurface artifacts is described in **Section 4.12**.

4.5.1 INTRODUCTION

This section describes the existing geological and soil resources within the City, identifies the regulatory framework with respect to regulations that address geological conditions, and evaluates the significance of the potential changes to geological and soil resources that could result from implementation of the Village South Specific Plan. In addition, to reduce impacts, mitigation measures are included when applicable. The information and analysis in this section is derived from the Geotechnical Study contained in **Appendix E** of this DEIR.

4.5.2 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to geology and soils are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. 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.
 - ii. Strong seismic ground shaking?
 - iii. Seismic-related ground failure, including liquefaction?
 - iv. 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 Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater 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 geologic feature?

4.5.2 ENVIRONMENTAL SETTING

Geological Setting

The site is located in the Los Angeles Basin in the northern portion Peninsular Range geomorphic province of California. This is an area of complex geology as the relatively northwestward-moving Peninsular Range Province collides with the Transverse Range Province (San Gabriel Mountains) to the north. Several active or potentially active faults have been mapped in the region and are believed to accommodate compression associated with this collision. The site is located less than 4 miles south of the active Cucamonga fault, less than 2 miles south of the Indian Hill Fault and less than one-mile northeast of the San Jose fault.¹

The site is underlain by a thick accumulation of alluvial soil consisting of sand, gravel, silt, and clay eroded from the San Gabriel Mountains, then transported and deposited at the site. The valley surface in the region is covered by fine- to very coarse-grained younger Quaternary alluvial soil deposits that make up the upper portion of the large alluvial fan developed by San Antonio Creek and other drainages from the San Gabriel Mountains north of this site. The portion of the alluvial fan in the site vicinity is dominated by deposits rich in sand and gravel.

Review of regional geologic maps and historical topographic maps spanning the time period from 1938 to 2016 did not identify geologic features of significance that could potentially affect the site.

The majority of the Village South Specific Plan area is underlain by Quaternary age alluvial deposits. Soils on site are considered to have very low expansion potential.

Geological Hazards

Faulting

The California Geological Survey (CGS) defines a fault as a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side. The CGS defines a fault zone as a zone of related faults that commonly are interconnected and subparallel to each other, but may be branching and divergent.

Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface, however not all earthquakes result in surface rupture. Fault rupture almost always follows preexisting faults, which are zones of weakness. Rupture may occur suddenly during an earthquake or slowly in the

¹ *Claremont General Plan*, Figure 6-1, Faults.

form of fault creep. Sudden displacements (as compared to fault creep) are more damaging to structures because they are accompanied by shaking.

Faults in Southern California are classified as active, potentially active, or inactive, based on their most recent activity. A fault is considered active if it has demonstrated movement with the Holocene epoch, or approximately in the last 11,000 years. Faults that have demonstrated Quaternary movement (last 1.6 million years), but lack strong evidence of Holocene movement, are classified as potentially active and faults that have not moved since the beginning of the Quaternary period are deemed inactive.

Under the Alquist-Priolo Earthquake Fault Zoning Act (discussed in detail below), development near active faults is regulated in order to mitigate the hazard of surface fault-rupture. The CGS designates Alquist-Priolo Earthquake Fault Zones, which are regulatory zones around active faults. A 50-foot setback from any known trace of any active fault is required for all projects.

The closest major active fault to the site with surface expression is the Cucamonga thrust fault, which is located approximately 2½ miles to the north of the site. The San Jose fault may cross the site in the southeast. The San Jose Fault is an 11- to 14-mile-long fault that splays west-southwest from the Cucamonga-Sierra Madre Fault Zone in the Upland/Claremont area and continues southwest along the southern boundary of the San Jose Hills.

Seismicity

Ground shaking may affect areas hundreds of miles away from the earthquake's epicenter. Historic earthquakes have caused strong ground shaking and damage in many areas surrounding and within the City. The composition of underlying soils in areas located relatively distant from faults can intensify ground shaking. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill.

Ground shaking is commonly described in terms of peak ground acceleration as a fraction of the acceleration of gravity (g), or by using the Modified Mercalli (MM) intensity scale, a common metric for characterizing intensity. The MM Intensity Scale is a more descriptive method involving 12 levels of intensity denoted by Roman numerals. MM intensities ranging from IV to X could cause moderate to significant structural damage. The degree of structural damage, however, would not be uniform. Not all buildings perform identically in an earthquake. The age, material, type, method of construction, size, and shape of a building all affect its performance.

Potentially active fault systems are expected to produce a wide range of ground shaking intensities. The estimated maximum moment magnitudes represent characteristic earthquakes on particular faults. While

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the magnitude is a measure of the energy released in an earthquake, intensity is a measure of the ground shaking effects at a particular location. Shaking intensity can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and characteristics of geologic media. Generally, intensities are highest at the fault and decrease with distance from the fault. However, at any given location, the amount of the resulting shaking motion caused by the sudden movement depends, to a large extent, on local ground conditions (including the degree of water saturation), and may be as severe as 10 miles from the fault or immediately adjacent to it.

Identified faults must be considered in planning and land use activities, and faults identified as active should be considered when deciding on a project's location. No structure should be built astride an active fault. Similarly, utilities that cross such faults must be designed to remain functional even after fault movement.

Liquefaction and Lateral Spreading

Liquefaction is the loss of soil strength or stiffness due to a buildup of pore-water pressure during a seismic event and is associated with relatively loose, saturated fine- to medium-grained unconsolidated The existing water level, soil type, particle size distribution and gradation, relative density, confining pressure, intensity of shaking and duration of shaking are all key factors that can increase the chances of liquefaction. Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as a dense fluid. Liquefiable soil conditions are not uncommon in alluvial deposits in moderate to large canyons and could also be present in other areas of alluvial soils where the groundwater level is shallow (e.g., 50 feet below the surface).

Seismic Induced Landslides

Landslides often occur along preexisting zones of weakness within bedrock (i.e., previous failure surfaces). Additionally, landslides have the potential to occur on over-steepened slopes, especially where weak layers, such as thin clay layers, are present and dip out-of-slope. The specific plan area is located in a relatively flat area, with no portion mapped as having the potential for landslides.

Subsidence

Subsidence hazards involve either the sudden collapse of the ground to form a depression or the compaction of the sediments near the Earth's surface. Settlement of under-consolidated soils may occur during earthquake shaking. This process can result in a slight lowering of the ground surface, which can vary in amount from place to place. Although not considered a major problem, areas of the City with a high groundwater table could be subject to subsidence.

Soil Expansion and Erosion

Expansive soils are clay-rich soils which can easily absorb water and swell, or shrink when water is sparse. Excessive swelling and shrinkage cycles can result in distress to improvements and structures. The change in volume exerts stress on buildings and other loads placed on these soils. Expansive soils can be widely dispersed and are found in hillside areas as well as low-lying alluvial basins.

Wind and rain erosion can result in varying amounts of soil erosion which is common in unconsolidated alluvium surficial soils. The specific plan area is relatively flat and generally does not possess conditions conducive to substantial soil erosion.

REGULATORY FRAMEWORK

Federal

Uniform Building Code

The Uniform Building Code (UBC) is published by the International Conference of Building Officials and forms the basis for California's building code, as well as approximately one-half of the state building codes in the United States. It has been adopted by the California Legislature to address the specific building conditions and structural requirements for California, as well as provide guidance on foundation design and structural engineering for different soil types. The UBC defines and ranks the regions of the United States according to their seismic hazard potential. There are four types of regions defined by Seismic Zones 1 through 4, with Zone 1 having the least seismic potential and Zone 4 having the highest.

Earthquake Hazards Reduction Act of 1977

The Earthquake Hazards Reduction Act (EHRA) of 1977 (42 USC § 7701 et seq.) established the National Earthquake Hazards Reduction Program as a long-term earthquake risk reduction program for the United States which focuses on: developing effective measures to reduce earthquake hazards; promoting the adoption of earthquake hazard reduction activities by federal, state, and local governments, building standards and model building code organizations, engineers, architects, building owners, etc.; improving the understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering, natural sciences, and social, economic, and decision sciences; and developing and maintaining the Advanced National Seismic System, the George E. Brown Jr. Network for Earthquake Engineering Simulation, and the Global Seismic Network.

4.5 Geology and Soils

State

California Building Code

Under State law, all building standards must be centralized in Title 24 or they are not enforceable. The California Building Code is another name for the body of regulations contained in Title 24, Part 2, of the California Code of Regulations, which is a portion of the California Building Standards Code.14 Title 24 is assigned to the California Building Standards Commission which, by law, is responsible for coordinating all building standards. Published by the International Conference of Building Officials, the UBC is a widely adopted model building code in the United States. The California Building Code incorporates by reference the UBC with necessary California amendments. About one-third of the text within the California Building Code has been tailored for California earthquake conditions. Although widely accepted and implemented throughout the United States, local, city, and county jurisdictions can adopt the UBC either in whole or in part.

Alquist-Priolo Earthquake Fault Zoning Act

California's Alquist-Priolo Act, originally enacted in 1972 as the Alquist-Priolo Special Studies Zones Act and renamed in 1994, is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location of most types of structures intended for human occupancy across the traces of active faults and strictly regulates construction in the corridors along active faults (Earthquake Fault Zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to Earthquake Fault Zones.

Under the Alquist-Priolo Act, faults are zoned, and construction along or across them is strictly regulated if they are "sufficiently active" and "well-defined." A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during Holocene time (defined for the purposes of the Act as within the last 11,000 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment.²

Seismic Hazards Mapping Act

The program and actions mandated by the Seismic Hazards Mapping Act closely resemble those of the Alquist-Priolo Earthquake Fault Zoning Act. The Seismic Hazards Mapping Act of 1990 addresses nonsurface fault rupture earthquake hazards, including liquefaction and seismically induced landslides.

² Hart, E.W. and Bryant, W.A., 1997 (revised), Fault-rupture hazard zones in California: California Department of Conservation, Division of Mines and Geology Special Publication 42, 38 p.

4.5 Geology and Soils

The purpose of the Act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes.

Southern California Catastrophic Earthquake Preparedness Plan

The Southern California Catastrophic Earthquake Preparedness Plan, adopted in 2008, examines the initial impacts, inventories resources, provides for the wounded and homeless, and develops a long-term recovery process. The process of Long-Term Regional Recovery (LTRR) provides a mechanism for coordinating federal support to state, tribal, regional, and local governments, nongovernmental organizations (NGOs), and the private sector to enable recovery from long-term consequences of extraordinary disasters. The LTRR process accomplishes this by identifying and facilitating the availability and use of recovery funding sources, and providing technical assistance (such as impact analysis) for recovery and recovery planning support. "Long-term" refers to the need to re-establish a healthy, functioning region that will sustain itself over time. Long-term recovery is not debris removal and restoration of utilities, which are considered immediate or short-term recovery actions. The LTRR's three main focus areas are housing, infrastructure (including transportation), and economic development.

Local

City of Claremont General Plan

The City's General Plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines the programs that were developed to accomplish the goals and policies of the General Plan. City policies pertaining to geological hazards are included in Chapter 6 of the City's General Plan, Public Safety and Noise Element. Geological policies relevant to the project include:

Goal 6-2	Minimize the risk of injury, loss of life, and damage to property resulting from		
	natural and human-caused disasters and conditions.		
Policy 6-2.1	Practice proactive planning and development approaches that require developers to identify potential I hazards that might affect a development and mitigate the potential hazards as needed to the satisfaction of the City.		
Policy 6-2.2	Enforce Uniform Building Code standards for grading.		
Policy 6-2.6	Maintain a list of public buildings that could support emergency functions in the event of a disaster.		

Policy 6-2.7	Require that development of major facilities and high occupancy
	buildings in the hazardous zone submit design analysis. soils. geologic.
	and seismic reports to the City to indicate that an undue hazard does not
	exist or would not result from construction on the property.

Goal 6-4 Minimize risks to public safety from seismic events.

Policy 6-4.1Enforce the most recent building codes governing seismic safety and
structural design to minimize damage from earthquakes.

- Policy 6-4.2 Continue to support efforts to identify location, potential activity, and dangers associated with faults under investigation, and implement recommendations setbacks. foundation/ building design methods, etc.) contained in geotechnical reports.
- **Goal 6-5** Minimize risks to public safety from geologic events.
 - Policy 6-5.1Require geotechnical evaluation and recommendations prior to new
development, as appropriate. Such geotechnical evaluation shall analyze
the potential hazards from: Landslides; Liquefaction; Expansive soils, and
Mud and debris flow. Recommendations shall include mitigation to avoid
or minimize the identified hazards.

4.5.3 IMPACT ANALYSIS

a.

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

i. 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.

- ii. Strong seismic ground shaking?
- iii. Seismic-related ground failure, including liquefaction?
- iv. Landslides?

4.5 Geology and Soils

The Project is located in Southern California; an area subject to strong seismic ground shaking. As described above, the Cucamonga Fault, San Jose Fault and Indian Hill Fault run through the City. This site is not located within a currently designated State of California Earthquake Fault Zone for surface fault rupture. As with any site in the Southern California region, the Project Site is susceptible to strong seismic ground shaking in the event of a major earthquake. All future construction and development would be required to comply with applicable provisions of the most current edition of the California Building Code (CBC) at the time of construction and the City's adopted building codes pursuant to the Municipal Codes of Claremont. With adherence to the CBC, design and construction of the proposed development would be engineered to withstand the expected ground acceleration that may occur at the Project Site. Therefore, impacts related to ground rupture and ground shaking are less than significant.

Liquefaction is a phenomenon whereby a saturated granular soil temporarily loses its strength because of the buildup of pore water pressure during seismic excitation. The loss of strength may cause structures founded on these soils to experience subsidence and/or lateral movement. Thus, for liquefaction to occur loose to medium granular soils need to be below the ground water. Liquefaction may also cause lateral spreading. For lateral spreading to occur, the liquefiable zone must be continuous, unconstrained laterally, and free to move along gently sloping ground toward an unconfined area such as an unlined river channel. **Appendix E** indicates that groundwater in the project area is approximately 100 feet below the ground surface. Consequently, the potential for liquefaction at the site is considered to be low and the potential for lateral spreading at the site is also considered low

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

The erosion characteristics of the unconsolidated alluvial deposits exposed on any future potential cut slopes on site is expected to be moderately to highly susceptible to erosion. Although not currently anticipated, any manufactured slopes composed of compacted fill would be expected to be moderately susceptible to erosion.

The native soils on site, as well as fill slopes constructed with native soils, will have a moderate susceptibility to erosion. These materials will be particularly prone to erosion during the site development, especially during heavy rains. Temporary erosion control measures should be provided during construction, as required by current grading codes. Such measures typically include temporary catchment basins and/or sandbagging to control runoff and contain sediment transport within the Project Site. Correct implementation of these erosion control measures is expected to reduce the impact resulting from erosion to less than significant.

4.4-9

с.

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 Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Regional ground subsidence generally occurs due to rapid and intensive removal of subterranean fluids, typically water or oil. It is generally attributed to the consolidation of sediments as the fluid in the sediment is removed. The total load of the soils in partially saturated or saturated deposits is born by their granular structure and the fluid. When the fluid is removed, the load is born by the sediment alone and it settles. No reports of regional subsidence have documented subsidence in the site vicinity, and lack of intense removal of significant quantities of water or oil extraction in the area makes the potential for damage due to ground subsidence low. Therefore, the risk from geological units or soil becoming unstable is less than significant.

Unstable/expansive soils are generally removed during foundation work to avoid structural damage. Unstable/expansive soils are addressed through the integration of geotechnical information in the planning and design process for individual projects. Local soil suitability is assessed for specific projects in accordance with standard industry practices and state-provided guidance, such as CGS Special Publication 117A, used to minimize the risk associated with unstable soils. Compliance with UBC and CBC requirements, as well as local building codes and ordinances, and review of individual project grading reports and plans by the City's Building Division, and pad certifications by the City Engineering Division, would ensure that no significant impacts related to expansive soils would occur. Thus impacts would be less than significant, and no mitigation is required.

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

The project area is served by an existing wastewater sewer system. As such, whether soils would be capable of supporting the use of septic tanks is not relevant and impacts would be less than significant.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No unique paleontological resource or unique geologic feature are known to be present within the Project Site. Inadvertent discovery of subsurface artifacts is addressed in **Section 4.2: Cultural Resources**.

4.5 Geology and Soils

4.5.4 CUMULATIVE IMPACTS

Related projects would be subject to varying risks associated with geotechnical hazards. Due to the site specific nature of geological conditions, geotechnical impacts are typically assessed on a project-by project basis in accordance with the CEQA and building code regulations. All future development in the Plan Area would be subject to all mitigation measures required under this Village South Specific Plan EIR, any additional mitigation measures identified if additional project level CEQA study is required, and the project level requirements of the CBC, UBC, MS4, and Claremont Municipal Code. The CBC and UBC regulations would require that structures be constructed to meet minimum seismic safety standards. In most cases cumulative impacts would be reduced to less than significant levels through compliance with existing codes and regulations. Therefore, with the implementation of appropriate mitigation measures and existing regulations cumulative impacts would be less than significant.

4.5.5 MITIGATION

As impacts would be less than significant, no mitigation is necessary.

4.6.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to greenhouse gas emissions are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and *Guidelines*.

Would the project:

- 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 regulation adopted for the purpose of reducing the emissions of greenhouse gases?

There are no adopted quantitative level significance thresholds for Greenhouse Gases (GHG) emissions that would be applicable to the Project. Section 15064.4 of the CEQA Guidelines provides the guidance for lead agencies to estimate the amount of GHGs and the factors for determining the significance of impacts. Specifically, the lead agency has the discretion to determine, in the context of a particular project, whether to use a model or methodology to quantify GHG emissions resulting or rely on a qualitative analysis or performance-based standards. Furthermore, the lead agency should consider the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting, whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

4.6.2 ENVIRONMENTAL SETTING

Existing Conditions

Global Context

GHGs are global pollutants that have long atmospheric lifetimes (one year to several thousand years). GHGs persist in the atmosphere for a long enough time to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule depends on multiple variables and cannot be pinpointed, more carbon dioxide (CO_2) is currently emitted into the atmosphere than is avoided or sequestered. CO_2 sinks, or reservoirs—including vegetation and the ocean—absorb CO_2 through photosynthesis and dissolution, respectively. These are two of the most common processes of CO_2 sequestration. Of the total annual human-caused CO_2 emissions, approximately 54 percent is sequestered within a year through ocean uptake, northern hemisphere forest regrowth, and other terrestrial sinks; the remaining 46 percent of human-caused CO₂ emissions are stored in the atmosphere.

Similarly, the effects of GHGs are borne globally (sea-level rise, hurricanes, droughts, etc.), as opposed to the localized air quality effects of criteria air pollutants and toxic air contaminants (TACs). The quantity of GHGs that it takes to ultimately result in climate change is not precisely known, but that quantity is enormous. No single project would be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or microclimates; however, it is the combined GHG contributions per project that create an impact.

In the context of CEQA, "GHG impacts are exclusively cumulative impacts; there are no noncumulative GHG emission impacts from a climate change perspective."¹ Further, because climate change is occurring on a global scale, it is not meaningfully possible to quantify the scientific effect of new GHG emissions caused by a single project.²

Greenhouse Effect

GHGs play a critical role in determining the Earth's surface temperature, as these gases absorb solar radiation. Solar radiation enters the Earth's atmosphere from space. A portion of the radiation is absorbed by the Earth's surface, and a smaller portion of this radiation is reflected back into space. The radiation absorbed by the Earth is reradiated as lower-frequency infrared radiation, which is then selectively absorbed by GHGs in the Earth's atmosphere. As a result, the greater the amount of GHGs in the atmosphere, the greater the amount of infrared radiation trapped, resulting in a warming of the atmosphere. This phenomenon is commonly referred to as the "greenhouse effect." Scientists have speculated that increased GHG emissions from human activity (anthropogenic) could lead to a less habitable climate. Anthropogenic GHG emissions leading to atmospheric levels in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the Earth's atmosphere and oceans, with corresponding effects on global air and water circulation patterns and climate. CO₂ emissions associated with fossil fuel combustion are the primary contributors to human-induced emissions.

¹ CAPCOA, *CEQA & Climate Change (January 2008)*, p. 35. See also SCAQMD, CEQA Guide (February 2016), p. 6-1 ["from the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative"]; SJVAPCD, Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA (December 2009), p. 4 ["effects of project specific GHG emissions are cumulative"]; California Natural Resources Agency, Final Statement of Reasons for Regulatory Action, December 2009.

² SCAQMD, *CEQA Guide (February 2016),* p. 6-10 ["there is no known level of emissions that determines if a single project will substantially impact overall GHG emission levels in the atmosphere"]; SJVAPCD, Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA (December 2009), p. 3 ["existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change"].

Climate Change Effects for California

According to the California Air Resources Board (CARB), which has the authority over GHG emissions, some of the potential California-specific impacts of global warming may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years.

To protect the State's public health and safety, resources, and economy, the California Natural Resources Agency, in coordination with other State agencies, has updated the *2009 California Climate Adaptation Strategy* with the *2014 Safeguarding California: Reducing Climate Risk* plan. Additionally, in March 2016, the California Natural Resources Agency released *Safeguarding California: Implementation Action Plans*, a document that shows how California is acting to convert the recommendations contained in the 2014 *Safeguarding California* plan into action. The 2016 *Action Plans* document is divided by ten sectors.³ It shows the path forward by presenting the risks posed by climate change; the adaptation efforts underway; and the actions that will be taken to safeguard residents, property, communities, and natural systems. The California Natural Resources Agency will continue to update the Statewide strategy summarizing climate change impacts and preparing reports to the Governor regarding the ongoing implementation of the Statewide strategy. The California Natural Resources Agency also has produced climate change assessments which detail the anticipated impacts of global warming in California.⁴

Several recent studies have attempted to explore the possible negative consequences that climate change, left unchecked, could have in California.⁵ These reports acknowledge that scientists' understanding of the complex global climate system, and the interplay of the various internal and external factors that affect climate change, remains too limited to yield scientifically valid conclusions on a localized scale. And, while substantial work has been done at the international and national levels to evaluate climatic impacts, far less information is available on regional and local impacts. In addition, projecting regional impacts of climate change relies on large-scale scenarios of changing climate parameters, using information that is typically at too general a scale to make accurate regional or local assessments.

Sources of Greenhouse Gas Emissions

GHGs are the result of both natural and anthropogenic activities. With respect to anthropogenic activities, motor vehicle travel, air travel, consumption of fossil fuels for power generation, industrial processes, heating and cooling, landfills, agriculture, and wildfire are the primary sources of GHG emissions.

³ The ten sectors are agriculture; biodiversity and habitat; emergency management; energy; forestry; land use and community development; oceans and coastal resources and ecosystems; public health; transportation; and water.

⁴ State of California Department of Justice, Attorney General, *Climate Change Impacts in California*, https://oag.ca.gov/environment/impact, accessed June 2020.

⁵ California EPA, *Climate Change Research Plan for California*, February 2015; California Natural Resources Agency, California Energy Commission, Governor's Office of Planning and Research, California's Fourth Climate Assessment, August 2018.

Additionally, land use decisions and future development projects pursuant to implementation of a general plan can affect the generation of GHG emissions from multiple sectors, resulting in direct or indirect GHG emissions. For example, electricity consumed in the lighting and heating of buildings is an indirect source of GHG emissions because it requires electricity from power plants, which emits GHG directly into the atmosphere. Conversely, tailpipe emissions from the use of vehicles generates direct GHG emissions.

GHGs are a group of emissions that include CO_2 , methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorinated chemicals (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). A general description of these GHGs are provided in **Table 4.6-1: Description of Identified Greenhouse Gases**. Carbon dioxide is the most abundant GHG. As stated above, other GHGs are less abundant, but have higher global warming potential than CO_2 . Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2 ; denoted as CO_2e .

Greenhouse Gas Emissions Inventory and Trends

In 2017, California produced 424.1 million metric tons of carbon dioxide equivalents (MMTCO₂e), including imported electricity and excluding combustion of international fuels and carbon sinks or storage. The major source of GHGs in California is transportation, contributing to 40 percent of the State's total GHG emissions. Industrial generation is the second largest source, contributing to 21 percent of the State's GHG emissions. The Statewide inventory of GHGs by sector is shown in **Table 4.6-2: California GHG Inventory 2008–2017**.

Project Site

The Project is within the City of Claremont, in the eastern portion of Los Angeles County. The predominant land uses within the Project Site include a vacant automobile sales lot, residential uses, an auto service station, light industrial and warehousing uses, offices, and service commercial businesses. A mix of singleand multifamily residential uses are present along Indian Hill Boulevard, Arrow Highway and Bucknell Avenue. Approximately 80,000 square feet of industrial uses and six (6) single-family residential uses and 10,000 square feet of office uses would be removed as part of the Project. **Table 4.6-3: Existing Maximum Operational GHG Emissions**, provides the greenhouse gas emissions of those uses. These estimates are derived from the same model used for air quality emissions in **Section 4.2** of this DEIR. As shown, existing uses result in a total of 1,372 MTCO2e per year.

4.6-4

Table 4.6-1

Description of Identified Greenhouse Gases

GHG	General Description
Carbon Dioxide (CO ₂)	An odorless, colorless GHG that has both natural and anthropocentric sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (human caused) sources of CO ₂ are burning coal, oil, natural gas, and wood.
Methane (CH4)	A flammable gas and is the main component of natural gas. When one molecule of CH ₄ is burned in the presence of oxygen, one molecule of CO ₂ and two molecules of water are released. A natural source of CH ₄ is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain CH ₄ , which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.
Nitrous Oxide (N ₂ O)	A colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, race cars, and as an aerosol spray propellant.
Hydrofluoroca rbons (HFCs)	Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH4 or ethane (C ₂ H ₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987. HFCs are synthetic man-made chemicals that are used as substitute for CFCs as refrigerants. HFCs deplete stratospheric ozone, but to a much lesser extent than CFCs.
Perfluorinated Chemicals (PFCs)	PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semi-conduction manufacturing.
Sulfur Hexafluoride (SF₅)	An inorganic, odorless, colorless, nontoxic, and nonflammable gas. SF ₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
Nitrogen Trifluoride (NF₃)	An inorganic, nontoxic, odorless, nonflammable gas. NF ₃ is used in the manufacture of semiconductors, as an oxidizer of high energy fuels, for the preparation of tetrafluoro hydrazine, as an etchant gas in the electronic industry, and as a fluorine source in high power chemical lasers.

Table 4.6-2 California GHG Inventory 2008–2017

	Emissions (MMTCO ₂ e)									
Main Sector	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Transportation ^a	177.35	170.20	165.13	161.76	161.31	160.91	162.53	166.18	168.76	169.86
Industrial ^b	90.54	87.90	91.50	90.17	91.08	93.69	94.02	91.48	89.49	89.40
Electric power	120.14	101.37	90.34	87.97	95.52	89.40	88.46	83.82	68.59	62.39
Commercial and residential	44.37	44.48	45.92	46.37	43.76	44.42	38.25	38.82	40.62	41.14
Agriculture	35.09	32.85	33.68	34.34	35.46	33.99	35.06	33.75	33.51	32.42
High GWP ^{c,d}	11.65	12.29	13.52	14.63	15.54	16.75	17.73	18.60	19.26	19.99
Recycled and waste	8.11	8.27	8.37	8.47	8.49	8.52	8.59	8.73	8.81	8.89
Total	487.25	457.35	448.46	443.61	451.16	447.69	444.65	441.37	429.04	424.10

Source: CARB (2019), https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_sum_2000-17.pdf

a Includes equipment used in construction, mining, oil drilling, industrial and airport ground operations.

b Reflects emissions from combustion of natural gas, diesel, and lease fuel plus fugitive emissions.

c These categories are listed in the Industrial sector of CARB's GHG Emission Inventory sectors.

d This category is listed in the Electric Power sector of CARB's GHG Emission Inventory sectors.

Table 4.6-3

	Unmitigated
Source	MTCO₂e per year
Area	1
Energy	433
Mobile (trips)	760
Waste	58
Water	119
Total	1,372

Existing Maximum Operational GHG Emissions

Source: CalEEMod Emissions calculations are provided in **Appendix F.** Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Abbreviation: MTCO₂e = metric tons of carbon dioxide emissions.

Regulatory Framework

Federal

Federal Clean Air Act

The US Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*⁶ that CO₂ and other GHGs are pollutants under the federal Clean Air Act (CAA), which the US Environmental Protection Agency (USEPA) must regulate if it determines they pose an endangerment to public health or welfare.⁷ The Court did not mandate that the USEPA enact regulations to reduce GHG emissions. Instead, the Court found that USEPA could avoid taking action if it found that GHGs do not contribute to climate change or if it offered a "reasonable explanation" for not determining that GHGs contribute to climate change.

On April 17, 2009, USEPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare. On April 24, 2009, the proposed rule was published in the Federal Register under Docket ID No. EPA-HQ-OAR-2009-0171.⁸ USEPA stated that high atmospheric levels of GHGs "are the unambiguous result of human emissions and are very likely the cause of the observed increase in average temperatures and other climatic changes." USEPA further found that "atmospheric

⁶ Massachusetts v. Environmental Protection Agency, 127 S.Ct. 1438 (2007).

⁷ Perry W. Payne and Sara Rosenbaum, "Massachusetts et al. v Environmental Protection Agency: Implications for Public Health Policy and Practice," Public Health Reports 122 No. 6 (2007): 817–819, https://doi.org/10.1177/003335490712200614.

⁸ Federal Register, "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act" (December 15, 2009), accessed May 2020, https://www.federalregister.gov/documents/2009/12/15/E9-29537/endangerment-and-cause-or-contribute-findings-for-greenhouse-gases-under-section-202a-of-the-clean.

concentrations of greenhouse gases endanger public health and welfare within the meaning of Section 202 of the Clean Air Act." The final rule was effective on January 14, 2010.⁹ While these findings alone did not impose any requirements on industry or other entities, this action was a prerequisite to regulatory actions by USEPA, including, but not limited to, GHG emissions standards for light-duty vehicles.

In response, USEPA promulgated a regulation to require reporting of all GHG emissions from all sectors of the economy. The final rule applies to fossil fuel suppliers and industrial gas suppliers, direct greenhouse gas emitters and manufacturers of heavy-duty and off-road vehicles and engines. The rule does not require control of greenhouse gases; rather, it requires only that sources above certain threshold levels monitor and report emissions.¹⁰

Corporate Average Fuel Economy (CAFE) Standards

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the George W. Bush administration issued Executive Order 13432 in 2007, directing USEPA, the US Department of Transportation (USDOT), and the US Department of Energy (USDOE), to establish regulations that reduce GHG emissions from motor vehicles, nonroad vehicles, and nonroad engines by 2008.¹¹ In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for model year 2011; in 2010, USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.¹²

In 2010, President Obama issued a memorandum directing USEPA, USDOT, USDOE, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles.¹³ The proposed standards projected to achieve 163 grams/mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.6 miles per gallon (mpg) if this level were achieved solely through

⁹ United States Environmental Protection Agency (USEPA), "Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Section 202(a) of the Clean Air Act," accessed May 2020, https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a-clean/.

¹⁰ Federal Register, "Mandatory Reporting of Greenhouse Gases" (October 30, 2009), https://www.gpo.gov/fdsys/pkg/FR-2009-10-30/pdf/E9-23315.pdf.

¹¹ US Government Publishing Office, Administration of George W. Bush, "Executive Order 13432—Cooperation Among Agencies in Protecting the Environment With Respect to Greenhouse Gas Emissions From Motor Vehicles, Nonroad Vehicles, and Nonroad Engines," 631 (May 14, 2007), https://www.gpo.gov/fdsys/pkg/WCPD-2007-05-21/pdf/WCPD-2007-05-21-Pg631.pdf.

¹² USEPA, "Regulations for Greenhouse Gas Emissions from Commercial Trucks & Buses" (December 27, 2017), https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercialtrucks.

¹³ USEPA, "Presidential Announcements and Letters of Support related to Greenhouse Gas Emissions" (August 28, 2017), https://www.epa.gov/regulations-emissions-vehicles-and-engines/presidential-announcements-and-letters-supportrelated.

fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021. On April 2, 2018 USEPA signed the Mid-term Evaluation Final Determination, which finds that the model year 2022–2025 greenhouse gas standards are not appropriate and should be revised.¹⁴ The Final Determination serves to initiate a notice to further consider appropriate standards for model year 2022–2025 light duty vehicles. On August 24, 2018, USEPA and NHTSA published a proposal to freeze the model year 2020 standards through model year 2026 and to revoke California's waiver under the Clean Air Act to establish more stringent standards.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2016, USEPA and NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. If implemented, the Phase 2 standards would be expected to lower CO₂ emissions by approximately 1.1 billion metric tons (MT) and save vehicle owners fuel costs of about \$170 billion.¹⁵ But as discussed previously, USEPA and NHTSA have proposed to roll back GHG and fuel economy for cars and light-duty trucks, which suggest a similar rollback of Phase 2 standards for medium and heavy-duty vehicles may be pursued.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:¹⁶

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of renewable fuel in 2022, with at least 16 billion gallons from cellulosic biofuels and a cap of 15 billion gallons for corn-starch ethanol;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and

¹⁴ Federal Register, *Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022 – 2025 Light-Duty Vehicles,* April 13, 2018, accessed May 2020, https://www.federalregister.gov/documents/2018/04/13/2018-07364/mid-term-evaluation-of-greenhouse-gas-emissions-standards-for-model-year-2022-2025-light-duty.

¹⁵ USEPA, EPA and NHTSA Adopt Standards to Reduce GHG and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond, August 2016.

¹⁶ USEPA, "Summary of the Energy Independence and Security Act," https://www.epa.gov/laws-regulations/summaryenergy-independence-and-security-act.

• While superseded by USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks; and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks, and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."¹⁷

State

Executive Orders

Executive Order S-3-05

Executive Order S-3-05, signed by Governor Arnold Schwarzenegger and issued in June 2005, proclaimed that California is vulnerable to the impacts of climate change.¹⁸ It declared that increased temperatures could reduce the Sierra snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established the following total GHG emission targets:

- 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.

However, in adopting the California Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32 (Pavley), discussed below, the Legislature did not adopt the 2050 horizon-year goal from Executive Order No. S-3-05 and, in the 2006 legislative session, rejected legislation to enact the Executive Order's 2050 goal.

Executive Order S-01-07

Executive Order S-1-07, the Low Carbon Fuel Standard (issued on January 18, 2007), requires a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020.¹⁹ Regulatory proceedings and implementation of the Low Carbon Fuel Standard have been directed to CARB. The Low Carbon Fuel Standard has been identified by CARB as a discrete early action item in the adopted Climate

¹⁷ A green job, as defined by the United States Department of Labor, is a job in business that produce goods or provide services that benefit the environment or conserve natural resources.

¹⁸ National Resources Conservation Service, "Emerging Issues Committee Members," https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_008701.pdf.

¹⁹ Office of the Governor, Executive Order S-01-07 (January 18, 2007), https://www.arb.ca.gov/fuels/lcfs/eos0107.pdf.

Change Scoping Plan (discussed below). CARB expects the Low Carbon Fuel Standard to achieve the minimum 10 percent reduction goal; however, many of the early action items outlined in the Climate Change Scoping Plan work in tandem with one another. Other specific emission reduction measures included are the Million Solar Roofs Program²⁰ and AB 1493 (Pavley I), Vehicle Emissions: Greenhouse Gases, which establishes motor vehicle GHG emissions standards.²¹ To avoid the potential for double-counting emission reductions associated with AB 1493, the Climate Change Scoping Plan has modified the aggregate reduction expected from the Low Carbon Fuel Standard to 9.1 percent. In accordance with the Climate Change Scoping Plan, this analysis incorporates the modified reduction potential for the Low Carbon Fuel Standard. CARB released a draft version of the Low Carbon Fuel Standard in October 2008. The final regulation was approved by the Office of Administrative Law and filed with the Secretary of State on January 12, 2010; the Low Carbon Fuel Standard became effective on the same day.

Executive Order B-30-15 and B-55-18

Executive Order B-30-15, signed by Governor Edmund Gerald "Jerry" Brown and issued in April 29, 2015, established a new Statewide policy goal to reduce GHG emissions to 40 percent below their 1990 levels by 2030. Reducing GHG emissions by 40 percent below 1990 levels in 2030, and by 80 percent below 1990 levels by 2050 (consistent with Executive Order S-3-05), aligns with scientifically established levels needed to limit global warming to less than 2 degrees Celsius.²² EO B-30-15 also directed all State agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 target, as well as the preexisting, long-term 2050 target identified in EO S-3-05 (see discussion above). Additionally, EO S-3-05 directed CARB to update its Scoping Plan (see discussion below) to address the 2030 target. EO B-55-18, issued by Governor Brown on September 10, 2018, directs the State to achieve carbon neutrality no later than 2045 and achieve and maintain net negative emissions thereafter.

Assembly Bill 32 and Related Legislation

AB 32, the Global Warming Solutions Act of 2006, required a sharp reduction of GHG emissions to 1990 levels by 2020. To achieve these goals, AB 32 mandates that CARB establish a quantified emissions cap and institute a schedule to meet the cap; implement regulations to reduce Statewide GHG emissions from stationary sources consistent with the California Climate Action Team strategies; and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. To reach the reduction

²⁰ US Department of Energy, "Laying the Foundation for Solar America: The Million Solar Roofs Initiative" (October 2016), https://www.nrel.gov/docs/fy07osti/40483.pdf.

²¹ The standards enacted in Pavley I are the first GHG standards in the nation for passenger vehicles and took effect for model years starting in 2009 and going through 2016. Pavley I could potentially result in 27.7 million metric tons CO2e reduction in 2020. Pavley II will cover model years 2017 to 2025 and potentially result in an additional reduction of 4.1 million metric tons CO2e.

²² Office of the Governor, "Governor Brown Established Most Ambitious Greenhouse Gas Reduction Target in North America" (April 29, 2015), https://www.gov.ca.gov/2015/04/29/news18938/.

4.6 Greenhouse Gas Emissions

targets, AB 32 requires CARB to adopt—in an open, public process—rules and regulations that achieve the maximum technologically feasible and cost-effective GHG reductions.

