V. ENVIRONMENTAL IMPACT ANALYSIS

This section of the SCEA contains an assessment and discussion of impacts associated with the environmental issues and subject areas identified in the Initial Study Checklist (Appendix G to the State CEQA Guidelines, California Code of Regulations [CCR], Title 14, Chapter 3, 15000-15387) (refer to Section VI [Initial Study Checklist]). The analytical methodology and thresholds of significance are based in part on the L.A. CEQA Thresholds Guide (Thresholds Guide).

Pursuant to Public Resources Code (PRC) Section 21155.2(b), the SCEA is required to identify all significant or potentially significant impacts of a transit priority project, other than those impacts that do not need to be reviewed pursuant to Section 21159.28, based on substantial evidence in light of the whole record. Additionally, the SCEA is required to identify any cumulative effects that have been adequately addressed and mitigated in prior applicable certified EIRs.

1. AESTHETICS

In 2013, the State of California enacted Senate Bill 743 (SB 743), which made several changes to CEQA for projects located in areas served by transit. Specifically, PRC Section 21099 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." PRC Section 21099 defines a "transit priority area" as an area within one-half 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 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. This state law supersedes the aesthetic impact threshold in the Thresholds Guide.

The Project is a 31-story mixed-use infill development consisting of up to 5,610 square feet of commercial land uses (including an approximately 2,980-square-foot leasing office and up to 2,630 square feet of neighborhood-serving retail land uses), 428 multi-family residential units, 41,378 square feet of open space/recreation uses, residential vehicle parking, and short and long-term bicycle parking. The Project Site is located directly adjacent to the Los Angeles County Metropolitan Transportation Authority's (Metro) Red Line's Pershing Square subway station northeast portal, and thus the Project Site is located in a transit priority area as defined in PRC Section 21099. Further, the Project Site is located in an urban area and served by multiple local bus lines that provide regular service intervals of 15 minutes or less near the Project Site during

the peak hours, including Metro Local Lines 2/302, 4, 10, 18, 28, 30/330, 40, 45, 81, 90/91, and 745.

On February 10, 2016, the City circulated Zoning Information File No. 2452 to clarify the locations of transit priority areas within the City, and reaffirm that aesthetic impacts shall not be considered a significant impact on the environment under the provisions of SB 743 (refer to Appendix C). Specifically, Zoning Information File No. 2452 states that visual resources, aesthetic character, shade and shadow, light and glare, and scenic vistas or any other aesthetic impact, as defined in the City's CEQA Threshold Guide, shall not be considered an impact for infill projects within transit priority areas pursuant to CEQA. A map of transit priority areas is attached to Zoning Information File No. 2452 in Appendix C. As shown on that map, the Project Site is located in a transit priority area.

Thus, the Project's aesthetic (and parking) impacts are not considered significant impacts on the environment pursuant to PRC Section 21099. Therefore, an assessment of the Project's potential aesthetics impacts is not required. However, some of the aesthetics issues below will be addressed in the SCEA for **informational purposes only**.

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

This discussion is for informational purposes only.

A scenic vista generally provides focal views of objects, settings, or features of visual interest; or panoramic views of large geographic areas of scenic quality, primarily from a given vantage point. Scenic vistas are generally associated with public vantages. A significant impact may occur if the Project introduces incompatible visual elements within a field of view containing a scenic vista or substantially alters a view of a scenic vista.

The Project Site is located in downtown, an urbanized area of the City. The Project Site is currently developed with an 850-square-foot restaurant and surface parking lot. The area surrounding the Project Site is developed with a mix of low- to high-rise buildings associated with a variety of commercial and residential land uses. Due to existing topography and urban development, views from within the Project Site area are limited to short- and mid-range views of existing structures; no scenic vistas are present from and/or near the Project Site. For this reason, even if the Project were subject to analysis of aesthetic impacts, the Project would not have the potential to have a substantial adverse effect on a scenic vista.

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

This discussion is for informational purposes only.

The Project Site is not located near trees, rock outcroppings, and historic resources visible from any designated scenic roadways or highways. According to Map A7 of the Mobility Plan, the closest City-designated highway to the Project Site is Stadium Way, located approximately 1.5 miles to the north. No oak trees or other protected trees are located on or adjacent to the Project Site. Eleven Mexican Fan Palms (*Washingtonia robusta)* and 9 London Plane trees (*Platanus x*

acerifolia), 3 Indian Laurel Fig trees (*Ficus microcarpa "nitida")* are located within the Project Site boundaries (refer to the Tree Report in Appendix D). Additionally, 6 London Plane trees (City street trees) are located along 348 Hill Street. These 29 trees (including the 6 street trees) would be removed during construction of the Project. Prior to the issuance of a Certificate of Occupancy, the Project Applicant would be required to show proof to the Urban Forestry Division of a Tree Removal Permit and a subsequent Tree Planting Permit, as well as approval from the Board of Public Works for all street trees being removed and replaced. The landscape plans for the Project shall identify the trees within the Project Site that would be removed. Compliance with the City's requirements would ensure no significant impacts related to scenic resources, in particular trees, would occur.

As discussed in greater detail under Section 5(a), below, the existing building on the Project Site is not eligible for listing in the National and California Registers due to lack of significance as well as a lack of integrity, nor is it eligible for designation as a Los Angeles Historic-Cultural Monument. In addition, although the Project Site vicinity contains ten significant historical resources, the Project would not affect the integrity of any of these resources (refer to response to Checklist Question 5[a], below). Finally, as described in greater detail in response to Checklist Question 5(a), below, the Project meets the City's Historic Downtown Design Guidelines. For these reasons, even if the Project were subject to analysis of aesthetic impacts, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a scenic highway.

c) 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?

This discussion is for informational purposes only.

The Project Site is located in a highly urbanized area at the intersection of Hill Street and 4th Street in Downtown Los Angeles. The Project Site is currently developed with a restaurant and surface parking. The visual character of the Project Site area is characterized by high-density, low- to high-rise development, including a mix of land uses. The existing land uses surrounding the Project Site include a dense development of transit, commercial, and high-density residential land uses. The Project Site is also adjacent to the Metro Red Line's Pershing Square station entrance.