The California Climate Action Team stated that "smart land use" is an umbrella term for strategies that integrate transportation and land-use decisions.²³ Such strategies generally encourage jobs/housing proximity, promote transit-oriented development (TOD), and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land-use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. "Intelligent transportation systems" is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and the movement of people, goods, and service.²⁴

Climate Change Scoping Plan

CARB approved a Climate Change Scoping Plan (2008 Scoping Plan) on December 11, 2008, as required by AB 32. The 2008 Scoping Plan proposed a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health."²⁵ The 2008 Scoping Plan had a range of GHG reduction actions, including direct regulations; alternative compliance mechanisms; monetary and nonmonetary incentives; voluntary actions; market-based mechanisms, such as a cap-and-trade system; and an AB 32 implementation regulation to fund the program.

The 2008 Scoping Plan called for a "coordinated set of strategies" to address all major categories of GHG emissions.²⁶ Transportation emissions were to be addressed through a combination of higher standards for vehicle fuel economy, implementation of the Low Carbon Fuel Standard, and greater consideration to reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations were encouraged and, sometimes, required to implement energy efficiency practices. Utility energy supplies will change to include more renewable energy sources through implementation of the Renewables Portfolio Standard. Established in 2002 under Senate Bill (SB) 1078, the California Renewables Portfolio Standards (RPS) were accelerated in 2006 under SB 107, which required that, by 2010, at least 20 percent of electricity retail sales come from renewable sources. In April 2016, the California Energy Commission (CEC) updated the RPS pursuant to SB 350, intended to set the

²³ California Energy Commission, "The Role of Land Use in Meeting California's Energy and Climate Change Goals" (June 2007), http://www.energy.ca.gov/2007publications/CEC-600-2007-008/CEC-600-2007-008-SD.PDF.

²⁴ California Environmental Protection Agency, *Climate Action Team Report to Governor Schwarzenegger and the Legislature* (*March 2006*), 58.

²⁵ CARB, Climate Change Scoping Plan: A Framework for Change (December 2008), https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf.

²⁶ CARB, Climate Change Scoping Plan, p. ES-7.

new target 50 percent renewables by 2030.²⁷ This will be complemented with emphasis on local generation, including rooftop photovoltaics and solar hot water installations. Additionally, the Scoping Plan emphasized opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicated that substantial savings of electricity and natural gas would be accomplished through improving energy efficiency.

CARB updated the Scoping Plan in May 2014 (2014 Scoping Plan). The 2014 Scoping Plan²⁸ adjusted the 1990 GHG emissions levels to 431 MMTCO₂e; the updated 2020 GHG emissions forecast is 509 MMTCO₂e, which credited for certain GHG emission reduction measures already in place (e.g., the RPS). The 2014 Scoping Plan also recommended a 40 percent reduction in GHG emissions from 1990 levels by 2030, and a 60 percent reduction in GHG emissions from 1990 levels by 2040. The 2014 Scoping Plan "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050."

The 2017 Scoping Plan,²⁹ approved on December 14, 2017, builds on previous programs and takes aim at the 2030 target established by the 2016 SB 32 (Pavley), which is further discussed below. The 2017 Scoping Plan outlines options to meet California's aggressive goals to reduce GHGs by 40 percent below 1990 levels by 2030. In addition, the Scoping Plan incorporates the State's updated RPS requiring utilities to procure 50 percent of their electricity from renewable energy sources by 2030. It also raises the State's Low Carbon Fuel Standard and aims to reduce emissions of methane and hydrofluorocarbons by 40 percent from 2013 levels by 2030 and emissions of black carbon by 50 percent from 2013 levels.

Advanced Clean Cars Regulations

In 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for vehicle model years 2017–2025. The program combines the control of smog, soot, and GHGs with requirements for greater number of zero-emission vehicles. By 2025, when the rules will be fully implemented, automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.³⁰

²⁷ California Energy Commission, Enforcement Procedures for the Renewables Portfolio Standards for Local Publicly Owned Electric Utilities: Amended Regulations (April 12, 2016), http://www.energy.ca.gov/2016publications/CEC-300-2016-002/CEC-300-2016-002-CMF.pdf.

²⁸ CARB, First Update to the Climate Change Scoping Plan: Building on the Framework (May 2014).

²⁹ CARB, California's 2017 Climate Change Scoping Plan (November 2017), https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

³⁰ CARB, Advanced Clean Cars Program, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program

AB 197: Statewide GHG Emissions Limit

On September 8, 2016, Governor Brown signed AB 197, which requires CARB to approve a Statewide GHG emissions limit equivalent to the Statewide GHG emission level in 1990 to be achieved by 2020.³¹ AB 197 requires the CARB to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions. The bill became effective on January 1, 2017.

Senate Bills

Senate Bill 375

SB 375, signed into law in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations.³² The act requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) that prescribes land use allocation in that MPO's regional transportation plan (RTP). CARB, in consultation with MPOs, provided regional reduction targets for GHGs for the years 2020 and 2035.

Senate Bill X1-2: 2020 Renewable Portfolio Standard

On April 12, 2011, California governor Jerry Brown signed SB X1-2.³³ This bill supersedes the 33 percent by RPS created by Executive Order S-14-08, previously signed by Governor Schwarzenegger. The RPS required that all retail suppliers of electricity in California serve 33 percent of their load with renewable energy by 2020. A number of significant changes are made in SB X1-2. It extends application of the RPS to all electric retailers in the State, including municipal and public utilities, and community choice aggregators.

SB X1-2 creates a three-stage compliance period for electricity providers to meet renewable energy goals: 20 percent of retail sales must be renewable energy products by 2013, 25 percent of retail sales must be renewable energy products by 2016, and 33 percent of retail sales must be renewable energy products by 2020. The 33 percent level must be maintained in the years that follow. This three-stage compliance period requires the RPS to be met increasingly with renewable energy that is supplied to the California grid and is located within or directly proximate to California. SB X1-2 mandates that renewables from this category make up:

• At least 50 percent for the 2011–2013 compliance period;

³¹ California Legislative Information, Assembly Bill No. 197 (September 8, 2016), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB197.

³² California Legislative Information, Senate Bill No. 375 (September 30, 2008), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB375.

³³ California Energy Commission, Renewable Portfolio, http://www.energy.ca.gov/portfolio.

- At least 65 percent for the 2014–2016 compliance period; and
- At least 75 percent for 2016 and beyond.

SB X1-2 sets rules for the use of Renewable Energy Credits (RECs) as follows:

- Establishes a cap of no more than 25 percent unbundled RECs going toward the RPS between 2011 and 2013, 15 percent from 2014 to 2016, and 10 percent thereafter;
- Does not allow for the grandfathering of tradable REC contracts executed before 2010, unless the contract was (or is) approved by the California Public Utilities Commission (CPUC);
- Allows banking of RECs for 3 years only; and
- Allows energy service providers, community choice aggregators, and investor-owned utilities with 60,000 or fewer customers to use 100 percent RECs to meet the RPS.

SB X1-2 also eliminates the Market Price Referent, which was a benchmark to assess the above-market costs of RPS contracts based on the long-term ownership, operating, and fixed-price fuel costs for a new 500-megawatt (mW) natural-gas-fired, combined-cycle gas turbine.

Senate Bill 350: Clean Energy and Pollution Reduction Act

SB 350, the Clean Energy and Pollution Reduction Act of 2015, was signed on October 7 of that year.³⁴ SB 350 implements some of the goals of Executive Order B-30-15 described above. The objectives of SB 350 are: (1) to increase the procurement of our electricity from renewable sources from 33 percent to 50 percent; and (2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.³⁵

Center for Biological Diversity v. California Department of Fish and Wildlife

The California Supreme Court's decision published on November 30, 2015, in *Center for Biological Diversity v. California Department of Fish and Wildlife* (Case No. 217763; the Newhall Ranch case) reviewed the methodology used to analyze GHG emissions in an EIR prepared for a large scale residential project on undeveloped land in a rural area of the City of Santa Clara.³⁶ That EIR used the "business as usual" (BAU) methodology to determine whether the project would impede the State of California's compliance with statutory emissions reduction mandate established by the AB 32 Scoping Plan.

³⁴ California Legislative Information, Senate Bill No. 350 (October 7, 2015), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350.

³⁵ Senate Bill 350 (2015–2016 Reg, Session) Stats 2015, ch. 547.

³⁶ California Department of Fish and Wildlife, Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan, https://www.wildlife.ca.gov/regions/5/newhall.

The Court did not invalidate the BAU approach entirely, but did hold that:

The Scoping Plan nowhere related that statewide level of reduction effort to the percentage of reduction that would or should be required from individual projects and nothing Department of Fish and Wildlife or Newhall have cited in the administrative record indicates the required percentage reduction from business as usual is the same for an individual project as for the entire state population and economy.³⁷

The California Supreme Court suggested regulatory consistency as a pathway to compliance, stating that a Lead Agency might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities. The Court recognized that to the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan, and adopted by CARB or other State agencies, a Lead Agency could appropriately rely on their use as showing compliance with performance-based standards adopted to fulfill a Statewide plan for the reduction or mitigation of GHG emissions. This approach is consistent with CEQA Guidelines Section 15064, which provides that a determination that an impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including plans or regulations for the reduction of greenhouse gas emissions. The Supreme Court also suggested "a lead agency may rely on existing numerical thresholds of significance for greenhouse gas emissions (*brightline threshold approach*)."³⁸

California Energy Commission

Building Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations (CCR) regulates the design of building shells and building components. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The CEC adopted the 2016 Building Energy Efficiency Standards (2016 Building Standards), effective January 1, 2017. The CEC adopted the 2019 Building Energy Efficiency Standards and became effective January 1, 2020. Two key areas specific to nonresidential development in the 2019 standards focus on nonresidential ventilation requirements and nonresidential lighting requirements.³⁹ Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards.

³⁷ Center for Biological Diversity et al. v. California Department of Fish and Wildlife (2015) (62 Cal.4th 204, 195 Cal.Rptr.3d 247, 361 P.3d 342).

³⁸ The South Coast Air Quality Management District (SCAQMD), Interim CEQA Greenhouse Gas (GHG) Significance Thresholds, draft guidance document (October 2008), Attachment E, http://www.aqmd.gov/docs/defaultsource/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf.

³⁹ California Energy Commission (CEC), 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, https://www.energy.ca.gov/title24/2019standards/, accessed May 2020.

The CPUC, CEC, and CARB also have a shared, established goal of achieving Zero Net Energy (ZNE) for new construction in California. The key policy timelines include (1) all new residential construction in California will be ZNE by 2020, and (2) all new commercial construction in California will be ZNE by 2030.

The ZNE goal generally means that new buildings must use a combination of improved efficiency and renewable energy generation to meet 100 percent of their annual energy need, as specifically defined by the CEC:

A ZNE Code Building is one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building, at the level of a single "project" seeking development entitlements and building code permits, measured using the [CEC]'s Time Dependent Valuation (TDV) metric. A ZNE Code Building meets an Energy Use Intensity value designated in the Building Energy Efficiency Standards by building type and climate zone that reflect best practices for highly efficient buildings.⁴⁰

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24), commonly referred to as CALGreen, establish voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. CALGreen is periodically amended; the most recent 2019 standards became effective on January 1, 2020.

Appliance Standards

The CEC periodically amends and enforces Appliance Efficiency Regulations contained in Title 20 of the CCR. The regulations establish water and energy efficiency standards for both federally and non-federally regulated appliances. The most current Appliance Efficiency Regulations, dated January 2019, cover 23 categories of appliances (e.g., refrigerators; plumbing fixtures; dishwashers; clothes washer and dryers; televisions) and apply to appliances offered for sale in California.⁴¹

⁴⁰ CEC, 2015 Integrated Energy Policy Report (2015), p. 41.

⁴¹ CEC, Appliance Efficiency Standards Scheduled to Take Effect in 2019, Accessed May 2020, http://calenergycommission.blogspot.com/2018/12/appliance-efficiency-standards.html.

Regional and Local

Southern California Association of Governments

SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

SCAG is the metropolitan planning organization (MPO) for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for the discussion of regional issues related to transportation, the economy, community development, and the environment. As the federally-designated MPO for the Southern California region, SCAG is mandated by the federal government to research and develop plans for transportation, hazardous waste management, and air quality. Pursuant to California Health and Safety Code Section 40460(b),⁴² SCAG has the responsibility for preparing and approving the portions of the AQMP relating to regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG is also responsible under the CAA for determining conformity of transportation projects, plans, and programs with applicable air quality plans.

With regard to air quality planning, SCAG has prepared and adopted the 2020–2045 RTP/SCS,⁴³ which includes a Sustainable Communities Strategy that addresses regional development and growth forecasts. The SCAG 2020–2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, with a specific goal of achieving an 8 percent reduction in passenger vehicle GHG emissions on a per capita basis by 2020, 19 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level. Although the RTP/SCS is not technically an air quality plan, consistency with the RTP/SCS has air quality implications, including the reduction of VMT which reduces air quality emissions.

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990.⁴⁴ The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan (AQMP). In March

⁴² California Health and Safety Code, Division 26. Air Resources, PART 3. Air Pollution Control Districts, Chapter 5.5. South Coast Air Quality Management District, ARTICLE 5. Plan, Section 40460(b).

<sup>https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=40460.&lawCode=HSC.
Southern California Association of Governments (SCAG), Connect SoCal: 2020-2045 Regional Transportation
Plan/Sustainable Communities Strategies Draft, "Chapter 1," https://www.connectsocal.org/Pages/Connect-SoCal-Draft-Plan.aspx, Accessed on July 10, 2020.</sup>

⁴⁴ SCAQMD, "SCAQMD's Historical Activity on Climate Change," http://www.aqmd.gov/nav/about/initiatives/climatechange.

1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons by the year 2000;
- Develop recycling regulations for hydrochlorofluorocarbons (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

City of Claremont General Plan

The Community Design, Open Space and Conservation, and Air Quality Elements of the City's General Plan contains the following goals or policies that are related to air quality but indirectly related to greenhouse gases as they address energy conservation and sustainability. The consistency of the Project with those goals and policies are analyzed in **Table 4.6-12** below.

City of Claremont Sustainable City Plan

In 2008, the City of Claremont adopted a Sustainable City Plan (SCP) to implement the sustainabilityrelated goals of the General Plan, including those related to greenhouse gases. The SCP, which was amended in 2013, includes goals, indicators and targets that are both directly and indirectly related to greenhouse gases. The SCP includes a direct goal of reducing GHG emissions Citywide by 15% by 2020. This goal has been achieved as indicated in the 2015 City report card. Indirect goals that relate to GHG's include public education measures, building efficiency, increasing use of renewable energy strategies, and increased levels of travel by public transit, cycling and walking.

4.6.3 IMPACT ANALYSIS

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

Pursuant to State CEQA Guidelines Section 15064.4, suitable methods for analysis of GHG emissions are:

1. Use a model or methodology to quantify greenhouse gas emissions resulting from a project. The Lead Agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The Lead Agency should explain the limitation of the particular model or methodology selected for use.

2. Rely on a qualitative analysis or performance-based standards.

The City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions and has not formally adopted a local plan for reducing GHG emissions. Nor have SCAQMD, OPR, CARB, CAPCOA, or any other State or regional agency adopted a numerical significance threshold for assessing GHG emissions that is applicable to the Project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the Project's impacts related to GHG emissions focuses on its consistency with Statewide, regional, and local plans adopted for the purpose of reducing and/or mitigation GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the Project's GHG-related impacts on the environment.

Nevertheless, a quantitative evaluation of the Project's GHG emissions can be estimated based on the modeling output used for the Air Quality section of this DEIR. The California Emissions Estimator Model Version 2016.3.2, known as CalEEMod, is the CARB–approved computer program model recommended by SCAQMD for use in the quantification of air quality emissions, including GHG emissions. CalEEMod was developed under the auspices of SCAQMD, with input from other California air districts. CalEEMod utilizes widely accepted models for emissions estimates combined with appropriate data that can be used if site-specific information is not available. For example, CalEEMod incorporates USEPA-developed emission factors; CARB's on-road and off-road equipment emission models, such as EMFAC and OFFROAD;⁴⁵ and studies commissioned by other California agencies, such as the CEC and CalRecycle. Proposed Project development would generate GHG emissions from a number of individual sources during both construction and postconstruction (operational) use of the buildings and related activities (e.g., landscape maintenance). These individual sources collectively are hereafter referred to as the proposed Project's GHG emissions inventory.

Construction

Construction activity impacts are relatively short in duration, they contribute a relatively small portion of the total lifetime GHG emissions of a project. The combustion of fossil fuels in construction equipment results in GHG emissions of CO₂ and smaller amounts of CH₄ and N₂O. Emissions of GHG would also result from the combustion of fossil fuels from haul trucks and vendor trucks delivering materials, and construction worker vehicles commuting to and from the Project Site. Typically, light-duty and medium-duty automobiles and trucks would be used for worker trips and heavy-duty trucks would be used for vendor trips. The vast majority of motor vehicles used for worker trips rely on gasoline as an energy source

⁴⁵ EMFAC is an emissions factor model used to calculate emissions rates from on-road vehicles (e.g., passenger vehicles; haul trucks). OFFROAD is an emissions factor model used to calculate emission rates from off-road mobile sources (e.g., construction equipment). CalEEMod version 2016.3.2 utilizes CARB's 2014 version of EMFAC.

while motor vehicles used for vendor trips would primarily rely on diesel as an energy source. In addition, GHG emissions-reduction measures for construction equipment are relatively limited. Therefore, in its *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Thresholds*, the SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies.

Construction assumptions used in the analysis of GHG emissions conservatively assume that the Project would be constructed with the most intensive activities occurring on a daily basis. The total emissions from construction of the Project are shown in **Table 4.6-4: Construction Annual Greenhouse Gas Emissions**.

Year ^a N	1TCO2e	
Overall Total	10,112	
30-Year Annual Amortized Rate	337	
Source: Refer to Appendix F, Section 2.1 Overall Construction Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.		
$GHG = areenhouse age: MTCO_2e = metric tons of$	carbon dioxide eauivalen	

As recommended by SCAQMD, the total GHG construction emissions were amortized over the 30-year lifetime of the Project (i.e., total construction GHG emissions were divided by 30 to determine annual construction emissions estimate that can be added to the Project's operational emissions) in order to determine the Project's annual GHG emissions inventory.⁴⁶ Total GHG emissions from the construction activities are 10,112 MTCO₂e. The total GHG emissions were amortized over 30-year project lifetime at 337 MTCO₂e per year.

Operation

Emissions from mobile and area sources and indirect emissions from energy and water use, wastewater, as well as waste management would occur every year after buildout. This section addresses operational GHG emissions.

⁴⁶ SCAQMD Governing Board Agenda Item 31, December 8, 2008.

Area Sources

The area source GHG emissions resulting from the proposed Project are primarily generated from landscaping-related fuel combustion sources, such as lawn mowers. GHG emission due to natural gas combustion in buildings are excluded from area sources since they are included in the emissions associated with building energy use.

Consumer products are various solvents used in nonindustrial applications which emit Reactive Organic Gases (ROGs) during their product use. Consumer products to be used by the proposed fast food restaurant include cleaning supplies, kitchen aerosols, cosmetics, and toiletries. The proposed building is assumed to be repainted at a rate of 10 percent of area per year. This is based on the assumptions used by SCAQMD. However, CalEEMod does not consider architectural coatings and consumer products to be sources of GHG.

The GHG emissions for the proposed Project were calculated using CalEEMod. CalEEMod defaults were used for landscape maintenance emissions. Area source emissions are shown in **Table 4.6-5: Area Source Greenhouse Gas** Emissions. As shown in **Table 4.6-5**, Project emissions would result in 17 MTCO₂e per year from area sources.

	Unmitigated
Source	MTCO ₂ e per year
Architectural Coating	0
Consumer Products	0
Landscaping	17
Total	17

Table 4.6-5
Area Source Greenhouse Gas Emissions

Source: Refer to Appendix F for Emission Model Output.

Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Energy Sources

GHGs are emitted as a result of activities in buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; when this occurs in a building, it is a direct emission source associated with that building. GHGs are also emitted during the generation of electricity from fossil fuels. When electricity is used in a building, the electricity generation typically takes place off-site at the power plant; electricity use in a building generally causes emission in an indirect manner.

Estimated emissions from the combustion of natural gas and other fuels from the implementation of the Project are calculated using the CalEEMod emissions inventory model, which multiplies an estimate of the energy usage by applicable emissions factors chosen by the utility company. GHG emissions from electricity use are directly dependent on the electricity utility provider. In this case, GHG intensity factors for Southern California Edison were selected in CalEEMod. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building, such as plug-in appliances. CalEEMod calculates energy use from systems covered by Title 24 (e.g., heating, ventilation, and air conditioning [HVAC] system, water heating system, and lighting system); energy use from lighting; and energy use from restaurant related equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting.

Energy source emissions are shown in **Table 4.6-6: Energy Source Greenhouse Gas Emissions**. As shown in **Table 4.6-6**, the Project would result in 61 MTCO₂e per year for electricity and 59 MTCO₂e per year for natural gas. Therefore, the total energy source emissions for the Project would be 120 MTCO₂e per year.

	Ele etuisitus	Natural Cas		
	Electricity	Natural Gas		
	Unmitigated	Unmitigated		
Land Use	MTCO ₂ e per year	MTCO₂e per year		
Apartments (Low Rise)	34	22		
Apartments (Mid Rise)	1,261	700		
General Office Building	187	25		
High Turnover (Sit Down Restaurant)	508	446		
Hotel	175	93		
Quality Restaurant	113	99		
Regional Shopping Center	177	4		
Total	2,456	1,390		

Table 4.6-6Energy Source Greenhouse Gas Emissions

Source: Refer to Appendix F for Emission Model Output.

Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Mobile Sources Emissions

Vehicle trips generated by growth within the Project Site vicinity would result in operational emissions through the combustion of fossil fuels. CO₂ emissions were determined based on the trip rates from the Traffic Impact Analysis Report (refer to **Appendix F** of this Draft EIR). The trip rate takes into account internal and external trips.
The Specific Plan Area is served by bus lines operated by Foothill Transit. In addition, Metrolink operates the San Bernardino Line within the Specific Plan vicinity. The Metrolink San Bernardino Line runs between San Bernardino and downtown Los Angeles, where it connects with other Metrolink lines, Amtrak, and the Metro L (Gold), B (Red), and D (Purple) Lines. As shown in **Table 4.6-7: Mobile Source Greenhouse Gas Emissions**, the Project's mobile source emissions would result in 7,326 MTOC2e per year. In addition, as calculated by CalEEMod, the Specific Plan would result in 19,735,424 annual vehicle miles travelled (VMT).

Table 4.6-7		
Mobile Source Greenhouse Gas Emissions		
Source	Unmitigated MTCO ₂ e per year	
Mobile (trips)	7,326	
Land Use	Annual VMT	
Apartments (Low Rise)	485,724	
Apartments (Mid Rise)	13,108,771	
General Office Building	687,138	
High Turnover (Sit Down Restaurant)	3,270,817	
Hotel	428,999	
Quality Restaurant	679,975	
Regional Shopping Center	1,074,000	
Total	19,735,424	

Source: Refer to **Appendix F** for Emission Model Output.

Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Solid Waste Emissions

Solid waste generation and associated emissions are calculated based on the square footage of the Project Area, using default data found in CalEEMod for the proposed land uses. Disposal of organic waste in landfills can lead to the generation of CH4, a potent GHG. By generating solid waste, the Project would contribute to the emission of fugitive CH₄ from landfills, as well as CO₂ and N₂O from the operation of trash collection vehicles. As shown in **Table 4.6-8: Solid Waste Source Greenhouse Gas Emissions**, GHG emissions resulting from solid waste would be 507 MTCO₂e per year.

Table 4.6-8

Land Use	Unmitigated MTCO ₂ e per year
Apartments (Low Rise)	6
Apartments (Mid Rise)	225
General Office Building	21
High Turnover (Sit Down Restaurant)	215
Hotel	14
Quality Restaurant	4
Regional Shopping Center	22
Total	507

Solid Waste Source Greenhouse Gas Emissions

Source: Refer to Appendix F for Emission Model Output.

Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Water Consumption and Wastewater Emissions

California's water conveyance system is energy intensive, with electricity used to pump and treat water. The Project will result in indirect GHG emissions due to water consumption and wastewater generation. Water consumption and wastewater generation, and their associated emissions, are calculated based on the square footage of the Project Site, using CalEEMod data. As shown in **Table 4.6-9: Water Source Greenhouse Gas Emissions**, the Project's water and wastewater GHG emissions would be 675 MTCO₂e per year.

Total Emissions

As shown in **Table 4.6-10: Operational Greenhouse Gas Emissions,** the Specific Plan Buildout would result in a total of 12,369 MTCO₂e per year. As discussed below, the Specific Plan would be consistent with the City's goals and policies to reduce emissions from mobile and stationary sources. As such, impacts would be less than significant.

Table 4.6-9

Water Source Greenhouse Gas Emissions

	Unmitigated
Land Use	MTCO ₂ e per year
Apartments (Low Rise)	13
Apartments (Mid Rise)	493
General Office Building	62
High Turnover (Sit Down Restaurant)	63
Hotel	8
Quality Restaurant	14
Regional Shopping Center	23
Total	675

Source: Refer to Appendix F for Emission Model Output.

Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Table 4.6-10

Operational Greenhouse Gas Emissions

	Unmitigated
Source	MTCO ₂ e per year
Construction (amortized)	337
Area	17
Energy	3,845
Mobile (trips)	7,326
Waste	507
Water	675
Total	12,369

Source: CalEEMod Emissions calculations are provided Appendix F

Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations. Abbreviation: $MTCO_2e =$ metric tons of carbon dioxide emissions.

b:

Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As part of the statewide requirement to reduce GHGs, CARB's Climate Change Scoping Plan instructs local governments to establish sustainable community strategies to reduce GHG emissions associated with energy, transportation, and water as required under SB 375. The Climate Change Scoping Plan

recommends energy-efficiency measures in building operations as well as complying with green building standards that result in decreased energy consumption compared to Title 24 California Building Codes. The City has adopted its City Sustainability Plan and has requirements for building design to meet LEED standards as well as Title 24 standards and encourages use of best practices for sustainable Building Operations and Maintenance. In addition, planning efforts that lead to reduced vehicle trips while preserving personal mobility along with programs and designs that enhance and complement land use and transit strategies are effective at achieving consistency with the CARB Scoping Plan. The Project would create a framework that integrates land use and mobility in a way that reduces vehicle trips, promotes walkability and supports transit. As such, the Project is consistent with CARB's Climate Change Scoping Plan.

SCAG 2020- 2045 RTP/SCS

In September 2020, SCAG's adopted SoCal Connect, its 2020-2045 RTP/SCS. SoCal Connect includes population, housing and employment projections that form the basis for SCAG's analysis of future land use patterns, mobility, and thus GHG emissions. SoCal Connect includes strategies that identify how the SCAG region can implement Connect SoCal and achieve related GHG reductions. The strategies are identified under subheadings of: Focus Growth Near Destinations & Mobility Options; Promote Diverse Housing Choices; Leverage Technology Innovations; Support Implementation of Sustainability Policies; and Promote a Green Region. Though some of the strategies can be implemented by local jurisdictions as part of land use decisions, not all of these strategies are applicable to the Project. Those strategies that are relevant to the Project are identified below in **Table 4.6-11, SCAG 2020—2045 RTP/SCS Project Consistency Analysis**.

As discussed in **Section 4.9: Population and Housing**, the Project would accommodate part of the growth anticipated by SCAG for the City of Claremont. This growth would occur in a transit-oriented village context. The Project would lead to a pedestrian friendly, community with improved streetscapes that link the Plan area to the existing Village, nearby colleges, and transit. As such, the Project would establish a framework for the form of development encouraged by the RTP/SCS to achieve reductions in GHG emissions from the land use and transportation sectors. Therefore, the Project would support the achievement of the goals of the RTP/SCS.

4.6-27

Table 4.6-11 SCAG 2020—2045 RTP/SCS Project Consistency Analysis

Goal/Strategy	Consistency Analysis
Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations	Consistent . The Project would support Transit-Oriented Development and includes multimodal travel paths to nearby businesses, colleges, and services.
Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets	Consistent . The Project would provide for mixed-use development near transit.
Plan for growth near transit investments and support implementation of first/last mile strategies	Consistent . The Project provides growth near existing (Metrolink & Foothill Transit) and proposed (Light Rail extension) transit and includes implementation of several improvements identified in Metro's First Mile/Last Mile Plan for the Claremont Light Rail station area.
Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses	Consistent . The proposed Project would support the redevelopment of the closed Hibbard Auto Center, four chronically vacant parcels, and several underutilized industrial parcels.
Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods	Consistent . The Project would accommodate growth, include a variety of residential units and retail uses, and create enhanced connectivity with the Village and existing neighborhoods.
Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations)	Consistent . The proposed Project would create a mixed-use neighborhood adjacent to transit services and the village.
Identify ways to "right size" parking requirements and promote alternative parking strategies (e.g. shared parking or smart parking)	Consistent . The Project would feature shared parking between various uses as well as provide incentives for decoupling parking from individual residential units.

Source: SCAG, 2020–2045 RTP/SCS. Meridian Consultants LLC, 2020.

City of Claremont General Plan

The City of Claremont General Plan includes policies that are directly and indirectly related to GHG emissions. Table 4.6-12: General Plan Consistency, Greenhouse Gas evaluates the consistency of the proposed Specific Plan with the City's General Plan policies.

The Project is a Specific Plan designed to implement the vision of the City that is outlined in its General Plan and Sustainable City Plan. The Project creates a framework for development that would be Mixed-Use, transit-oriented, efficient construction, green infrastructure, and in line with the principles of neighborhood design.

Based on the above, the Project would not conflict with applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases; rather the Project is designed to support City and State goals for achieving reductions in greenhouse gas emissions. As such, impacts would be less than significant.

General Plan Consistency, Greenhouse Gas	
General Plan Policies	General Plan Consistency Analysis
Open Space, Parkland, Conservation and Air Quality Element	
Goal 5-18: Reduce the amount of air pollution emissions from mobile and stationary sources and enhance the airshed.	
Policy 5-18.1 : Enhance pedestrian and bike facilities within the City and encourage alternative modes of transportation.	The proposed Project includes pedestrian areas, specifically within the parks in the center of the Project Site. Additionally, the proposed Project includes bike rack areas for residents and patrons to the retail uses on site. The Project would enhance non-vehicular mobility through these features. Specifically, the transformed Indian Hill Boulevard south of Green Street will include improved street landscaping, an "at-grade" center median/left-turn lane with increments of landscape and gateway signage. The street configuration would include 4 travel lanes with bike lanes or street parking in each direction.
Policy 5.18-3 ; Promote the use of fuel efficient heating and cooling equipment and other appliance, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.	The proposed Project would be designed to be compliant with CALGreen standards and Title 24 California Code of Regulations. This would mandate that low-energy appliances and fuel-efficient HVAC systems are installed as part of the proposed Project.
Policy 5.18.5 : Continue to require the planting of street trees along City streets and inclusion of trees and landscaping for all development projects to help improve	Consistent . The Project includes landscaping consisting of street trees and internal trees to provide shade. Specifically, portions of Indian Hill will include new parkways and a landscaped median with new street trees and Green Street will be characterized by wide landscaped parkways, broad-canopy shade trees, comfortable

Table 4.6-12

airshed and minimize urban heat island effects.	sidewalks, mid-block crossings at the Central Plaza/Paseo, and building frontages. The landscaping plan would be reviewed and approved by the City prior to final site plan approval and during Design Review with the intent of providing an extensive level street trees like that found in the existing Village.
Policy 5.18-6 : Encourage small businesses to utilize clean, innovative technologies to reduce air pollution.	Consistent . Proposed retail space would be encouraged (by the City of Claremont) to participate in green principles that are consistent with the objectives of the proposed Project.
Policy 5.18.7: Implement principles of green building.	Consistent . This project would be required to adhere to "Green" building practices that meet the California Building Energy Efficiency Standards and CALGreen Building Standards (California Code of Regulations Title 24, Parts 6 and 11) to reduce the impact on the environment, decrease energy costs, and create healthier living through improved indoor air quality and safer building materials. Title 24 sets forth building standard requirements including, but not limited to, planning and site design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, waste reduction, indoor air quality and pollutant control, thermal comfort, and provisions for bicycle and electric vehicle parking. All new development within the Project Site is required to meet the rigorous standards of Title 24. Each new building would be inspected for compliance and would include an operation manual to help end-users maintain and effectively use the sustainable building features provided.
Policy 5-18.8 : Support jobs/housing balance within the community so more people can both live and work within the community. To reduce vehicle trips, encourage people to telecommute or work out of home or in local satellite offices.	Consistent . An objective of the proposed Project is to help meet the high market demand for high quality housing in eastern Los Angeles County and to meet the City's housing needs to support forecast population growth. The project would include a variety of residential units, offices and retail uses. The project is proposed to be a balanced TOD with a mix of both jobs and housing located in close proximity to transit.

Source: Claremont General Plan Open Space, Parkland, Conservation and Air Quality Element (2009).

Cumulative Impact

GHG emissions are cumulative in nature, as their impact is associated with global climate change. As such, the evaluation of Project impacts is also the determinant of whether a Project has a considerable contribution to cumulative effects. The analysis herein determined that the implementation of the proposed Project would not result in significant adverse impacts related to the emissions of greenhouse gases. As a result, the Project would also not have a considerable contribution to cumulative GHG impacts.

4.6.4 MITIGATION

As impacts would be less than significant, no mitigation is necessary

4.7.1 INTRODUCTION

This section evaluates the significance of potential hazardous impacts that could result from implementation of the Village South Specific Plan. The findings of this section incorporate findings from a Phase 1 Environmental Site Assessment contained in Appendix E of this Draft EIR.

4.7.2 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to Hazards and Hazardous Materials are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

- 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?

4.7.3 ENVIRONMENTAL SETTING

Hazardous Materials

Section 25501(m) of the California Health and Safety Code defines a "hazardous material" as:

A material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous Materials" include, but are not limited to, hazardous substances, hazardous wastes, and any materials which a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.

"Hazardous waste" is any hazardous material that is abandoned, discarded, or recycled, as defined by Sections 25117 and 25124 of the California Health and Safety Code. In addition, hazardous waste may occasionally be generated by actions that change the composition of previously nonhazardous materials. The criteria used to characterize a material as hazardous include ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity.

As will be discussed in more detail below, hazardous materials and wastes are defined and regulated in the United States by federal, state, and local regulations, including those administered by the US Environmental Protection Agency (US EPA), the California Environmental Protection Agency (Cal/EPA), the US Occupational Safety and Health Administration, the US Department of Transportation, the US Nuclear Regulatory Commission, and various other agencies. Hazardous materials include hazardous wastes and, in the discussion, below (except as noted) hazardous materials refers to both hazardous materials and wastes.

Public health is potentially at risk whenever hazardous materials are, or would be, used and when hazardous wastes are disposed of, including transportation of hazardous materials and wastes. It is necessary to differentiate between the "hazard" of these materials and the acceptability of the "risk" they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The California Department of Toxic Substances Control (DTSC) determines the risk to health and public safety by the probability of exposure, in addition to the inherent toxicity of a material.

Factors that can influence health effects when human beings are exposed to hazardous materials or wastes include: the dose the person is exposed to, the frequency of exposure, the duration of exposure, the exposure pathway (route by which a chemical enters a person's body), and the individual's unique biological susceptibility.

Hazardous Waste Generation and Management

There are four general categories of waste management: source reduction, recycling, treatment, and residuals disposal. All of these activities can occur on-site at the location where they are generated.

Recycling, treatment, and disposal can also occur off-site but require additional intermediate support to store and transport the waste.

The generation and handling of hazardous waste in the City is overseen by multiple agencies including: US EPA; California Department of Toxic Substances Control, California Department of Resources, Recycling and Recovery (CalRecycle), Los Angeles County Department of Public Works, Sanitation Districts of Los Angeles County, and the Los Angeles County Fire Department. Businesses that generate hazardous waste are either Large-Quantity Generators (e.g., heavy industrial or commercial facilities) or Small-Quantity Generators (e.g., dry cleaners, automotive repair shops, etc.); these businesses require an EPA identification number used to monitor and track hazardous waste activities.

Certain land uses can indicate that there is potential for generating hazardous materials or waste, or that existing hazardous materials or waste may be present (for example: industrial uses, gas stations, and dry cleaners). Hazardous materials can also be used and generated during construction activities. Common hazardous materials that are typically present on construction sites include oil, transmission fluids, fuels, solvents, paints, asphalt, and adhesives. A variety of federal, state, and local regulations require best management practices to be implemented to ensure that these wastes are not released into the environment.

Transportation of Hazardous Materials

The transportation of hazardous materials within the State of California is subject to various federal, state, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit loading or delivery of such materials (California Vehicle Code Sections 31602(b), 32104(a)). The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials in the City is restricted to this route except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users.

There are several risks associated with the transportation of hazardous materials. Transport of hazardous materials via truck, rail, and other modes involves a degree of risk of accident and release. The use of hazardous materials and the generation of hazardous waste in the construction and maintenance of the transportation system are other avenues for risk or exposure. Past disposal of hazardous materials in a manner that creates residual contamination of soil or water can be a source of risk when such sites are disturbed in the course of construction of transportation projects and development. Each of these avenues is discussed below.

Hazardous materials move through the City by a variety of modes: truck, rail, air, and pipeline. Any given shipment of hazardous materials can involve one or more movements, or trip segments, that can occur by different modes. For instance, a shipment might arrive at a port by ship (out of the City) and be picked up by a truck, with a transfer to rail, and a final delivery by truck again (for a total of four movements). Each movement of hazardous materials implies a degree of risk, depending on the material being moved, the mode of transport, and numerous other factors.

Vehicles transporting hazardous materials through the City use many of the same freeways, arterials, and local streets as other traffic in the region. This creates a risk of accidents and associated release of hazardous materials that could create a risk for drivers and for people living, working, and going to school along these routes. A similar risk exists for use of rail for hazardous materials transport. Rail line maintenance is the responsibility of each private company that owns and operates each line. Rail routes pass through urban areas and near sensitive land uses such as schools, hospitals, and residential areas. Rail shipments through urban areas and on local rail spurs usually travel at slower speeds than in rural areas reducing the possibility of major safety related accidents. In addition, shipping by rail is often safer than shipping by truck because rail tankers can reduce the number of trucks on the road hauling hazardous materials by four to 10 times, reducing the chances of trucking related accidents.