Compatibility with Character of Surrounding Community

As stated previously, the Project Site is located in a highly urbanized and developed area of the City. Existing land uses surrounding the Project Site include a dense development of transit, commercial, and high-density multi-family land uses. The Project Site is immediately adjacent to the Metro Red Line's Pershing Square subway station northeast portal. A single-story building occupied by a restaurant abuts the northern boundary of the Project Site. To the north of this restaurant on Hill Street is the three-story Grand Central Market, which is abutted to the north by a six-story parking structure with a surface parking lot. To the south of the Project Site, across 4th

Street is a 10-story government office building. Bunker Hill, Angels Flight Railway, and a multi-level parking residential structures are located to the west of the Project Site, across Hill Street. The topography from Hill Street toward the west increases in height, and taller mixed-commercial and residential buildings can be seen from the Project Site area. Several buildings ranging from one to six stories are located along Broadway, one block east of the Project Site. Specific land uses in the greater Project Site area are shown on Figures II-30 and II-31 in Section II (Project Description). The age and architecture of the buildings in the Project Site area vary from historic (i.e., more than 40 years old) and modern. The visual character of the Project Site area is that of a highly urbanized city, supporting a variety of land uses.

The Project features ground-floor retail uses designed to activate both Hill Street and 4th Street and enhance the overall pedestrian experience. Pedestrian access to the Project Site would be available from both Hill and 4th Streets via landscaped areas that would link the pedestrian to sidewalks, transit lines, and the adjacent Metro Station. The Project provides uses that would be similar to those already found in the area to provide additional synergy with patrons, customers, and visitors to the area throughout the day and night. Further, the Project would promote use of the currently underutilized parcel, generating customers for existing businesses in the area.

Architectural Style and Design

The design of the mixed-use building would be modern. The ground-floor commercial uses would be constructed out of large cardinal glass panes with exterior reflectance of 27 percent and 36 percent to create a transparent interior-exterior relationship.

As discussed in greater detail in response to Checklist Question 11(b), below, the Project would be required to comply with the City of Los Angeles Downtown Design Guide. From an architectural perspective, the Downtown Design Guidelines emphasize walkability, sustainability and transit options; and urban design standards to coordinate and orchestrate the overall development of the City core, to ensure projects create and contribute to a livable downtown. As part of the application for development, the requisite Checklist for Project Submittal was submitted to the Department of City Planning demonstrating that the Project is overall consistent with the applicable design requirements for architectural detail, streetscape improvements, signage, public art, sidewalks and setbacks, ground floor treatment, parking and access, massing, and on-site open space.

Specifically, the Project incorporates sustainable design features including convenient access to transit and landscape elements that reduce energy use. Also, the Project emphasizes walkability through the use of outdoor dining space, use of street trees and landscaping, and retail setbacks from sidewalks.

To be in accordance with the Downtown Design Guide, a Project's building massing shall be designed to reinforce the street wall with well-scaled elements or structures that are sensitive to the neighborhood context. Further, monolithic slab-like structures that wall off views and overshadow the surrounding neighborhood are discouraged. The Project's building base would be of the same scale and size as the Million Dollar Theater, located at 307 South Broadway, one block north of the Project Site on the same block on Broadway, and would replicate the cornice

line from the Junipero Serra Building across the street. With the high-rise portion of the Project located directly on Hill Street and set back from the rear alley, the Project would create a transitional volume from the tall high rises of Bunker Hill to the low- and mid-rise structures on Broadway. Articulation of the window wall façade with transparent glass balconies would provide additional detail and human scale to the Project.

The Project's signage/way finding and architectural design would be similar to that of the existing buildings' located in the surrounding downtown area. The signage would utilize the same materials, colors, and textures found in the architecture to reinforce continuity and articulate the Project's building brand identity. The large blade signs and identity signs would be the same bronze color as the fins and mimic them in location as well. They would be internally illuminated with white L.E.D. lighting to create white lettering on the blade signs and identity signs. The signage would be placed lower on the building to effectively reduce the overall scale, creating a more welcoming experience for residents, visitors, and their guests. The remainder of the exterior signage would include 3D letters on the garage opening and above the doors to indicate address, lobby and retail, which would receive light from the architectural lighting on the building and would not be lit internally. The overall design would be simple and modern as it directs guests, visitors, and residents to the lobby entrance, retail, and parking garage.

The Project would include a three-level subterranean parking garage and an four-story parking podium. The parking podium design would comply with the Downtown Design Guide, specifically the parking and access guidelines, as well as the project design features included the City Planning Commission Advisory Notice Relative to Above-Grade Parking.[1] In compliance with the Downtown Design Guide and the Commission's Advisory Notice, the Project's parking would be integrated into the building's design and would not be visible on the ground floor of the building facades that face Hill Street and/or 4th Street. Floors five through eight would be lined by habitable floor area along Hill Street and 4th Street.

The Project would be designed and constructed to achieve Leadership in Energy and Environmental Design (LEED) v4 Building Design and Construction, Multifamily Midrise Gold standards. In response to solar heat gain from the sun, the exterior treatment of each façade would be articulated to minimize heat gain without compromising daylight and views. To the south and west portion, the building skin is proposed to have more solid panels and continuous cantilevered balconies that double as sun shade.

For these reasons, even if the Project were subject to analysis of aesthetic impacts, the Project would not conflict with applicable zoning and other regulations governing scenic quality.

[1] *City of Los Angeles Advisory Notice Relative to Above-Grade Parking, October 27, 2016.*

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

This discussion is for informational purposes only:

The Project Site is located in downtown Los Angeles and is currently developed with a restaurant and surface parking lot. The surrounding area is fully developed with low and high-density land uses and roadway and utility infrastructure, all of which produce light and glare (e.g., indoor/outdoor lighting, windows, light-colored surfaces, etc.) typical of such urban uses in the City. No protected or scenic nighttime views are available from the Project Site area, due to existing terrain, development, and lighting. The Project includes demolition and removal of the existing land uses from the Project Site and development of the site with a 31-story mixed-use building comprising 428 multi-family residential units and a maximum of 5,610 square feet of commercial land uses (leasing office/neighborhood-serving retail), and would add additional sources of light and glare at the Project Site. The ground-floor commercial uses would be constructed out of large cardinal glass panes with exterior reflectance of 27 percent and 36 percent to create a transparent interior-exterior relationship. Glass used in building facades shall minimize glare by minimizing the use of glass with mirror coatings. Consistent with applicable energy and building code requirements, including Section 140.3 of the California Energy Code as may be amended, glass with coatings required to meet the Energy Code requirements shall be permitted. Additionally, the Project would include interior and exterior building lighting, lighted signage, and street/ pedestrian pathway lighting that would comply with the Los Angeles Municipal Code (LAMC) provision that requires minimizing the effect of the new sources of lighting. Specifically, LAMC Section 91.6205 requires that new lighting sources not exceed 1 foot-candle of new light spillover at residential property lines. Consequently, no substantial changes in nighttime illumination would occur that would adversely affect nighttime views in the area and prevent spillover lighting.