Pipelines tend to be protected because they are buried and result in relatively low risk, although they could be affected by seismic or other activity that could cause rupture. According to the USDOT, Hazardous Materials Information System, in 2014, highways accounted for the largest share of hazardous materials incidents, with a total of 15,156 incidents or 88 percent of total incidents.

In addition to the CHP designated routes, the City has designed and designated various roadways as truck routes to provide for the regulated movement of trucks through the City. These include both Arrow Highway and Indian Hill Boulevard south of Arrow of Highway, which provide the Specific Plan Area with direct access to truck routes. However, these transportation routes are also used to transport hazardous materials (among other materials/freight) from suppliers to users. Transportation accidents involving hazardous materials could occur on any of the routes, potentially resulting in explosions, physical contact by emergency response personnel, environmental degradation, and exposure to the public via airborne exposure.

Hazardous Waste Sites

GeoTracker

GeoTracker is the California State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating underground storage tanks (USTs) and land disposal sites.

The Geographic Environmental Information Management System (GEIMS) is a data warehouse that tracks regulatory data about underground fuel tanks, fuel pipelines, and public drinking water supplies using GeoTracker. GeoTracker and GEIMS were developed pursuant to a mandate by the California State Legislature (AB 592, SB 1189) to investigate the feasibility of establishing a statewide GIS for leaking underground fuel tank (LUFT) sites. The GeoTracker database provides lists of several site types including Leaking Underground Storage Tank (LUST) Cleanup Sites, Other Cleanup Sites, Land Disposal Sites, Military Sites, Waste Discharge Report (WDR) Sites, and Permitted Underground Storage Tank (UST) Facilities.

EnviroStor

The DTSC's EnviroStor database is an online search and Geographic Information System (GIS) tool. EnviroStor provides access to detailed information on hazardous waste permitted and corrective action facilities, as well as existing site cleanup information. EnviroStor allows a search for information on investigation, cleanup, permitting, and/or corrective actions that are planned, being conducted or have been completed under DTSC's oversight. The EnviroStor database provides information on a variety of cleanup sites and permitted hazardous materials sites. The cleanup sites include Federal Superfund (National Priority List), State Response, Voluntary Cleanup, School Cleanup, Corrective Action, as well as several others.

4.7.4 REGULATORY FRAMEWORK

Federal

Clean Air Act

The Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes the United States Environmental Protection Agency (US EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants. One of the goals of the Act was to set and achieve NAAQS in every state by 1975 in order to address the public health and welfare risks posed by certain widespread air pollutants. The setting of these pollutant standards was coupled with directing the states to develop state implementation plans (SIPs), applicable to appropriate industrial sources in the state, in order to achieve these standards. The Act was amended in 1977 and 1990 primarily to set new goals (dates) for achieving attainment of NAAQS, since many areas of the country had failed to meet the deadlines.

Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources. "Major sources" are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An "area source" is any stationary source that is not a major source. For major sources, Section 112 requires that US EPA establish emission standards that require the maximum degree of reduction in emissions of hazardous air pollutants. These emission standards are commonly referred to as "maximum achievable control technology" or "MACT" standards. Eight years after the technology-based MACT standards are issued for a source category; US EPA is required to review those standards to address such risk. (All impacts related to air quality are addressed in Section 4.2, Air Quality.)

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, US EPA has implemented pollution control programs such as setting wastewater standards for industry. Water quality standards for all contaminants in surface waters were also established. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. US EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. These impacts are discussed in detail in Section 4.8, Hydrology and Water Quality.

Environmental Protection Agency Regulations

The US EPA's mission is to protect human health and the environment. The US EPA takes action to reduce risks associated with exposure to chemicals in commerce, indoor and outdoor environments, and products and food. The US EPA continues to oversee the introduction and use of pesticides, improve their Integrated Risk Information System (IRIS) program, reduce radon risks, identify and address children's health risks in schools and homes, and improve chemical management practices. Oversight of chemical storage and manufacturing in coordination with their interagency partners remains a key focus of the US EPA, as well as efforts to reduce urban air toxics.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund") provides a federal "superfund" to clean up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, US EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. US EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, US EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. US EPA also recovers costs from financially viable individuals and companies once a response action has been completed.

The US EPA is authorized to implement the Act in all 50 states and US territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies.

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. This included Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA); this act is discussed in further detail below.

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Action (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions, clarifications, and technical requirements were added to the legislation, including additional enforcement authorities.

Hazardous Material Transportation Act

The Hazardous Materials Transportation Act, as amended, is the basic statute regulating hazardous materials transportation in the United States. The purpose of the law is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce. This law gives the US Department of Transportation (DOT) and other agencies the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials.

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act, which is implemented by OSHA, contains provisions with respect to hazardous materials handling. Federal OSHA requirements, as set forth in Title 29 of the Code of Federal

Regulations (CFR) Section 1910, et seq., are designed to promote worker safety, worker training, and a worker's right-to-know. In California, OSHA has delegated the authority to administer OSHA regulations to the State of California.

Title 49 of the CFR, which contains the regulations set forth by the Hazardous Materials Transportation Act of 1975, specifies additional requirements and regulations with respect to the transport of hazardous materials. Title 49 of the CFR requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Drivers are also required to be trained in operations of their equipment and commodity specific requirements.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) gives the EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste by "large-quantity generators" (1,000 kilograms/month or more). Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days or treated/disposed of at a facility, any treatment, storage, or disposal unit must be permitted under RCRA. Additionally, all hazardous waste transporters are required to be permitted and must have an identification number. RCRA allows individual states to develop their own program for the regulation of hazardous waste as long as it is at least as stringent as RCRA. In California, the US EPA has delegated RCRA enforcement to the State of California.

Department of Transportation Regulations

The Secretary of the Federal Department of Transportation receives the authority to regulate the transportation of hazardous materials from the Hazardous Materials Transportation Act (HMTA), as amended and codified in 49 USC 5101 et seq. The Secretary is authorized to issue regulations to implement the requirements of 49 USC The Pipeline and Hazardous Materials Safety Administration (PHMSA) (formerly the Research and Special Provisions Administration [RSPA]) was delegated the responsibility to write the hazardous materials regulations, which are contained in 49 CFR Parts 100180.

Toxic Substances Control Act

Congress enacted the Toxic Substances Control Act (TSCA) of 1976 to give US EPA the ability to track the approximately 75,000 industrial chemicals currently produced or imported into the United States. The US EPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an

environmental or human-health hazard. The US EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

Research and Special Programs Administration Regulations

The Research and Special Programs Administration Regulations (RSPA) regulations cover definition and classification of hazardous materials, communication of hazards to workers and the public, packaging, and labeling requirements, operational rules for shippers, and training. They apply to interstate, intrastate, and foreign commerce by air, rail, ships, and motor vehicles, and also cover hazardous waste shipments. The Federal Highway Administration (FHWA) is responsible for highway routing of hazardous materials and highway safety permits. The US Coast Guard regulates bulk transport by vessel. The hazardous material regulations include emergency response provisions, including incident reporting requirements. Reports of major incidents go to the National Response Center, which in turn is linked with CHEMTREC, a service of the chemical manufacturing industry that provides details on most chemicals shipped in the US.

Emergency and Community Right to Know Act

The Emergency and Community Right to Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. EPCRA was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for federal, state, and local governments, tribes and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. States and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment. To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC). The SERCs were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district.

State

California Environmental Protection Agency and California Department of Toxic Substances Control

The California EPA (Cal/EPA) includes the DTSC, whose mission it is to protect California's people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation, and pollution prevention. The DTSC regulates hazardous waste, cleans-up existing contamination, and looks for ways to reduce the hazardous waste produced in California. Approximately 1,000 scientists, engineers, and specialized support staff ensure that companies and individuals handle, transport, store, treat, dispose of, and clean-up hazardous wastes appropriately. Through these measures, DTSC contributes to greater safety for all Californians, and less hazardous waste reaches the environment.

DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code. The DTSC regulates hazardous waste, cleans up existing contamination, and researches ways to reduce the hazardous waste produced in California. In addition, the DTSC develops legislation, coordinates with lawmakers, and responds to constituent complaints. The regulations spell out what those who handle hazardous waste must do to comply with the laws.

Statewide, DTSC cleans-up or oversees approximately 220 hazardous substance release sites at any given time and completes an average of 125 cleanups each year. Ensuring compliance through inspection and enforcement is an important part of effectively regulating hazardous waste. DTSC conducts roughly 200 inspections a year. DTSC's Criminal Investigations Branch has the only law enforcement officers in the Cal/EPA. These peace officers, with the powers of arrest, and search and seizure, investigate alleged criminal violations of the Hazardous Waste Control Law. They work closely with district attorneys' offices, the federal Environmental Protection Agency, the Federal Bureau of Investigation, and law enforcement personnel in other states.

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that any business that handles hazardous materials prepare a business plan, which must include:

- details, including floor plans, of the facility and business conducted at the site;
- an inventory of hazardous materials that are handled or stored on-site;
- an emergency response plan; and
- a safety and emergency-response training program for new employees with annual refresher courses.

California Occupational Safety and Health Administration Regulations

The California Occupational Safety and Health Administration Regulations (Cal/OSHA) has set forth work requirements for disturbance of Asbestos-Containing Construction Materials (ACCMs) including removal operations for all types of ACCMs. In addition, the agency has developed standards for general industry and the construction industry hazardous waste operations and emergency response. Cal/OSHA ensures that employers must have controls to reduce and monitor exposure levels of hazardous materials, an informational program describing any exposure during operations and the inspection of drums and

containers prior to removal or opening. Decontamination procedures and emergency response plans must be in place before employees begin working in hazardous waste operations.

California Office of Emergency Services Regulations

The California Office of Emergency Services (CAL OES) Hazardous Materials (HazMat) Section under the Fire and Rescue Division coordinates statewide implementation of hazardous materials accident prevention and emergency response programs for all types of hazardous materials incidents and threats. In response to any hazardous materials emergency, the section staff is called upon to provide state and local emergency managers with emergency coordination and technical assistance.

Accidental Release Prevention Law

The state's Accidental Release Prevention Law provides for consistency with federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the state and federal programs. State and federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower than the federal quantities. Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the Certified Unified Program Agency (CUPA) and requires that any business, where the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the County as a manager of regulated substances and prepare a risk management plan. A risk management plan must contain an off-site consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel. The business plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

Hazardous Waste Control Act

The Hazardous Waste Control Act created the state hazardous waste management program, which is similar to but more stringent than the federal Resource Conservation and Recovery Act program. The act is implemented by regulations contained in Title 26 of the CCR, which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities and staff training; and closure of facilities and liability requirements. These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the

generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with DTSC.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) required the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a CUPA. The Program Elements consolidated under the Unified Program are: Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs (a.k.a. Tiered Permitting); Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC); Hazardous Materials Release Response Plans and Inventory Program (a.k.a. "Hazardous Materials Disclosure" or "Community-Right-To-Know"); California Accidental Release Prevention Program (Cal ARP); UST Program; and Uniform Fire Code Plans and Inventory Requirements. The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs. The Unified Program is implemented at the local government level by CUPAs. Most CUPAs have been established as a function of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency, a participating agency, which implements one or more Program Elements in coordination with the CUPA.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as unsafe raw or unused materials that are part of a process or manufacturing step. They are not considered hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste.

Hazardous Waste Source Reduction and Management Review Act of 1989

This Act requires generators of 12,000 kilograms/year of typical/operational hazardous waste to conduct an evaluation of their waste streams every four years and to select and implement viable source reduction alternatives. This Act does not apply to nontypical hazardous waste (such as asbestos and polychlorinated biphenyls).

California Vehicle Code

The California Vehicle Code (Title 13 of the CCR) establishes regulations for motor carrier transport of hazardous materials. For example, all motor carrier transporters of hazardous materials are required to have a Hazardous Materials Transportation license issued by the California Highway Patrol. In addition, placards identifying that hazardous materials are being transported must be displayed on the vehicle.

California Health and Safety Code

The transport of hazardous waste materials is further governed by the California Health and Safety Code Section 25163 and Title 22, Chapter 13, of the CCR. Specifically, Section 25163 of the California Health and Safety Code requires transporters of hazardous waste to hold a valid registration issued by the DTSC in his/her possession while transporting hazardous waste. Additionally, Title 22, Chapter 13 of the CCR includes a number of requirements, which include, but are not limited to, the following:

- Transporters shall not transport hazardous waste without first receiving an identification number and a registration certificate from DTSC
- Registration as a hazardous waste transporter expires annually, on the last day of the month in which the registration was issued
- To be registered as a hazardous waste transporter, an application must be submitted
- Hazardous waste shall not be accepted for transport without a Uniform Hazardous Waste Manifest that has been properly completed and signed by generator and transporter
- Hazardous waste shall be delivered to authorized facilities only

Local

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) works with the California Air Resources Board (CARB) and is responsible for developing and implementing rules and regulations regarding air toxics on a local level. The SCAQMD establishes permitting requirements, inspects emission sources, and enforces measures through educational programs and/or fines. The SCAQMD and regulations related to air quality are discussed in detail in Section 4.2 Air Quality.

Los Angeles County Health Care Agency- Environmental Health Care Division

The Certified Unified Program Agency with jurisdiction over the City of Claremont is the County of Los Angeles Fire Department Health Hazardous Materials Division (HHMD). The HHMD became a CUPA in 1997. The HHMD coordinates the regulation of hazardous materials and hazardous wastes in Los Angeles County through the following programs:

- Aboveground Petroleum Tank
- California Accidental Release Prevention (CalARP)
- Hazardous Waste
- Hazardous Materials (Hazardous Material Handler Permit Requirements)
- Underground Storage Tank

City Fire Agencies within Los Angeles County have joined in partnership with the CUPA as Participating Agencies (PAs). The CUPA provides its regulated businesses several convenient benefits such as a single point of contact for permitting, billing, and inspections; uniformity and consistency in enforcement of regulations; and a single fee system incorporating all of the applicable fees from the CUPA programs. The HHMD provides detailed guidelines to respond to emergency hazardous materials spills or releases and abandonment.

The Hazardous Material Handler Permit Requirements indicates that businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity, are considered a hazardous materials handler and to report appropriate information (i.e. emergency response and contingency plan and employee training plan) in the California Environmental Reporting System (CERS). Compliance with the Hazardous Materials Handler Permit Requirements would ensure that all hazardous wastes generated by existing and proposed uses are properly handled, recycled, treated, stored, and disposed. This program involves inspection of facilities that generate hazardous waste disposal, and response to emergency hazardous chemical spills. The CalARP program aims to prevent accidental releases of hazardous materials that could cause harm to the public or environment.

Standardized Emergency Management System Multi-Hazard Functional Plan

The Basic Plan of the Standardized Emergency Management System (SEMS) Multi- Hazard Functional Plan (MHFP) is outlined with different phases. The preparedness phase with increased readiness, response phase with pre-emergency and emergency response, recovery phase, and mitigation phase. These phases provide detailed information to handle disaster events whether they are peacetime emergencies such as natural or technological or national security emergencies such as food and petroleum shortages or nuclear attack. Assessments of the major threats to the City of Claremont are included in the SEMS MHFP which includes earthquake, hazardous materials from spills during transit, flooding, dam failure, and many others. Each threat is assessed for its impact to the City including damage to vital service systems, transit routes, and fuel access. An appropriate response to the threat is also discussed.

4.7.5 IMPACT ANALYSIS

- 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?

Development within the Project would increase density and population. Routine transportation of hazardous materials, including through traffic, poses a risk to residents within the City as a result of potential accidents involving trucks, rail, and other modes that are used to transport hazardous materials and wastes and are shared with the public. Future development could result in the construction of residential uses and other sensitive receptors adjacent to existing land uses such as dry cleaners or gas stations that require the routine transport, use, and disposal of hazardous materials. The proposed land uses do not generally involve the routine use, transport, or disposal of significant amounts of hazardous materials, including hazardous chemical, radioactive, and biohazardous materials.

The operation of land uses that use, create, or dispose of hazardous materials is regulated and monitored by federal, state, and local regulations and policies. Specifically, future development within the City of Claremont would be subject to compliance with the programs administered by the HHMD (Los Angeles County CUPA). The owners or operators of businesses that handle or store hazardous materials equal to or above the reportable quantities would be subject to compliance with the CUPA programs detailed above. These programs, as well as other federal, state, and local regulations and policies, provide a high level of protection to the public and the environment. As such, impacts from routine use, transport, or disposal of hazardous materials would be less than significant. Likewise, the project would not expose the public or any school to significant hazard through reasonably foreseeable upset, accident conditions or emissions of hazardous materials, substances, or waste.

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?

A search of selected government databases was conducted, as well as site observation, and the following conditions with potential hazardous materials were identified:

d.

- An active automobile service station is located at the northwest corner of Indian Hill Boulevard and Arrow Highway. Access ports for three underground storage tanks were observed.
- In addition, the Hibbard Auto Center had former Underground Storage Tanks.
- One or more dry cleaners may have operated within the Project area at some point over the site history, however no evidence of such a business is known to the City.
- Vortox Air Technology and King Precision Glass are RCRA small quantity generators and thus have the potential to be sources of hazardous materials within the soil.
- The majority of the structures were constructed prior to the bans on lead-based paint and OCP termiticides and thus there is a potential for impacts to the soil surrounding the on-site structures from lead and OCPs.
- Two nearby off-site properties were found to have the potential to impact the subject site a dry cleaner at 370 South Indian Hill Boulevard and an automobile service center at 150 Olive Street. However, no violations or enforcements are reported for either of these facilities.

The demolition of existing buildings and ground disturbance for construction has the potential to uncover any subsurface contaminants present as a result of the above conditions. While extensive soils testing has been performed prior to the transfer of several properties within the plan area, these Phase 2 tests generally indicate that tested soils are not significantly contaminated. Beyond these limited testing locations the true extent of existing levels of contaminants is unknown and would not be fully determined until development activity is proposed and further tests are performed. As such, the potential hazard cannot be determined to be less than significant at this time. Therefore, impacts are potentially significant, and mitigation is identified below.

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?

The Project is not located within an airport land use plan. The Project Site is approximately two miles from Cable Airport in the City of Upland. However, the Project is outside of the Airport Influence Area of the Cable Airport Land Use Plan.¹ No impacts would occur.

¹ Cable Airport Land Use Compatibility Plan, City of Upland, Map 3A, Compatibility Policy Map

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Project provides design guidance for roadways, sidewalks and driveways within the Project Area that would ensure emergency access would be maintained. The potential for roadway impacts during construction is discussed in Section 4.13, Transportation.

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

The Project is not located within or next to wildlands with the nearest high fire severity risk zone being located approximately 2.5 miles from the Plan Area. As such, no impacts would occur.

Cumulative Impacts

As discussed above, implementation of the Village South Specific Plan would result in development that has the potential to occur on or adjacent to sites that use or previously-used hazardous materials or material that are listed as hazardous, which could place construction workers and future residents at-risk. Construction-related hazardous materials impacts would generally be site-specific and limited to the duration of the construction activity, and would continue to be highly regulated under federal, state, and local regulations. Therefore, there would not be a cumulatively considerable contribution to a cumulatively significant impact.

Residential development as part of the cumulative development may be located in proximity or adjacent to facilities that use, store, transport, and dispose hazardous materials, which could increase an individual's exposure to hazardous materials. The cumulative projects that would use, store, transport, and dispose hazardous materials would also be required to comply with hazardous materials laws which are designed to avoid and minimize adverse impacts on public health, safety, and the environment. Each cumulative project has been or would be subject to environmental review and if significant impacts are identified, mitigation measures would be implemented to avoid or reduce the impacts. Therefore, the cumulative impact would be less than significant.

4.7-17

4.7.6 MITIGATION

To mitigate the potential for significant impacts resulting from undetermined subsurface contaminants, the following measures shall be incorporated into the Project:

MM-HAZ-1 At such time as development is proposed within any portion of the Specific Plan, the Applicant shall prepare and provide to the City a detailed Phase I environmental site assessments to identify if specific areas that will require additional investigation and sampling.

If warranted, soil sampling shall be conducted in locations with high potential for presence of Title 22 metals, TPH, SVOCs, and VOCs, as well as lead related to lead-based paint and OCP from the application of termiticides.

If concentrations of contaminants are found to be above residential California Human Health Screening Levels (CHHSL), soil remediation and health and safety measures required by the applicable regulatory agencies [e.g., California Department of Toxic Substances (DTSC), Los Angeles Regional Water Quality Control Board (LARWQCB), etc.] shall be implemented by the Project Applicant during construction, which will be included in a Soils Management Plan and a Health and Safety Plan, as applicable.

MM-HAZ-2 The underground storage tanks associated with the former Hibbard Auto Center and Chevron Service Station shall be removed under the oversight of the Los Angeles County Department of Public Works Environmental Programs Division prior to redevelopment of either site.

4.8.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to hydrology and water quality are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

- 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 a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. result in substantial erosion or siltation on- or off-site;
 - ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - iii. 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; or
 - iv. 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?

4.8.2 ENVIRONMENTAL SETTING

Existing Conditions

The Specific Plan Area encompasses approximately 24 gross acres in a highly urbanized area of the City of Claremont. The City of Claremont is located in an urban area and is primarily developed land. The Specific Plan Area is mostly developed although there are several vacant and underutilized lots. No hydrological features are present within the Specific Plan Area.

The Specific Plan Area lies above a groundwater subbasin, itself part of the Six Basins Area of the San Gabriel Valley Groundwater Basin. The Six Basins are a group of adjacent groundwater subbasins, located

just south of the San Gabriel Mountains in eastern Los Angeles and western San Bernardino counties. Groundwater is pumped from the Six Basins primarily by public water agencies and mutual water companies that supply water for municipal uses. The main source of groundwater replenishment to the Six Basins is surface-water runoff from precipitation that falls on the San Gabriel Mountains and recharges at spreading grounds located along the foot of the mountain range—predominantly at the San Antonio Spreading Grounds (SASG). The water-supply agencies also use imported surface water from the Metropolitan Water District of Southern California for artificial recharge at the SASG and for direct delivery to customers after treatment to drinking-water standards.¹

The current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) indicates the Specific Plan Area is located within Flood Zone X: Area of Minimal Flood Hazard.²

Regulatory Framework

In the past, the effort to control the discharge of storm water has focused on managing the quantity of storm water (e.g., flood control) and only to a limited extent on managing the quality of storm water. In recent years, awareness of the need to improve storm water quality has increased. With this awareness, an extensive body of federal, State, and local laws and regulatory programs has been established to pursue the goal of reducing pollutants contained in storm water discharges to waterways. The emphasis of these programs is to promote the concept and the practice of preventing pollution at the source before it can cause environmental harm.

Federal

Clean Water Act

In 1972 Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Known today as the Clean Water Act (CWA), Congress has amended it several times. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. Important CWA sections are:

¹ Six Basins Watermaster, *Precipitation, Pumping, and Groundwater in Storage in the Six Basins*, accessed October 6, 2020, http://www.6bwm.com/editor_upload/File/Handouts/Precip%20pumping%20and%20groundwater%20in%20storage_co mbo.pdf.

² Flood Insurance Rate Map. Federal Emergency Management Agency. Map Number 06037C1750F (Los Angeles County, revised September 26, 2008), accessed October 6, 2020, https://www.floodpartners.com/?gclid=EAIaIQobChMIrsmu4PaJ3wIVT2F-Ch0pAQUYEAMYASAAEgJunfD_BwE.

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S., to obtain certification from the State that the discharge would comply with other provisions of the act. (Most frequently required in tandem with a Section 404 permit request.)
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Board(s) (RWQCBs) administer this permitting program in California.
- Section 402(p) requires permits for discharges of storm water from industrial/construction and Municipal Separate Storm Sewer Systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the United States Army Corps of Engineers (USACE).

EPA regulations require NPDES permits for discharges of storm water from industrial/construction and MS4s. To comply with the permits, storm water pollution controls must be implemented for construction and industrial activity that discharges either directly to surface waters or indirectly through separate municipal storm drains. Pollution control is achieved by establishing engineering measures that have been designed, tested, and successfully implemented throughout the past decades, such as detention basins and sediment traps, during both the construction period and the operational phases of a project. In California, the RWQCBs administer the NPDES permitting program.

Pursuant to Section 404 of the CWA, the USACE regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in the USACE regulations). The USACE typically regulates as non-wetland waters of the U.S. any body of water displaying an ordinary high water mark (OHWM). In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met.

National Flood Insurance Program (NFIP)

Beginning with the Flood Control Act of 1936, Congress assigned the USACE the responsibility for flood control engineering works and later for floodplain information services. Flood control was provided through the construction of dams and reservoirs. Despite these programs and rapidly rising federal expenditures for flood control, flood losses continued to rise. In 1968, Congress passed the National Flood Insurance Act, which created the NFIP. The Flood Disaster Protection Act of 1973, which amended the 1968 Act, required the purchase of flood insurance by property owners who were located in special flood hazard areas and were being assisted by federal programs, or by federally supervised, regulated, or insured agencies or institutions.

National Flood Insurance Program Reform Act of 1994

In 1994, the National Flood Insurance Program Reform Act went through its first major revision since its inception. Included in this revision were provisions that if a lender were to escrow an account and if the structure were in the floodplain, then the lender must escrow for flood insurance. The revised legislation also included increased flood insurance limits and the elimination of the 1962 buy-out program. However, the legislation did initiate the Hazard Mitigation Fund as part of the flood insurance policy. Also included in this legislation was the increase from a 5-day to a 30-day waiting period for a new policy to become effective. It also prohibits the waiver of flood insurance purchase requirements as a condition of receiving federal disaster assistance. If the flood insurance policy were not maintained, in the event of another disaster, no disaster assistance would be made available for that structure.

State

Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act,³ enacted in 1969, provides the legal basis for water quality regulation within California. This Act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the State. It predates the CWA and regulates discharges to waters of the State. It prohibits discharges of "waste" as defined and this definition is broader than the CWA definition of "pollutant."

Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and for regulating discharges to ensure

³ Water Code §§13000 et seq.

compliance with the water quality standards. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan.

RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect these uses. The water quality standards developed for particular water segments vary depending on uses. Additionally, the SWRCB identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA Section 303(d). If the State determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-source point controls (NPDES permits or Waste Discharge Requirements), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

The NPDES Construction General Permit issued by the SWRCB applies to all construction activities that result in the disturbance of at least one acre of total land area, or activity that is part of a larger common plan of development of one acre or greater. The NPDES permit deals with both the construction phase and operational phase of development projects. For the construction phase of a project, the NPDES permit identifies the preparation of a Storm Water Pollution Prevention Plan (SWPPP).

The implementation of NPDES permits ensures the State's mandatory standards for the maintenance of clean water and the federal minimum standards are met. Coverage under an NPDES permit regulates sedimentation and soil erosion through implementation of an SWPPP and periodic inspections by RWQCB staff. An SWPPP is a written document that describes the construction operator's activities to comply with the requirements in the NPDES permit. The SWPPP establishes a process whereby the operator evaluates potential pollutant sources at the site and implements Best Management Practices (BMPs) designed to prevent or control the discharge of pollutants in storm water runoff during construction.

Storm water control measures during construction and grading would be outlined in the construction NPDES permit and SWPPP prepared for the proposed Project. Examples of such BMP control measures include but are not limited to the following:

- Temporary detention basins for runoff and silt containment;
- Regular street-sweeping and truck washing prior to exiting construction areas;
- Covering of soil hauling trucks to minimize dust generation and silt buildup on project roads;
- Dirt rockers at project exits to reduce soil transported out of construction areas;

- Monitoring of runoff and protection devices during storm events;
- Use of silt fencing, gravel bags, and/or straw bales to channel runoff to temporary basins; and
- Identification of emergency procedures in case of hazardous materials spills.

The Project applicant would be required to obtain a construction NPDES permit prior to any landdisturbing activities that result in the alteration of one or more acres of land.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) administers water rights, water pollution control, and water quality functions throughout the State, while the RWQCBs conduct planning, permitting, and enforcement activities. Development projects typically result in the disturbance of soil that requires compliance with the NPDES General Permit, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES Number CAS000002). This Statewide General Construction permit regulates discharges from construction sites that disturb one or more acres of soil. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre of total land area must comply with the provisions of this NPDES Permit, and develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). Project applicants/developers must submit a Notice of Intent (NOI) to the SWRCB, to be covered by the NPDES General Permit, and prepare the SWPPP before beginning construction. Implementation of the project. Upon completion of the project, the project applicant/developer must submit a Notice of Termination (NOT) to the SWRCB to indicate that construction is completed.

California Fish and Game Code

The California Fish and Game Code has provisions to prevent unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life. The California Department of Fish and Wildlife (CDFW), through provisions of the California Fish and Game Code,⁴ is empowered to regulate any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. The presence of a channel bed and banks, and at least an intermittent flow of water define streams (and rivers), is one of the most important factors in establishing CDFW jurisdiction. The CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFW.

⁴ California Fish and Game Code §§1601 through §1603

Groundwater Management Act (AB 3030)

The Groundwater Management Act⁵ provides a systematic procedure for an existing local agency to develop a groundwater management plan. Assembly Bill (AB) 3030 allows a local agency whose service includes a groundwater basin that is not already subject to groundwater management pursuant to law or court order to adopt and implement a groundwater management plan and includes plans to mitigate overdraft conditions, control brackish water, and to monitor and replenish groundwater. Adjudicated basins⁶ are not required to form groundwater sustainability agencies or prepare groundwater management plans. Rather, adjudicated basins are required to submit an annual report to the Department of Water Resources, which provide much of the same information required by Courts during the adjudication process. Golden State Water Company, which serves the City of Claremont and ultimately the project, obtains a portion of its water from groundwater basins that have previously been adjudicated.

Stormwater Pollution Prevention Plans

The purpose of the Stormwater Pollution Prevention Plan (SWPPP) is to develop a strategy for construction projects to comply with federal and State stormwater regulations. These regulations are put in place to minimize sediment and other pollutants in stormwater runoff commonly associated with construction activities. The SWPPP is a document that outlines how a construction project would minimize stormwater pollution. Construction sites are a well-known source of sediment and other pollutants which can cause significant harm to rivers, lakes, coastal waters, and flood control facilities. The SWPPP describes the contractor's activity to prevent pollution for the specific project. The SWPPP should be kept on the construction site and updated frequently to reflect changes at the site. Typically, SWPPPs are only required for construction projects that disturb more than 1 acre of developed or undeveloped land. Additionally, the City of Claremont requires projects less than one acre to effectively implement the following stormwater BMP's: 1) Erosion Control, 2) Sediment Control, 3) Non-stormwater Management, and 4) Waste Management in accordance with Order R-42012-0175, Section VI-8, Table 12.

Sustainable Groundwater Management Act of 2014 (SB 1168 and SB 1319, AB 1739)

In March 2014, the Governor's Office released a draft framework soliciting input on actions that can be taken to ensure local groundwater managers have the tools and authority to manage groundwater sustainably. In response, Senate Bill (SB) 1168 and AB 1739 were introduced. These bills moved through the legislation process in nearly identical form while the authors and administration convened multiple stakeholder meetings and further developed the provisions of the bills. On August 22, 2014, both bills

⁵ California Water Code, §§ Sections 10750–10756

⁶ Through adjudication, the courts can assign specific water rights to water users and can compel the cooperation of those who might otherwise refuse to limit their pumping of groundwater. Watermasters are typically appointed by the court to ensure that pumping conforms to the limits defined by the adjudication.

were amended to divide the provisions between the two bills. In tandem, SB 1168 and AB 1739 provide a comprehensive groundwater sustainability management program.⁷ In September 2014, SB 1168 and SB 1319, and AB 1739 were enacted, amending and adding to the State's Government and Water Codes relative to the management of groundwater resources. The three bills comprise the Sustainable Groundwater Management Act of 2014, which provides for the formation of local groundwater sustainability agencies responsible for monitoring and sustainably managing groundwater basins.

Cobey-Alquist Flood Plain Management Act (California Water Code Sections 8000–9651)

The Cobey-Alquist Flood Management Act states that a large portion of land resources of the State of California is subject to recurrent flooding. The public interest necessitates sound development of land use, as land is a limited, valuable, and irreplaceable resource, and the floodplains of the State are a land resource to be developed in a manner that, in conjunction with economically justified structural measures for flood control, would result in prevention of loss of life and of economic loss caused by excessive flooding. The primary responsibility for planning, adoption, and enforcement of land use regulations to accomplish floodplain management rests with local levels of government. It is policy of the State of California to encourage local government to plan land use regulations to accomplish floodplain management and to provide State assistance and guidance. As part of its discretionary review process, the City must determine if the project would comply with this Act and not create flooding impacts on adjacent land uses.

California Toxics Rule

On May 18, 2000, the State Environmental Protection Agency (CalEPA) promulgated numeric water quality criteria for priority toxic pollutants and other provisions for water quality standards to be applied to waters in the State of California. CalEPA promulgated this rule based on the Administrator's determination that the numeric criteria are necessary in California to protect human health and the environment. Pursuant to this rule, project-specific treatment control BMPs shall be capable of removing pollutants at a high efficacy level equal to or greater than (\geq) 80 percent. The rule fills a gap in California water quality standards that was created in 1994 when a State court overturned the State's water quality control plans containing water quality criteria for priority toxic pollutants. These federal criteria are legally applicable in the State for inland surface waters, enclosed bays, and estuaries for all purposes and programs under the CWA.

⁷ Sustainable Groundwater Management Act of 2014. Association of California Water Agencies https://water.ca.gov/ Programs/Groundwater-Management/SGMA-Groundwater-Management (accessed October 6, 2020).

Local

Los Angeles Regional Water Quality Control Board

The Los Angeles Regional Water Quality Control Board (LARWQCB) includes the City of Claremont in its boundaries. The LARWQCB develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. The LARWQCB is required to develop a basin plan for its hydrologic area, issuing waste discharge requirements, taking enforcement action against violators, and monitoring water quality.

City of Claremont

Municipal Separate Storm Sewer System (MS4) Permit System

The City of Claremont is included among the 84 incorporated cities that are subject to the requirements of the Los Angeles County Municipal Storm Water (Municipal NPDES Permit) Order No. R4-2012-0175. The goal of the Municipal NPDES Permit is to protect the beneficial uses associated with receiving waters through control measures that eliminate or reduce pollutants in runoff discharges. Because stormwater runoff and discharges from urbanized areas are significant sources of pollutants that can impair water quality and beneficial uses of the receiving water bodies, the City of Claremont (City) has established a Development Planning/Low Impact Development (LID) program to control pollutants from new development and redevelopment projects.

In accordance with the Los Angeles County Municipal Storm Water Order No. R4-2012-0175. Project applicants are required to prepare and implement a Development Planning Document (DPD)/ Low Impact Development (LID) plan if their project falls into any of the categories below:

Low Impact Development Oridnance: Municipal Code Chapter8.28

Priority Projects Classification

- Projects equal to one acre or greater of disturbed area and adding more than 10,000 ft2 of impervious area;
- Industrial parks 10,000 ft2 or more of surface area;
- Commercial malls 10,000 ft2 or more of impervious surface area;
- Retail gasoline outlets 5,000 ft2 or more of surface area;
- Restaurants (SIC 5812) 5,000 ft2 or more of surface area;
- Parking lots 5,000s ft2 or more of impervious surface area, or with 25or more parking spaces;
- Streets and road construction of 10,000 ft2 or more of impervious surface area;

- Automobile service facilities (SIC 5013, 5014, 5511, 5541, 7532-7534and 7536-7539) 5,000 ft2 or more of surface area;
- Redevelopment1 project in subject categories greater than 5,000ft2;
- Projects located in or discharging to a Significant Ecological Area (SEA).

Redevelopment projects are land-disturbing activities that result in the creation, addition, or replacement of 5,000 feet or more of impervious surface area on an already developed site within the categories listed above. Existing single-family and accessory structures are exempt from the redevelopment requirements unless they add or replace 10,000 feet or more of impervious area.

SUSMP/LID or Site-Specific Mitigation plans are required as part of the project plan submittal process. All Priority Projects shall proceed with the preparation of a DPD/LID Plan.

The Los Angeles County Municipal National Pollution Discharge and Elimination System (NPDES) Permit R4-2012-0175 requires all applicable new development and redevelopment projects maximize the percentage of pervious surfaces and minimize the amount of stormwater discharging to impervious surfaces. Development and redevelopment projects are required to control pollutant loads and runoff volumes emanating from the Project Site by:

- Minimizing impervious surface area; and
- Controlling runoff from impervious surfaces through infiltration, bioretention, and/or rainfall harvest and use.

The project design shall demonstrate through hydrology calculations the runoff volume for the Project Site, and the treatment capacity of the proposed LID BMP(s). Unless it is technically infeasible, the project must mitigate on-site the SWQDv.

To demonstrate technical infeasibility, the specific studies must demonstrate that the project cannot reliably retain 100 percent of the SWQDv on-site, even with the maximum application of green roofs and rainwater harvest and use, and that compliance with the applicable post-construction requirements would be technically infeasible by sub-mitting a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect.

With project design, LID best management practices (BMPs) shall be implemented to meet the MS4 requirements. Examples of appropriate LID BMPs are summarized below:

Bioretention Systems

A bioretention area is a vegetated shallow depression that is designed to receive, retain, and infiltrate stormwater runoff from downspouts, piped inlets, or sheet flow from adjoining paved areas. A shallow ponding zone is provided above the vegetated surface for temporary storage of stormwater runoff. During storm events, stormwater runoff accumulates in the ponding zone and gradually infiltrates and filters through the bioretention soil media before infiltrating the underlying soil. Bioretention can be used to meet the on-site retention requirements of the City's LID Ordinance.