Shade/Shadow

The issue of shade and shadow pertains to the blockage of direct sunlight by project buildings, which may affect adjacent properties. Shading is an important environmental issue because the users or occupants of certain land uses have some reasonable expectations for direct sunlight and warmth from the sun. These land uses are termed “shadow-sensitive.” Shadow lengths are dependent on the height and size of the building from which they are cast and the angle of the sun. The angle of the sun varies with respect to the rotation of the earth (i.e. time of day) and elliptical orbit (i.e. change in seasons). The longest shadows are cast during the winter months and the shortest shadows are cast during the summer months.

Winter and Summer Solstice

“Solstice” is defined as either of the two points on the ecliptic (i.e., the path of the earth around the sun) that lie midway between the equinoxes (separated from them by an angular distance of 90°). At the solstices, the sun’s apparent position on the celestial sphere reaches its greatest distance above or below the celestial equator, about 23 1/2° of the arc. At winter solstice, about December 22, the sun is overhead at noon at the Tropic of Capricorn; this marks the beginning

of winter in the Northern Hemisphere. At the time of summer solstice, about June 22, the sun is directly overhead at noon at the Tropic of Cancer. In the Northern Hemisphere, the longest day and shortest night of the year occur on this date, marking the beginning of summer. Measuring shadow lengths for the winter and summer solstices represents the extremes of the shadow patterns that occur throughout the year. Shadows cast on the summer solstice are the shortest shadows during the year, becoming progressively longer until winter solstice when the shadows are the longest they are all year.

Thresholds of Significance

A project impact would normally be considered significant if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 AM and 3:00 PM Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 AM and 5:00 PM Pacific Daylight Time (between early April and late October).[2]

Sensitive Uses

Sensitive uses include: routinely useable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses; commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors. These uses are considered sensitive because sunlight is important to function, physical comfort, or commerce.

Shadow-sensitive uses in the Project vicinity include the following: an outdoor patio at the Horse Thief BBQ restaurant to the north, an outdoor patio at La Cita restaurant to the north, outdoor space (planting areas and park like connections) between the various residential buildings of the hillside complex to the north, and outdoor dining areas along Broadway at the Grand Central Market to the northeast.

Shadow Analysis

Winter Solstice

Depictions of the winter shadows are provided on Figures V-1 through V-3. The shadow sweeps rapidly from 9:00 AM to 3:00 PM. As shown on Figure V-1, at 9:00 AM the shadows would be directed to the northwest and would not create shadows on any of the identified sensitive uses. As shown on Figure V-2, at noon shadows would be directed to the north and would shade the outdoor patios at the Horse Thief BBQ restaurant and La Cita restaurant, and also a portion of the outdoor residential space at the complex to the north. As shown on Figure V-3, by 3:00 PM the outdoor residential space at the complex to the north would no longer be shaded. However, the outdoor patios at the Horse Thief BBQ restaurant and La Cita restaurant would still be shaded.

[2] *As discussed previously, due to SB 743 and Zoning Information File No. 2452, the Project's aesthetics impacts, including those related to shade/shadow, as a matter of law deemed not significant. This threshold of significance is included here for informational purposes only.*

Figure V-1
Winter Solstice Shadows 9 AM

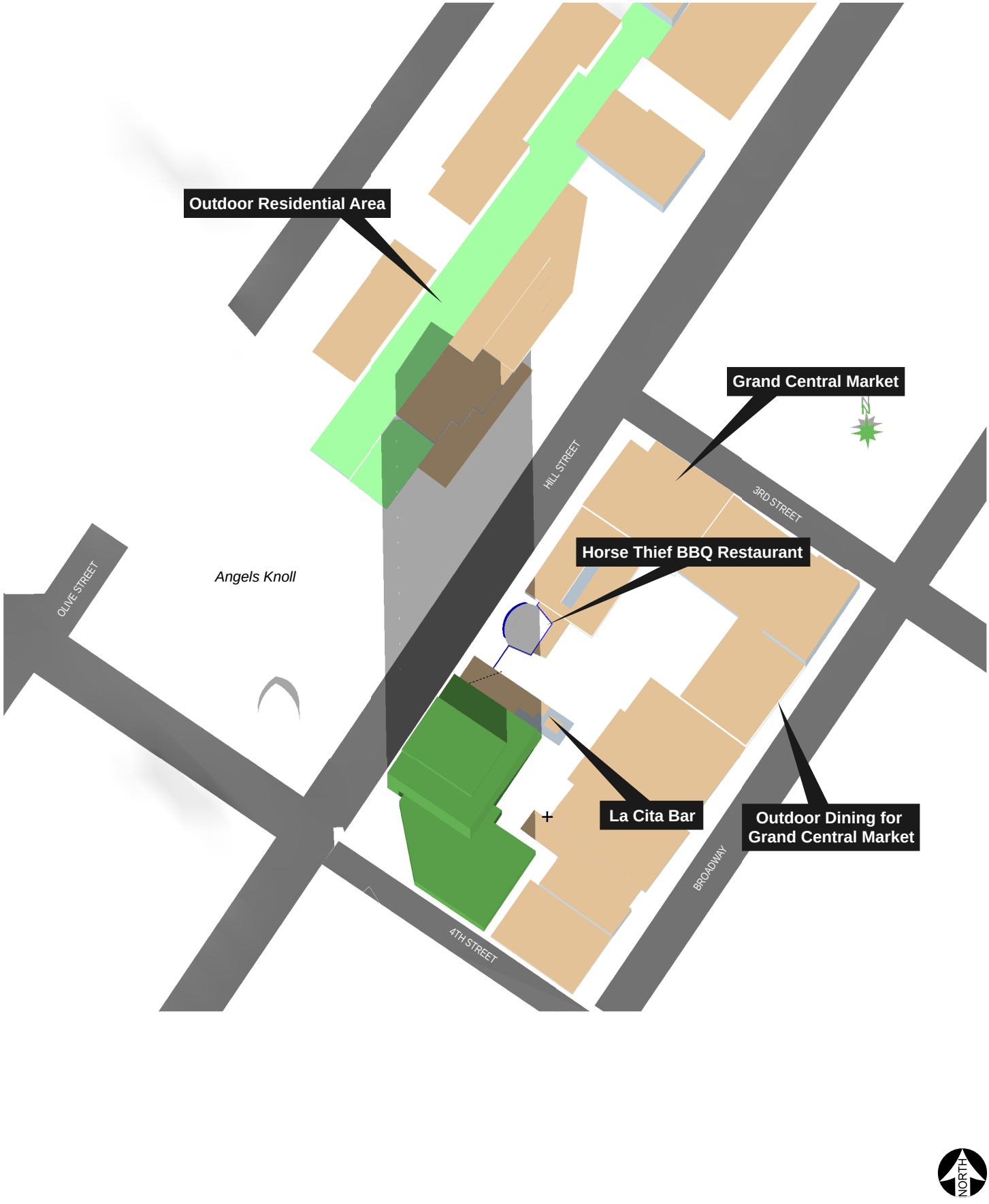

Figure V-2
Winter Solstice Shadows 12 PM

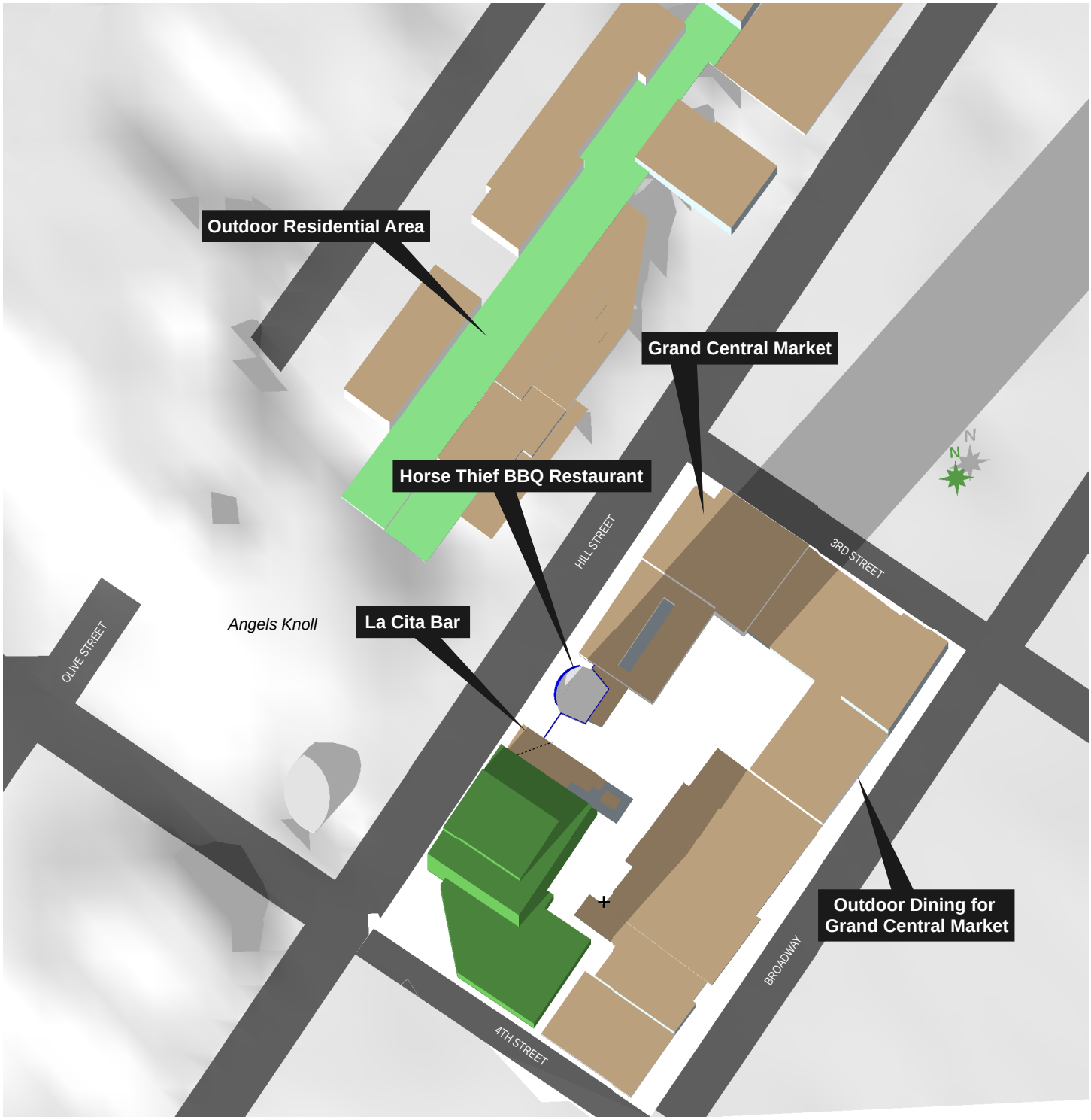

Figure V-3
Winter Solstice Shadows 3 PM

Thus, the Project would shade portions of the Horse Thief BBQ restaurant patio for more than 3 hours during the winter, although this patio area does currently have some level of shade provided by large trees and umbrellas. The Project would also shade portions of the La Cita restaurant patio for more than 3 hours during the winter, although according to the restaurant's website, the patio does not open until 4:00 PM.

Summer Solstice

Depictions of the summer shadows are provided on Figures V-4 through V-6. As shown in these figures, the shadow sweeps rapidly from 8:00 AM (9:00 AM PDT) to 4:00 PM (5:00 PM PDT). There are no shadow sensitive uses within the shadow arc, with the exception of a small portion of the outdoor dining area at the Grand Central Market on Broadway at 4:00 PM (5:00 PM PDT). Therefore, the Project would not create a shadow for more than 4 hours during the summer on a sensitive receptor.

Cumulative Impacts

The geographic context for the analysis of cumulative impacts related to visual character of the surrounding area and its aesthetic image would include the cumulative development projects located within view of the Project Site. Projects located in such a position that they would not be visible from the Project Site or to which the Project would not be visible will not normally have a potential to combine with the Project to create a cumulative impact on visual character. Similarly, the geographic context for the analysis of cumulative impacts related to shade and shadows, and light and glare, would include the cumulative development projects located in such a position so as to create shading or potential light and glare impacts of the same properties as the Project.

As previously stated in Section II (Project Description), there are 172 related projects within 1.5 miles of the Project Site. Most of these related projects would not be visible from the Project following development due to both distance and intervening structures. No scenic vistas are available from the Project Site area and as such, development of related projects in the vicinity of the Project Site would not result in any cumulative impacts related to scenic vistas. The degree to which each of the related project sites contain scenic resources that could be affected by the related projects would be considered by the City on a case-by-case basis. The Project Site does not contain any scenic resources that are shared by or common to any of the related project sites. Related projects within the Project Site area would be required to undergo review and approval by the Department of City Planning to ensure compliance with the Downtown Design Guide, which would ensure continuity of these projects with the visual character standards the City has established for Downtown development. Further, related projects near the Project Site are located in a transit-priority area for which impacts related to aesthetics are not considered significant. Thus, cumulative impacts related to scenic vistas, scenic resources, and visual character would not be considered significant.