Vegetated Swales

Vegetated swales are open, shallow channels with low-lying vegetation covering the side slopes and bottom, used to collect and slowly convey stormwater runoff to a downstream storm drain system, or another stormwater quality control measure. Vegetated swales provide pollutant removal through settling and filtration in the vegetated lining of the channel. They also provide the opportunity for stormwater runoff volume reduction through limited infiltration and evapotranspiration, and reduce stormwater flow velocity. Vegetated swales can be used as a stormwater quality control measure to treat stormwater runoff, however; they are considered an alternative compliance measure because of their primary function is to provide pretreatment and stormwater velocity reduction.

Infiltration Systems

Infiltration systems capture runoff and allow it to seep into the ground. This reduces the volume of stormwater that is discharged to receiving water bodies, thereby improving water quality. Infiltration systems include infiltration basins, permeable pavement systems, infiltration trenches/swales, and dry wells. Infiltration systems can be used to meet the on-site retention requirements of the City's LID Ordinance.

Infiltration Basin

An infiltration basin is a shallow earthen basin constructed in naturally permeable soil, designed for retaining and infiltrating stormwater runoff into the underlying native soils and groundwater table. Infiltration basins can be used to meet the on-site retention requirements of the City's LID Ordinance.

Infiltration Trench

An infiltration trench is a narrow trench constructed in naturally pervious soils, designed to retain and infiltrate stormwater runoff into the underlying native soils and groundwater table. Infiltration trenches differ from infiltration basins in that infiltration trenches are used for small drainage areas and usually store stormwater out of site within the void spaces of rocks or stones (e.g., gravel and sand). Infiltration trenches can be used to meet the on-site retention requirements of the City's LID Ordinance.
Hydromodification control standards

Projects located within natural drainage systems are required to implement hydrologic control measures, to prevent accelerated downstream erosion and to protect stream habitat in a natural drainage system.

The City allow project exemptions to Hydromodification Controls standards where assessments of downstream channel conditions and proposed discharge hydrology indicate that adverse hydromodification effects to beneficial uses of Natural Drainage Systems are unlikely:

- Projects that are replacement, maintenance or repair of a Permittee's existing flood control facility, storm drain, or transportation network.
- Redevelopment Projects in the Urban Core that do not increase the effective impervious area or decrease the infiltration capacity of pervious areas compared to the pre-project conditions.
- Projects that have any increased discharge directly or via a storm drain to a sump, lake, area under tidal influence, into a waterway that has a 100-year peak flow (Q100) of 25,000 cfs or more, or other receiving water that is not susceptible to hydromodification impacts.
- Projects that discharge directly or via a storm drain into concrete or otherwise engineered (not natural) channels (e.g., channelized or armored with rip rap, shotcrete, etc.), which, in turn, discharge into receiving water that is not susceptible to hydromodification impacts.
- LID BMPs implemented on single family homes are sufficient to comply with Hydromodification criteria.

Green Streets Policy-resolution 2014-53

As part of the MS4 compliance, the City of Claremont adopted a Green Streets Policy. Community Development Department and Community Services Department shall implement Green Street best management practices (BMP) for transportation corridors associated with new and redevelopment street and roadway projects, including Capital Improvement Projects (CIPs). This policy is enacted to demonstrate compliance with the NPDES MS4 Permit for the Los Angeles Region (Order No. R4-2012-0175) which adds at least 10,000 square feet of impervious surface.

Green Streets are an amenity that provides many benefits including water quality improvement, groundwater replenishment, creation of attractive streetscapes, and pedestrian/bicycle accessibility. Green streets are defined as right-of-way areas that incorporate infiltration, biofiltration, and/or storage and use BMPs to collect, retain, or detain stormwater runoff as well as a design element that creates attractive streetscapes.

In consistency with the City of Claremont Green Streets Policy, the project shall identify opportunities to replenish groundwater, create attractive streetscapes, and provide pedestrian/bicycle accessibility through new development and redevelopment of streets and roadway projects and CIPs.

The Los Angeles County Low impact Development Manual and USEPA's *Managing Wet Weather with Green Infrastructure Handbook shall be consulted for* BMP feasibility and technical design standards for use in public and private green streets projects.

Water Conservation Ordinance: Municipal Code Chapter 8.30

The City of Claremont Water Conservation Ordinance Chapter 8.30 establishes a water conservation and supply shortage program designed to reduce water consumption within the City of Claremont through conservation, effective water supply planning, assurance of beneficial use of water, the prevention of water waste, and maximize the efficient use of water within the City. The Ordinance establishes permanent water conservation requirements to include: Limits on water hours; Limits on watering duration; Prohibit excessive water flow and runoff; Prohibits washing down of hard or paved surfaces; Obligation to fix leaks, breaks or malfunctions; and Re-circulating waster required for fountains and decorative features. The project shall ensure the Permanent water conservation requirements are considered and implemented appropriately.

Fats, Oil, and Grease (FOG) Control Ordinance: Municipal Code Chapter 5.05

The intent of Chapter 5.05 is to reduce sanitary sewer overflow incidents through proper sizing and installation of FOG control devices. All new food preparation establishments are required to install, operate and maintain and approved type of, and adequately sized, grease control device necessary to maintain compliance with Chapter 5.05. Said devices shall conform the current edition of the California Plumbing Code.

City of Claremont General Plan

The Claremont General Plan identifies several goals and policies related to hydrology and water quality within the City. Some of these goals and policies are designed for implementation citywide, while others are designed to be implemented at site-specific locations depending on the type of development proposed. Hydrology and water quality policies relevant to the project include:

- **Goal 5-4** Protect groundwater resources.
 - Policy 5-4.2Encourage use of drainage improvements designed with native
vegetation where possible, to retain or detain storm water runoff,
minimizing volume and pollutant concentrations.
- **Goal 5-4** Achieve the highest level of water conservation possible.
 - Policy 5-15.1Support water conservation through requirements for landscaping with
drought -tolerant plants and efficient irrigation.
- **Goal 6-6** Minimize the risks associated with storm flooding and dam inundation.
 - Policy 6-6.1Work with the U.S. Army Corps of Engineers and Los Angeles County to
ensure dam structures are upgraded as needed to best withstand
earthquakes and prevent dam inundation.
 - Policy 6-6.2Work with the U.S. Army Corps of Engineers and Los Angeles County to
encourage regular maintenance and monitoring of flood-control
facilities.
- **Goal 6-10** Maintain the highest level of emergency preparedness for natural and humancaused disasters and threats.
 - Policy 6-10.1Educate residents of hazards and threats addressed in the Claremont
Emergency Plan/ SEMS Multi-hazard Functional Plan, and the Natural
Hazard Mitigation Basic Plan and use these Plans as a guide to prevention
and mitigation of natural and human-caused hazards.

Accordingly, **Table 4.8-1: Claremont General Plan Consistency Analysis, Hydrology and Water Quality** below summarizes the Project's consistency with applicable goals and policies of the Claremont General Plan.

Table 4.8-1

Claremont General Plan Consistency Analysis, Hydrology and Water Quality

General Flan Goals and Folicies	General Fian consistency Analysis
City of Claremont General Plan – Chap	ter 5 Open Space, Parkland, Conservation, and Air
Qu	uality Element

Goal 5-4: Protect groundwater resources.

Policy 5-4.2: Encourage use of drainage improvements designed with native vegetation where possible, to retain or detain storm water runoff, minimizing volume and pollutant concentrations.

General Plan Goals and Policies

Consistent: The Project's design guidelines and Objective Design Review Matrix encourage the use of California native and/or drought-tolerant species for both public and private landscaping. Landscape maintenance contractors would be provided educational materials to be made aware of site-specific water quality guidelines pursuant to the site-specific LID ordinance.

General Plan Consistency Analysis

Goal 5-15: Achieve the highest level of water conservation possible.

Policy 5-15.1: Support water conservation through requirements for landscaping with drought - tolerant plants and efficient irrigation.

Consistent: Only California native and/or drought tolerant species shall be selected for landscaping.

City of Claremont General Plan – Chapter 6 Public Safety and Noise Element

Goal 6-6: Minimize the risks associated with storm flooding and dam inundation.

Policy 6-6.1: Work with the U.S. Army Corps of Engineers and Los Angeles County to ensure dam structures are upgraded as needed to best withstand earthquakes and prevent dam inundation.	Consistent: Federal Emergency Management Agency (FEMA) requires that all dam owners develop Emergency Action Plans (EAP) for warning, evacuation, and post-flood actions, and development of potential flood inundation maps and facilitation of emergency response is the responsibility of the dam owner. Because the Project does not preclude the City from coordinating with the U.S. Army Corps of Engineers and Los Angeles County, it is reasonable to conclude the Project Site is adequately protected from potential dam inundation to the degree that other surrounding developed properties are protected.
Policy 6-6.2: Work with the U.S. Army Corps of Engineers and Los Angeles County to encourage regular maintenance and monitoring of flood-control facilities.	Consistent: The Project does not preclude the City from coordinating with the U.S. Army Corps of Engineers and Los Angeles County for maintenance and monitoring of flood control facilities. Additionally, the Project is expected to result in new development that would be required to pay development impact fees and result in increased property tax assessments; both of which would be used in part to construct and maintain flood-control facilities within the City and surrounding watershed.

Goal 6-10: Maintain the highest level of emergency preparedness for natural and humancaused disasters and threats.

Policy 6-10.1: Educate residents of **Consistent:** The proposed Project would be conditioned to hazards and threats addressed in comply with State Civil Code Sections 1103 through 1103.4 the Claremont Emergency Plan/ requiring notification to those potentially affected of the

SEMS Multi-hazard Functional Plan, risk involved in locating within a flood hazard or dam and the Natural Hazard Mitigation inundation area. Basic Plan and use these Plans as a guide to prevention and mitigation of natural and human-caused hazards.

4.8.3 IMPACT ANALYSIS

a.

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

The Project would enable future development that would involve construction activities such as grading, excavation, and trenching. These types of land-disturbing activities have the potential for increased soil erosion and sedimentation in stormwater runoff. In addition, general construction activities could contribute pollutants such as construction waste, diesel and oil from equipment, solvents, and lubricants in the drainage system. Sediment and contaminants could enter the stormwater drainage system and eventually enter downstream waterways and water bodies. However, the construction activities associated with any future development will comply with all applicable regulatory requirements and standards to minimize the degradation of water quality.

All future development resulting from the Project will be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit requirements. Construction activities will be subject to the NPDES general construction activity permit and will be required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters and consider the use of post-construction permanent Best Management Practices (BMPs). Individual projects will be required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) with BMPs that will be employed to prevent soil erosion and discharge of other construction-related pollutants, as well as a monitoring program to ensure that BMPs are implemented appropriately and are effective at controlling discharges of stormwater-related pollutants. All future development is required to comply with the City's Low Impact Development (LID) ordinance, Green Streets Policy, Fats Oils and Grease Ordinance, and the Water Conservation Ordinance. Compliance with these requirements is designed to reduce stormwater run-off, stormwater pollutants, eliminate non-stormwater discharges, and prevent sanitary sewer overflows.

Pollutants of concern during the operation of the proposed Project include bacteria and viruses, fats, oils and grease, metals, nutrients, pesticides, and trash and debris have the potential to be transported via

Source: City of Claremont General Plan – Chapter 5 Open Space, Parkland, Conservation, and Air Quality Element and Chapter 6 Public Safety and Noise Element (2009).

storm runoff into downstream receiving waters (e.g., San Antonio Creek, Chino Creek, Prado Basin, Santa Ana River, and, ultimately, the Pacific Ocean).

Claremont conditions project developers to comply with the requirements of the respective NPDES MS4 Permit⁸ and municipal ordinances.

b. Would the proposed Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

The Project includes the potential for new retail, service, office, hotel, and residential land uses within the Specific Plan Area. Buildout of the Specific Plan would increase the percentage of impervious surfaces in the plan area, potentially affecting groundwater recharge rates. While developed parcels in the Specific Plan Area would be redeveloped, the Specific Plan encourages the use of permeable paving, stormwater capture and infiltration devices, and urban bioswales to minimize the effects of impermeable areas and largely maintain groundwater recharge. The Specific Plan Area is located in a highly urbanized area of the City that was developed when stormwater was typically diverted off site rather than retained and infiltrated. Because all new development will be required to retain and infiltrate the entirety of rainwater from all but the most intense rain events, any impacts to water recharge potential is likely to be small or nonexistent.

Claremont is part of the Six Basins. The Six Basins is a group of small groundwater basins located in the northeasterly portion of the Three Valleys Municipal Water District service area. The grouping includes the Canyon, Upper Claremont Heights, Lower Claremont Heights, Pomona, Live Oak and Ganesha Basins. The site is located within the Pomona Sub-Basin. Recharge for the Pomona Sub-Basin occurs from deep percolation, subsurface inflow, and artificial recharge through spreading basins.⁹ Therefore, since the project is within the jurisdiction and service area of the Six Basins, the Project does not conflict with the stated purpose or provisions of the Groundwater Management Act. As such, impacts to the Pomona Basin would be less than significant.

Would the proposed Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

c.

⁸ NPDES No. CAS004001 Order No. R4-2012-0175 for the City of Claremont.

⁹ Final Draft, 2015 Urban Water Management Plan, Claremont. Golden State Water Company. Page 6-4. July 2016. 29 California Water Code, §§ Sections 10750–10756

i. Result in substantial erosion or siltation on- or off-site;
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
iii. 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; or
iv. Impede or redirect flood flows?

Implementation of the Specific Plan is not anticipated to substantially change the drainage patterns within the Specific Plan Area. At completion, future Project Sites would be developed with buildings, landscaped areas, roads, and other hardscape improvements; no bare areas of soil would be left vulnerable to erosion. While erosion and siltation impacts could occur during construction of individual development projects, existing state and local regulations, as discussed under the first and fifth thresholds, would mitigate impacts to a less than significant level.

Project development could increase the rate and/or amount of stormwater runoff in comparison to existing conditions, which in turn could result in flooding issues on- or off-site. The Specific Plan includes sustainable design guidelines to minimize surface water runoff (e.g., bioswales, permeable groundcover, drought tolerant landscaping, and efficient water irrigation). These design guidelines would help to mimic natural hydrologic conditions which can help reduce sheet flow and the velocity of stormwater, and prevent soil erosion.

Growth and urbanization in the Specific Plan Area could place increased pressure on existing storm drain capacities. Storm water runoff is influenced by rainfall intensity, ground surface permeability, watershed size and shape, and physical barriers. The introduction of impermeable surfaces greatly reduces natural infiltration, allowing for a greater volume of runoff. In addition, paved surfaces and drainage conduits can accelerate the velocity of runoff, concentrating peak flows in downstream areas faster than under natural conditions. Significant increases to runoff and peak flow could overwhelm drainage systems and alter flood elevations in downstream locations. Increased runoff velocity can promote scouring of existing drainage facilities, reducing system reliability, and safety.

As the City is responsible for land use planning and development within the municipal limits, City officials shall review and approve all local hydrology and hydraulic analyses. These specific studies shall identify any existing storm drain deficiencies in the Specific Plan Area, to ensure, that if necessary, the projected increase in stormwater runoff would not result in flooding on-or off-site. In the event that when the specific studies are performed, and show a deficiency in the capacity of the storm drain system, upgrades to the system will be provided to reduce the impacts to be less than significant.

d. In flood hazard, tsunami, or seiche zones, [would the Project] risk release of pollutants due to Project inundation?

The current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) indicates the Project Site is located within Flood Zone X: Area of Minimal Flood Hazard.¹⁰ However, the Specific Plan Area is located approximately 4.1 miles southwest of the San Antonio Dam. In the event of dam failure, some areas of the City could be subject to flooding and associated hazards, including the risk of pollutant release. Based on the U.S. Army Corps of Engineers (USACE) Dam Safety Program (USACE 2012), the San Antonio Dam received a Dam Safety Action Class II (or DSAC II) rating in December 2008, based on a risk analysis completed in May 2007. A DSAC II rating is given to dams where failure could begin during normal operations or be initiated as the consequence of an event. The likelihood of failure from one of these occurrences, prior to remediation, is too high to assure public safety; or the combination of life or economic consequences with probability of failure is very high. San Antonio Dam received a DSAC II rating because of the potential for: 1) failure from foundation seepage and piping, 2) failure of intake or channel walls under the maximum design earthquake scenario, and 3) failure from overtopping of a maximum probable flood. The DSAC II rating does not indicate that dam failure is occurring. Rather, this rating indicates the Corps has identified dam safety issues that do not meet industry standards and the risk to public safety is unacceptable.

As specified in the Claremont General Plan Update, Seismic and Geologic Technical Background Report, dam failure would result in hazardous flooding in the Specific Plan Area. Dam-failure induced flooding could result in an average over bank depth of 7 to 8 feet; however, the hazard at Specific Plan Area may be less due to the construction of Interstate 210, which is located north of the Project Site and constructed below adjacent grades, and thus, would act as a large cut-off trench. The potential for dam failure is considered low and would likely only occur during extremely severe seismic shaking conditions at the same time the dam is near capacity, which is rare and limited only to extended periods of heavy rain.

As a result of the DSAC II rating, the USACE has developed a plan to implement the following interim risk reduction measures:

- Remote monitoring;
- Inspection and monitoring;
- Update emergency action plan;

¹⁰ Flood Insurance Rate Map. Federal Emergency Management Agency. Map Number 06037C1750F, Los Angeles County, revised September 26, 2008, accessed October 9, 2020, https://www.floodpartners.com/?gclid=EAIaIQobChMIrsmu4PaJ3wIVT2FCh0pAQUYEAMYASAAEgJunfD_BwE.

- Pre-position materials;
- Coordinate with local interests/conduct table-top exercises; and
- Improve flood mapping downstream of the dam.

The USACE is completing Issue Evaluation Studies of dams across the United States, based on a national priority list and availability of future funding and staffing. Such a study has not been completed to-date for the San Antonio Dam. If modifications are needed following completion of the Issue Evaluation Study of the San Antonio Dam, the USACE will begin a Dam Safety Modification Study, to be completed approximately 36 months after initiation (USACE 2012).

Dams are continually monitored by various government agencies (such as the State of California Division of Safety of Dams and the U.S. Army Corps of Engineers) to guard against the threat of dam failure. The Division of Safety of Dams requires annual inspection of dam facilities to detect and repair any identified deficiencies. The proposed Project would not directly or indirectly affect a dam's propensity to fail, and the existing level of hazard from dam failure would not change upon project implementation. In the unlikely event of a dam failure, the emergency response plans applicable to the project area would go into effect and evacuation and emergency response procedures would be implemented.

Seiches are earthquake-induced waves in enclosed bodies of water, such as lakes or reservoirs. The Specific Plan Area is not located near any large bodies of standing water, and thus, would not be susceptible to seiches.

A tsunami is a sea wave generated by an underwater seismic disturbance, such as sudden faulting or landslide activity. The Specific Plan Area is not located near any coastal areas. The City is located approximately 34 miles inland from the Pacific Ocean. The risk of a tsunami inundating the Project Site is negligible. In conclusion, although the Project Site is located within a City-identified inundation area from the San Antonio Dam, the likelihood of project inundation occurring is very low. As such, in the unlikely event of project inundation as a result of dam failure, a significant release of pollutants from the project is not likely. Impacts would be less than significant.

e. Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As detailed under the first and second thresholds above, the proposed Project would comply with the requirements of the City of Claremont's respective NPDES MS4 Permit and all applicable federal, State,

and local laws. Additionally, pursuant to the Groundwater Management Act,¹¹ the Six Basins Judgment defines adjudication for the Pomona Basin underlying the Specific Plan Area. The Watermaster calculates the operating safe yield based on fluctuating hydrologic conditions to ensure safe operating yield and avoidance of groundwater over-extraction.¹² Therefore, development of the Specific Plan will not conflict with the stated purpose or provisions of the Sustainable Groundwater Management Act. As such, development of the Specific Plan Area will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan and impacts would be less than significant.

Cumulative Impacts

The development of related projects and buildout of the Specific Plan could result in cumulative water quality and hydrological impacts. Runoff from the Project Sites could result in increased stormwater runoff which could include sediment and pollutants. The development of vacant parcels would result in an increase in impervious surfaces while decreasing areas of infiltration. Future development will be subject to existing federal, State, and local water regulations including a NPDES permit and BMPs, including the City's Low Impact Development (LID) ordinance, Green Streets Policy, Fats Oils and Grease Ordinance, and the Water Conservation Ordinance.

As the City is highly urbanized, buildout of the Specific Plan in conjunction with the related projects would not substantially change the surrounding drainage patters. Further, the City is not located within a designated groundwater recharge area. Thus, by implementing the Specific Plan with all the requirements stated above, it anticipated that the project would not result in cumulatively considerable hydrology, drainage, or water quality impacts. During the development approval process, project applicants will be required to construct storm drain facilities as determined by engineering studies and undergo stormwater related CEQA analysis as required. With adherence to these federal, State, and local regulations cumulative impacts would be less than significant.

4.8.4 MITIGATION

As future development with this Plan will be subject to existing federal, State, and local water regulations including a NPDES permit and BMPs, including the City's Low Impact Development (LID) ordinance, Green Streets Policy, Fats Oils and Grease Ordinance, and the Water Conservation Ordinance, it is anticipated that impacts will be less than significant; no mitigation is necessary.

¹¹ California Water Code, §§ Sections 10750–10756 43

¹² *Final Draft, 2015 Urban Water Management Plan – Claremont*. Golden State Water Company. Pages 6-6 and 6-7. July 2016.

4.9.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to land use and planning are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

- 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?

4.9.2 ENVIRONMENTAL SETTING

Existing Conditions

The Project encompasses approximately 24 gross acres (Plan Area). The northern portion of the site is occupied by manufacturing firms - Vortox Air Technology and King Precision Glass – and a former automobile dealership, which is now vacant except for occasional use as a temporary storage yard. The southern and eastern portions of the Plan Area contain a mix of residences, a gas station, and small business offices. The Plan Area also includes four vacant parcels that are marginalized, in part, by an irregular lot pattern and disjointed mix of land uses within the Plan Area.

The surrounding area includes the Keck Graduate Institute (KGI) campus immediately west of the Project area; the Vista and Oakmont residential neighborhoods to the south and east; and the existing Village/Village Expansion to the north.

Regulatory Framework

California Planning and Zoning Law requires each city to prepare and adopt "a comprehensive, long term general plan for the physical development" of land within its jurisdiction. Under Gov. Code Section 65302, each General Plan must include a land use element that designates the general distribution, location and extent of the uses of the land.

The Claremont General Plan is the blueprint for future growth and development in the City. The Land Use element of the General Plan is based on a community vision that includes: distinct neighborhoods; protective environment; a leading center of learning; a village feeling; pedestrian friendly; historic preservation; well-planned streets, parks and open space; thriving commercial and industrial clusters; and an active and engaged community. The Plan area is currently designated in the General Plan as a range of commercial uses. In addition, the Land Use Element contains in the following Land Use goals:

- 1. Make Claremont a model for the application of sustainable development practices
- 2. Preserve the City's distinctive residential character by maintaining land use patterns that strengthen our neighborhoods
- 3. Accommodate a range of land uses that meet the economic, environmental, educational, and social needs of the City while remaining sensitive to the community's residential character
- 4. Protect, preserve, and manage the City's diverse and valuable open space, water, air, and habitat resources.

Government Code section 65450 states that a city may prepare a specific plan "for the systematic implementation of the general plan..." A Specific Plan must include text and diagrams that specify the distribution, location and extent of uses of land and infrastructure within the plan area, standards for development, and a program of implementation.

4.9.3 IMPACT ANALYSIS

Project Impact

a.

Physically divide an established community?

Rather than dividing an established community, the Project is intended to unify an otherwise disjointed area of the City and create linkages both within the Plan Area and between the Plan Area and the adjacent neighborhoods, college campuses and Village. The urban form of the Project has been crafted to extend the street, use and development patterns of the adjacent Claremont Village into the Plan Area while also providing zoning and development standards intended to reduce development intensity along the south and east perimeters to provide a better transition to adjacent single family neighborhoods. As such, the Project would not 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?

The Project has been designed to further the vision of Claremont contained in the Claremont General Plan. The Project would support mixed-use, transit-oriented development that is consistent with the existing General Plan and includes a high-quality, pedestrian-oriented public realm framed by context-sensitive buildings that emulate the historic character of Claremont. The Project represents a model of sustainable development practices; seeks to support existing residential neighborhoods through providing a vibrant link between the existing village and the surrounding neighborhoods; and accommodates a range of uses. Furthermore, by focusing a portion of the forecasted growth of Claremont into the Project area, the City's open space and habitat resources that are at distant locations would experience less

development pressure. As such, the Project is supportive of the General Plan Land Use Goals.

The Project would establish land use regulations, zoning, development standards, and design guidelines for the Project area. The Project would include a General Plan Amendment and amendments to the municipal code to establish consistency between the Project and the General Plan. As stated in Government Code section 65450, the intent of a specific plan is to implement the General Plan in a specified geographic area and California Government Code Section 65454 requires that all specific plans be consistent with the general plan. As such, the Project would not conflict with the land use plans and policies of the City and impacts would be less than significant.

Cumulative Impact

The Project sits between the existing Claremont village, residential neighborhoods and the Keck Graduate Institute. The development of the Project would knit these areas together. The maximum Floor Area Ratio (FAR) for the Project would remain at 1.5, which is the same as other nearby mixed-use districts, and the development standards of the Project would create a transitional scale at the interface with adjacent residential neighborhoods. As discussed in **Section 4.11, Population and Housing**, the growth enabled by the Project would accommodate a portion of the growth forecasted by SCAG to occur over the next 20 years. And as stated above, the intent of the Project is to implement the principles of the City's General Plan over a specified geographic area. As such, the Project would not have a considerable contribution to a cumulative impact.

4.9.4 MITIGATION

As impacts would be less than significant, no mitigation is necessary.

4.9-3

4.10.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to noise are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

- a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in 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?

4.10.2 ENVIRONMENTAL SETTING

Fundamentals of Noise

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is generally defined as unwanted sound. Sound is characterized by various parameters that describe the physical properties of sound waves. These properties include the rate of oscillation (frequency); the distance between successive high and low noise levels, the speed of propagation; and the pressure level or energy content of a given sound wave. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level.

The unit of sound pressure expressed as a ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB). Sound or noise can vary in intensity by more than one million times within the range of human hearing. A logarithmic loudness scale, similar to the Richter scale for earthquake magnitude, is used to describe sound-intensity levels. The human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called A weighting, written as dBA. Further reference to decibels in this analysis should be understood to be A-weighted.

Several noise descriptors have been developed to evaluate the adverse effect of community noise on people. Since noise level fluctuates over time, an equivalent sound level (Leq) descriptor is used to describe typical time-varying instantaneous noise. Finally, because community receptors are more sensitive to unwanted noise intrusion during evening and nighttime hours, State law requires that an

artificial decibel increment be added to noise occurring during those time periods. The 24-hour noise descriptor with a specified evening (7:00 to 10:00 PM) and nighttime (10:00 PM to 7:00 AM) penalty is called the Community Noise Equivalent Level (CNEL).

Noise sources can generally be categorized as one of two types: (1) point sources, such as stationary mechanical equipment; and (2) line sources, such as a roadway. Sound generated by a point source typically diminishes (attenuates) at a rate of 6 dBA for each doubling of distance from the source to the receptor at acoustically hard sites, and at a rate of 7.5 dBA at acoustically soft sites.¹ A hard or reflective site consists of asphalt, concrete, or very hard-packed soil, which does not provide any excess ground-effect attenuation. An acoustically soft or absorptive site is characteristic of normal earth and most ground with vegetation. As an example, a 60-dBA noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dBA at 100 feet from the source and 48 dBA at 200 feet from the source. Noise from the source. Sound generated by a line source typically attenuates at a rate of 3 dBA at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3 dBA at 200 feet from the source for hard and soft sites, respectively.² Noise levels generated by a variety of activities are shown in Figure 4.10-1: Common Noise Levels. Man-made or natural barriers can also attenuate sound levels, as illustrated in Figure 4.10-2: Noise Attenuation by Barriers.

Noise Terminology

Different types of scales are used to characterize the time-varying nature of sound. Applicable scales include the maximum noise level (Lmax), equivalent noise level (Leq), and the CNEL. Lmax is the maximum noise level during a specified period. Leq is the average A-weighted sound level measured over a given time interval. Leq can be measured over any period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods. CNEL is an average A-weighted sound level measured over a 24-hour period. However, this noise scale is adjusted to account for some individuals' increased sensitivity to noise levels during the evening and nighttime hours. A CNEL noise measurement is obtained by adding 5 dBA to sound levels occurring during the evening, from 7:00 PM to 10:00 PM, and 10 dBA to sound levels occurring during the nighttime, from 10:00 PM to 7:00 AM. The 5 dBA and 10 dBA "penalties" are applied to account for increased noise sensitivity during the evening and nighttime hours. Day-night average level (Ldn) is the A-weighted equivalent sound level for a 24-hour period with an additional 10 dB imposed on the equivalent sound levels for nighttime hours of 10:00 PM to 7:00 AM. Table 4.10-1: Noise Descriptors identifies various noise descriptors developed to measure sound levels over different periods of time.

¹ USDOT FHWA, Fundamentals and Abatement, 97.

² USDOT FHWA, Fundamentals and Abatement, 97.

Table 4.10-1 Noise Descriptors

Term	Definition				
Sound	A disturbance created by a vibrating object, which, wher transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.				
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.				
Decibel (dB)	The unit for measuring the volume of sound equal to 10 times the logarithm (base 10) of the ratio of the pressure of a measure sound to a reference pressure.				
A-Weighted Decibel (dB[A])	A sound measurement scale that adjusts the pressure of individual frequencies according to human sensitivities. The scale accounts for the fact that the region of highest sensitivity for the human ear is between 2,000 and 4,000 cycles per second (hertz).				
Equivalent Continuous Sound Level (Leq)	The sound level containing the same total energy as a time varying signal over a given time period. The Leq is the value that expresses the time averaged total energy of a fluctuating sound level. Leq can be measured over any time period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods.				
Day-Night Level (Ldn)	The energy average of the A-weighted sound levels occurring during a 24-hour period with 10 dBA added sound levels occurring from 10 PM to 7 AM.				
Community Noise Equivalent Level (CNEL)	A rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments add 5 dBA for the evening, 7:00 PM to 10:00 PM, and add 10 dBA for the night, 10:00 PM to 7:00 AM. The 5 and 10 decibel penalties are applied to account for increased noise sensitivity during the evening and nighttime hours. The logarithmic effect of adding these penalties to the 1-hour Leq measurements typically results in a CNEL measurement that is within approximately 3 dBA of the peak-hour Leq.				
sound pressure level	The sound pressure is the force of sound on a surface area perpendicular to the direction of the sound. The sound pressure level is expressed in dB.				
Ambient Noise	The level of noise that is all encompassing within a given environment, being usually a composite of sounds from many and varied sources near to and far from the observer. No specific source is identified in the ambient environment.				

Note: California Department of Transportation, Technical Noise Supplement; A Technical Supplement to the Traffic Noise Analysis Protocol, (Sacramento, CA: November 2009), N51-N54.

Noise Barrier Attenuation

The introduction of a barrier between a noise source and a sensitive receptor redistributes the sound energy into several paths, including a diffracted path over the top of the barrier, a transmitted path through the barrier, and a reflected path directed away from the sensitive receptor. Diffraction is the bending of sound waves over the top of a barrier. The area behind the barrier in which diffraction occurs is known as a "shadow zone," and sensitive receptors located in this area will experience some sound attenuation. The amount of attenuation is related to the magnitude of the diffraction angle. The diffraction angle will increase if the barrier height increases or if the distance from sensitive receptors is decreased to the barrier. In addition to diffraction with the use of barriers, sound can travel through the barrier itself. The level of sound transmission through the barrier depends on factors relating to the composition of the barrier (such as its weight and stiffness), the angle of incidence of the sound, and the frequency spectrum of the sound. The rating of a material's ability to transmit noise is called transmission loss. Transmission loss is related to the ratio of the incident noise energy to the transmitted noise energy, and it is normally expressed in decibels, which represents the amount noise levels will be reduced when the sound waves pass through the material of the barrier.

Noise energy can also be reflected by a barrier wall. Thus, the reflected sound energy would not affect the sensitive receptor but may affect sensitive receptors to the left and right of the developed barrier.³ Manmade or natural barriers can also attenuate sound levels; a solid wall or berm may reduce noise levels by 5 to 10 dBA.⁴

Contemporary wood frame construction techniques in California typically provide about 25 dBA reduction in exterior to interior noise levels. This is due to structural means used to comply with California regulations, such as the Title 24 energy conservation standards. The minimum attenuation of exterior to interior noise provided by typical structures in California is provided in **Table 4.10-2: Attenuation of Typical Structures**.

³ U.S. Department of Housing and Urban Development, Office of Community Planning and Development, *The Noise Guidebook* (*n.d.*), 21–23.

⁴ Federal Highway Administration, Highway Noise Fundamentals (1980), 18.

Building Type	Open Windows (dBA)	Closed Windows (dBA) ^a
Residences	17.0	25.0
Churches	20.0	30.0
Hospitals/convalescent homes	17.0	25.0
Offices	17.0	25.0
Theaters	20.0	30.0
Hotels/motels	17.0	25.0

Table 4.10-2 Attenuation of Typical Structures

Source: Bolt Beranek and Newman, Inc., Highway Noise: A Design Guide for Highway Engineers, NCHRP Report No.

117, (1971). Prepared for Highway Research Board, National Academy of Sciences, Washington, D.C.

^a As shown, structures with closed windows can attenuate exterior noise by a minimum of 25.0 to 30.0 dBA.

Vibration

Vibration consists of waves transmitted through a solid medium. Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. A vibration may be a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum," of many frequencies, and are generally classified as broadband or random vibrations. **Figure 4.10-4: Typical Levels of Groundborne Vibration** identifies typical groundborne vibration levels. The normal frequency range of most groundborne vibration that can be felt starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration is often measured in terms of the peak particle velocity (PPV) in inches per second (in/sec) because it is related to the stresses that are experienced by buildings. Vibration is also measured in vibration decibels (VdB). The human threshold of perception is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Vibration levels are acceptable at approximately 85 VdB if there are an infrequent number of events per day.⁵

Vibration energy attenuates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source.⁶ High frequency vibrations reduce much more rapidly than low frequencies, so that in the far-field from a source, the low frequencies tend to dominate. Soil properties also affect the propagation of vibration. When groundborne vibration interacts with a building, there is usually a ground-to-foundation coupling loss, but the vibration can also be amplified by the structural

⁵ Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, September 2018), 7-8.

⁶ California Department of Transportation, Earthborne Vibrations (1990), VII-27.

4.10 Noise

resonances of the walls and floors.⁷ Vibration in buildings is typically perceived as rattling of windows or of items on shelves, or the motion of building surfaces.

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough groundborne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps.⁸ If traffic, typically heavy trucks, induces perceptible vibration in buildings, such as window rattling or shaking of small loose items, then it is most likely an effect of low-frequency airborne noise or ground characteristics. Human annoyance by vibration is related to the vibration energy and the number and duration of events, as well as the setting in which the person experiences the vibration. As discussed previously, vibration can be amplified by the structural resonances of the walls and floors of buildings. The more the events or the greater the duration, the more annoying will it be to humans.

Existing Conditions

The Project encompasses approximately 24 gross acres in a highly urbanized area of the City of Claremont. The City of Claremont is located in an urban area and is primarily developed land.

Existing Off-Site Roadway Noise Levels

The existing traffic noise on local roadways in the surrounding areas was calculated to quantify the daytime (AM) and evening (PM) peak hour noise levels using information provided in the Traffic Impact Study (refer to **Appendix I**). The traffic study analyzed a total of eight (8) intersections. These intersections and connecting roadway segments were selected for the generation of existing off-site traffic noise. Traffic noise levels were calculated using the Federal Highway Administration Traffic Noise Model (FHWA TNM).

Table 4.10-3: Existing Roadway Noise Levels provides the calculated AM and PM peak hour noise for the analyzed local roadway segments based on existing traffic volumes. As shown, AM peak hour noise levels ranged from a low of 40.4 dBA along Santa Fe Street east of Indian Hill Boulevard (Intersection 3) to a high of 65.5 dBA along Arrow Highway east of Indian Hill Boulevard (Intersection 6). Additionally, PM peak hour noise levels ranged from a low of 47.9 dBA along Green Street west of Green Street (Intersection 5) to a high of 66.5 along Arrow Highway east of Indian Hill Boulevard (Intersection 7).

Existing Off-Site Railway Noise Levels

The existing rail line along the northern boundary of the Project is another source of off-site noise. However, unlike automobile traffic, the Project would not contribute to an increase in rail frequency or

⁷ Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, September 2018, 7-1, 7-2.

⁸ Federal Transit Administration (2018), 7-9.

noise level. Noise measurements conducted along the rail line just west of the Project, indicate that existing noise levels along the rail line are 58dBA.⁹ However, as an existing condition, the noise level of rail traffic is not evaluated as a project impact. Furthermore, Title 24 of the California Building Code requires building construction achieve noise insulation standards to provide acceptable interior noise levels for residential uses.

Existing Vibration Conditions

Based on field observations, the primary source of existing ground-borne vibration near the Project Site is vehicle traffic on local roadways. According to the FTA,¹⁰ typical road traffic-induced vibration levels are unlikely to be perceptible by people. In part, FTA indicates that "it is unusual for vibration from traffic including buses and trucks to be perceptible, even in a location close to major roadways." Therefore, based on FTA published vibration data, the existing ground vibration environment in the Project vicinity would be below the perceptible levels. Trucks and buses typically generate vibration velocity levels of approximately 63 VdB (at 50-feet distance), and these levels could reach 72 VdB when trucks and buses pass over bumps in the road.