Figure V-4
Summer Solstice Shadows 8 AM (9 AM PDT)

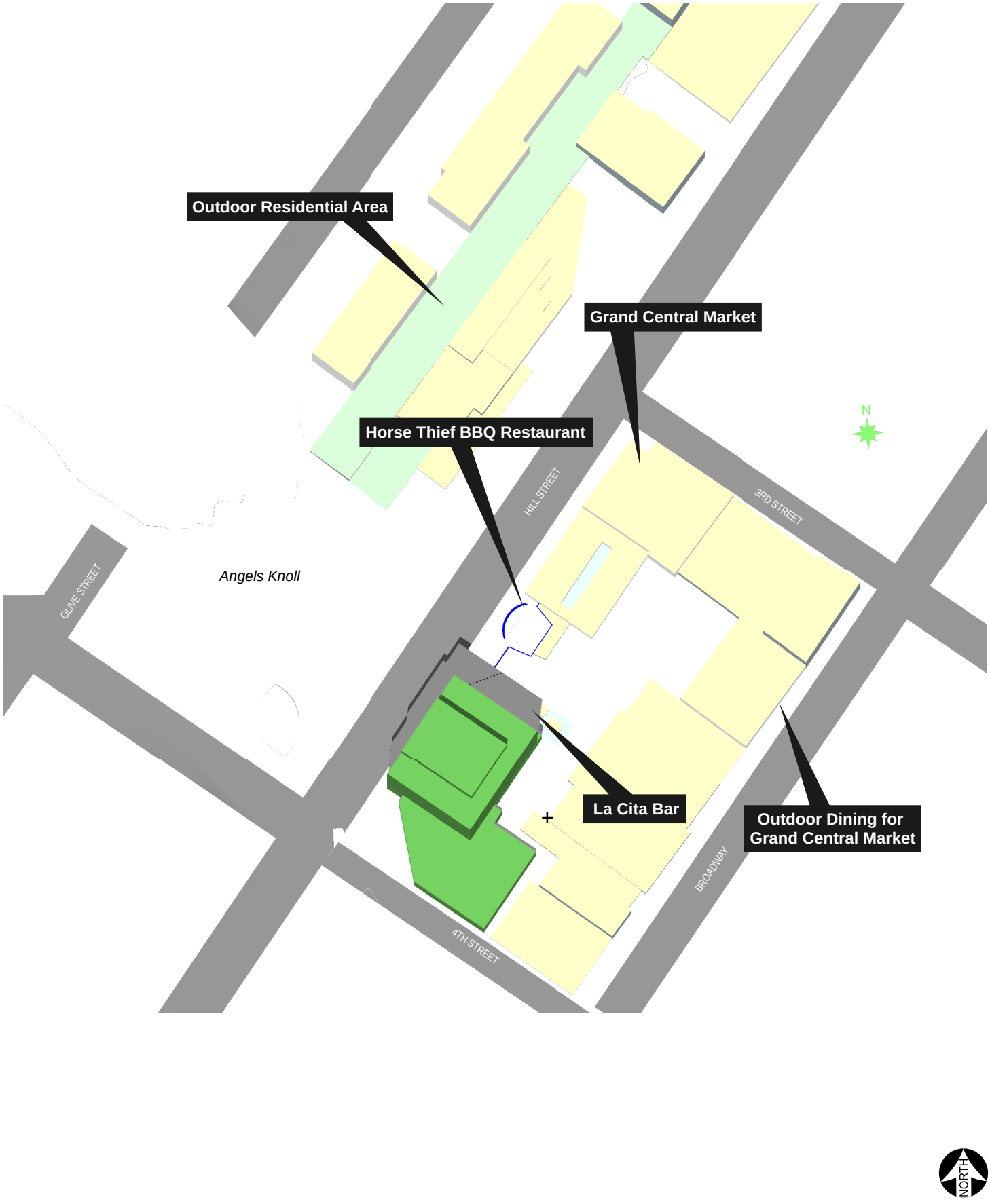

Figure V-5
Summer Solstice Shadows 12 PM (1 PM PDT)

Figure V-6
Summer Solstice Shadows 4 PM (5 PM PDT)

As it relates to light and glare, development of the Project in combination with the related projects would result in an intensification of land uses in an already urbanized area of the City that currently maintains an elevated level of ambient light and glare. Due to its scale in relation to existing development in the area, light generated from the interior of the Project could potentially be seen from more distant areas around the Project Site. As such, the Project and related projects would contribute to increased ambient light levels within the surrounding area. However, as discussed above, this is a heavily urbanized area and the presence of additional nighttime illumination resulting from the Proposed and related projects would not represent a significant, adverse alteration to the existing nighttime visual environment. Additionally, the potential increase in nighttime light resulting from the Project would not be bright enough to substantially affect nearby sensitive uses.

Lastly, none of the related projects would be located close enough to the Project to result in shading of the same off-site areas as the Project. Additionally, most of these related projects would not be visible from the Project following development due to both distance and intervening structures.

2. AGRICULTURE AND FORESTRY RESOURCES

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

No Impact. The Extent of Important Farmland Map Coverage maintained by the Division of Land Protection indicates that the Project Site is not included in the Important Farmland category.[3] Therefore, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. No impacts would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract?

No Impact. The Project Site is zoned C2-4D and located in the Central City Community Plan area. The General Plan land use designated for the Project Site is Regional Center Commercial. The Project Site is not zoned for agricultural use, and the site is not under a Williamson Act Contract.[4] Therefore, the Project would not conflict with existing zoning for agricultural use, or a Williamson Act Contract, and no impacts would occur.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public

[3] *State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Los Angeles County Important Farmland, 1998.*

[4] *Ibid.*

Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 [g])?

No Impact. The Project Site is located in an urbanized area of the City and is developed with a surface parking lot and an 850-square-foot restaurant. The Project Site does not include any forest or timberland and is not zoned as forest land or timberland. Therefore, no impacts related to this issue would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project Site is located in a developed area of the City and does not contain any forest land. Additionally, forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."[5] Timberland is defined as "land…which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees."[6] There are 29 trees located on the Project Site and along the public right of way parkway, none of the trees or the level of tree cover are within the definitions of forest land or timberland. Therefore, no impacts related to this issue would occur.

e) Would the project involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

No Impact. The Project Site and surrounding area are developed with urban land uses. The Project Site is currently developed with a surface parking lot and an 850-square-foot restaurant. No agricultural uses are located on the Project Site or within the area. Therefore, no impacts related to this issue would occur.

Cumulative Impacts

Neither the Project Site nor any of the related projects' sites are used or designated as agricultural land or forest land. Therefore, no cumulative impacts related to agricultural resources would occur.