Intersection		Adjacent	Time	Average Daily	Existing Roadway
NO.	Roadway Segment	Land Use	Period	Trips (ADT)	Noise Level (CNEL)
Indian Hill Bou	ilevard				
	North of 1 st Street	Commercial	AM	14,584	64.5
1 -	North of 1 Street	commercial	PM	15,872	64.9
1	South of 1 st Street	Commercial	AM	16,488	65.1
	South of 1 Street	commercial	PM	18,632	65.6
	North of Santa Fe Street	Commercial	AM	16,880	65.2
2			PM	18,424	65.6
3	South of Santa Fe Street	Residential/	AM	16,920	65.2
		Commercial	PM	18,560	65.6
	North of Green Street	Residential/ _ Commercial	AM	14,384	64.5
4			PM	16,144	65.0
4 -	South of Green Street	Residential/	AM	13,968	64.4
		Commercial	PM	15,744	64.9
	North of Arrow Highway	Commorcial	AM	10,480	63.1
7	North of Arrow Highway	Commercial -	PM	16,928	65.2
/	South of Arrow Highway	Commorcial	AM	13,856	64.3
		Commercial -	PM	19,504	65.8

Table 4.10-3 Existing Roadway Noise Levels

⁹ Metro Gold Line Foothill Extension Construction Authority, Metro Gold Line Foothill Extension–Azusa to Montclair Final Environmental Impact Report, Chapter 3.11 Noise and Vibration, 2013

¹⁰ Federal Transit Administration, Transit Noise and Vibration Impact Assessment (2018).

Intersection No.	Roadway Segment	Adjacent Land Use	Time Period	Average Daily Trips (ADT)	Existing Roadway Noise Level (CNEL)
College Avenu	Ie				
		Desidential	AM	4,088	58.9
2	North of 1" Street	Residential	PM	6,336	60.8
Z	Courth of 1 st Chroat	Commencial	AM	3,656	58.4
	South of 1" Street	Commercial -	PM	5,936	60.5
	Nouth of Cuson Street	Desidential	AM	3,936	58.7
-	North of Green Street	Residential	PM	5,872	60.5
5	Courth of Croon Streat	Desidential	AM	4,688	59.5
	South of Green Street	Residential	PM	5,768	60.4
		Desidential	AM	4,784	59.6
0	North of Arrow Highway	Residential	PM	4,944	59.7
8	Courth of Amount Lichmon	Desidential	AM	3,184	57.8
	South of Arrow Highway	Residential	PM	2,960	57.5
1 st Street					
	East of Indian Hill Poulovard	Commorcial	AM	3,320	54.3
1	East of Indian Hill Boulevard	Commercial -	PM	5,416	56.4
T	West of Indian Hill Poulovard	Commorsial	AM	1,384	50.2
			PM	3,296	54.0
	East of College Avenue	Residential/	AM	1,928	51.9
2		Commercial	PM	2,584	53.2
Z		Commercial -	AM	3,256	54.2
	west of college Avenue		PM	3,368	54.4
Santa Fe Stree	et				
	East of Indian Hill Boulevard	Residential -	AM	144	40.4
2			PM	192	41.7
5	West of Indian Hill Boulevard	Commercial	AM	1,176	49.5
	west of mulan mill boulevaru	Commercial	PM	1,224	49.7
Green Street					
	East of Indian Hill Boulevard	Residential/	AM	1,216	49.7
4		Commercial	PM	960	48.6
4	West of Indian Hill Boulevard	Commercial	AM	N/A	N/A
		commercial	PM	N/A	N/A
	East of Groop Streat	Posidontial	AM	648	46.9
E		Residential	PM	696	47.2
C	Wheet of Oregon Charles	Residential	AM	1,496	50.6
	west of Green Street	Residential	PM	816	47.9
Arrow Highwa	γ				
	East of Cambridge Avenue	Residential	AM	13,128	64.2
6		Residential	PM	19,992	66.0
	West of Cambridge Avenue	Residential	AM	13,672	64.4

Intersection No.	Roadway Segment	Adjacent Land Use	Time Period	Average Daily Trips (ADT)	Existing Roadway Noise Level (CNEL)
			PM	20,200	66.1
	East of Indian Hill Poulovard	Commorsial	AM	17,928	65.5
7		Commercial	PM	22,368	66.5
7	West of Indian Hill Boulevard	Commercial	AM	16,504	65.2
			PM	19,904	66.0
	East of College Avenue	Desidential	AM	17,616	65.5
8	East of College Avenue	Residential	PM	22,000	66.4
	West of College Avenue	Posidontial	AM	17,248	65.4
	west of college Avenue	Residential -	PM	22,064	66.4

Source: Refer to **Appendix H** for roadway noise calculation worksheets. Note: N/A = No Data as roadway segment does not exist.

Regulatory Framework

Federal

Department of Housing and Urban Development

The US Department of Housing and Urban Development (HUD) has set a goal of 65 dBA CNEL as a desirable maximum exterior standard for residential uses developed under HUD funding. While HUD does not specify acceptable interior noise levels, standard construction of residential uses constructed under Title 24 standards typically provides in excess of 20 dBA of attenuation with the windows closed. Based on this premise, the interior CNEL should not exceed 45 dBA CNEL.¹¹

Federal Transit Administration

The FTA has published a technical manual, *Transit Noise and Vibration Impacts Assessment*, that provides ground-borne vibration impact criteria with respect to building damage during construction activities.¹² According to the FTA guidelines, a vibration criterion of 0.20 PPV should be considered as the significant impact level for nonengineered timber and masonry buildings. Structures or buildings constructed of reinforced concrete, steel, or timber have a vibration damage criterion of 0.50 PPV based on the FTA guidelines. Structures amplify ground-borne vibration, and wood-frame buildings, such as typical residential structures, are more affected by ground vibration than are heavier buildings. The level at which

12 US Department of Transportation, Federal Transit Administration (USDOT, FTA), Transit Noise and Vibration Impact Assessment, FTA report no. 0123 (September 2018), accessed May 2020, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impactassessment-manual-fta-report-no-0123_0.pdf.

¹¹ Code of Federal Regulations, Title 24, sec. 51, Housing and Urban Development, Environmental Criteria and Standards (revised April 1, 2004).

ground-borne vibration is strong enough to cause architectural damage has not been determined conclusively.

The most conservative estimates are reflected in the FTA standards, shown in **Table 4.10-4**: **Construction Vibration Damage Criteria**. The FTA has also adopted standards for ground-borne vibration impacts related to human annoyance, as shown in **Table 4.10-5**: **Ground-borne Vibration Sensitivity Criteria**. These criteria are based on extensive research that suggests humans are sensitive to vibration velocities in the range of 8 to 80 Hz.¹³

Table 4.10-4Construction Vibration Damage Criteria

Bu	ilding Category	PPV (ips)	Lv (VdB)	
١.	Reinforced concrete, steel, or timber (no plaster)	0.5	102	
II.	Engineered concrete and masonry (no plaster)	0.3	98	
III.	Nonengineered timber and masonry buildings	0.2	94	
IV.	Buildings extremely susceptible to vibration damage	0.12	90	

Source: Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, September 2018). Note: For Max Lv (VdB), Lv = the velocity level in decibels as measured in 1/3 octave bands of frequency over the frequency ranges of 8 to 80 Hz; VdB = vibration decibels; Hz = hertz; ips = inches per second.

Table 4.10-5 Ground-borne Vibration Sensitivity Criteria

Building Category	Frequent Events	Occasional Events	Infrequent Events
Category 1: High Sensitivity. Buildings where vibration would interfere with interior operations (e.g., vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and research operations).	65 VdB ¹	65 VdB ¹	65 VdB ¹
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses, such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.	75 VdB	78 VdB	83 VdB

Source: Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, September 2018. Note:

1 This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. For equipment that is more sensitive, a Detailed Vibration Analysis must be performed.

13 USDOT, FTA, Transit Noise and Vibration Impact Assessment.

State

Noise Standards

The California Department of Health Services (DHS) has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure; these guidelines have been included in the State of California General Plan Guidelines, which is published and updated by the Governor's Office of Planning and Research.¹⁴ According to the State, an exterior noise environment up to 60 dBA CNEL and 65 dBA CNEL is "normally acceptable" for single- and multifamily residential uses, respectively, without special noise insulation requirements. In addition, noise levels up to 75 dBA CNEL are "conditionally acceptable" for residential uses. In addition, Section 65302(f) of the California Government Code requires each county and city in the State to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element must (1) identify and appraise noise problems in the community, (2) recognize Office of Noise Control guidelines, and (3) analyze and quantify current and projected noise levels.

DHS's Office of Noise Control has established guidelines to provide communities with noise environments that it deems to be generally acceptable based on land-use categories. These guidelines serve as a primary tool for a city to use to assess the compatibility between land uses and outdoor noise. Noise exposure for single-family uses is normally acceptable when the CNEL at exterior residential locations is equal to or below 60 dBA, conditionally acceptable when the CNEL is between 55 to 70 dBA, and normally unacceptable when the CNEL some overlap exists between categories. These guidelines apply to noise sources such as vehicular traffic, aircraft, and rail movements.

Vibration Standards

The California Department of Transportation (Caltrans) published its *Transportation and Construction Vibration Guidance Manual* in April 2020.¹⁵ The manual provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. This manual provides guidelines for assessing vibration damage potential to various types of buildings, ranging from 0.08 to 0.12 inches per second for extremely fragile historic buildings, ruins, and ancient monuments, to 0.50 to 2.0 inches per second for modern industrial and commercial buildings.

¹⁴ State of California, Governor's Office of Planning and Research, *General Plan Guidelines 2017 (2018)*, 374, accessed May 2020, http://opr.ca.gov/planning/general-plan/guidelines.html.

¹⁵ California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, April 2020, accessed May 2020, https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf.

The guidance and procedures provided in the Caltrans manual should be treated as screening tools for assessing the potential for adverse effects related to human perception and structural damage. General information on the potential effects of vibration on vibration-sensitive research and advanced-technology facilities is also provided, but a discussion of detailed assessment methods in this area is beyond the manual's scope. The document is not an official policy, standard, specification, or regulation. Therefore, the vibration analysis in this Draft EIR is based on the FTA's standards and the Caltrans standards are included for informational purposes only.

State of California Building Code

California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

California Noise Insulation Standards

The California Noise Insulation Standards¹⁶ require that interior noise levels from exterior sources be 45 dBA or less in any habitable room of a multiresidential use facility (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses, except detached single-family dwellings) with doors and windows closed. Measurements are based on CNEL or Ldn (the day–night average): whichever is consistent with the noise element of the local general plan. Where exterior noise levels exceed 60 dBA CNEL, an acoustical analysis for new development may be required to show that the proposed construction will reduce interior noise levels to 45 dBA CNEL. If the interior 45 dBA CNEL limit can be achieved only with the windows closed, the residence must include mechanical ventilation that meets applicable Uniform Building Code (UBC) requirements.

California Department of Health Services

The State of California Department of Health Services, Environmental Health Division, has published recommended guidelines for noise and land use compatibility, referred to as the *State Land Use Compatibility Guidelines for Noise* (*State Noise Guidelines*). The *State Noise Guidelines*, illustrated in **Figure 4.3-6: Land Use Compatibility to Noise** indicates that residential land uses and other noise-sensitive receptors generally should locate in areas where outdoor ambient noise levels do not exceed 65

¹⁶ California Code of Regulation, Title 24, sec. 3501 et seq.

to 70 dBA CNEL. According to the *State Noise Guidelines*, an exterior noise level of 60 dBA CNEL is considered to be "normally acceptable" for single-family, duplex, and mobile homes involving normal, conventional construction, without any special noise insulation requirements. Exterior noise levels up to 65 dBA CNEL are typically considered "normally acceptable" for multifamily units and transient lodging without any special noise insulation requirements. Between these values and 70 dBA CNEL, exterior noise levels are typically considered "conditionally acceptable," and residential construction should only occur after a detailed analysis of the noise reduction requirements and needed noise attenuation features have been included in the Project design. Exterior noise attenuation features include, but are not limited to, setbacks to place structures outside the conditionally acceptable noise contour, orienting structures so no windows open to the noise source, and/or installing noise barriers such as berms and/or solid walls.

City of Claremont General Plan Noise Element

The maximum exterior and interior noise standards specified in **Table 4.10-6: Claremont Land Use/Noise Guidelines** of the City's General Plan Noise Element are used as a guideline to evaluate the acceptability of the noise generated by traffic. These standards are for assessment of long-term vehicular traffic noise impacts. As shown in **Table 4.10-6**, the City has a maximum exterior noise standard of 65 dBA CNEL for residential uses and a maximum exterior noise standard of 70 dBA CNEL for commercial and office uses. In addition, the City has a maximum interior noise standard of 45 dBA CNEL for residential uses.

Property Receiving Noise		Maximum Noise Lev	Maximum Noise Level (dBA Ldn or CNEL)		
Type of Use	Zoning Designation	Interior	Exterior		
	Hillside				
	Rural	45	6E		
Desidential	Very Low	45	65		
Residential	Low Medium				
	Medium	45	65/70 ¹		
	High	45	70 ¹		
	Professional Commercial				
	Neighborhood				
	Limited		70		
Commercial and Office	Major		70		
	Highway				
	Freeway				
	Professional Office	50	70		
Business Park	Business Park	55	75		

Table 4.10-6 Claremont Land Use/Noise Guidelines

Property Receiving Noise		Maximum Noise Level (dBA Ldn or CNEL)		
Type of Use	Zoning Designation	Interior	Exterior	
Dublic/Institutional	Schools	50	65	
Public/Institutional	All Others	50	70	
Onen Enges	Active Open Space		70	
Open Space	Passive Open Space		70/65 ¹	

Source: City of Claremont, Chapter 6, Noise Element

¹ Maximum exterior noise level up to 70 dBA CNEL are allowed for multiple-family housing.

² Where quiet is a basis for the land use.

³ Regarding aircraft-related noise, the maximum acceptable exposure for new residential development is 60 dBA CNEL.

City of Claremont Municipal Code

Section 16.154.020(D)E of the City's Municipal Code establishes noise level standards for various land use categories affected by stationary noise sources and not noise from mobile sources on aircraft. Land use categories in the City are defined in three noise zones, as listed below. **Table 4.10-7: Exterior Noise Level Standards from Stationary Noise Sources** and **Table 4.10-8: Interior Noise Level Standards from Stationary Noise Sources**, provide the City's exterior and interior noise standard based on the noise zone and the time period, respectively.

- Noise Zone 1: All single, double and multiple family residential properties.
- Noise Zone 2: All commercial properties.
- Noise Zone 3: All manufacturing or industrial properties.

Section 16.154.020(F) of the City Municipal Code states that noise sources associated with or vibration created by construction, repair, remodeling or grading of any real property, or during authorized seismic survey provide that activities take place between the hours of 7:00 a.m. and 8:00 p.m. weekdays and Saturdays, excluding national holidays and noise levels as measured on residential properties do not exceed 65 dBA for a cumulative period of more than 15 minutes in any one hour, 70 dBA for a cumulative period of more than 15 minutes in any one hour, 70 dBA for a cumulative in any one hour, 79 dBA for a cumulative period of more than 5 minutes in any one hour or 80 dBA at any time and any vibration created does not endanger the public health, welfare, and safety. Only construction, repair, remodeling, and grading activity that does not exceed the noise levels set by Section 16.154.020(D) may occur on Sundays and national holidays.

Section 16.154.020(H) of the City Municipal Code states that the noise standards specified in Section 16.154.020 (D and E) for noise levels generated by air conditioning or refrigeration system or associated equipment shall be increased by 5 dBA. In addition, no person shall cause the loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects

between the hours of 10:00 p.m. and 7:00 a.m. the following day in such a manner as to cause a noise disturbance across a residential real property boundary or within Noise Zone 1. Section 16.154.020(J) of the City Municipal Code states that it shall be unlawful for any person to create, maintain or cause any ground vibration which is perceptible without instruments at any point on any affected property adjoining the project on which the vibration source is located. The perception threshold shall be presumed to be more than 0.05 inches per second (in/sec) RMS vertical velocity (PPV)

Table 4.10-7 Exterior Noise Level Standards from Stationary Noise Sources					
Noise Zone	Time Interval	15-minutes ¹ (dBA)	10 minutes ² (dBA)	5 minutes ³ (dBA)	Anytime ⁴ (dBA)
1	7:00 AM to 10:00 PM	60	65	74	75
	10:00 PM to 7:00 AM	55	60	69	70
2	7:00 AM to 10:00 PM	65	70	79	80
	10:00 PM to 7:00 AM	60	65	74	75
3	Anytime	70	75	84	85

Source: City of Claremont Municipal Code Section 16.154.020(D).

Note: Per the Claremont Municipal Code Section 16.154.020(D), it shall be unlawful for any person at any location within the incorporated area of the City to create any noise or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person which causes the noise level when measured on the property line of any other property to exceed the basic noise level as adjusted above. Each of the noise limits above shall be reduced by 5 dBA for noise consisting of impulse or simple tone noise. If the measurement location is a boundary between two different noise zones, the lower noise level standard shall apply. If the intruding noise source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient noise level can be determined, the measured noise level obtained while the noise is in operation shall be compared directly to the allowable noise level standards as specified respective to the measurement location's designated land use and for the time of day the noise level is measured.

¹ 15-minute noise standard. Basic noise level for a cumulative period of more than 15 minutes in any one hour.

² 10-minute noise standard. Basic noise level plus 5 dBA for a cumulative period of more than 10 minutes in any one hour.

³ 5-minute noise standard. Basic noise level plus 14 dBA for a cumulative period of more than 5 minutes in any one hour.

⁴ Anytime noise standard. Basic noise level plus 15 dBA at any time.

Table 4.10-8 Interior Noise Level Standards from Stationary Noise Sources

Noise Zone	Type of Land Use	Time Interval	Allowable Interior Noise Level (dBA)
All	Residential	7:00 AM to 10:00 PM	47
		10:00 PM to 7:00 AM	37

Source: City of Claremont Municipal Code Section 16.154.020(E).

Note: Each of the noise limits above shall be reduced by 5 dBA for noise consisting of impulse or simple tone noise. It shall be unlawful for any person at any location within the incorporated area of the City to create any noise or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person which causes the noise level when measured on the property line of any other property to exceed the basic noise level as adjusted above. If the measurement location is a boundary between two different noise zones, the lower noise level standard shall apply. If the intruding noise source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient noise level can be determined, the measured noise level obtained while the noise is in operation shall be compared directly to the allowable noise level standards as specified respective to the measurement location's designated land use and for the time of day the noise level is measured.

4.10.3 IMPACT ANALYSIS

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

Potential noise and vibration impacts are commonly divided into two groups: short-term construction and long-term operational (stationary source and mobile vehicular noise). Short-term impacts are usually associated with noise and vibration generated by construction activities. Long-term impacts include effects on both surrounding land uses as well as noise-sensitive on-site uses, which can include stationary and traffic operations. For the purposes of this analysis, it is expected that the long-term operational noise impacts associated with the proposed Project would be a product of increased off- site traffic noise impacts and from on-site stationary noise sources. The evaluation of noise and vibration impacts associated with the proposed Project includes the following:

- Analysis of short-term construction noise and vibration levels at off-site noise-sensitive uses using the City of Claremont's Noise Ordinances and the construction vibration building damage and/or human annoyance criteria recommended by the FTA and Caltrans.
- Analysis of long-term potential noise impacts associated with off-site vehicular traffic using guidelines
 provided by the FHWA and on-site traffic noise impacts from nearby roads and noise impacts
 generated by aircraft operations at Cable Airport as compared to the City of Claremont and Caltrans
 pertinent noise standards.

Construction

For purposes of this analysis, the Project would have a significant impact if it exceeds the stationary source noise criteria for the City of Claremont as specified in the City's General Plan and Municipal Code Noise Ordinance (refer to **Table 4.10-7** above).

On-Site Construction Activities

Forecasts of construction noise levels are shown in **Table 4.10-9: Typical Maximum Noise Levels for Construction Equipment**. The construction equipment-reference noise levels are based on measured noise data compiled by the FHWA. These maximum noise levels would occur when equipment is operating under full power conditions. However, equipment used on construction sites typically operate at less than full power. The acoustical usage factor is the percentage of time that each type of construction equipment is anticipated to be in full power operation during a typical construction day. These values are estimates and will vary based on the actual construction process and schedule.

Equipment Description	Typical Duty Cycle (%)	Spec Lmax (dBA) ^a	Actual Lmax (dBA)ª
Air Compressor	40	80.0	77.7
Backhoe	40	80.0	77.6
Crane	16	85.0	80.6
Dozer	40	85.0	81.7
Forklift	40	85.0	N/A
Generator	50	82.0	80.6
Grader	40	85.0	N/A
Loader	40	80.0	79.1
Paver	50	85.0	77.2
Roller	20	85.0	80.0
Scraper	40	85.0	83.6
Tractor	40	84.0	N/A
Welder	40	73.0	74.0

Table 4.10-9Typical Maximum Noise Levels for Project Construction Equipment

Source: FHWA Roadway Construction Noise Model (RCNM) version 1.1

Note: N/A = not available.

^a Lmax sound levels are measured 50 feet from the source of the equipment.

To characterize construction-period noise levels, the average (hourly Leq) noise level associated with each construction stage was calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment operating simultaneously.

Construction equipment operates at its noisiest levels for certain percentages of time during operation. It is important to note, equipment would operate at different percentages over the course of an hour.¹⁷ During a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently.

To characterize construction-period noise levels, the noise level associated with each construction stage was calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment operating simultaneously.

¹⁷ Federal Highway Administration, *Traffic Noise Model (2006)*.

The estimated construction noise levels were calculated for a scenario in which a reasonable number of construction equipment was assumed to be operating simultaneously, given the physical size of the Project Site and logistical limitations, and with the noise equipment located at the construction area nearest to the affected receptors to present a conservative impact analysis. This is considered a worst-case evaluation because construction of the Project would typically use fewer pieces of equipment simultaneously at any given time and, as such, would likely generate lower noise levels than reported herein.

Forecasts of construction noise levels from on-site construction during each phase of construction were completed and are shown in **Table 4.10-10**: **Construction Maximum Noise Estimates.** As shown in **Table 4.10-10**, construction noise levels at a distance of 25 feet range from a low of 79.7 dBA during the architectural coating phase to a high of 88 dBA during the paving phase.

The Project would be required to comply with the construction hours and days specified in the City's Municipal Code. Construction noise levels would exceed the City's exterior 15-minute, 10-minute, 5-minute, and anytime noise standard for single, double and multiple family residential properties (Noise Zone 1) of 65, 70, 74, and 75 dBA, respectively. Construction noise impacts would be potentially significant prior to mitigation. Implementation of **Mitigation Measure MM N-1** would reduce potential construction related noise impacts to less than significant.

Construction measures would be implemented and enforced by the City of Claremont during construction activities. These measures include optimal muffler systems for all equipment to a sensitive receptor would reduce construction noise levels by approximately 10 dB or more.¹⁸ Additionally, **Mitigation Measure MM N-1** would require the preparation of a construction management plan which specifies that all construction equipment, fixed or mobile, be equipped with properly operating and maintain mufflers and other State-required noise attenuation devices; require the maximum distance between construction equipment staging areas and occupied residential areas; and require the use of electric air compressors and similar power tools. Limiting the number of noise-generating heavy-duty off-road construction equipment (e.g., backhoes, dozers, excavators, loaders, rollers, etc.) simultaneously used on the Project Site within close proximity of each other would further reduce construction noise levels by approximately 10 dBA. Temporary abatement techniques include the use of temporary and/or movable shielding for both specific and nonspecific operations. An example of such a barrier utilizes noise curtains in conjunction with trailers to create an easily movable, temporary noise barrier system.

¹⁸ FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, accessed March 2020, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm.

Construction Phase	Max Leq (25 feet)	Noise Standard	Noise Level Standard	Maximum Outdoor Noise Increase over Noise Level Standard without Mitigation Measures (dBA)
		15-minute	60	+20
Domolition	80	10-minute	65	+15
Demonuon	80 –	5-minute	74	+6
	-	Anytime	75	+5
		15-minute	60	+21
Cuadina	81 — —	10-minute	65	+16
Grading		5-minute	74	+7
		Anytime	75	+6
		15-minute	60	+27
Building	-	10-minute	65	+22
Construction	87 -	5-minute	74	+13
		Anytime	75	+12
		15-minute	60	+27
Doving		10-minute	65	+22
Paving	87 —	5-minute	74	+13
		Anytime	75	+12
		15-minute	60	+20
Architectural	<u>00</u>	10-minute	65	+15
Coating	80 —	5-minute	74	+6
		Anytime	75	+5

Table 4.10-10 Construction Maximum Noise Estimates

Source: Refer to **Appendix H** for construction noise worksheets.

A noise barrier can achieve a 5 dB noise level reduction when it is tall enough to break the line-of-sight to the receiver. After it breaks the line-of-sight, it can achieve approximately 1.5 dB of additional noise level reduction for each one (1) meter (3.3 feet) of barrier height.¹⁹ Therefore, an approximately 15-foot tall construction noise barrier would reduce construction noise levels by a minimum 7 dB. With implementation of **MM N-1**, construction noise levels would be reduced by a minimum of 27 dB, dependent on the construction activity and height of the temporary noise barrier used. As such, construction noise would be less than significant with mitigation incorporated.

Off-Site Construction Noise

Construction of the Project would require worker and vendor truck trips to and from the Project Site to work on the site and deliver supplies to the site. Trucks traveling to and from the Project Site would be required to travel along a haul route approved by the City. The construction workforce would consist of 15 worker trips per day and 458 total hauling trips during demolition; 20 worker trips per day during grading; 796 worker trips per day and 140 vendor trips per day during building construction; 15 worker trips per day during paving; and 159 worker trips per day during architectural coating.

Noise associated with construction worker and delivery trips were estimated using the Caltrans FHWA Traffic Noise Model based on the maximum number of worker and truck trips in a day. The 936 daily trips (combined 796 worker trips and 140 vendor trips per day) would generate noise levels during the daytime of approximately 52.6 dBA, measured at a distance of 75 feet from the adjacent sensitive receptors along the roadway. The noise level increases from worker and vendor related trips would be below the significance exterior threshold of 65 dBA for residential uses and off-site construction related vehicle noise at sensitive receptors would be less than significant.

Operation

For purposes of this analysis, the Project would have a significant impact related to traffic if both of the following conditions occur:

- Long-term project traffic would cause a noise level increase of 3 dBA or more on a roadway segment adjacent to a noise-sensitive land use. Noise-sensitive land uses include the following: residential (single-family, multifamily, and mobile home); transient lodging (e.g., hotels and motels); nursing homes; hospitals; schools; and parks, playgrounds, and recreation areas.
- The resulting "future with project" noise level exceeds the noise standard for sensitive land uses as identified in the City of Claremont General Plan.

¹⁹ FHWA, Special Report – Measurement, Prediction, and Mitigation, updated June 2017, accessed March 2020, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm

Table 4.10-11: Existing plus Project illustrates the change in AM and PM peak hour noise levels from existing traffic volumes and from traffic generated by the Project. The difference in traffic noise between existing conditions and existing plus Project conditions represents the increase in noise attributable to Project-related traffic. As shown in **Table 4.10-11**, the maximum noise level increases during the AM peak hour along analyzed roadways would be 1.5 dBA along College Avenue north of 1st Street (Intersection 2). Additionally, the maximum noise level increases during the PM peak hour along analyzed roadways would be 1.5 dBA along College Avenue north of note, the Specific Plan creates new vehicle paths, such as the extension of Green Street west to Bucknell Avenue that alters the trip distribution within the Project vicinity.

Also, the Project would remove the existing uses that high peak hour trips and develops uses that produce more trip credits for walking and transit and are more broadly time-distributed for smaller peaks. As such, some roadway segments result in a reduction of average daily trips (ADTs) and therefore result in reduced roadway noise levels. Other roadway segments have similar or small increases in ADTs that would have an insignificant impact on roadway noise. Accordingly, Project-related traffic would not cause noise levels along the analyzed roadways to increase by more than 3.0 dBA. Furthermore, roadway noise levels would remain within normally acceptable limits with proposed Project related-traffic, as specified in the General Plan. Consequently, the addition of proposed Project related traffic would not increase noise levels along analyzed roadway segments by 3 dBA or greater. Thus, the proposed Project would not result in a permanent increase in noise levels and vehicular related noise impacts under the Existing plus Project scenario would be less than significant.

Intersection No.	Roadway Segment	Adjacent Land Use	Time Period	Existing ADT	Existing plus Project ADT	Existing (dBA)	Existing plus Project (dBA)	Difference (dBA)	Significant Impact
Indian Hill Bou	levard								
1 -	North of	Commercial -	AM	14,584	11,080	64.5	63.4	-1.1	No
	1 st Street		PM	15,872	11,544	64.9	63.5	-1.4	No
	South of	Commercial -	AM	16,488	12,744	65.1	64.0	-1.1	No
	1 st Street		PM	18,632	14,000	65.6	64.4	-1.2	No
	North of		AM	16,880	12,904	65.2	64.0	-1.2	No
	Santa Fe Street	Commercial	PM	18,424	13,664	65.6	64.3	-1.3	No
3	South of		AM	16,920	13,080	65.2	64.1	-1.1	No
	Santa Fe Street	Residential/Commercial	PM	18,560	13,880	65.6	64.3	-1.3	No
	North of		AM	14,384	12,168	64.5	63.8	-1.3	No
	Green Street	Residential/Commercial	PM	16,144	13,096	65.0	64.1	-0.9	No
4	South of	Residential/Commercial	AM	13,968	11,760	64.4	63.6	-0.8	No
	Green Street		PM	15,744	12,704	64.9	64.0	-0.9	No
	North of	Commercial	AM	10,480	12,152	63.1	63.8	0.7	No
	Arrow Highway		PM	16,928	12,936	65.2	64.0	-1.2	No
/	South of	Commercial	AM	13,856	14,856	64.3	64.6	+0.3	No
	Arrow Highway		PM	19,504	14,888	65.8	64.6	+1.2	No
College Avenue	2								
	North of	rth of Residential – Street	AM	4,088	2,880	58.9	57.4	+1.5	No
2	1 st Street		PM	6,336	4,512	60.8	59.3	+1.5	No
		Commercial	AM	3,656	2,664	58.4	57.1	+1.3	No

Table 4.10-11Existing Plus Project Roadway Noise Levels

Intersection No.	Roadway Segment	Adjacent Land Use	Time Period	Existing ADT	Existing plus Project ADT	Existing (dBA)	Existing plus Project (dBA)	Difference (dBA)	Significant Impact
	South of 1 st Street		PM	5,936	4,368	60.5	59.2	+1.3	No
5	North of	Residential	AM	3,936	2,952	58.7	57.5	+1.2	No
	Green Street		PM	5,872	4,328	60.5	59.2	+1.3	No
	South of	Residential	AM	4,688	3,680	59.5	58.5	+1.0	No
	Green Street		PM	5,768	4,224	60.4	59.1	+1.3	No
	North of		AM	4,784	3,768	59.6	58.6	+1.0	No
0	Arrow Highway	Residential	PM	4,944	4,192	59.7	59.0	-0.1	No
8	South of	Residential	AM	3,184	2,920	57.8	57.4	+0.4	No
	Arrow Highway		PM	2,960	2,544	57.5	56.9	+0.6	No
1 st Street									
	East of	Commercial	AM	3,320	3,056	54.3	53.9	+0.4	No
1	Indian Hill Boulevard		PM	5,416	5,072	56.4	56.1	-0.3	No
1	West of	Commercial	AM	1,384	1,360	50.2	50.2	0.0	No
	Indian Hill Boulevard		PM	3,296	3,240	54.0	53.9	-0.1	No
	East of	Residential/Commercial	AM	1,928	1,904	51.9	51.9	0.0	No
-	College Avenue		PM	2,584	2,536	53.2	53.1	-0.1	No
2	West of	Commercial	AM	3,256	2,984	54.2	53.8	+0.4	No
	College Avenue		PM	3,368	3,064	54.4	54.0	-0.4	No
Santa Fe Stree	t								
	East of		AM	144	56	40.4	36.3	-4.1	No
3	Indian Hill Boulevard	n Hill Residential	PM	192	152	41.7	40.6	-1.1	No

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Intersection No.	Roadway Segment	Adjacent Land Use	Time Period	Existing ADT	Existing plus Project ADT	Existing (dBA)	Existing plus Project (dBA)	Difference (dBA)	Significant Impact
	West of		AM	1,176	936	49.5	48.5	-1.0	No
	Indian Hill Boulevard	Commercial	PM	1,224	1,072	49.7	49.1	-0.6	No
Green Street									
	East of		AM	1,216	1,192	49.7	49.6	-0.1	No
4	Boulevard	Residential/Commercial	PM	960	952	48.6	48.6	0.0	No
4	West of		AM	N/A	N/A	N/A	N/A	N/A	No
	Indian Hill Boulevard	Commercial	PM	N/A	N/A	N/A	N/A	N/A	No
	East of	Residential	AM	648	648	46.9	46.9	0.0	No
r	Green Street		PM	696	696	47.2	47.2	0.0	No
5	West of		AM	1,496	1,472	50.6	50.5	-0.1	No
	Green Street	Residential	PM	816	816	47.9	47.9	0.0	No
Arrow Highwa	у								
	East of		AM	13,128	10,040	64.2	63.0	-1.2	No
C	Cambridge Avenue	Residential	PM	19,992	15,752	66.0	65.0	-1.0	No
D	West of		AM	13,672	10,560	64.4	63.2	-1.2	No
	Cambridge Avenue	Residential	PM	20,200	15,952	66.1	65.0	+1.1	No
	East of		AM	17,928	13,560	65.5	64.3	+1.2	No
7	Indian Hill Boulevard	Commercial	PM	22,368	15,688	66.5	65.0	-1.5	No
/	West of		AM	16,504	13,048	65.2	64.2	-1.0	No
	Indian Hill Boulevard	Commercial	PM	19,904	15,336	66.0	64.9	-1.1	No
8		Residential	AM	17,616	12,608	65.5	64.0	-1.5	No

Intersection No.	Roadway Segment	Adjacent Land Use	Time Period	Existing ADT	Existing plus Project ADT	Existing (dBA)	Existing plus Project (dBA)	Difference (dBA)	Significant Impact
 (East of College Avenue		PM	22,000	14,808	66.4	64.7	-1.7	No
	West of	West of College Residential Avenue	AM	17,248	12,976	65.4	64.1	-1.3	No
	College Avenue		PM	22,064	15,464	66.4	64.9	-1.5	No

Source: Refer to **Appendix H** for roadway noise calculation worksheets.

Note: N/A = No Data as roadway segment does not exist.

General Plan Consistency

Table 4.10-12: Claremont General Plan Consistency Analysis evaluates the Project's consistency with Claremont's General Plan goals and policies related to noise. As shown, the Project would be consistent with the General Plan Policies related to noise.

Claremont Gen	eral Plan Consistency Analysis
General Plan Goals and Policies	General Plan Consistency Analysis
Goal 6-12: Minimize the impact of excessive no noise level requirements for all land uses.	oise levels throughout the community, and adopt appropriate
Policy 6-12.1: Use noise contour maps and noise/land use compatibility criteria in planning and development decisions	Consistent. As discussed above, with implementation of Mitigation Measure MM N-1 , construction noise levels would not exceed the City of Claremont noise thresholds for nearby land uses. Additionally, the Project Site is located approximately 1.5 miles to the southwest of Cable Airport. However, the Project Site is not within the Cable Airport Noise Contour Map. Therefore, the Project would not be exposed to noise levels from Cable Airport that would exceed the exterior threshold standards.
Policy 6-12.2 : Develop standards and encourage private property owners to locate, screen, and/or buffer equipment in order to reduce noise impacts on surrounding areas.	Consistent. The proposed Project would include the use of stationary noise sources (i.e., truck deliveries/unloading/loading areas, surface parking lots, and residential/commercial HVAC systems). As discussed in the analysis, these features would be located in areas where intervening buildings would reduce noise levels generated by the stationary sources. This type of design would be consistent with this policy as set forth by the City
Policy 6-12.3: Minimize noise from property maintenance equipment, construction activities and other nontransportation noise sources by enforcing designated	 Consistent. The construction contractor would comply with Section 16.154.020(F) of the City's Municipal Code, which exempts construction noise if the following occur: Activities take place between the hours of 7:00 a.m. and 8:00 p.m. weekdays and Saturdays, excluding national holidays; and Noise levels as measured on residential properties do not exceed 65 dBA for a cumulative period of more than 15 minutes in any 1 hour, 70 dBA for a cumulative period of more than 10 minutes in any 1 hour, and 79 dBA for a cumulative period of more than 5 minutes in any 1 hour or 80 dBA at any time. Abiding by the standards of the Claremont Municipal Code would ensure that nearby sensitive receptors are not exposed to construction noise levels that exceed residential interior and exterior limits. The Project would therefore be consistent with this policy.

Table 4.10-12 Claremont General Plan Consistency Analysis

Source: City of Claremont General Plan – Chapter 6 Public Safety and Noise Element.

b. Generation of excessive groundborne vibration or groundborne noise levels?

Construction Vibration

Based on the *Transit Noise and Vibration Impact Assessment*, a minimum of 0.5 in/sec PPV is required to cause any potential building damage to the off-site sensitive uses. FTA guidelines show that a vibration level of up to 102 VdB (equivalent to 0.5 in/sec PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. As such, for purposes of this analysis, the Project would have a significant impact if construction vibration exceeds 0.5 in/sec PPV.

Table 4.10-13: On-Site Construction Vibration Impacts–Building Damage presents the construction vibration impacts associated with on-site construction in terms of building damage. As shown in **Table 4.10-12**, the forecasted vibration levels due to on-site construction activities would not exceed the building damage significance threshold of 0.5 PPV ips for all sites surrounding the Project area. Therefore, on-site construction vibration would not result in a significant vibration impact with regard to building damage. Impacts related to building damage from on-site construction vibration would be less than significant.

	Estimat Site Stru	ted Vibratio	on Velocit n the Proj	ty Levels a ject Const	at the Nea truction Ec	rest Off- quipment	Significance	
Distance	Vibratory Roller	Large Bulldozer	Caisson Drilling	Loaded Trucks	Jack- hammer	Small bulldozer	Threshold (PPV ips)	Exceeds Threshold?
FTA Reference Vibro	ation Levels	<u>at 25 feet</u>						
	0.210	0.089	0.089	0.076	0.035	0.003	0.5	No
50 feet	0.074	0.031	0.031	0.027	0.012	0.001	0.5	No
75 feet	0.040	0.017	0.017	0.015	0.007	0.001	0.5	No
100 feet	0.026	0.011	0.011	0.010	0.004	0.000	0.5	No

 Table 4.10-13

 On-Site Construction Vibration Impacts – Building Damage

Source: US Department of Transportation, Federal Transportation Authority, Transit Noise and Vibration Impact Assessment. Note: Refer to **Appendix H** for construction vibration worksheets.