3. AIR QUALITY

Introduction

Pollutants and Effects

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. The federal and state

[5] *California Public Resources Code Section 1222 [g].*

[6] *California Public Resources Code Section 4526.*

standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), particulate matter ten microns or less in diameter (PM_{10}), and lead (Pb). These pollutants are discussed below.

- Carbon Monoxide (CO) is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. It is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of emissions. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient concentrations generally follow the spatial and temporal distributions of vehicular traffic. Concentrations are influenced by local meteorological conditions, primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. Inversions are an atmospheric condition in which a layer of warm air traps cooler air near the surface of the earth, preventing the normal rising of surface air. The highest concentrations occur during the colder months of the year when inversion conditions are more frequent. CO is a health concern, because it competes with oxygen, often replacing it in the blood and reducing the blood's ability to transport oxygen to vital organs. Excess CO exposure can lead to dizziness, fatigue, and impair central nervous system functions.

- Ozone (O_3) is a colorless gas that is formed in the atmosphere when volatile organic compounds (VOC) and nitrogen oxides (NO_X) react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; rather, it is a secondary pollutant formed by complex interactions of these two pollutants directly emitted into the atmosphere. The primary sources of VOC and NO_X, the components of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation. Ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. The greatest source of smog-producing gases is the automobile. Short-term exposure (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.

- Nitrogen Dioxide (NO_2), similar to O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. NO_2 also contributes to the formation of PM_{10}. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2-3 years old) has been observed at concentrations below 0.3 parts per million (ppm).

- Sulfur Dioxide (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Main sources of SO_2 are coal and oil used in power plants and industries. Generally, the highest levels of SO_2 are found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

- Particulate Matter (PM) consists of small liquid and solid particles floating in the air, including smoke, soot, dust, salts, acids, and metals and can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair and results from fuel combustion (e.g., motor vehicles, power generation, industrial facilities, etc.), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as SO_2, NO_X, and VOC. Inhalable particulate matter, or PM_{10}, is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

  $PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, they can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as Pb, sulfates, and nitrates can cause lung damage directly. These substances can be absorbed into the blood stream and cause damage elsewhere in the body. These substances can transport absorbed gases, such as chlorides or ammonium, into the lungs and cause injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

- Lead (Pb) in the atmosphere occurs as particulate matter. Sources of Pb include leaded gasoline; the manufacturers of batteries, paint, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities have become emission sources of greater concern.

  Prolonged exposure to atmospheric Pb poses a serious threat to human health. Health effects associated with exposure to Pb include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of

particular concern are low-level Pb exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

- Toxic Air Contaminants (TAC) are airborne pollutants that may increase a person's risk of developing cancer or other serious health effects. TACs include over 700 chemical compounds that are identified by State and federal agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process established in 1983 that includes risk identification and risk management.

Regulatory Setting

Federal

United States Environmental Protection Agency (USEPA). The USEPA is responsible for enforcing the Federal Clean Air Act (CAA), the legislation that governs air quality in the United States. USEPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS). The NAAQS are required under the 1977 CAA and subsequent amendments. USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. It has jurisdiction over emission sources outside State waters (e.g., beyond the outer continental shelf) and establishes emission standards, including those for vehicles sold in States other than California, where automobiles must meet stricter emission standards set by the State.

As required by the CAA, the NAAQS have been established for seven major air pollutants: CO, NO_2, O_3, $PM_{2.5}$, PM_{10}, SO_2, and Pb. The CAA requires USEPA to designate areas as attainment, nonattainment, or maintenance for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized on Table V-1. The USEPA has classified the Los Angeles County portion of the South Coast Air Basin as nonattainment for O_3 and $PM_{2.5}$, attainment for PM_{10}, and attainment/unclassified for CO and NO_2.

State

California Air Resources Board

In addition to being subject to the requirements of the CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). The California Air Resources Board (CARB) became part of the California Environmental Protection Agency in 1991 and is responsible for administering the CCAA and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the State to achieve and maintain the CAAQS, which are generally more stringent than the federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB has broad authority to regulate mobile air pollution sources, such as motor vehicles. It is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established

passenger vehicle fuel specifications, which became effective in March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The State standards are summarized on Table V-1.

Table V-1
State and National Ambient Air Quality Standards and Attainment Status for the South Coast Air Basin

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m^3)	Non-attainment	--	--
	8-hour	0.070 ppm (137 µg/m^3)	N/A[1]	0.070 ppm (137 µg/m^3)	Non-attainment
Respirable Particulate Matter (PM_{10})	24-hour	50 µg/m^3	Non-attainment	150 µg/m^3	Attainment
	Annual Arithmetic Mean	20 µg/m^3	Non-attainment	--	--
Fine Particulate Matter ($PM_{2.5}$)	24-hour	--	--	35 µg/m^3	Non-attainment
	Annual Arithmetic Mean	12 µg/m^3	Non-attainment	12 µg/m^3	Non-attainment
Carbon Monoxide (CO)	8-hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Unclassified/ Attainment
	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Unclassified/ Attainment
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Attainment	53 ppb (100 µg/m^3)	Unclassified/ Attainment
	1-hour	0.18 ppm (338 µg/m^3)	Attainment	100 ppb (188 µg/m^3)	Unclassified/ Attainment
Sulfur Dioxide (SO_2)	24-hour	0.04 ppm (105 µg/m^3)	Attainment	--	Attainment
	1-hour	0.25 ppm (655 µg/m^3)	Attainment	75 ppb (196 µg/m^3)	Attainment
Lead (Pb)	30-day average	1.5 µg/m^3	Attainment	--	--
	Calendar Quarter	--	--	0.15 µg/m^3	Non-attainment

[1]N/A = CARB has not determined 8-hour O_3 attainment status
Source: CARB, Ambient Air Quality Standards, and attainment status, accessed August 5, 2019. (www.arb.ca.gov/desig/adm/adm.htm).

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a State standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as nonattainment.

Local

South Coast Air Quality Management District

The 1977 Lewis Air Quality Management Act merged four air pollution control districts to create the South Coast Air Quality Management District (SCAQMD) to coordinate air quality planning efforts throughout Southern California. It is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain State and federal ambient air quality standards. Programs include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

SCAQMD monitors air quality over its jurisdiction of 10,743 square miles, including the South Coast Air Basin, which covers 6,745 square miles and is bounded by the Pacific Ocean to the west, the San Gabriel, San Bernardino and San Jacinto mountains to the north and east, and San Diego County to the south. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. SCAQMD also regulates the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin.