Operational Vibration

Similar to existing conditions, the primary sources of vibration associated with operation would include passenger-vehicle circulation within the Project area and on-site truck activity. Ground-borne vibration typically attenuates rapidly as a function of distance from the vibration source. Furthermore, the majority of the Project's operation-related vibration sources, such as mechanical equipment, would incorporate vibration attenuation mounts as required by the particular equipment specifications. Therefore, operation

would not substantially increase existing vibration levels in the immediate vicinity of the Project Site. Vibration impacts associated with operation would be less than significant.

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?

The City of Claremont does not recognize the Cable Airport Land Use Compatibility Plan that was adopted by the City of Upland. Therefore, in lieu of this plan, the impact analysis for future residents occupying the site and being exposed to Cable Airport noise is based on the 2011 Handbook. Noise generated by the operation of aircraft is primarily measured in terms of the cumulative noise levels of all aircraft operations to, from, and around an airport. In California, the cumulative noise level metric established by State regulations is the CNEL. The basic California guidance sets a CNEL of 65 dB as the maximum noise level generated by an airport that is normally compatible with urban residential land uses, However, the current Claremont General Plan indicates that the maximum acceptable exposure from aircraft-related noise for new residential development is 60 dBA CNEL.²⁰

The Project Site is located approximately 1.5 miles to the southwest of Cable Airport. According to the Claremont General Plan, the Project Site is not within the Cable Airport Noise Contour Map.²¹ As such, the Project would not be exposed to noise levels from Cable Airport that would exceed the exterior threshold standards. Accordingly, no impacts would occur.

Cumulative Impact

<u>Noise</u>

Noise impacts are localized in nature and decrease with distance. Cumulative construction noise impacts have the potential to occur when multiple construction projects in the local area generate noise within the same time frame and contribute to the local ambient noise environment. In the event that adjacent properties are developed at the same time as the proposed Project, adherence to the City of Claremont that regulate the timing construction activities would reduce impacts pertaining to construction noise. Therefore, combined construction noise impact of the related projects and the Project's contribution would not cause a significant cumulative impact. Consequently, impacts would be less than significant.

²⁰ City of Claremont, *General Plan Public Safety and Noise Element*, Table 6-5 Claremont Land Use/Noise Guidelines, table note 3, page 6-47.

²¹ City of Claremont, *General Plan*, Figure 6-7 Cable Airport Noise Contours, accessed, September 2020, https://www.ci.claremont.ca.us/home/showdocument?id=3701

Table 4.10-14: Future plus Project illustrates the change in AM and PM peak hour noise levels from future traffic volumes and from traffic generated by the Project. The difference in traffic noise between future conditions and future plus Project conditions represents the increase in noise attributable to Projectrelated traffic. As shown in Table 4.10-14, the maximum noise level increases during the AM peak hour along analyzed roadways would be 7.6 dBA along Green Street east of College Avenue (Intersection 5) resulting in roadway noise levels of 46.9 dBA. Additionally, the maximum noise level increases during the PM peak hour along analyzed roadways would be 5.8 dBA along Santa Fe Street east of Indian Hill Boulevard (Intersection 3) resulting in roadway noise levels of 40.6 dBA. As mentioned previously, the Specific Plan creates new vehicle paths, such as the extension of Green Street west to Bucknell that alters the trip distribution within the Project vicinity. Although roadway noise levels would increase by more than 3 dBA, noise levels would be within the normally unacceptable or clearly unacceptable land use compatibility limits for residential uses. Also, the Project would remove the existing uses that high peak hour trips and develops uses that have more trip credits for walking and transit and are more timedistributed for smaller peaks. As such, some roadway segments result in a reduction of average daily trips (ADTs) and resulting in reduced roadway noise levels. Accordingly, Project-related traffic would not cause noise levels along the analyzed roadways to increase by more than 3.0 dBA. Furthermore, roadway noise levels would remain within normally acceptable limits with proposed Project related-traffic. Consequently, the addition of proposed Project related traffic would not increase noise levels along analyzed roadway segments by 3 dBA or greater. Thus, the proposed Project would not result in a permanent increase in noise levels. Vehicular related noise impacts under the Existing plus Project scenario would be less than significant.

Intersection	Roadway		Time	Future	Future plus	Future	Future plus	Difference	Significant
No.	Segment	Adjacent Land Use	Period	ADT	Project ADT	(dBA)	Project (dBA)	(dBA)	Impact
Indian Hill Bou	levard								
	North of 1 st	Commencial	AM	13,696	14,584	64.3	64.5	+0.2	No
1	Street	Commercial	PM	15,024	15,872	64.7	64.9	+0.2	No
T	South of 1 st	Commorcial	AM	15,064	16,488	64.7	65.1	+0.4	No
	Street	Commercial	PM	17,256	18,632	65.3	65.6	+0.3	No
	North of Santa	Commorcial	AM	15,088	16,880	64.7	65.2	+0.5	No
2	Fe Street	Commercial	PM	16,976	18,424	65.2	65.6	+0.4	No
5	South of Santa	Residential/Commercial	AM	15,536	16,832	64.8	65.2	+0.4	No
Fe Street	Fe Street	Residential/commercial	PM	17,616	18,520	65.4	65.6	+0.2	No
	North of Green	Residential/Commercial	AM	14,016	14,384	64.4	64.5	+0.1	No
4	Street		PM	16,000	16,144	65.0	65.0	0.0	No
4	South of Green	een Residential/Commercial	AM	13,712	13,968	64.3	64.4	+0.1	No
	Street		PM	15,656	15,744	64.9	64.9	0.0	No
	North of Arrow	Commercial	AM	14,424	15,280	64.5	64.8	+0.3	No
7	Highway	commercial	PM	16,120	16,928	65.0	65.2	+0.2	No
7	South of Arrow	Commercial	AM	17,768	18,656	65.4	65.6	+0.2	No
	Highway	Commercial	PM	18,648	19,504	65.6	65.8	+0.2	No
College Avenue	e								
	North of 1 st	Residential	AM	3,880	3,656	58.7	58.9	+0.2	No
2	Street	Residential	PM	6,128	5,936	60.7	60.8	+0.1	No
۷.	South of 1 st	Commercial	AM	4,088	3,656	58.4	58.4	0.0	No
	Street	Commercial	PM	6,336	5,936	60.5	60.5	0.0	No
5		Residential	AM	3,768	4,520	58.6	58.7	+0.1	No

Table 4.10-14Future (2024) Roadway Noise Levels

Intersection No.	Roadway Segment	Adjacent Land Use	Time Period	Future ADT	Future plus Project ADT	Future (dBA)	Future plus Project (dBA)	Difference (dBA)	Significant Impact	
	North of Green Street		PM	5,712	5,640	60.4	60.5	+0.1	No	
	South of Green	Posidontial	AM	3,936	4,688	59.3	59.5	+0.2	No	
	Street	Residential	PM	5,872	5,768	60.3	60.4	+0.1	No	
	North of Arrow	Desidential	AM	4,688	4,312	59.5	59.1	-0.4	No	
o .	Highway	Residential	PM	5,664	5,144	60.3	59.9	+0.4	No	
0	South of Arrow	Posidontial	AM	2,936	3,056	57.5	57.6	+0.1	No	
	Highway	Residential	PM	2,720	2,808	57.1	57.3	+0.2	No	
1 st Street										
	East of Indian	Commorcial	AM	2,784	3,320	53.5	54.3	+0.8	No	
1	Hill Boulevard	Commercial	PM	4,888	5,416	56.0	56.4	+0.4	No	
T	West of Indian	West of Indian	Commorcial	AM	1,384	1,384	50.2	50.2	0.0	No
	Hill Boulevard	Commercial	PM	3,296	3,296	54.0	54.0	0.0	No	
	East of College	Posidential/Commercial	AM	1,592	1,928	51.1	51.9	+0.8	No	
2	Avenue	Residential/Commercial	PM	2,256	2,584	52.6	53.2	+0.6	No	
2	West of College	Commorcial	AM	2,712	3,256	53.4	54.2	+0.8	No	
	Avenue	Commercial	PM	2,832	3,368	53.6	54.4	+0.8	No	
Santa Fe Street	:									
	East of Indian	Posidontial	AM	88	56	38.3	36.3	-2.0	No	
2	Hill Boulevard	Residential	PM	40	152	34.8	40.6	+5.8	No	
5	West of Indian	Commorcial	AM	824	1,176	48.0	49.5	+1.5	No	
	Hill Boulevard	Commercial	PM	872	1,224	48.2	49.7	+1.5	No	
Green Street										
	East of Indian	Posidontial/Commercial	AM	1,104	1,216	49.3	49.7	+0.4	No	
4	Hill Boulevard		PM	904	960	48.4	48.6	+0.2	No	
		Commercial	AM	N/A	N/A	N/A	N/A	N/A	No	

Intersection No.	Roadway Segment	Adjacent Land Use	Time Period	Future ADT	Future plus Project ADT	Future (dBA)	Future plus Project (dBA)	Difference (dBA)	Significant Impact
	West of Indian Hill Boulevard		PM	N/A	N/A	N/A	N/A	N/A	No
	East of College	Posidontial	AM	112	648	39.3	46.9	+7.6	No
E	Avenue	Residential	PM	232	696	42.5	47.2	+4.7	No
5	West of College	Posidontial	AM	1,104	1,496	49.3	50.6	+1.3	No
	Avenue	Residential	PM	480	816	45.6	47.9	+2.3	No
Arrow Highwa	У								
	East of		AM	12,120	13,128	63.8	64.2	+0.4	No
Cambrid Avenue	Cambridge Avenue	Residential	PM	19,008	19,992	65.8	66.0	+0.2	No
0	West of		AM	12,872	13,672	64.1	64.4	+0.3	No
	Cambridge Avenue	Residential	PM	19,424	20,200	65.9	66.1	+0.2	No
	East of Indian	Commorcial	AM	17,568	17,928	65.4	65.5	+0.1	No
7	Hill Boulevard	Commercial	PM	22,088	22,368	66.4	66.5	+0.1	No
/	West of Indian	Commorcial	AM	16,144	16,504	65.1	65.2	+0.1	No
	Hill Boulevard	Commercial	PM	19,496	19,904	65.9	66.0	+0.1	No
	East of College	Posidontial	AM	17,464	14,336	65.4	64.6	-0.8	No
0	Avenue	Residential	PM	22,664	19,384	66.6	65.9	-0.7	No
õ	West of College	Posidontial	AM	16,944	14,568	65.3	64.6	-0.7	No
	Avenue	Avenue Residential	PM	21,768	19,400	66.4	65.9	-0.5	No

Source: Refer to **Appendix H** for roadway noise calculation worksheets. Note: N/A = No Data as roadway segment does not exist.

Vibration

As discussed above, vibration impacts are generally less than significant when the receptor is more than 25 feet from the vibration source. Accordingly, there are no related projects anticipating construction concurrently with the Project that would also be within 25 feet of the sensitive receptors that could be affected by construction. As such, there would be no cumulative sources of construction vibration and cumulative impacts would be less than significant.

4.10.4 MITIGATION

The following mitigation measure is recommended to reduce potentially significant noise impacts from Project construction.

- **MM N-1** Prior to the issuance of grading permits, the Project Applicant or their designee shall develop a Construction Noise Reduction Plan to minimize construction noise at nearby noise sensitive receptors. The Construction Noise Reduction Plan shall be developed in coordination with a certified acoustical consultant and the Project construction contractors, and shall be approved by the City of Claremont. The Construction Noise Reduction Plan shall outline and identify noise complaint measure, best management construction practices, and equipment noise reduction measures. The Construction Noise Reduction Plan shall include, but is not limited to, the following actions:
 - Construction equipment shall be properly maintained per manufacturers' specifications and fitted with the best available noise suppression devices (i.e., mufflers, silencers, wraps, etc.).
 - Noise construction activities whose specific location on the Project Site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) shall be conducted as far as feasibly possible from the nearest noise sensitive land uses.
 - If feasible, schedule grading activities so as to avoid operating numerous pieces of heavy-duty off-road construction equipment (e.g., backhoes, dozers, excavators, loaders, rollers, etc.) simultaneously in close proximity to the boundary of properties of off-site noise sensitive receptors surrounding the Project Site to reduce construction noise levels by approximately 5 to 10 dB.
 - Shroud or shield all impact tools, and muffle or shield all intake and exhaust port on power equipment to reduce construction noise by 10 dB or more.
 - Where feasible, temporary barriers, including but not limited to, sound blankets on existing fences and walls, or freestanding portable sound walls, shall be placed as close to the noise source or as close to the receptor as possible and break the line of

sight between the source and receptor where modeled levels exceed applicable standards. Noise barriers may include, but is not necessarily limited to, using appropriately thick wooden panel walls (at least 0.5-inches think). Such barriers shall reduce construction noise by 5 to 10 dB at nearby noise-sensitive receptor locations. Alternatively, field-erected noise curtain assemblies could be installed around specific equipment sites or zones of anticipated mobile or stationary activity. The barrier material is assumed to be solid and dense enough to demonstrate acoustical transmission loss that is at least 10 dB or greater than the estimated noise reduction effect. These suggested barrier types do not represent the only ways to achieve the indicated noise reduction in dB; they represent examples of how such noise attenuation might be attained by this measure.

Implement noise compliant reporting. A sign, legible at a distance of 50 feet, shall be
posted at the Project construction site, providing a contact name and a telephone
number where residents can inquire about the construction process and register
complaints. This sign will indicate the dates and duration of construction activities. In
conjunction with this required posting, a noise disturbance coordinator will be
identified to address construction noise concerns received. The contact name and the
telephone number for the noise disturbance coordinator will be posted on the sign.
The coordinator will be responsible for responding to any local complaints about
construction noise and will notify the County to determine the cause and implement
reasonable measures to the complaint, as deemed acceptable by the City.

4.11.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to population and housing are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

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

4.11.2 ENVIRONMENTAL SETTING

Claremont is located within the six county region of the Southern California Association of Governments (SCAG). Pursuant to federal and State law, SCAG serves as a Council of Governments, Regional Transportation Planning Agency, and the Metropolitan Planning Organization (MPO) for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. One of SCAG's primary functions is to forecast population, housing and employment growth for each region, subregion, and city. In September 2020, SCAG adopted *Connect SoCal* as its 2020-2045 RTP/SCS. Connect SoCal contains growth forecasts that are relied upon by regional and local agencies in planning growth.¹ **Table 4.11-1: City of Claremont: Population, Housing, and Employment Forecasts (SCAG)** show forecasts for the City that are contained in Connect SoCal, indicating an expected growth of 3,600 people, 1,900 housing units and 1,400 employees between 2016 and 2045.

	Ye	ar	Change 2016 – 2045		
	2016	2045	Growth	Percent Growth	
Population	36,200	39,800	3,600	9.9%	
Housing	11,800	13,700	1,900	16%	
Employment	18,800	20,200	1,400	7.4%	

Table 4.11-1 City of Claremont: Population, Housing, and Employment Forecasts (SCAG)

Source: Southern California Association of Governments, 2020 Adopted Demographics and Growth Forecast (May 2020) https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx.

¹ Southern California Associations of Governments, 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (May 2020). Accessed September 2020. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx.

Regulatory Framework

SB 375- The Sustainable Communities and Climate Protection Act of 2008

Senate Bill 375 (SB 375) focuses on aligning transportation, housing, and other land uses to achieve regional greenhouse gas (GHG) emission reduction targets established under the California Global Warming Solutions Act, also known as Assembly Bill No. 32 (AB 32). SB 375 requires California Metropolitan Planning Organizations to develop a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP), with the purposes of identifying policies and strategies to reduce per capita vehicle-generated GHG emissions. The SCS must identify the general location of land uses, residential densities, and building intensities within the region; identify areas within the region sufficient to house all the population of the region; identify areas within the region sufficient to house an eight-year projection of the regional housing need; identify a transportation network to service the regional transportation needs; gather and consider the best practically available scientific information regarding resources areas and farmland in the region; consider the State housing goals; set forth a forecasted development pattern for the region; and allow the regional transportation plan to comply with the federal Clean Air Act (CAA) of 1970 (42 USC § 7401 et seq.). The development pattern in the SCS, when integrated with the transportation network and other transportation measures and policies, must reduce the GHG from automobiles and light duty trucks to achieve the GHG emission reduction targets approved by the California Air Resources Board (ARB). If the SCS does not achieve the GHG emission targets set by ARB, an Alternative Planning Strategy (APS) must be developed to demonstrate how the targets could be achieved.

SB 375 also imposes a number of new requirements on the Regional Housing Needs Assessment (RHNA) process. SB 375 synchronizes the schedules of the RHNA and regional transportation planning processes. The RHNA must be developed after the regional transportation plan, using the development pattern included in the SCS. Previously, the RHNA determination was based on population projections produced by the Department of Finance. SB 375 requires the determination to be based upon population projections by the Department of Finance and regional population forecasts used in preparing the regional transportation plan. If the total regional population forecasted and used in the regional transportation plan is within a range of three percent of the regional population forecast developed by the Department of Finance planning period, then the population forecast developed by the regional agency and used in the regional transportation plan shall be the basis for the determination. If the difference is greater than three percent, then the two agencies shall meet to discuss variances in methodology and seek agreement on a population projection for the region to use as the basis for the RHNA determination. If no agreement is reached, then the basis for the RHNA determination shall be the regional population projection created by the Department of Finance.

Existing law requires local governments to adopt a housing element as part of their general plan. Unlike the rest of the general plan, where updates sometimes occur at intervals of 20 years or longer, under previous law the housing element was required to be updated as frequently as needed and no less than every five years. Under SB 375, this period has been timed so that the housing element period begins no less than 18 months after adoption of the regional transportation plan to encourage closer coordination between the housing and transportation planning.

California Department of Housing and Community Development

State housing law (Government Code § 65580 et seq.) requires local government plans to address the existing and projected housing needs of all economic segments of the community through their housing elements. The housing element is one of seven State-mandated elements that every general plan must contain, and it is required to be updated every eight years and determined legally adequate by the State. The purpose of the housing element is to identify the community's housing needs, state the community's goals and objectives with regard to housing production, rehabilitation, and conservation to meet those needs. In addition, the Housing Element defines the related policies and programs that the community will implement in order to achieve the stated goals and objectives. This would be accomplished through the allocation of regional housing needs consistent with the SCS.

Local

City of Claremont Housing Element

The Housing Element comprises one of the seven General Plan Elements mandated by the State of California (California Government Code Sections 65580 to 65589.8). California State law requires that the Housing Element consist of "identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing."

To address the City's needs for very low- and low-income housing, Claremont must demonstrate that it has an adequate supply of land for higher density housing. Although zoning land for higher density development does not guarantee the construction of housing that is affordable to low- and moderate-income families, without such higher density zoning, the opportunity to provide housing for lower income households is limited. The City of Claremont adopted its most recent Housing Element in October 2017 and began the process of updating the Housing Element in Fall 2020.

4.11.3 IMPACT ANALYSIS

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)?

As the development that would occur under the Project would be infill or redevelopment of existing urban uses, the extension of roads and infrastructure into undeveloped areas would not occur. Implementation of the project would directly affect population growth by introducing new housing and new commercial uses that could induce population growth.

Buildout of the Village South Specific Plan could result in the construction of up to 1,000 dwelling units in the specific plan area. Based on the average household size of 2.69 persons per unit, the Project could accommodate approximately 2,690 additional persons. This is likely an overestimate, as the expected unit mix would include a substantial percentage of studio, one- and two-bedroom apartments that would house a lower average number of residents. Nonetheless, even at that higher average household size, the projected increase in residents would be within the population increase forecast for the City through 2045. Although the increase in population would represent a substantial share of the growth in the City, this is the intended for the Project.

As noted above, SCAG forecasts an increase of 1,900 housing units on Claremont by 2045. As such, the Project is within the expected growth.

The City's 2017-2021 House Element identified several of sites within the Project area as among the "Vacant and Underutilized Properties for Potential Residential Development". These sites are identified within the City's inventory as sites that can realistically be developed with residential or mixed-use developments during the planning period of the Housing Element (2021).

Proposed office, retail, and services could result in approximately 447 new employees shown in **Table 4.11-2: Estimated Additional Employment Opportunities**. This increase in employees represents approximately 32% of SCAG's employment forecast for the City of Claremont.

Based on the above, the Project would not generate substantial unplanned growth, rather the Project supports the forecasted growth in a focused way. As such, impacts would be less than significant.

Commercial Type	Square Feet	S.F. Building Space per Employee	Additional Employees
Retail	100,000	500	200
Office	45,000	250	180
Hotel	40,000	600	67
Total Additional Employment			447

Table 4.11-2Estimated Additional Employment Opportunities

Source: Employment Density Study Summary Report, accessed September 2020, https://www.mwcog.org/file.aspx?A=QTTITR24POOOUIw5mPNzK8F4d8djdJe4LF9Exj6lXOU%3D.

Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Project is expected to result in the removal of some housing, however the quantity of exiting housing within the Project area is not substantial. Additionally, the Project would lead to the construction of a greater number of new housing units. Therefore, the project would result in less than significant impacts related to the displacement of housing.

Cumulative Impacts

b.

The Project would represent a substantial amount of the forecasted growth in the City over the next twenty years. However, the growth associated with the Project is focused and planned for. As such, it would not have a considerable contribution to significant growth impacts.

4.11.4 MITIGATION

As impacts would be less than significant, no mitigation is necessary.

This section of the Draft EIR evaluates the Specific Plan's potential impacts to public services, including fire protection and emergency medical services, police services, libraries, parks, and schools.

4.12.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to public services are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

- 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:
 - i. Fire protection?
 - ii. Police protection?
 - iii. Schools?
 - iv. Parks?
 - v. Other public facilities?

4.12.2 ENVIRONMENTAL SETTING

Existing Conditions

The Project encompasses approximately 24 gross acres in a highly urbanized area of the City of Claremont. The City of Claremont is located in an urban area and is primarily developed land.

Fire Protection

In the City of Claremont, the Fire Department is responsible for the protection of life and property from losses due to fire, explosion, and other disasters. The City receives wildland fire protection from the Los Angeles County Fire Department's County Forester and Fire Warden (LACoFD). The City is home to three Los Angeles County fire stations at various locations, as shown in **Table 4.12-1: Los Angeles County Fire Stations Serving the Village South Specific Plan Area**. Since the County serves emergency cases within the County regardless of city boundaries, services from stations in Pomona, San Dimas, or Glendora can

be dispatched depending on availability and distance. Los Angeles County Station 101 also houses a paramedic squad that handles medical emergencies along with the crews on the engines.¹

 Table 4.12-1

 Los Angeles County Fire Stations Serving the Village South Specific Plan Area

Fire Station	Location	Distance from Specific Plan Area
Los Angeles County Fire Department Station 101	606 W Bonita Avenue	0.25 miles northwest
Los Angeles County Fire Department Station 101	2040 Sumner Avenue	2.15 miles northwest
Los Angeles County Fire Department Station 101	3701 N Mills Avenue	3.05 miles northeast

Source: Fire Services, City of Claremont. Google Earth.

Los Angeles County Fire Station 101 is located approximately a quarter-mile northwest of the Specific Plan Area. Fire Station 102 is located approximately 2 miles northwest of the Specific Plan Area. Fire Station 62 is located approximately 3 miles northeast of the Specific Plan Area.

Fire Hazards

A majority of the City is built out and urbanized. Urbanized areas are susceptible to structure fires, which can spread depending on building construction, density, and winds. Open and undeveloped areas within the City could be susceptible to wildland fires. The San Gabriel Mountains and surrounding areas are identified as having very high fire hazard severity potential. However, no portions of the Specific Plan site are located in or adjacent to a Very High Fire Hazard Severity Zone (VHFHSZ).

Police Protection

The City of Claremont Police Department (CPD) responds to emergency situations within the City and patrols neighborhoods to promote a safe environment. The CPD also utilizes reserve police officers who perform similar duties as regular police officers and enhance police services to the community. The Claremont City Council authorized the collection of fees from users of certain non-essential police services that are not directly related with the protection of life and property. The fees are designed to provide cost recovery for these non-emergency services. Fees are based upon formulas approved by Council, and are adjusted every July, or when there is a significant change in a cost factor.²

¹ https://www.ci.claremont.ca.us/living/fire-department, accessed September 11, 2020.

² https://www.ci.claremont.ca.us/government/departments-divisions/police-department/department-services, accessed September 11, 2020.

The nearest police station in the City of Claremont is located at 570 W. Bonita Avenue, Claremont, approximately 0.2 miles northwest of the specific plan area. Response time for critical calls is a maximum of 3 minutes.³

Schools

Claremont Unified School District (CUSD or District) provides elementary, middle, and high school education services to students living within the City of Claremont. The district includes eight elementary schools, one middle school, and two high schools. In addition, the District maintains one adult school.

No CUSD schools are located in the specific plan area. Existing schools that would serve students living in the specific plan area include Oakmont Elementary School, located two blocks east of the specific plan area; Sycamore Elementary School, located north of the specific plan area; Vista Del Valle Elementary School, located south of the specific plan area; El Roble Middle School, located northwest of the specific plan area; Claremont High School, located north of the specific plan area, and San Antonio High School, located south of the specific plan area.

Parks

Claremont maintains numerous parks as shown in Table 4.12-2; none of which are located within the specific plan area. The Claremont City Council has adopted a Park dedication standard of 4.0 acres per 1,000 residents. The City also imposes a Parkland development impact fee of \$4,400 per new residential unit to build new parks or make significant capital improvements to existing parks to maintain and extend this park system as new homes are constructed.

Regulatory Framework

State of California

Fire Protection

Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (OSHA) enforces the provisions of the State Occupational Safety and Health Act, which requires implementation of safety and health regulations under Title 24 of the California Code of Regulations (CCR). Examples of general requirements related to fire protection and prevention include maintaining fire suppression equipment specific to a project site; providing a temporary or permanent water supply of sufficient volume, duration, and pressure; properly operating on-site fire-fighting equipment (e.g., sprinklers); and keeping sites free from the accumulation of unnecessary combustible materials.

³ City of Claremont Police Department 2018 Annual Report, https://www.ci.claremont.ca.us/home/showdocument?id=13322, accessed September 15, 2020.

Table 4.12-2 Claremont Parks

Name	Location	Acre
Mini-Parks and Pocket Parks		
El Barrio Park	Claremont Blvd.	1.3
Mallows Park	520 N. Indian Hill Blvd.	1.1
Rancho San Jose Park	610 W. San Jose Ave.	1.3
Shelton Park	NE comer of Harvard Ave. and Bonita Ave.	0.5
Rosa Torrez Park	Western terminus of First St.	0.7
Neighborhood Parks		
Blaisdell Park	440 S. College St	7.5
Blaisdell Preserve	NE comer of Grand Ave. and New Orleans Ct.	7.3
Chaparral Park	1899 N. Mills Ave.	3.0
College Park and Pooch Park	100 S. College Ave.	8.6
Griffith Park	1801 Woodbend Dr.	9.7
Higginbotham Park	Mt. Carmel Dr.	5.4
Jaeger Park	Monticello Rd.	4.5
June Vail Park	NE Corner of Grand Ave. and Bluefield Dr.	5.8
Larkin Park	660 N. Mountain Ave.	9.0
Lewis Park	881 Syracuse Dr.	4.7
Wheeler Park	626 Vista Dr.	7.0
Community Parks		
Cahuilla Park	Indian Hill Blvd. and Scripps Dr.	18.2
Memorial Park	840 N. Indian Hill Blvd.	7.2
Thompson Creek Trail	Adjacent to Thompson Creek	24.9
Sports Parks		
La Puerta Sports Park	2430 N. Indian Hill Blvd.	10.0
Padua Avenue Sports Park	4200 Padua Ave.	15
Total Existing Parks		152.7
Planned New Parks		
Padua Avenue Park – Phase 2	4200 Padua Avenue	9
Freeway Mini Park - Williams Avenue	East side of Williams Avenue - South of 210 freeway	2.1
Freeway Mini Park -Monte Vista Avenue	West side of Monte Vista Avenue -South of 210	3.1
	freeway	
Total Planned New Parks		14.2
Natural/Wilderness Parks		
Claremont Hills Wilderness Park	North Claremont, entrance north end of Mills Ave.	1,589.0
Sycamore Canyon	North of Thompson Creek Trail	144.0
Total Wilderness Parks		1,733.0

Source: City of Claremont Park System and Public Facilities, Community Services Department.

California Office of Emergency Services

The California Emergency Management Agency was incorporated into the Governor's Office on January 1, 2009, by Assembly Bill (AB) 38 (Nava), and merged the duties, powers, purposes, and responsibilities of the Governor's Office of Emergency Services (OES) with those of the Governor's Office of Homeland Security. Cal OES is responsible for the coordination of overall state agency response to major disasters in support of local government. The agency is responsible for ensuring the state's readiness to respond to and recover from all hazards—natural, man-made, emergencies, and disasters—and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts.

The Cal OES Fire and Rescue Division coordinates statewide response of fire and rescue mutual aid resources to all types of emergencies, including hazardous materials incidents. The Operations Section under the Fire and Rescue Division coordinates the California Fire and Rescue Mutual Aid System and coordinated response through the Mutual Aid System includes responses to major fires, earthquakes, tsunamis, hazardous materials, and other disasters.

California Building Code

The California Building Standards Code (CBSC), in Part 2 of Title 24 of the CCR identifies building design standards, including those for fire safety. The CBSC is based on the International Building Code but has been amended for California conditions. The CBSC is updated every three years, and the current 2019 CBSC went into effect on January 1, 2020. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBSC. Typical fire safety requirements of the CBSC include the installation of fire sprinklers in all new residential, high-rise, and hazardous materials buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The California Fire Code (CFC), contained in Part 9 of Title 24 of the CCR, incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The CFC is updated every three years, and the current 2019 CFC went into effect on January 1, 2020. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. The CFC regulates building standards in the CBSC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection.

California Construction Article XIII, Section 35

Section 35 of Article XIII of the California Constitution at Subdivision (a)(2) provides: "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50-percent sales tax to be expended exclusively on local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include fire protection. Section 30056 mandates that cities and counties are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on fire protection services, as well as other public safety services. In *City of Hayward v. Board of Trustee of California State University* (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services, including fire protection and emergency medical services, and that it is reasonable to conclude that the county will comply with that provision to ensure that public safety services are provide.⁴

Police

State and County Emergency Response/Evacuations Plans

OES coordinates the overall response of State agencies to major disasters in support of local government. The office is responsible for (1) assuring the State's readiness to respond to and recover from natural, manmade, and war-caused emergencies; and (2) assisting local governments in their emergency preparedness, response, and recovery efforts. Accordingly, the Cal OES maintains the State Emergency Plan, which outlines the organizational structure for the State's response to natural and manmade disasters. The Cal OES also assists local governments and other state agencies in developing their own emergency preparedness and response plans, in accordance with the Standardized Emergency Management System (SEMS) and State Emergency Plan, for earthquakes, floods, fires, hazardous material incidents, nuclear power plant emergencies, and dam breaks. Each jurisdiction is required to show the Cal OES that it follows SEMS through several measures, including preparation and maintenance of an up-to-date emergency management plan, which incorporates an emergency evacuation plan. Non-compliance with SEMS can result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster. The Cal OES also coordinates an emergency organizational network, comprised of the Cal OES, local Emergency Operations Centers (EOCs) in the State, cities, and regional EOCs within each county.

⁴ *City of Hayward v. Board Trustee of California State University* (2015) 242 Cal. App. 4th 833, 847.

The regional office of the Cal OES is in Los Alamitos, and the County EOC is in downtown Los Angeles. The County Office of Emergency Management has prepared the County's All-Hazards Mitigation Plan, which details the coordination of County agencies during and after a catastrophic event and establishes the framework for the mutual aid agreements with the CHP, and federal, state, and other local governments in the region. It also serves as the emergency management plan (including emergency evacuation plan) for the entire County. The County recently released the draft 2019 County of Los Angeles All-Hazards Mitigation Plan.⁵

The County EOC is responsible for emergency operations in the unincorporated areas of Los Angeles. Should an emergency occur, the Los Angeles County Sheriff's Department and LACoFD would provide the first response, as well as the initial contact with other agencies that may need to be involved, such as the Red Cross. Funding for the County's EOC is primarily from the County General Fund, with a small percentage coming from federal funds, which are funneled through California's OES to the County's EOC.

Schools

AB 2926

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed AB 2926 in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction. The provisions of AB 2926 have since been expanded and revised by AB 1600.

Assembly Bill 1600

AB 1600, which created Sections 66000, *et seq.*, of the Government Code, was enacted by the State in 1987. AB 1600 requires that all public agencies satisfy the following requirements when establishing, increasing, or imposing a fee as a condition of approval for a development project. AB 1600 limits the ability of a school district to levy School Fees unless (i) there is a need for the School Fee revenues generated and (ii) there is a nexus or relationship between the need for School Fee revenues and the type of development project on which the School Fee is imposed.

⁵ Los Angeles County, Chief Executive Office – Office of Emergency Management, 2019 County of Los Angeles All-Hazards Mitigation Plan, (2019).

Senate Bill 50 and Proposition 1A

Title 5 (Education Code) of the California Code of Regulations governs all aspects of education within the State.

Senate Bill (SB) 50 and Proposition 1A, both of which passed in 1998, provided a comprehensive school facility financing and reform program, in part by authorizing a \$9.2 billion school facilities bond issue, and school construction cost containment provisions. Specifically, the bond funds are to provide \$2.9 billion for new construction and \$2.1 billion for reconstruction/modernization needs statewide. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate and reinstate the school facility fee cap for legislative actions (e.g., General Plan amendments, specific plan adoption, zoning plan amendments). According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation."

SB 50 establishes three levels of developer fees that may be imposed upon new development by the governing board of a school district depending upon certain conditions within a district. Level One Fees are the statutory fees, which can be adjusted for inflation every two years. Level Two Fees allow school districts to impose fees beyond the base statutory cap, under specific circumstances. Level Three Fees come into effect if the State runs out of bond funds after 2006, which would allow school districts to impose 100 percent of the cost of the school facility or mitigation less any local dedicated school funding.

In order to accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions and/or agreements between developers, the affected school districts, and occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

AB 97

The approved Local Control Funding Formula (LCFF) included in the 2013–2014 California State Budget changed the way State officials disperse funds to schools. Categorical programs often dictated which schools received funding in the past. Each categorical program maintained a set of regulations and rules which a school would have to follow to receive state funding. The LCFF affects school funding opportunities in two ways; first, the multiple categorical funding requirements are removed, and schools no longer are forced to comply with categorical spending rules to ensure funding. Second, disadvantaged schools and students receive additional resources. While all schools receive funding based on enrollment numbers,

schools with foster children, non-native speakers, or students living in poverty would receive additional funding.

Propositions

On November 5, 2002, California voters passed Proposition 47, which authorized the issuance of \$13.05 billion in State bonds and also enacted AB 16, which provided for additional reformation of the School Building Program. AB 16, among other things, clarified that if the State Allocation Board is no longer approving apportionments for new construction due to the lack of funds available for new school facilities construction, a school district may increase its Level II Fee to the Level III Fee. With the issuance of the State bonds authorized by the passage of Proposition 47, this section of AB 16 became inoperable.

Furthermore, Proposition 55 was approved on March 2, 2004, which authorized the sale of \$12.3 billion in State bonds. In addition, California voters approved Proposition 1D in the general election held on November 7, 2006. Proposition 1D authorized the issuance of \$10.4 billion in State bonds.

Most recently, California voters approved Proposition 51 (the California Public School Facility Bonds Initiative) in the general election held on November 8, 2016, authorizing the issuance of \$9 billion in bonds to fund the improvement and construction of school facilities for K-12 schools and community colleges.

Parks

Mitigation Fee Act

The California Mitigation Fee Act, Government Code sections 66000, et seq., allows cities to establish fees which will be imposed upon development projects for the purpose of mitigating the impact that the development projects have upon the City's ability to provide specified public facilities.

County of Los Angeles

Fire Protection

Los Angeles County Fire Code and Building Code

The Los Angeles County Fire Code (Title 32) and Building Code (Title 26) establish standards for the construction, design, and distribution of fire suppression facilities. These policies ensure new developments comply with criteria regarding fire flow, minimum distance to fire stations, public and private fire hydrants, and access provisions for firefighting units.

LACoFD Strategic Plan 2017-2021

Additionally, the Los Angeles County Board of Supervisors approved the update to goals and actions to achieve the goals of the fire services within the County. The Strategic Plan 2017-2021 serves as the latest organization guide for the LACoFD.⁶

City of Claremont

Claremont General Plan

The City's General Plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines the programs that were developed to accomplish the goals and policies of the General Plan. City policies pertaining to fire services and police services are included in the Public Safety and Noise Element of the City's General Plan.

Fire policies relevant to the Specific Plan Area include:

Goal 6-2	Minimize the risk of injury, loss of life, and damage to property resulting from
	natural and human-cause disasters and conditions.
Policy 6.2-4	Cooperate with and coordinate emergency preparedness and response programs with jurisdictions, agencies, and organizations such as surrounding cities. The Claremont Colleges, the Claremont School District, and the Los Angeles County Fire Department.
Goal 6-7	Minimize the risks associated with urban and wildland fires
Policy 6-7.1	Work with the Fire Department to establish minimum standards for water supply and access for firefighting equipment.
Policy 6-7.2	Work with fire Department to enforce restrictions on vehicular in recreational use of foothill areas during critically hazardous periods.
Policy 6-7.3	Enforce building fire codes and ordinances, and continue to research and adopt best practices pertaining to fire management and fire hazards.
Policy 6-7.4	Work with the Fire Department to establish an aggressive fire inspection and code enforcement program.

⁶ Los Angeles County Fire Department, *Strategic Plan 2017-2021*, accessed September 2020, https://fire.lacounty.gov/wp-content/uploads/2019/09/LACoFD-Strategic-Plan-2017-2021.pdf.

Policy 6-7.5	Continue to disseminate information relating to fire prevention measures
	and resident response to emergency situations with the understanding
	that an informed public can greatly aid in the reduction of fire loss.

Policy 6-7.6 Continue to work with Los Angeles County Weed Abatement Division to implement and enforce the county's systematic weed abatement program.

Police policies relevant to the Specific Plan Area include:

- **Goal 6-9** Provide effective and comprehensive policing services and enforce laws in an equitable way.
 - Policy 6-9.1Provide a state-of-the-art police station an up-to-date emergency
communications technology for the Claremont Police Department.
 - Policy 6-9.6Continue to develop and implement community oriented policing
projects to foster accountability, mutual trust, and respect between the
community and the Police Department.
 - Policy 6-9.7 Assign personnel and resources, such that east police patrol unit can maintain 30 to 35 percent "free patrol" time to provide preventative crime patrol, proactive traffic enforcement and regulation, and community oriented public safety service.
 - Policy 6-9.9Provide additional cost-effective public safety services through the
utilization of volunteers in our Police Reserve Officer, Community Patrol
Volunteer Program, Explorer Program, Traumatic Intervention Service,
Chaplain Volunteer Program, and Community Emergency Response Team
(CERT).
 - Policy 6-9.10Participate in school liaison activities such as Healthy Start Collaborative
Program (School Resource Officer), on-campus probation officer, Drug
Abuse Resistance Education (D.A.R.E.), Adopt-a-Cop, Red Ribbon Week,
School Attendance Review Board (SARB), and other joint police/school
district projects that may be developed in the future.

Education policies relevant to the Specific Plan Area include:

- Goal 7-10Improve access of all Claremont residents to high quality education and lifelong
learning opportunities that satisfy each individual's needs, desires, and potential.
 - Policy 7-10.1Promote and support the quality K-12 public education system by
working closely with the Claremont Unified School District to determine
and meet community needs for public education and related activities.
 - Policy 7-10.2Maintain life-long learning opportunities through the City's special
interest programs offered at the City and Claremont Adult School.
 - Policy 7-10.5 Strive to provide equal access to educational and informational resources.

Library policies relevant to the Specific Plan Area include:

- Goal 7-11Provide high-quality library resources to meet the educational, cultural, civic,
business, and life-long learning needs of all residents.
 - Policy 7-11.1Continue the innovative partnership with the county library and Friends
of the Claremont Library to improve the quality of library services in
Claremont.
 - Policy 7-11.2Continue to work closely with the Friends of the Claremont Library and
the Claremont Unified School District to connect the Claremont Library
to the greater community and to enhance services.
 - Policy 7-11.3Encourage Los Angeles County to develop programs and services for
adults, children, and new readers that meet future needs.

Park policies relevant to the Specific Plan Area include:

- **Goal 5-9** Provide a variety of park facilities that meet the diverse needs and interests of the community.
 - Policy 5.9-1Develop a high-quality network of parks and open spaces that meet the
needs of families, young adults, seniors, children, and disabled
individuals.

- Policy 5.9-2 Achieve and maintain a park ratio of 4.0 acres of parkland per 1,000 residents.
- Policy 5.9-3 Provide similar or equal levels of parks and recreational facilities to all areas of the community.
- Policy 5.9-5Strive to make parks and related facilities accessible to Claremont
residents. when feasible. Build and maintain parks and community
facilities in a manner that is environmentally responsible.
- **Policy 5.9-7** Build and maintain parks and community facilities in a manner that is environmentally responsible.

4.12.3 IMPACT ANALYSIS

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.

Fire Protection

Construction

The LACoFD provides emergency and fire services throughout the City. Buildout of the project includes the development and construction of retail, office, lodging, and residential uses.⁷ Construction activities associated with buildout of the Specific Plan have the potential to increase fire hazards. Construction of future projects could require large amounts of flammable construction materials (including wood framing) and the installation of electrical, plumbing, and mechanical systems. Although rare, fires do occur at construction sites, thus, all future projects would be subject to LACoFD codes and inspection by LACoFD personnel. In addition, all future projects would be subject to LACoFD requirements relative to water availability and accessibility to firefighting equipment, as well as comply with City, County, and state fire protection regulations. Construction activities could also result in traffic delays in the specific plan area, and increase emergency response times and the potential for vehicle traffic accidents. Under the Village South Specific Plan, all future projects would be required to maintain space for emergency vehicles on

⁷ The Village South Specific Plan area is comprised of urban infill development on underutilized or vacant parcels within the City of Claremont. The plan area is adequately served by existing fire and police service areas n and does not expand new development beyond the existing fire and police service areas.

and adjacent to the project site. Therefore, adherence to LACoFD codes and requirements during buildout of the project would reduce the potential for fire hazards during construction of projects to a less than significant level.

Operation

As previously mentioned, the specific plan area would be served by the LACoFD. For urban areas the LACoFD uses the national guideline response time of 5 minutes for fire and basic life support services and 8 minutes for paramedic service.

Buildout of the specific plan area would result in 100,000 square feet of retail, 45,000 square feet of office use, 50 hotel rooms and 1,000 residential units. The addition of 1,000 residential units would result in approximately 2,690 new residents. Daytime population could also increase due to additional retail employees and patrons within the specific plan area.

The LACoFD would be responsible for providing fire protection services within the specific plan area. Due to the increase in population and retail, service and office uses with buildout of the project, it is anticipated that the demands for fire services would increase above current levels.

The specific plan area includes 24 acres and includes potential development opportunities in this area. As such, it is not possible to specify the exact location, size, or timing of future development that may contribute to an increase in the need for staff and/or facilities. As discussed above, with implementation of the project, the number of residents in the specific plan area is projected to grow by approximately 2,690 residents. As shown in **Table 2-1** the project would increase development by adding additional retail, office, lodging and residential opportunities.

Over the buildout of the specific plan area, emergency calls would be expected to incrementally increase. As the residential population and commercial development increase in the specific plan area, the LACoFD would continue to monitor fire protection resources to ensure adequate facilities, staffing, and equipment are available. Further, as future projects are built, they would be required to comply with all City and LACoFD codes and regulations regarding access requirements for commercial and residential areas and design standards for fire prevention (e.g., emergency plans and evacuation routes). Pursuant to the LACoFD's Development Fee Program, individual projects would be required to pay all necessary fees to the LACoFD to offset impacts on fire protection services. Revenue generated from the Development Fee Program, as well as a percentage of property taxes would go towards improvement and maintenance of existing facilities, construction of new facilities, and the hiring of additional personnel as needed. As such, impacts to new or physically altered facilities would be less than significant. Water service for domestic use and fire flows is provided by the Golden State Water Company.⁸ The local water main system is a combined domestic and fire protection water grid system that provides adequate water pressure and volume to the area in and surrounding the specific plan area for purposes of fire suppression and domestic water use.

The required fire flow for a future project is based on the project's total square footage, type of construction, and if an automatic fire sprinkler system would be installed. The LACoFD does not readily maintain information regarding the number of gallons per minute for each fire hydrant. A fire flow test must be conducted by the Golden State Water Company in conjunction with the City and project applicant prior to operation of a future project. All development plans are reviewed by the LACoFD prior to construction to ensure that adequate fire flows are maintained and that an adequate number of fire hydrants are provided in the appropriate locations in compliance with the California Fire Code. Golden State Water Company has provided a will-serve letter for the Specific Plan indicating that the company has available water resources needed to serve the new development that is anticipated to occur under the Specific Plan.

Police Protection

Construction

The Claremont Police Department provides police protection and services throughout the City. Implementation of the specific plan would encourage the development of a mix of uses within the 24-acre specific plan area, including residential, commercial, and office. Construction of new projects would normally not require services from the Claremont Police Department, except in the cases of trespass, theft, and/or vandalism.

Construction activity could increase traffic in the specific plan area and conceivably could incrementally increase response times and incrementally increase vehicle accident potential. During construction of all future projects, the City and Police Department would require ample access for emergency vehicles including routine patrol vehicles. With adequate access, response times would not be extended and the ability of officers to provide proactive policing and efficient crime suppression would not be diminished. As described in Section 4.13, Transportation, a detailed Construction Management Plan would be prepared and submitted to the City for review and approval for future development within the Project. These measures would further reduce any potential impacts to police services during construction activities.

⁸ Golden State Water Company, Claremont, accessed September 15, 2020, https://www.gswater.com/claremont.

Operation

The Project would redevelop areas already served by existing police facilities. Though the new uses expected from the Project could result in additional calls for service, it is not expected that new or physically altered police protection facilities would be necessary to serve the Project area. The City of Claremont monitors staffing levels to ensure that adequate police protection and response times continue to be provided as individual development projects are proposed and on an annual basis as part of the City Council budgeting process. Funding for additional police personnel or facilities commensurate with the increased demand for services in Claremont would be provided from additional property tax assessments, sales taxes and Transient Occupancy Taxes expected to result from the new development. Therefore, impacts would be less than significant, and no mitigation is required.

Schools

Construction

Construction activities associated with buildout of the Specific Plan would not impact CUSD school facilities or directly increase the student population. Thus, no impacts to the existing educational facilities would occur.

Operation

Buildout of the Specific Plan could include the construction of approximately 1,000 residential units, resulting in what has been conservatively estimated to be up to 2,690 residents. It is reasonable to assume that a portion of these 2,690 residents would include school aged children. The school District has indicated to the City that it has adequate capacity in its existing schools and is hopeful of receiving additional students to the two nearest elementary schools, which are currently experiencing low levels of registration of local students. To make up for lower numbers of local students, the school district has been accepting a large number of inter-district transfer (IDT) students (students from nearby cities). This allows the district to keep all of its local schools open and maintain a higher level of classes and extracurricular programs. It also provides the district with a buffer to admit more local students, should the number of local students increase. As local student enrollment increases, fewer IDT students will be admitted. Additionally, buildout of the specific plan area would occur over a multi-year period, thus the projected student growth would be gradual and students are allowed to attend any District school with available capacity. As such, the projected number of students would not result in any school operating above design capacity, and thus project related impacts to local public schools would be less than significant.

In addition, project applicants/developers would be required to pay School Impact fees to CUSD, prior to issuance of each building permit, which as provided by state law, would fully mitigate the impact of a future project. These fees, which are charged on a per square foot basis for new development, would provide funding to ensure that adequate school capacity/construction would be available to serve the students generated by the proposed residential units. Pursuant to SB 50, payment of fees to the appropriate school district is considered full mitigation for project impacts. As individual projects are developed, each project applicant/developer would be responsible for payment of fees in accordance with SB 50 requirements. Therefore, impacts related to the provision of new or physically altered school facilities would be less than significant. With payment of the required School Impact fees, impacts would be less than significant.

Parks

Construction

Construction activities associated with buildout of the project would not impact the existing parks and recreation facilities or increase the permanent population in the specific plan area. Thus, no impacts to the existing parks and recreation facilities would occur during construction.

Operation

Buildout of the Specific Plan would include the construction of 1,000 residential units, resulting in an additional 2,690 residents; however the Specific Plan requires the provision of new private and public open spaces similar in size to those that already exist in the Claremont Village.

Residential development constructed under the Village South Specific Plan would be required to pay the current CityParkland fee, referred to at the state level as Quimby Act Fees, at the time of project construction. The fee is currently set at \$4,400 per new residential unit. The City has determined the fee is adequate to offset the impact of residential units on existing parks. The fees collected as the specific plan area is built out would be used for acquisition, development, and improvement of public parks and recreation facilities throughout the City. In lieu of paying the fees associated with residential development, project applicants/developers would have the option to dedicate land to be used for public parkland. Further, as new development is proposed, project applicants/developers would be required to pay fees or dedicate parkland to satisfy their obligation to the City. As such, buildout of the Village South Specific Plan would not result in the overuse of existing parks such that substantial physical alteration and/or deterioration would occur or be accelerated. Therefore, impacts to existing parks would be less than significant.

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Other Public Facilities

The proposed specific plan would serve as a community tool to improve the quality of life of its residents and it would result in improved medians, parkways, curbs, gutters, sidewalks, and bicycle lanes along the project site frontage and approach roadways, which are public facilities. In addition to improving the public rights of way within and immediately adjacent to the plan area, new development within the plan area would be required to pay Transportation Impact fees to help fund transportation improvements throughout the City. It is reasonable to conclude the payment of required fees, taxes, and other payments by future developers would sufficiently offset any incremental increase in demand for governmental services. Impacts to other public facilities would be less than significant and no mitigation is required.

Cumulative Impacts

Fire Protection

Buildout of the project and related projects ongoing and planned in the City would increase the demand for LACoFD services. The LACoFD and City would continue to monitor impacts to fire services and facilities and review each future development project on a project-by-project basis to determine the need for additional resources. Increased revenues from property taxes and assessments resulting from build out of the Specific Plan could be used to fund increases in staffing and equipment, as well as revenue derived from Fire Facility Fees.

Furthermore, all future development projects would be required to submit site design plans to the LACoFD during the planning and building permit check process. In conformance with standard City procedures, these plans shall be reviewed by the LACoFD with respect to access and building design. Incorporation of such reviews would avoid any significant cumulative impacts to fire resources and services. Therefore, cumulative impacts concerning LACoFD staffing, response times, equipment, and facilities would be less than significant.

Police Protection

As discussed above, buildout of the project is not expected to result in the need for additional police officers or facilities. Cumulative projects outside of the specific plan area would potentially increase the need for police services and would require additional police staffing. The Claremont Police Department would continue to monitor impacts to police services on a project-by-project basis to ensure adequate police resources are available to serve the specific plan area and other portions of the City.

Similar to projects proposed under the Village South Specific Plan, development projects located in other areas of the City would be required to submit site designs to the Department and comply with City regulations. Revenues generated from the cumulative project's increased property taxes and assessments

would reduce cumulative impacts. Based on the above information, implementation of the Village South Specific Plan and other related projects would not result in cumulatively considerable impacts to the Police Department's service rations, response times, or other performance objectives.

Schools

Buildout of the Specific Plan and related projects would generate new students and could exceed the capacity of the existing CUSD schools, which could result in a cumulative impact on the District. However, as with the development projects allowed under the Specific Plan, each related project would be required to pay the appropriate School Impact fees which would mitigate potential impacts on schools. Therefore, buildout of the Specific Plan, in combination with related projects, would not result in a cumulatively considerable impact on school facilities.

Parks

Buildout of the Specific Plan and related projects would result in population growth in the Specific Plan area that would result in increased usage of the City's parks. Similar to residential projects included in the Village South Specific Plan, related residential projects would be required to provide parkland acreage or pay the City's Parkland fee. Revenue generated from the Parkland fee could be used towards the development and construction of new park and recreation facilities and maintenance or expansion of current facilities. As stated above, future development of new park facilities would be subject to CEQA evaluation, including reducing significant impacts to a less than significant level when possible. Thus implementation of the Specific Plan would not result in cumulatively considerable impacts to the City's parks.

4.12.4 MITIGATION

Impacts would be less than significant, and no mitigation is necessary.

4.13.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to transportation are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

- a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?
- b. Would the project 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?

4.13.2 ENVIRONMENTAL SETTING

Existing Conditions

The Project encompasses approximately 24 gross acres within the City of Claremont. The Specific Plan's Study Area is generally bounded by First Street to the north, College Avenue to the east, Arrow Highway to the south, and Cambridge Avenue to the west.

Primary regional access to the Specific Plan Area is provided by I-10, which generally runs in the east-west direction in the Study Area; SR 210, which generally runs in the east-west direction in the Study Area; and State Route 57 (SR 57), which generally runs in the north-south direction in the Study Area. I-10 is located approximately 0.75 miles south of the Study Area, with access available via an interchange at Indian Hill Boulevard. SR 210 is located approximately 1.75 miles north of the Study Area, with access available via interchanges at Towne Avenue and Base Line Road. SR 57 is located approximately 5.75 miles west of the Study Area, with access available via interchanges at Arrow Highway and Covina Boulevard.

The Specific Plan Area is served by bus lines operated by Foothill Transit. In addition, Metrolink operates the San Bernardino Line between San Bernardino and downtown Los Angeles with a stop in Claremont. Metro is also currently extending the existing Foothill Gold Line light rail to Claremont.

Regulatory Framework

State of California

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under CEQA for several categories of
4.13 Transportation

development projects including the development of infill projects in transit priority areas and to balance the needs of congestion management with Statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

SB 743 added Section 21099 to the CEQA statute. Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. SB 743 has also led to a change in the metrics for determining impacts resulting from traffic. Formerly, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments. As a result of SB 743, the focus of transportation analysis will shift from driver delay to reduction in vehicle miles traveled.

State Bill 743 started a process intended to fundamentally change how transportation impact analysis is conducted as part of the CEQA review of projects. SB 743 eliminated LOS as the basis for determining transportation impacts under CEQA and required the use of Vehicle Miles Traveled (VMT) instead. The State is shifting the focus of CEQA traffic analysis from measuring a project's impact on automobile delay, Level of Service (LOS), to measuring the amount and distance of automobile travel that is attributable to a project, VMT. The State's goal for changing the metric used to determine a significant transportation impact is to encourage land use and transportation decisions that reduce greenhouse gas emissions, encourage infill development, and improve public health through active transportation.

Claremont adopted screening criteria guidelines issued by the Technical Advisory produced by the Governor's Office of Planning and Research (OPR). The OPR has identified guidelines for projects which may be screened and would therefore be exempt from a VMT analysis. The theory is that the development of these projects will be their nature reduce vehicle trips and therefore be in conformance with SB 743.

Screening Criteria

- Retail projects up to 50,000 SF in floor area
- Projects generating less than 110 daily trips
- Residential and office projects located in low VMT areas. Low VMT is defined as 10% below the subarea VMT metrics for that area.
- Projects within a Transit Priority Area (TPA). A TPA is defined as locations within ½ mile of a major transit stop or station (e.g. Gold Line or Metrolink), or within ½ mile of a high quality transit corridor with a 15-minute or less headways during peak commute hours.
- Affordable housing developments or affordable housing units within mixed-used developments.

• Transportation projects that promote nonauto travel, improve safety, or improve traffic operations at current bottlenecks, such as transit, bicycle and pedestrian facilities, intersections traffic control or widening at intersections to provide new turn lanes.

Based on the above stated screening criteria adopted by the City, the VSSP project screens out, given the nature of the project, favorable to VMT.

To confirm this, staff conducted an in-house VMT screening analysis for the project, and found to be consistent with the screening criteria stated above.

While City now uses VMT for CEQA review purposes, nonCEQA transportation assessments based on LOS analysis procedures are still used to evaluate effects on the local transportation system on a project review level. The City continues to review vehicle LOS standards as they apply to discretionary approvals of new land use and transportation projects.

City of Claremont

The City of Claremont's General Plan Community Mobility Element includes goals and policies for the City's circulation system. Goals of the Mobility Element include efforts to enhance the regional transportation network, to reduce traffic congestion while retaining the historic patterns and functions of City streets, and to establish and maintain a comprehensive system of pedestrian ways and bicycle routes that provides viable options to travel by automobile.

In 2019 Claremont also adopted a Complete Streets Policy to establish guiding principles and practices so transportation improvements are planned, designed, constructed, operated, maintained and evaluated to encourage walking, bicycling, and transit use while promoting safe operations for all users. These guiding principles will be applied to this project to ensure that the goals of the Complete Street Policies are also implemented in the project.

4.13.3 IMPACT ANALYSIS

Project Impact

The analysis described below is based on the findings of the Transportation Impact Study contained in Appendix F of this Draft EIR.

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

The Policies of the Community Mobility Element of the City's General Plan are organized under a set of goals. The following identifies these goals and describes how the Project would support them.

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Goal 4-1 Support efforts that will enhance the regional transportation network and benefit Claremont residents. Policies under this goal focus on regional transportation planning, including working with Caltrans, Metro, and the Counties of Los Angeles and San Bernardino; and includes the policy "Promote transit- oriented development to facilitate the use of the community's transit services."

The Project would not conflict with regional planning initiatives or coordination with Caltrans, Metro, or the Counties of Los Angeles and San Bernardino. The Project is a transit-oriented specific plan intended to facilitate mixed-use development in close proximity to Claremont's primary transit hub (bus, commuter rail, and future light rail). It is intended, in part, to increase use of the regional transit services and thus is supportive of this goal. As further evidence of this support, the Project is being partially funded through a \$418,000 Metro Transit-Oriented Development Planning Grant.

Goal 4-2 Reduce traffic congestion while retaining the historic patterns and functions of City streets. Policies under this goal require minimizing traffic impacts of new development; maintaining the local street network consistent with the General Plan; using traffic calming policies, medians and Intelligent Transportation Systems (ITS) to improve the movement of traffic while protecting neighborhoods and pedestrian space; and promoting a network of different travel options.

The Project would minimize traffic impacts by promoting a walkable neighborhood with transit-oriented development that is expected to produce significantly lower levels of Vehicle Miles Traveled per capita. The street network within the Project would incorporate design elements that promote traffic calming and pedestrian comfort and safety. As such, the Project supports this goal.

Goal 4-3Establish and maintain a comprehensive system of pedestrian ways and bicycle
routes that provides viable options to travel by automobile. Policies include
promoting walking and bicycling through sidewalks, bicycle routes and trails.

The Project would not conflict with existing bicycle routes or plans and would improve the pedestrian pathways within the Project area including connections to the Village. The Project would improve the pedestrian experience within and through the area and would link the Project with the existing Village and the Metro rail station. The Project would provide a Village-style pedestrian environment on all streets, including canopy street trees, intersection planters, parkway landscaping, sidewalks, benches and bus shelters, on-street parking and other design enhancements. Pedestrian and bicycle access to the buildings within the Specific Plan would occur within the internal street network that would feature sidewalks on Santa Fe Street, Green Street, and South Street. Additional pedestrian and bicycle access points would

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occur along Bucknell Avenue, Green Street, and Arrow Highway. Pedestrian and bicycle access points would be kept separate form vehicle entrances, thus reducing the conflict between the different modes. Bicycle storage would be provided on the ground floor where it is easily accessible for all patrons, and a pedestrian plaza would also be provided between Santa Fe Street and Green Street. As such, the Project supports this goal.

Goal 4-4 Achieve optimum use of regional rail transit. Policies include supporting the Metro Gold line extension to Claremont; support the regional rail options provided by Metrolink; support integration of other transit options; and promote activity centers and transit-oriented development projects around the transit station.

The Project would facilitate development of activity centers and transit-oriented development with extensive pedestrian and bicycle facilities that would support the existing Metrolink and planned light rail stations.

Goal 4-5Expand and optimize use of local and regional bus and transit systems. Policiesinclude encouraging other public transit services locally and regionally.

The Project would lead to transit-oriented development that with extensive pedestrian facilities adjacent to the City's busiest bus lines and bus transfer station, which is located 3 blocks away in the Claremont Village. As such, the Project supports this goal.

Goal 4-6Provide convenient and accessible parking that fosters economic growth and
improves quality of life in neighborhoods. Policies include providing parking in
The Village to serve patrons and transit as well as working with the Colleges and
businesses to ensure adequate parking.

Among the guiding principles of the Project is a system of shared parking that will support the parking needs of the Village South community similar to the "park once" environment of the existing Village. Details of the plan include on street-parking on public streets (Indian Hill Blvd, Green Street and Arrow Highway and a series of private parking lots that will serve new development. As such, the Project is supportive of this goal.

Goal 4-7Reduce congestion in areas surrounding schools and parks. Policies including
working with the Claremont Unified School District to encourage students to walk
and bicycle to and from schools and parks.

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The Project enhances the pedestrian and bicycle environment that would support safe pedestrian and bicycle routes to nearby schools and parks. For example, the Project proposed improving pedestrian and bicycle access along Green Street, which is two blocks from the Plan Area. It is also anticipated that the Project's density, pedestrian friendly design, and proximity to local schools is likely to produce a higher level of students and parents walking or biking to nearby schools. As noted in Section 4.12 above, the Project is anticipated to increase enrollment in Claremont schools, which is likely to reduce the number of Inter-District transfers; further reducing traffic and congestion at surrounding schools. Finally, given the project's goals of providing both a denser mix of housing and public plazas, combined with its proximity to several local parks, it is anticipated that new residents in the project area will walk or bicycle to parks at a higher rate than typical Claremont residents. As such, the Project supports this goal.

Goals 4-8 and 4-9 address truck routes and airports. The Project would not conflict with these goals as they are not applicable to the Project Site.

Additionally, the Community Mobility Element established LOS E as the minimum LOS for intersections along major arterial roads, such as Arrow Highway, and LOS D as the minimum LOS along secondary arterial roads, such as Indian Hill Boulevard within the Project area. The Mobility Element states that these LOS objectives "reflect the City's desire to maintain stable traffic flows throughout Claremont" and that if they cannot be maintained "mitigation measures should be required to meet the City's standards". However, SB 743 changed the criteria for determining impacts under CEQA and according to the State Office of Planning and Research (OPR), "Even if a general plan contains an LOS standard and a project is found to exceed that standard, that conflict should not be analyzed under CEQA."¹ CEQA focuses on conflicts with planning policies that could lead to environmental impacts and auto delay, on its own, is no longer an environmental impact under CEQA. Therefore, while the traffic study includes analysis of LOS for planning purposes, this analysis has not been included in the determination of impacts under CEQA. Based on the above, the Project would not have significant operational impacts associated with threshold a.

However, construction within the Project could temporarily obstruct sidewalks and travel lanes such that the functioning of the circulation system could be impaired. In order to ensure that construction impacts are not significant, mitigation shall be imposed on future development as described below.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines section 15064.3(b) describes criteria for analyzing transportation impacts. Section 15064.3(b)(1) states that:

¹ OPR, https://opr.ca.gov/ceqa/updates/sb-743/faq.html.

Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

Because of the presence of the Metrolink and future Metro light rail station, the Project is within one-half mile of an existing major transit stop. As such, the Project area is within a Transit Priority Area, defined in Public Resources Code (PRC) as an area within 0.5 mile of a major transit stop. Due to the availability of transit, projects within TPAs are assumed to generate VMT per capita at a rate lower than the regional or area-wide average. As such, the Project is consistent with CEQA Guidelines section 15064.3(b). Therefore, impacts would be less than significant.

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

Roadways within and bordering the Project would be designed to the standards of the Specific Plan and the City's existing standards. Likewise, access points, driveways and parking would conform to City standards. This would ensure adequate and safe circulation of vehicles without significant conflicts. Operational impacts would be less than significant.

Construction impacts on access would be addressed by MM-TRANS-1.

d. Result in inadequate emergency access?

The Project provides design guidance for roadways, sidewalks and driveways within the Project area that would ensure emergency access would be maintained. New development will be required to meet existing fire and safety codes, including the provision of Fire Access roads. Operational impacts would be less than significant.

Construction impacts on access would be addressed by MM-TRANS-1.

Cumulative Impact

According to OPR, "A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact."² As the Project would have a less than significant impact on the average VMT in Claremont, its cumulative contribution to VMT would also be less than significant.

² OPR, https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

4.13.4 MITIGATION

In order to ensure that construction impacts would not have a significant adverse effect on the safe functioning of the circulation system, the following mitigation shall be imposed on future development within the Project:

MM- TRAF-1 Construction Management Plan

A detailed Construction Management Plan, including street closure information, a detour plan, haul routes, and a staging plan, will be prepared and submitted to the City for review and approval for each phase of the Specific Plan's development to formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Specific Plan Area and shall include, but not be limited to, the following elements, as appropriate:

- Advance notification of adjacent property owners and occupants of upcoming construction activities, including durations and daily hours of operation.
- Prohibition of construction worker or equipment parking on adjacent streets. Specific off-site or on-site parking facilities must be identified and secured prior to the issuance of building permits.
- Temporary pedestrian, bicycle, and vehicular traffic controls during all construction activities adjacent to public ROW to ensure traffic safety and to improve traffic flow on public roadways. These controls shall include, but not be limited to, flag people trained in pedestrian and bicycle safety.
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets.
- Potential sequencing of construction activity to reduce the amount of constructionrelated traffic on arterial streets.
- Containment of construction activity within the Specific Plan Area boundaries.
- Prohibition of construction-related vehicle/equipment parking on surrounding public streets.
- Coordination with Metro, Gold Line Rail Construction Authority and/or Southern California Regional Rail to address any construction near the rail ROW.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers shall be implemented as appropriate.
- Scheduling of construction-related deliveries, haul trips, etc., so as to occur outside the commuter peak hours to the extent feasible.

4.14.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to tribal cultural resources are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

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:

- a. 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
- b. 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.14.2 ENVIRONMENTAL SETTING

Existing Conditions

Prior to Spanish settlement, the area that is now Claremont was along the fringes of territory occupied by the Serrano and Gabrielino Native American cultural groups. The Serrano occupied the territory of the San Bernardino Mountains and the San Gabriel Mountains as well as portions of the desert to the north; most of the Los Angeles and Orange County areas were inhabited by the Gabrielino peoples.¹

Regulatory Framework

Assembly Bill (AB) 52 was approved by California State Governor Edmund Gerald "Jerry" Brown, Jr. on September 25, 2014. The act amended PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) is filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section 21074(a)(1) and (2) defines tribal cultural resources as "sites, features,

¹ For additional description see Cultural Resource Assessment in **Appendix C** of this DEIR.

places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

4.14.3 IMPACT ANALYSIS

Project 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 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)

A cultural resources evaluation has been completed for the entire plan area including a review of all structures, landscapes, and visible geologic features as well as historic databases and the local records (attached as **Appendix C**). All structures and sites that are listed or eligible for listing in the California Register of Historical Resources or in the City's local register of historical resources are identified in Section 4.03, Cultural Resources of this DEIR. No known resources have tribal or prehistoric significance. As such, there would be no impacts under this threshold.

b. 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 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

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The Project would enable new development within the plan area. The Project is a project under CEQA and includes a General Plan Amendment and implementation of a Specific Plan; therefore, consultation provisions of the Public Resource Code are required. As such, the City sent consultation requests to Native American tribes that have requested the City inform them of projects within the City. A response was received from the Gabrieleño Band of Mission Indians - Kizh Nation. This response did not identify specific Tribal Cultural Resources within the Project area.

However, redevelopment of properties within the Project would involve ground disturbance. The cultural history of the area is such that subsurface tribal cultural artifacts may be present within the Project area. In its correspondence with the City, the Gabrieleño Band of Mission Indians - Kizh Nation requested to be consulted as such time as ground disturbance is proposed. As such, the City recognizes that cultural artifacts may be unearthed as a result of the Project, the significance of which to the Gabrieleño Band of Mission Indians - Kizh Nation cannot be determined at this time. Therefore, the Project is considered to have the potential for significant impacts and shall incorporate the mitigation measure identified below.

Cumulative Impact

Cumulative impacts could occur through widespread adverse change in the significance of a tribal cultural resources. Implementation of the mitigation measure identified below would ensure that the Project would not have a considerable contribution to cumulative impacts on tribal cultural resources.

4.14.4 MITIGATION

The following mitigation measure shall be incorporated into the Project to reduce the potential for impacts from inadvertent discovery of Tribal Cultural Resources:

MM-TCR-1: At such time as development is proposed within the Specific Plan area that include site excavation for subterranean levels or structures shall, the City shall consult with the Gabrieleño Band of Mission Indians–Kizh Nation to determine the need for monitoring of construction-related ground disturbance activities. If monitoring occurs, the monitor shall complete logs on a daily basis. The logs will provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. In addition, the monitor shall provide insurance certificates, including liability insurance, for any archaeological resource(s) encountered during grading and excavation activities pertinent to the provisions outlined in the California Environmental Quality Act, California Public Resources Code Division 13, Section 21083.2 (a) through (k). The on-site monitoring shall end when the Project Site grading and excavation activities are completed, or when the Tribal Representatives and monitor have indicated that the site has a low potential

4.14 Tribal Cultural Resources

for archeological resources. All archaeological resources unearthed by the Project construction activities shall be evaluated by a qualified archaeologist and an approved Native American Monitor. Upon discovery of any archaeological resource, construction activities in the immediate vicinity of the find shall be ceased until the find can be assessed. If the resources are Native American in origin, the Tribe shall coordinate with the landowner regarding the treatment and curation of these resources.

If any human skeletal material or related funerary objects are discovered during ground disturbance, the Native American Monitor will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The Monitor will then notify the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the Project and keeping the remains in situ and protected. If the Project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the Qualified Archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes 4 or more burials, the location is considered a cemetery and a separate treatment plan shall be created. The Project Applicant shall consult with the Tribe regarding avoidance of all cemetery sites. Once complete, a final report of all activities is to be submitted to the NAHC.

With regulatory compliance and implementation of the above mitigation measure, no significant unavoidable adverse impacts relating to tribal cultural resources would result.

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4.15.1 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to utilities and service systems are derived from the environmental checklist form contained in Appendix G of the most recent update of the State CEQA Statutes and Guidelines.

- 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 telecommunications 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?

4.15.2 ENVIRONMENTAL SETTING

Existing Conditions

The Project encompasses approximately 24 gross acres that have been previously developed and served by existing utility systems.

Water is provided to the Project area by Golden State Water Company (GSWC). The GSWC obtains the water supply for Claremont through purchases from Three Valleys Municipal Water District (TVMWD) and the City of Upland, and local groundwater from the Six Basins Area and the Chino Basin. TVMWD and the City of Upland both obtain imported water supply from the Metropolitan Water District of Southern California and pump local groundwater. GSWC's 2015 Urban Water Management Plan for Claremont demonstrates the reliability of water supplies to meet projected annual water demands for the Claremont System during a normal, a single dry year, and multiple dry years through 2040.

Wastewater in the Claremont System is transported through LACSD-owned trunk sewers to LACSD's Pomona Water Reclamation Plant (WRP). The Pomona WRP provides primary, secondary, and tertiary treatment with a design capacity of 15 million gallons per day (mgd).

Stormwater is managed by a combination of City and County drainage systems that drain stormwater to the San Antonio Creek Channel.

The City of Claremont's Community Services Department provides trash collection and recycling services to all residents and businesses in Claremont. The County of Los Angeles Department of Public Works prepares an annual County Integrated Waste Management Plan (CoIWMP) in order to help meet long-term needs and maintain adequate capacity. The most recent report, the CoIWMP 2018 Annual Report, published in December 2019, provides disposal analysis and facility capacities through 2033.

Electric Power, Natural Gas, And Telecommunications are provided by regulated utility companies, specifically Southern California Edison (SCE), Southern California Gas (SocalGas), Frontier Communications and Spectrum.

Regulatory Framework

California Urban Water Management Plan Act

The California Urban Water Management Planning Act (California Water Code Division 6, Part 2.6, Sections 10610–10656) addresses several State policies regarding water conservation and the development of water management plans to ensure the efficient use of available supplies. The California Urban Water Management Planning Act requires Urban Water Suppliers that serve more than 3,000 customers or provide more than 3,000 acre-feet per year (afy), to develop Urban Water Management Plans (UWMPs) every five years to identify short-term and long-term demand management measures to meet growing water demands during normal, dry, and multiple-dry years. Golden State Water has prepared and adopted UWMPs for its Claremont service area.

Senate Bill 610

Senate Bill (SB) 610 established requirements in the State Water Code for Water Supply Assessments (WSAs) for projects subject to CEQA, which meet specific size criteria. The WSA is used to document that the water supplier has sufficient water resources to serve the projected water demand associated with a proposed Project.

Integrated Regional Water Management Planning Act

Integrated regional water management plans (IRWMPs) foster regional water management. The Los Angeles County Sanitation Districts has prepared Integrated Regional Water Management Plans to develop a vision and direction for the sustainable management of its local water resources, including wastewater treatment and recycled water.

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989, as well as subsequent amendments, improved solid waste disposal management with respect to (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. The Act mandated jurisdictions meet diversion goals and required counties to prepare a comprehensive solid waste management program with annual status reports.

Pursuant to California Integrated Waste Management Act, each County is required to prepare and administer a Countywide Integrated Waste Management Plan (ColWMP), including preparation of an Annual Report. The County continually evaluates landfill disposal needs and capacity as part of the preparation of the ColWMP Annual Report. Within each annual report, future landfill disposal needs over the next 15-year planning horizon are addressed in part by determining the available landfill capacity.

California Code of Regulations, Title 20

Title 20, Sections 1605.1(h) and 1605.1(i) of the California Code of Regulations (CCR) establish efficiency standards for all new federally-regulated plumbing fittings and fixtures, including such fixtures as showerheads, lavatory faucets, and water closets.

California Green Building Standards Code

Title 24, Part 11, regulates the design and construction of buildings and establishes the California Green Building Standards (CALGreen) Code. The purpose of CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CALGreen Code includes both mandatory measures and voluntary measures that address water consumption, building system efficiencies, construction waste, and low pollutant-emitting finish materials. The mandatory measures establish minimum baselines that must be met in order for a building to be approved. The voluntary measures can be adopted by local jurisdictions for greater efficiency.

4.15.3 IMPACT ANALYSIS

- 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 telecommunications 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?

Water

The Project area is served by GSWC through an existing water distribution system. A Water Supply Assessment (WSA), attached as **Appendix J**, was prepared Meridian Consultants and adopted by GSWC that demonstrates how the expected water demand of the Project is within the projections contained in GSWC's most recent UWMP.¹ Therefore impacts would be less than significant.

The Project would create the framework to accommodate up to 1,000 residential units, 100,000 sq. ft. of retail, 45,000 sq. ft. of office space and a 50/key/40,000 square foot hotel. These uses would be built over time, though they are expected to be developed within the planning horizon of the current UWMP.

Potential water usage for these future uses was estimated based on residential, retail, office, hotel and landscaping usage factors. As shown in **Table 4-15.1**, **Project Water Demand the Project** is expected to use approximately 275,040 gallons per day of water when fully built out.

The development of Village South Specific Plan would represent a substantial portion of the growth in the City of Claremont during the UWMP planning horizon. The 2015 UWMP assumed a steady increase in single-family connections. It is expected that, with the Village South Specific Plan in place, a higher portion of the new connections will be multifamily, which generally use lower amounts of water than single-family detached homes. Construction of development within the Plan Area would require new connections to existing water lines. Construction of these connections would not have significant effects beyond that already identified elsewhere in this document. The forecasted demand of the Project is part of and within the expected growth in demand captured in the 2015 UWMP. As such, new unplanned regional water

¹ See **Appendix J** of this DEIR.

facilities would not be necessary and sufficient water supplies are available to serve the Project. Impacts would be less than significant.