All areas designated as nonattainment under the CCAA are required to prepare plans showing how they will meet the air quality standards. SCAQMD regularly prepares an Air Quality Management Plan (AQMP) to address the CAA and CCAA requirements by identifying policies and control measures. On March 3, 2017, SCAQMD approved the 2016 AQMP, which includes strategies to meet the NAAQS for the 8-hour ozone standard by 2032, the annual $PM_{2.5}$ standard by 2021-2025, the 1-hour ozone standard by 2023, and the 24-hour $PM_{2.5}$ standard by 2019. In its role as the local air quality regulatory agency, the SCAQMD also provides guidance on how environmental analyses should be prepared. This includes recommended thresholds of significance for evaluating air quality impacts.

The Southern California Association of Governments (SCAG) assists in air quality planning efforts by preparing the transportation portion of the AQMP through the adoption of its Regional Transportation Plan (RTP). This includes the preparation of a Sustainable Communities Strategy (SCS) that responds to planning requirements of SB 375 and demonstrates the region's ability to attain greenhouse gas reduction targets set forth in State law. In April 2016, SCAG adopted its 2016-2040 RTP/SCS, a plan to invest $556.5 billion in transportation systems over a six-county region.

City of Los Angeles

Local jurisdictions, such as the City, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air 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 of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

Air Pollution Climatology

The Project Site is located within the Los Angeles County non-desert portion of the South Coast Air Basin, which is in an area of high air pollution potential due to its climate and topography. The region lies in the semi-permanent high pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The South Coast Air Basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The South Coast Air Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of its perimeter. The mountains and hills within the area contribute to the variation of rainfall, temperature, and winds throughout the region.

The South Coast Air Basin experiences frequent temperature inversions that help to form smog. While temperature typically decreases with height, it actually increases under inversion conditions as altitude increases, thereby preventing air close to the ground from mixing with the air above. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere. This interaction creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and NO_2 react under strong sunlight, creating smog. Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland toward the mountains.

Air quality problems also occur during the fall and winter, when CO and NO_2 emissions tend to be higher. CO concentrations are generally worse in the morning and late evening (around 10:00 p.m.) when temperatures are cooler. High CO levels during the late evenings result from stagnant atmospheric conditions trapping CO. Since CO emissions are produced almost entirely from automobiles; the highest CO concentrations in the Basin are associated with heavy traffic. NO_2 concentrations are also generally higher during fall and winter days.

Air Monitoring Data

SCAQMD monitors air quality conditions at 38 locations throughout the South Coast Air Basin. The Project Site is located SCAQMD's Central Los Angeles receptor area. Historical data from the area was used to characterize existing conditions in the vicinity of the Project Site area. Table V-2 shows pollutant levels, State and federal standards, and the number of exceedances recorded in the area from 2015 through 2017. The one-hour State standard and 8-hour federal standard for O_3 was exceeded 10 times and 18 times, respectively, during this three-year period. The daily State standard for PM_{10} was exceeded 85 times while the daily federal standard for $PM_{2.5}$ was exceeded 14 times. CO and NO_2 levels did not exceed the CAAQS from 2015 to 2017 for 1-hour (and 8-hour for CO).

Table V-2
2015-2017 Ambient Air Quality Data in the Project Site Vicinity

Pollutant	Pollutant Concentration & Standards	Central Los Angeles		
		2015	2016	2017
Ozone	Maximum 1-hour Concentration (ppm)	0.104	0.103	0.116
	Days > 0.09 ppm (State 1-hour standard)	2	2	6
	Days > 0.075 ppm (Federal 8-hour standard)	0	4	14
Carbon Monoxide	Maximum 1-hour Concentration (ppm)	3.2	1.9	1.9
	Days > 20 ppm (State 1-hour standard)	0	0	0
	Maximum 8-hour Concentration (ppm)	1.8	1.4	1.6
	Days > 9.0 ppm (State 8-hour standard)	0	0	0
Nitrogen Dioxide	Maximum 1-hour Concentration (ppb)	0.0791	0.0647	0.0806
	Days > 0.18 ppm (State 1-hour standard)	0	0	0
PM_{10}	Maximum 24-hour Concentration ($\mu g/m^3$)	88	67	96
	Days > 50 $\mu g/m^3$ (State 24-hour standard)	26	18	41
$PM_{2.5}$	Maximum 24-hour Concentration ($\mu g/m^3$)	56.4	44.4	49.2
	Days > 35 $\mu g/m^3$ (Federal 24-hour standard)	7	2	5
Sulfur Dioxide	Maximum 24-hour Concentration (ppb)	12.6	13.4	5.7
	Days > 0.04 ppm (State 24-hour standard)	0	0	0

Source: SCAQMD annual monitoring data (www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year) accessed June 14, 2019.

Existing Emissions

The Project Site includes an 850-square-foot restaurant with a surface parking lot. Emissions associated with existing land uses on the Project Site are shown on Table V-3.

Table V-3
Estimated Existing Daily Emissions at the Project Site

Emission Source	Pounds per Day					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	<1	<1	<1	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	<1	<1	2	<1	<1	<1
Total Operations	**<1**	**<1**	**2**	**<1**	**<1**	**<1**

Source: DKA Planning, 2019. Based on CalEEMod 2016.3.2 model runs. Refer to Appendix E.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following typical groups who are most likely to be affected by air pollution: children under 14; the elderly over 65 years of age; athletes; and people with cardiovascular and chronic respiratory diseases. According to SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

Sensitive receptors as defined by CARB in the vicinity of the Project Site include the following:

- Grand Central Apartments (306 West 3rd Street), a multi-story residential building about 165 feet northeast of the Project Site at approximately the same elevation.
- Metro 417 Apartments (417 South Hill Street), a multi-story apartment building about 270 feet west of the Project Site.
- South Spring Street Residences (408 South Spring Street), a multi-story multi-use building about 640 feet southeast of the Project Site.
- Angelus Plaza Retirement Community (255 South Hill Street), a multi-story retirement facility about 360 feet north of the Project Site, approximately 75 feet higher than the ground level of the Project Site.

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

No Impact. The Project would not conflict with SCAQMD's 2016 AQMP, nor jeopardize the region's attainment of air quality standards. The regional ozone attainment plan centers on accommodating population growth forecasts by SCAG. Specifically, SCAG's growth forecasts from the 2016-2040 RTP/SCS are largely built off local growth forecasts from local governments like the City. The 2016-2040 RTP/SCS accommodates up to 4,609,400 persons; 1,690,300 households; and 2,169,100 jobs in the City by 2040.