Use	Quantity	Water Demand Rate	Water Demand (gal/yr)
Townhome Residential (unit)	192	280	53,760
Apartment Residential (unit)	808	210	169,680
Retail (acre)	2.30	14,157	32,500
Office (acre)	1.03	8,712	9,000
Hotel (rooms)	50	125	6,250
Open space landscaping (acre)	2.60	1,481	3,851
Total (gpd)			275,040

Table 4.15-1 Project Water Demand

Notes: See Water Supply Assessment in Appendix J.

<u>Wastewater</u>

The Project is estimated to result in net new generation of wastewater of approximately 223,843 gpd.² Connections and improvements to the existing sewer system surrounding the Project would be necessary. Any improvements would be reviewed by both the City of Claremont and the Los Angeles County Sanitation Districts. LACSD prepares an Integrated Regional Water Management Plan (IRWMP) to guide the development and management of its facilities. The Pomona WRP currently has several million gallons per day of unused capacity. The Project is within the SCAG population forecasts used by the LACSD to forecast service needs. Therefore, impacts would be less than significant.

Stormwater

The Project area is currently developed and served by existing stormwater infrastructure. Future development as a result of the Project would be required to comply with the Low Impact Development (LID) requirements that would better manage stormflow compared to existing conditions. Specifically, development as a result of the Project would be required to implement BMPs that would be designed to capture and retain the stormwater on-site. As a result, impacts on stormwater infrastructure would be less than significant.

² Village South Project Sewer Analysis, AKM Consulting Engineers, September 9, 2020, included in Appendix J of this DEIR.

Electric Power, Natural Gas, And Telecommunications

The Project area is already served by electric power, natural gas, and telecommunications infrastructure. New hook-ups would be established as new development is constructed; however no new distribution infrastructure is anticipated to accommodate the area. The Project is within the SCAG population forecasts, used by the utility providers to project their service needs. Furthermore, the Project would encourage green building technologies, including rooftop photovoltaic panels, that would reduce demand on utility systems. As such, the Project is not expected to require relocation or construction of facilities, the construction which could cause significant environmental effects. Impacts are considered less than significant.

- 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?

The City requires all development to adhere to all source reduction programs set forth in the Source Reduction and Recycling Element (SRRE) for the disposal of solid waste. In addition, the California Green Building Standards require new development to meet recycling minimums. In addition, the County will continue to address landfill capacity through the preparation of annual CoIWMP reports. The Project is within the growth forecasts for the City of Claremont. As stated within the CoIWMP 2018 Annual Report, the County is not anticipating a solid waste disposal capacity shortfall within the next 15 years under forecasted growth conditions. As such, less than significant impact would occur.

Cumulative Impact

Given that the Project is within the growth forecasts of SCAG, which is the basis for the projected cumulative future demand that providers of utility systems plan for, the Project would not result in excessive unplanned demands on utility systems. As such, the Project would not have a considerable contribution to a cumulative impact.

4.15.4 MITIGATION

As impacts would be less than significant, no mitigation is necessary

5.1 IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2 (c) of the CEQA Guidelines requires that a Draft EIR include discussion of irreversible environmental change. The Guidelines indicates that "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely" and "irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." Impacts could consist of reduction in availability of resources; commitment of future generations to specific land uses; or accidents that cause irreversible damage.

The future development that could result from the Project would involve the commitment of resources necessary for construction. This could include nonrenewable resources such as fossil fuels. However, the Plan is not expected to significantly increase the amount or rate of consumption of these resources as compared to existing conditions throughout the City and the region. The Project is a Specific Plan that calls for mixed use, in-town development with a significant amount of ground floor space that must include physical design traits that accommodate a variety of uses so that the manner in which the structures are used can evolve over time. Arguably, this sort of flexible design allows new development under the plan to have longer lifespans, which results in lower consumption of nonrenewable resources that are used over the long-term.

Once established, land use patterns can be difficult to change. As such, the Project would likely commit future generations to the form of development envisioned by the Project. Furthermore, by increasing the density of development within the Village area, growth pressure to develop virgin land at the City's edges or redevelop other neighborhoods could decrease and the resources or embodied energy contained on those lands and existing neighborhoods would be preserved. This commitment to a pattern of development is consistent with the vision of the community to expand its town center (the Village) and to provide more mixed-use development in the City. As such, the commitments of resources for the Project is justified by the alignment of the Project with community goals.

New development resulting from the Project would comply with current applicable codes that would improve the efficient use of natural resources. Likewise, the Project would result in lower per-capita energy and water demand by encouraging living within a mixed-use town center; encouraging energy conservation through new construction and the adaptive reuse of existing buildings in compliance with modern building codes and seismic regulations; and reducing transportation demands by encouraging the use of alternative modes of transportation.

The nature of the Project does not support any change in activities that could result in accidents that would likely cause irreversible damage.

5.2 GROWTH INDUCEMENT

Section 15126.2 (d) of the CEQA Guidelines, as amended, requires that a Draft EIR include discussion of the potential growth-inducing impacts of a project. Growth-inducing impacts are defined as the ways a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Such a discussion should also include projects that would remove obstacles to population growth and the characteristics of a project, which may encourage and/or facilitate other activities that, either individually or cumulatively, could significantly affect the environment. The CEQA Guidelines state that growth in an area should not be considered beneficial, detrimental, or of little significance to the environment.

Based on the CEQA Guidelines, a project has the potential to foster economic or population growth in a geographic area if it meets any of the following criteria:

- Removal of an impediment to growth (e.g., the establishment of an essential public service or the provision of new access to an area).
- Urbanization of land in a remote location (leapfrog development).
- Economic expansion or growth occurring in an area in response to a project (e.g., changes in revenue base, employment expansion, etc.).
- Establishment of a precedent-setting action (e.g., a change in zoning or general plan designation).

Should a project meet any one of these criteria, it may be considered growth inducing under CEQA. An evaluation of the proposed Project in relation to these growth-inducing criteria is provided in this section.

5.3 REMOVAL OF AN IMPEDIMENT TO GROWTH

The removal of an impediment to growth could have a large effect on a community. For example, if essential public services, such as water utilities or roadway access, were unavailable and, consequently, limited the physical growth of the community, removal of these improvements could induce growth. The Project area is currently served by the full range of public services and utilities and would not alter physical impediments to growth. The Project would alter the existing policy framework to accommodate a different quantity and shape of growth within the Plan area. The Project is intended to foster growth that is in accordance with local and regional planning. The purpose of the Project is to guide growth and development in the City that will support new infill, mixed use development that facilitates pedestrian

and transit use transportation within the City's village core. As such, the Project is intended to encourage and facilitate other activities that would improve the vitality of the downtown.

5.4 URBANIZATION

The Project plan area covers an area of central Claremont that is already urban in form. As such, it would not result in urbanization of land in a remote location. The project is better characterized as the opposite of Leapfrog development. Instead it locates new mixed-used development on underutilized land located immediately adjacent to the existing mixed-use town center, where adequate infrastructure and transit already exist.

5.5 ECONOMIC EXPANSION

One of the primary economic development goals of the Project is to support the downtown area as an attractive, livable, and economically vital core. Much of the land located in the Plan Area is occupied by uses that are incompatible with their location in the town center or have remained chronically vacant due to the disjointed character of area uses or awkward lot design. The Project is intended to remedy these blighting conditions by providing a detailed vision and strong guidance for a vibrant mixed-use extension of the Claremont Village. The resulting positive economic development, increased residential, office, retail and possibly hotel uses would be consistent with the economic conditions already found in the Village and not to create new economic conditions that could have a negative impact on the environment. As such, some economic expansion is intended and is intended to make conditions more consistent with the surrounding areas of the City and reduce development pressures in surrounding neighborhoods. Therefore, any economic expansion resulting from the project is not considered growth inducing or likely to have significant negative environmental impacts.

5.6 PRECEDENT-SETTING ACTION

Precedent setting actions could include approvals that have implications for other properties or that could make it easier for other properties to develop. The Project involves adopting a specific plan which is consistent with the General Plan and substantially similar to a specific plan that has been implemented on a similar amount of land located directly north of the Plan Area. The Project has implications for properties within the Plan Area as it is intended to accommodate growth on these properties. The enhancement of the Plan Area could potentially encourage development on other properties within the vicinity. However, the use of a Specific Plan to accommodate growth consistent with the General Plan is not in itself precedent setting. The proposed Specific Plan is similar to mixed use zones and Specific Plans found throughout the City. As such, the Project would not establish a precedent that could have implications for other parts of the City.

5.7 SUMMARY OF IMPACTS

The Project is intended to expand the existing Village by providing for compact urban development that features active streetscapes and pedestrian connections to the existing Village and public transportation. The Project planned growth would not be induced in isolated, undeveloped areas or in built-out neighborhoods. As such, the Project would induce growth according to the goal of the City and in a way that minimizes effects on the environment.

6.1 INTRODUCTION

The California Environmental Quality Act (CEQA) Guidelines, Section 15126.6, provides the following framework for the formulation and analysis of alternatives in an environmental impact report (EIR):

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a Project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible.

The CEQA Guidelines require the analysis of a "No Project" alternative, and the identification of the "environmental superior alternative." The guidelines state: "If the environmentally superior alternative is the 'no project alternative' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." The analysis of environmental effects of alternatives need not be as thorough or detailed as the analysis of the project itself. Rather, the CEQA Guidelines, Section 15126.6(d) states that the EIR shall include "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project."

6.2 SELECTION OF ALTERNATIVES

The range of alternatives required within an EIR is governed by the "rule of reason," under CEQA Guidelines, Section 15126.6(f), which requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider every conceivable alternative to a project. An EIR need not consider an alternative with an unlikely or speculative potential for implementation or an alternative that would result in effects that cannot be reasonably ascertained.

An EIR is not required to evaluate alternatives that are not feasible. The term feasible is defined in the CEQA Guidelines, Section 15364 as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." CEQA Guidelines, Section 15126.6(f)(1) provides additional factors that may be taken into account when addressing the feasibility of alternatives. These factors include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to potential alternative sites.

Reasonable alternatives are those that would attain most of the basic objectives of the Project. As described in **Section 2.0: Project Description,** the following objectives have been identified for the proposed Project:

- 1. <u>Expand the Village</u> by continuing to grow the value and success of the existing Village, by providing an expanded customer base of nearby residents with walkable connections, and by creating new development of similar character.
- 2. <u>Shape New Development</u> through standards and guidelines for residential, commercial and mixeduse development as well as for public streets and open spaces.
- 3. <u>Create a Diverse Mix of Uses</u> by defining land uses and development intensities that encourage market-based, mixed-use development.
- 4. <u>Ensure Active Mobility</u> by providing a high quality, comfortable, and safe pedestrian and bicycling environment.
- 5. <u>Create High Quality Design</u> through development standards and design guidelines that reflect the vision of Claremont and protect historic structures.
- 6. <u>Straightforward Implementation</u> strategies and processes that encourage orderly development.

The City has considered the following alternatives for evaluation:

- Alternative 1: No Project Alternative: This alternative considers what would be reasonably expected to occur in the foreseeable future if the Project were not approved and future development is subject to zoning and development standards that are currently in place.
- Alternative 2: A "Conventional Residential Development" plan that assumes the area is rezoned to multi-family residential with no requirement for mixed-use, Village-style development.
- Alternative 3: A "Commercial TOD" plan that assumes rezoning much of the Project area to allow less residential development than the Project and require more commercial space than in the Project to create a job-centered TOD as opposed to the balanced (mixed-use) TOD envisioned by the Project.

5.3 ALTERNATIVES ANALYSIS

In accordance with CEQA Guidelines Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less, similar, or greater than the corresponding impacts of the Project. Section 15126.6(c) of the State CEQA Guidelines states that if any alternative is rejected as infeasible, the Lead Agency must briefly explain the reasons underlying this determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives; (ii) infeasibility; or (iii) inability to avoid significant environmental impacts.

6.0 Alternatives

The Proposed Project

As described in **Section 2.0: Project Description**, the Project creates a framework for future development within the Plan Area. For the purposes of CEQA analysis, the following use mix and development intensity is assumed to be the potential outcome of the Project:

- 1,000 Residential Units
- 100,000 square feet of retail space
- 45,000 square feet of office space
- A 50-room hotel

Alternatives are intended to "avoid or substantially lessen any of the significant effects" of the Project. The Project, as proposed, has the potential to have significant effects due to the potential disturbance of unknown subsurface hazardous materials and unknown subsurface tribal cultural resources, the potential effect on the significance of existing historic resources, and the potential for construction to generate excessive noise.

Alternative 1—No Project Alternative

Description of Alternative

Section 15126.6(e) of the CEQA Guidelines state: "the No Project/No Build Alternative means 'no build' wherein the existing environmental setting is maintained." Alternative 1 assumes that the Project, a Specific Plan that modifies the zoning and design standards for the plan area, is not approved and the zoning and design standards for the parcels located in the Plan Area remain unchanged. Because many of the plan area parcels are vacant or have recently transferred ownership, it is expected that new development would occur under the existing zoning. Alternative 1 assumes the Business Industrial Park (BIP) zoned portions of the Project area will develop in accordance with that zoning; low density business park with surface parking. It also assumes that, because there has been no interest from developers in developing parcels in the commercial (CH and CP) zoned portions of the Project with highway commercial uses or office buildings, the City will approve discretionary permits (Conditional Use Permits) to allow housing on all but the most commercially viable parcels.

Alternative 1 is expected to result in the following types of development:

• <u>On the northern third of the Project area</u>, BIP development similar to that found in the Claremont Business Park located west of the Project area and near the intersection of Andrew Drive and Claremont Boulevard, and • <u>On the southern two-thirds of the plan area</u>, Three story walk-up townhome development similar to several developments recently constructed along Base Line Road and possibly 3 story garden apartments with surface parking lots.

For the purposes of CEQA analysis, the following use mix and development intensity is assumed to be the likely outcome of the No Project Alternative:

- 298 Residential Units
- 56,000 square feet of commercial space
- 60,000 square feet of office space

Comparative Impacts

Aesthetics

The assumed development in a No Project Alternative would still be located within a Transit Priority Area, within which aesthetic impacts are presumed to be less than significant. However, under a No Project Alternative, the Project area would not be subject to the development guidelines of the Project. As such, aesthetics impacts would not be reduced under a No Project Alternative. Furthermore, the Project would have a less than significant aesthetic impact, thus a No Project Alternative would not avoid or reduce any significant aesthetic impact.

Air Quality

The level of development assumed under this Alternative would be less than that of the Project and therefore would result in less air pollutant emissions. However, the Project would result in less than significant air quality impacts, thus a No Project Alternative would not avoid or reduce any significant air quality impact.

Cultural Resources

The assumed development in a No Project Alternative would be less than that of the Project. Nonetheless, the existing historic resources in the Project area could still be affected by future development under a No Project Alternative. As such, cultural impacts would not be reduced under a No Project Alternative. As with the Project, a No Project Alternative could have significant and unavoidable impacts on cultural resources.

Energy

The level of development assumed under this Alternative would be less than that of the Project and therefore could result in less energy consumption. Because, the Project would result in less than

significant energy impacts, the No Project Alternative would not avoid or reduce any significant energy impact.

Geology /Soils

The level of development assumed under this Alternative would be less than that of the Project. However, the Project would result in less than significant geology impacts, thus a No Project Alternative would not avoid or reduce any significant geology impacts.

Greenhouse Gas Emissions

The level of development assumed under this Alternative would be less than that of the Project and therefore could result in less generation of greenhouse gas emissions. However, a No Project Alternative would not develop the Project area as a cohesive transit-oriented development that furthers the State and City goals for GHG reductions. Furthermore, the Project would result in less than significant GHG impacts, thus a No Project Alternative would not avoid or reduce a significant GHG impact.

Hazards & Hazardous Materials

The level of development assumed under this Alternative would be less than that of the Project. However, the potential for impacts from hazardous materials is associated with the ground disturbance that could expose contaminants from former uses of the site, which could happen under this Alternative as well. Thus a No Project Alternative would not avoid or reduce the significant hazards and hazardous material impacts of the Project.

Hydrology & Water Quality

The level of development assumed under this Alternative would be less than that of the Project. However, the same regulatory requirements would be imposed on future development. Furthermore, the Project would have a less than significant hydrology and water quality impacts. Thus, a No Project Alternative would not avoid or reduce a significant impact.

Land Use / Planning

The Project is intended to further the Land Use policy goals of the City of Claremont. A No Project Alternative would not achieve this result to the same degree. Furthermore, the Project would have a less than significant land use and planning impacts; thus a No Project Alternative would not avoid or reduce a significant impact.

6.0 Alternatives

Noise

The level of development assumed under this Alternative would be less than that of the Project. As such, construction noise impacts could be reduced; however due to the proximity of sensitive receptors and the nature of construction, significant noise impacts would likely still occur requiring equivalent mitigation to that of the Project. Thus, while a No Project Alternative could reduce the level of impact, it would not avoid the significant construction noise impacts of the Project. Furthermore, with mitigation, the Project would have less than significant noise impacts.

Population / Housing

The level of development assumed under this Alternative would be less than that of the Project. However, the Project would have a less than significant impact on population and housing. Furthermore, the Project provides focused development to accommodate a portion of the forecasted growth for the City of Claremont by providing substantial amounts new housing including types that are currently underdeveloped in the City. Thus, a No Project Alternative would not reduce or avoid the population and housing impact of the Project and would make it more difficult for the City to provide its fair share of needed housing types within the City.

Public Services

The level of development assumed under this Alternative would be less than that of the Project. However, the Project would have a less than significant impact on public services. Thus, a No Project Alternative would not substantially lessen or avoid a significant impact to public services.

Transportation

The No Project Alternative would still be within a Transit Priority Area for which transportation impacts would be presumed to be less than significant. However, the development of the area in a No Project Alternative would not be a cohesive transit-oriented development. As such, the No Project Alternative would be oriented more toward single occupant vehicle trips and less supportive of the transportation policy goals of the City and regional transportation planners than the Project. Therefore, a No Project Alternative is more likely to negatively impact transportation and would not reduce or avoid significant transportation impacts.

Tribal Cultural Resources

The level of development assumed under this Alternative would be less than that of the Project. However, the potential for impacts to Tribal Cultural Resources is associated with the ground disturbance during

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construction, which would happen under this Alternative as well. Thus, a No Project Alternative would not substantially lessen or avoid the significant tribal cultural resources impacts of the Project.

Utilities / Service Systems

The No Project Alternative would allow for future development under the existing planning and zoning framework. The resulting change would be reduced compared to the Project. As a result, the levels of impact on utilities would be reduced. However, the Project would not have a significant impact on utilities or service systems. Thus, a No Project Alternative could reduce the level of impact but no significant impact would be avoided.

Relationship to Project Objectives

The No Project Alternative would reduce some of the environmental impacts of the Project but would not avoid any of the significant impacts. Furthermore, a No Project Alternative would not achieve any of the objectives of the Project. Specifically, the Village would not be expanded in an integrated fashion with new standards and guidelines. The mix of uses, design quality, and active mobility would be substantially reduced compared to the Project.

Alternative 2—Conventional Residential Development Alternative

A second Alternative concept for the Project could allow for "Conventional Residential Development" of housing throughout the Project area. Alternative 2 assumes the plan area is rezoned to multi-family residential similar to other multi-family zoning districts in the City, with no requirement to include a mixof uses or Village-style development and infrastructure. This is a likely alternative as housing is generating the greatest interest among potential developers and currently commands the highest land prices in the City of Claremont.

For the purposes of CEQA analysis, the following use mix and development intensity is assumed to be the potential outcome of the "Conventional Residential Development" Alternative:

- 536 Residential Units
- 15,000 square feet of retail space

Comparative Impacts

Aesthetics

The assumed development in a Conventional Residential Development Alternative would still be located with a Transit Priority Area, within which aesthetic impacts are presumed to be less than significant. Under this Alternative, the Project area would be subject to existing City design review procedures which are similar, though less specific, than the Project. As such, aesthetic impacts would be equivalent to the Project. Furthermore, the Project would have a less than significant Aesthetic impact, thus a Conventional Residential Development Alternative would not substantially lessen or avoid any significant aesthetic impact.

Air Quality

The level of development assumed under this Alternative would be less than that of the Project and therefore would result in less air pollutant emissions. However, the Project would result in less than significant air quality impacts, thus a Conventional Residential Development Alternative would not avoid or reduce any significant air quality impact.

Cultural Resources

The assumed development in a Conventional Residential Development Alternative could be less than that of the Project. Nonetheless, the existing historic resources in the Project area would still be affected by future development under this alternative. As such, cultural impacts would not be substantially reduced. As with the Project, a Conventional Residential Development Alternative could have significant and unavoidable impacts on cultural resources.

Energy

The level of development assumed under this alternative would be less than that of the Project and therefore could result in less energy consumption. Furthermore, the Project would result in less than significant energy impacts, thus a Conventional Residential Development Alternative would not avoid or reduce any significant energy impact.

Geology /Soils

The level of development assumed under this Alternative would be less than that of the Project. However, the Project would result in less than significant geology impacts, thus a Conventional Residential Development Alternative would not avoid or reduce any significant geology impacts.

Greenhouse Gas Emissions

The level of development assumed under this Alternative would be less than that of the Project and therefore could result in less generation of greenhouse gas emissions. However, while a Conventional Residential Development Alternative would be transit-oriented, it would not develop the Project area as cohesive mixed-use development and therefore, would not further the State and City goals for GHG reductions to the same extent as the Project. Furthermore, the Project would result in less than significant

6.0 Alternatives

GHG impacts, thus a Conventional Residential Development Alternative would not avoid or reduce a significant GHG impact.

Hazards & Hazardous Materials

The level of development assumed under this Alternative would be less than that of the Project. However, the potential for impacts from hazardous materials is associated with the ground disturbance that could expose contaminants from former uses of the site, which could happen under this Alternative as well. Thus a Conventional Residential Development alternative would not avoid or reduce the significant hazards and hazardous material impacts of the Project.

Hydrology & Water Quality

The level of development assumed under this Alternative would be less than that of the Project. However, the same regulatory requirements would be imposed on future development. Furthermore, the Project would have a less than significant hydrology and water quality impacts. Thus, a Conventional Residential Development Alternative would not avoid or reduce a significant impact.

Land Use / Planning

The Project is intended to further the Land Use policy goals of the City of Claremont. However, while a Conventional Residential Development Alternative could be transit-oriented, it would not develop the Project area as cohesive mixed-use development that extends the Village and therefore, would not further the City goals to the same extent. A Conventional Residential Development Alternative would therefore not achieve project goals to the same degree. Furthermore, the Project would have a less than significant land use and planning impacts; thus a Conventional Development Alternative would not avoid or reduce a significant impact.

Noise

The level of development assumed under this Alternative would be less than that of the Project. As such, construction noise impacts could be reduced; however due to the proximity of sensitive receptors and the nature of construction, significant noise impacts would likely still occur requiring equivalent mitigation to that of the Project. Thus, while a Conventional Residential Development Alternative could reduce the level of impact, it would not avoid the significant construction noise impacts of the Project. Furthermore, with mitigation, the Project would have less than significant noise impacts.

Population / Housing

The level of development assumed under this Alternative would be less than that of the Project. However, the Project would have a less than significant impact on population and housing. Furthermore, the Project

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provides focused development intended to accommodate a portion of the forecasted fair-share growth for the City of Claremont by providing substantially more new housing in a larger variety of housing types than would be accommodated by the Conventional Residential Development Alternative. Thus, a Conventional Residential Development Alternative would not help to achieve the housing related goals of the Project and City and would therefore, not reduce or avoid the population and housing impact of the Project.

Public Services

The level of development assumed under this Alternative would be less than that of the Project and therefore likely to have less impact on public services. However, this alternative would also generate lower property tax, sales tax and transient occupancy tax revenues than the project. Furthermore, the Project would have a less than significant impact on public services. Thus, a Conventional Residential Development Alternative would not reduce or avoid the public service impact of the Project.

Transportation

The Conventional Residential Development Alternative would still be within a Transit Priority Area for which transportation impacts would be presumed to be less than significant. However, the development of the area under this Alternative would not be a cohesive mixed-use development. As such, the Conventional Residential Development Alternative would not support the transportation policy goals of the City to the same extent as the Project. Furthermore, as the Project would have less than significant transportation impacts, this Alternative would not significantly reduce or avoid significant transportation impacts.

Tribal Cultural Resources

The level of development assumed under this Alternative would be less than that of the Project. However, the potential for impacts to Tribal Cultural Resources is associated with the ground disturbance during construction, which would happen under this Alternative as well. Thus, a Conventional Residential Development Alternative would not avoid or reduce the significant tribal cultural resources impacts of the Project.

Utilities / Service Systems

The Conventional Residential Development Alternative would allow for future development under the existing planning and zoning framework. The resulting change would be reduced compared to the Project. As a result, the levels of impact on utilities would be reduced. However, the Project would not have a significant impact on utilities or service systems. Thus, a Conventional Residential Development Alternative could reduce the level of impact but no significant impact would be avoided.

Relationship to Project Objectives

As the development potential would be reduced, the Conventional Residential Development Alternative could result in some reduction of environmental impacts. However, none of the significant impacts that have been identified for the Project would be avoided. In addition, a Conventional Residential Development Alternative would not achieve the primary objectives of the Project. Specifically, the Village would not be expanded with an integrated mix of uses and active public realm.

Alternative 3—Commercial TOD Alternative

An Alternative concept for the Project envisions approval of a Specific Plan that creates a more jobsfocused TOD than the Project. It assumes that the floor area of total development in the Plan Area is split evenly between three uses; 1/3 retail, 1/3 office and 1/3 Residential. Given the current real estate market, Alternative 3 would likely take longer to build out as there appears to be little demand for developing the amount of office and retail space required under this alternative. For the purposes of CEQA analysis, the following use mix and development intensity is assumed to be the potential outcome of the Commercial TOD Alternative:

- 270 Residential Units
- 219,800 square feet of retail space
- 219,800 square feet of office space

Comparative Impacts

Aesthetics

The assumed development in a Commercial TOD Alternative would still be located within a Transit Priority Area, within which aesthetic impacts are presumed to be less than significant. Under a Commercial TOD Alternative, the Project area would be subject to development guidelines similar to the Project. As such, aesthetics impacts would be equivalent to the Project. Furthermore, the Project would have a less than significant Aesthetic impact, thus a Commercial TOD Development Alternative would not avoid or reduce any significant aesthetic impact.

Air Quality

The Commercial TOD Alternative would allow for an essentially equal allocation of development floor area potential to residential, office and retail uses within the same overall development envelope as the Project. As such, this alternative would not generate substantially less air pollutant emissions. As the Project would result in less than significant air quality impacts, a Commercial TOD Alternative would not avoid or reduce any significant air quality impact.

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Cultural Resources

The existing historic resources in the Project area could still be affected by future development under a Commercial TOD. As such, cultural impacts would not be reduced. As with the Project, a Commercial TOD Alternative could have significant and unavoidable impacts on cultural resources.

Energy

The Commercial TOD Alternative would allow for an equal amount of total development floor area as the Project with higher concentrations of retail and office space and lower level of residential floor area. It is expected that this mix would not generate substantially different demand for energy, but that the energy demand would likely shift to be more day- time oriented. Because the total energy demand would be similar, and the Project would result in less than significant energy impacts, the Commercial TOD Alternative would not avoid or reduce any significant energy impact.

Geology /Soils

The Commercial TOD Alternative would allow for an essentially an equal allocation of development floor area potential to residential, office and retail uses within the same overall development envelope as the Project. As such, the impacts would likely not be reduced compared to the Project. Furthermore, the Project would result in less than significant geology impacts, thus a Commercial TOD Alternative would not avoid or reduce any significant geology impacts.

Greenhouse Gas Emissions

The Commercial TOD Alternative would allow for an essentially an equal allocation of development floor area potential to residential, office and retail uses within the same overall development envelope as the Project. While a Commercial TOD Alternative would be transit-oriented, it would not develop the Project area with the same balance of residential development and therefore, would not further the State and City goals for GHG reductions to the same extent as the Project. Furthermore, the Project would result in less than significant GHG impacts, thus a Commercial TOD Alternative would not avoid or reduce a significant GHG impact.

Hazards & Hazardous Materials

The potential for impacts from hazardous materials is associated with the ground disturbance that could expose contaminants from former uses of the site, which could happen under this Alternative as well. Thus a Commercial TOD alternative would not avoid or reduce the significant hazards and hazardous material impacts of the Project.

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Hydrology & Water Quality

The Commercial TOD Alternative would allow for an equal allocation of development floor area potential to residential, office and retail uses within the same overall development envelope as the Project. The same stormwater and water quality regulatory requirements would be imposed on that same level of development. Furthermore, the Project would have a less than significant hydrology and water quality impacts. Thus, a Commercial TOD Alternative would not avoid or reduce a significant impact.

Land Use / Planning

The Commercial TOD Alternative would divide floor area evenly between residential, office, and retail uses within the same overall development envelope as the Project. While a Commercial TOD Alternative would be transit-oriented, it would develop the Project area with less residential uses and would, therefore, not further City, regional and State goals related to housing. In addition, the higher levels of office would likely increase peak hour travel on weekdays, while causing the plan area to be less active during the evening and on weekends. While the increased retail would theoretically counter this effect, the large amounts of retail would greatly increase the overall number of auto trips to the area and likely make the area less desirable for housing. Finally, the large amount of retail runs counter to long-term real estate trends and would likely be too great to be absorbed by market demand, creating high vacancies that would detract from the intended Village character of the project. A Commercial TOD Alternative would not achieve to the desired Village-expansion character to the same degree as the Project. Furthermore, the Project would have a less than significant land use and planning impacts; thus a Conventional Development Alternative would not avoid or reduce a significant impact.

Noise

The Commercial TOD Alternative would allow the same overall development envelope as the Project. Due to the proximity of sensitive receptors and the nature of construction, significant noise impacts would likely still occur during the construction phase of the project, requiring equivalent mitigation to that of the Project. The higher levels of retail developed under a Commercial TOD Alternative would likely increase noise levels in the operational phase of the project, but those would remain less than significant. Thus, a Commercial TOD Alternative would not avoid the significant construction noise impacts of the Project. Furthermore, with mitigation, the Project would have less than significant noise impacts.

Population / Housing

The Commercial TOD Alternative would allow for an equal allocation of development floor area potential to residential, office and retail uses within the same overall development envelope as the Project. As such, the Commercial TOD Alternative would not provide as much housing as the Project while increasing the commercial development would likely exceed the forecasted growth in commercial uses within the City

of Claremont. The Project would have a less than significant impact on population and housing. Thus, a Commercial TOD Alternative would not reduce or avoid the population and housing impact of the Project.

Public Services

The Commercial TOD Alternative would allow for an equal allocation of development floor area potential to residential, office and retail uses within the same overall development envelope as the Project. This would result in a higher intensity of uses, as per square-foot commercial uses would generate more activity than the same square footage of residential use. As such, the demand on police and fire service would likely be greater under this Alternative. The Project would have a less than significant impact on public services. Thus, a Commercial TOD Alternative would not reduce or avoid the public service impact of the Project.

Transportation

The Commercial TOD Alternative would still be within a Transit Priority Area for which transportation impacts would be presumed to be less than significant. However, the development of the area as a Commercial TOD Alternative would not achieve the balance of residents to commercial uses that would support the existing village to the same extent. In addition, the higher levels of office uses would increase peak hour travel on weekdays, while causing the plan area to be less active during the evening and on weekends. The increased retail would greatly increase daytime and evening auto trips as well as total auto trips to the area. As such, a Commercial TOD Alternative would likely increase the quantity and proportion of single occupant vehicle trips associated with the project as opposed to reducing trips or furthering local transportation policies. Furthermore, as the Project would have less than significant transportation impacts.

Tribal Cultural Resources

The Commercial TOD Alternative would allow for an equal amount of overall development as the Project. The potential for impacts to Tribal Cultural Resources is associated with ground disturbance during construction, which would happen under this alternative as well. Thus, a Commercial TOD Alternative would not avoid or reduce the significant tribal cultural resources impacts of the Project.

Utilities / Service Systems

The Commercial TOD Alternative would allow for an essentially an equal allocation of development floor area potential to residential, office and retail uses within the same overall development envelope as the Project. Due to the decrease in residential units, the total impact on utilities could be reduced, however, the Commercial TOD would likely create a more surge-intensive demand pattern for utilities, which could require additional system improvements. While a Commercial TOD Alternative could reduce the overall level of impact to utilities and services, the Project would not have a significant impact on utilities or service systems; therefore, no significant impact would be avoided.

Relationship to Project Objectives

By increasing the retail and office uses and reducing residential uses, this Alternative would not provide the expanded resident base to support the existing Village, the Metro transit service, or even the retail and services within the Project to the same extent as the Project.

Environmentally Superior Alternative

Section 15126.6(e)(2) of the State CEQA Guidelines requires that an EIR identify an environmentally superior alternative among the alternatives evaluated. If the "no project" alternative is the environmentally superior alternative, the EIR must identify another environmentally superior alternative among the remaining alternatives.

The "No Project" Alternative could have reduced levels of impact in some areas but would not avoid any of the significant impacts of the Project and would not achieve any of the City's objectives for the Project.

Alternative 2, conventional residential development, would reduce the level of development and would therefore result in reduced impacts. However, none of the significant impacts of the Project would be avoided by this alternative. Furthermore, Alternative 2 would not meet several of the basic Project objectives. The Project has been designed to align with the vision and principles of the City as expressed in the General Plan and through the collaborative process that formulated the Project. Alternative 2 would enable development in a conventional residential and commercial form. However, the Project area is envisioned as an extension of the Village and not as an emulation of other neighborhoods in the City.

Alternative 3, Commercial TOD, would not avoid any of the impacts of the Project and would likely create greater impacts related to traffic congestion and residential vacancies. Furthermore, Alternative 3 would not meet several of the basic Project objectives as it would likely compete with existing Village businesses as opposed to providing significant new residential base to serve as customers for Village businesses. The Project has been designed to align with the vision and principles of the City as expressed in the General Plan and through the collaborative process that formulated the Project.

As such, Alternative 2 could be considered marginally environmentally superior to the Project as its levels of impact are reduced. However, as stated above, none of the significant impacts of the Project could be avoided. The significant impacts of the Project are associated with ground disturbance, noise and effects on existing historic buildings during development of the area. These impacts could occur under any development scenario. Furthermore, the alternatives do not fully achieve the objectives of the Project. As such, the Project remains superior to the Alternatives.
7.1 INTRODUCTION

Section 15128 of the CEQA Guidelines requires a brief description of any possible significant effects that were determined not to be significant and were not analyzed in detail within the environmental analysis section of the document. The following includes those topics that did not have a separate subsection within **Section 4.0: Environmental Impact Analysis** of this DEIR.

7.2 AGRICULTURAL AND FORESTRY RESOURCES

The Project area is located adjacent to the City's jobs, transit and retail center and is predominantly urbanized, with a mixture of various types of land uses including residential, commercial and light industrial uses. No portion of the Project area currently contains or is proposed to include agricultural zoning designations or uses. Additionally, no Williamson Act contracts are in effect for the Project area or surrounding vicinity. Implementation of the Project would not involve changes that would result in the conversion of agricultural uses or conflict with existing zoning for agricultural uses or a Williamson Act contract. Therefore, based on the location and current state of development of the Project, no impacts to agricultural resources would occur.

As defined by the Public Resources Code Section 12220(g), forestland is land that can support 10 percent native tree cover of any species under natural conditions and that allows for management of one or more forest resources. A Timberland Production Zone is defined by the Government Code Section 51104(g) as an area that is zoned for the sole purpose of growing and harvesting timber. No portion of the Project area is zoned as forestland or timberland nor does the Project area contain natural forest or timberland conditions. Therefore, based on the location of the Project, no impacts to forestry resources would occur.

7.3 BIOLOGICAL RESOURCES

The Project area is developed and contains only limited amounts of natural habitat mostly in the form of ornamental landscaping, street trees and lawn. Due to the developed nature of the Project area, species likely to occur on-site are limited to small terrestrial and avian species typically found in developed settings. The Project Site does not contain any critical habitat, riparian, wetland or other sensitive natural community nor is it known to provide habitat specifically for 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 Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). Additionally, there are no habitat conservation plans, natural community conservation plans, or other related plans applicable to the Project area. As such, the Project would not adversely affect biological resources.

The Project area contains ornamental trees typical of urbanized settings. Future development that could disturb existing street trees would be required to comply with the City's existing tree preservation policies, specifically Sections 12.26.090 and 16.300.060.A.9 of the Municipal Code. Likewise, implementation of the Project calls for additional landscaping along rights of way and in public and semi-public plaza spaces. As such, impacts would be less than significant.

7.4 MINERAL RESOURCES

A significant impact could occur if the Project was located in an area used or available for extraction of a regionally-important mineral resource, or if the Project would convert an existing or future regionally-important mineral extraction use to another use, or if the Project would affect access to a site used or potentially available for regionally-important mineral resource extraction. The Surface Mining and Reclamation Act (SMARA) was enacted in 1975 and established a state surface mining and reclamation policy. The Claremont General Plan identifies those areas of the City that have been designed by the State Mining and Geology Board as "areas of regional significance"; the Project is not within any of the designated areas. As such, no impacts would occur.

7.5 RECREATION

The CEQA Checklist Thresholds for Recreation asks if a project would increase the use of recreational facilities such that substantial physical deterioration would occ`ur or would include recreational facilities the construction of which might have an adverse physical effect on the environment. The Project would provide for development of housing that would support population growth within Claremont. However, there is no indication that this population would substantially deteriorate existing recreational facilities. Furthermore, the Project would include new open space facilities including a "Central Plaza," public plazas and landscaped paseos that would provide residents and visitors with passive recreation. In addition, future development within the Project would be required to pay parkland fees that would support the maintenance of City Parks. The construction of these amenities would not have adverse effects separate from the effects already evaluated in this EIR. As such, recreation impacts would be less than significant.

7.6 WILDFIRE

The CEQA Checklist Thresholds for Wildfire impacts states "If located in or near state responsibility areas or lands classified as very high fire hazard severity zones". The Project area is not within or near a state responsibility area or a very high fire severity zone. As such, no impacts would occur.