As discussed in more detail in response to Checklist Question 14 a) (Population and Housing), as shown on Table V-40 later in this section, the Project would represent a small percent of the estimated population and housing growth in the City. The Project's residents and housing units would be within the forecasted population and housing SCAG and City estimates. Additionally, the Project would help achieve a portion of the household growth forecast for the City by adding housing to meet the need for housing identified in the City's Regional Housing Needs Assessment, while also being consistent with regional policies to reduce urban sprawl, efficiently utilize existing infrastructure, reduce regional congestion, and improve air quality through the reduction of vehicle miles traveled (VMT), as called for in SCAG's 2016-2040 RTP/SCS and SCAQMD's AQMP. Thus, the Project would not induce housing growth beyond forecasted levels. Instead, the Project would accommodate a portion of forecasted housing demand currently

forecasted for the City, including low-income housing. Thus, the Project would not represent a substantial or significant growth as compared to projected growth.

As such, the Project is consistent with the growth assumptions in the regional air plan. Thus, the Project would be consistent with SCAQMD's AQMP. Therefore, the Project would not result in any impacts on the SCAQMD's implementation of the AQMP.

b) 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?

Less Than Significant With Mitigation Incorporated. The Project's grading and construction would result in short-term air pollutant emissions associated with construction worker vehicle trips, haul truck trips, stationary source emissions, and site grading. In addition, operational activities associated with the Project would generate long-term air pollutant emissions.

Project-Specific Construction Impacts

Construction-related emissions for the Project were estimated using SCAQMD's CalEEMod 2016.3.1 model using assumptions from the Project's developer, including the Project's construction schedule of approximately 29 months. Table V-4 summarizes the Project's approximate construction schedule that was modeled to assess air quality impacts.

Table V-4
Approximate Project Construction Schedule

Phase	Approximate Duration	Notes
Demolition	7 days	Debris from 1,000 cubic yards of development and asphalt hauled off-site.
Site Preparation	15 days	
Grading	32 days	48,000 cubic yards of soil export and 5,000 cubic yards of soil import, phased to minimize haul truck activity. Material hauled 21 miles to Puente Hills Materials Recovery Facility.
Building Construction	578 days	
Architectural Coatings	306 days	

Note: The Building Construction phase and Architectural Coatings phase would overlap.
Source: DKA Planning, 2017

Regional Emissions

As shown on Table V-5 the construction of the Project would not produce VOC, CO, SO_X, PM_{10} and $PM_{2.5}$ emissions in excess of SCAQMD's regional thresholds. However, NO_X emissions from off-road construction equipment would exceed the daily thresholds for this O_3 precursor pollutant. Without mitigation, construction of the Project could contribute substantially to an existing violation of air quality standards for regional pollutants (e.g., ozone). However, implementation of

Mitigation Measure AQ-1 (listed as the end of this section) would reduce the regional NO_x emissions to below SCAQMD's significance threshold (refer to Table V-7, included at the end of this section). Therefore, Project impacts related to regional construction emissions would be less than significant.

Table V-5
Estimated Daily Construction Emissions - Unmitigated

Construction Phase Year	Pounds Per Day					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2021	12	85	108	<1	11	6
2022	27	126	167	<1	15	8
2023	25	116	164	<1	14	8
Maximum Regional Total	**27**	**126**	**167**	**<1**	**15**	**8**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	No	Yes	No	No	No	No
Maximum Localized Total	**32**	**115**	**139**	**<1**	**7**	**5**
Localized Significance Threshold	**--**	**74**	**680**	**--**	**5**	**3**
Exceed Threshold?	N/A	Yes	No	N/A	Yes	Yes

Source: DKA Planning, 2019, based on CalEEMod 2016.3.2 model runs. LST analyses based on 1-acre site with 25-meter distances to receptors in Central LA source receptor area.

Localized Emissions

In terms of localized emissions, the Project would not produce emissions in excess of SCAQMD's recommended localized standards of significance for CO during the construction phase. However, construction activities could produce NO_2, PM_{10} and $PM_{2.5}$ emissions that exceed localized thresholds recommended by the SCAQMD, primarily from vehicle exhaust and fugitive dust emissions from off-road construction vehicles. However, implementation of Mitigation Measure AQ-1 (listed at the end of this section) would reduce the localized NO_2, PM_{10} and $PM_{2.5}$ emissions to below SCAQMD's significance thresholds (refer to Table V-5 included at the end of this section). Therefore, Project impacts related to localized construction emissions would be less than significant.

Project-Specific Operational Impacts

Regional Emissions

The Project would produce long-term emissions, primarily from motor vehicles associated with the Project. The Project could add up to 2,277 net daily vehicle trips to and from the Project Site on a peak weekday at the start of operations in 2023.[7] However, as shown on Table V-6, the Project's operational emissions would not exceed SCAQMD's regional significance thresholds for

[7] *IBI Group, 340 South Hill Street Project Traffic Study, June 2017.*

VOC, NO_X, CO, PM_{10} and $PM_{2.5}$ emissions. Therefore, Project impacts related to regional operational emissions would be less than significant.

Table V-6
Estimated Daily Project Operations Emissions

Emission Source	Pounds per Day					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	9	<1	35	<1	<1	<1
Energy Sources[1]	<1	1	1	<1	<1	<1
Mobile Sources	4	16	51	<1	16	5
Total Operations	13	17	88	<1	17	5
Existing Operations	-<1	-<1	-1	-<1	-<1	-<1
Net Regional Total	**13**	**17**	**86**	**<1**	**17**	**5**
Regional Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceed Threshold?	No	No	No	No	No	No
Net Localized Total	**9**	**1**	**35**	**<1**	**<1**	**<1**
Localized Significance Threshold	**--**	**74**	**680**	**--**	**2**	**1**
Exceed Threshold?	N/A	No	No	N/A	No	No

[1] *The energy emissions identified here are only for on-site consumption of natural gas in water and space heating and cooking appliances, and that emissions related to use of electrical energy are not included here, because they are generated at the electrical generation source, rather than on-site.*

Note: Numbers may not add up due to rounding.

Source: DKA Planning, 2019, based on CalEEMod 2016.3.2 model runs. LST analysis based on 1-acre site with 25-meter distances to receptors in Central LA source receptor area.

With regard to localized emissions, as shown on Table V-6, the Project's localized emissions would not approach SCAQMD's localized significance thresholds that signal when there could be human health impacts at nearby sensitive receptors during long-term operations. Therefore, Project impacts related to localized operational emissions would be less than significant.

Cumulative Impacts

SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds identified above also be considered cumulatively considerable.[8] Individual projects that generate emissions not in excess of SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. The SCAQMD neither recommends quantified 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.

[8] *White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions, SCAQMD Board Meeting, September 5, 2003, Agenda No. 29, Appendix D, p. D-3.*

As discussed previously, with implementation of Mitigation Measure AQ-1, the Project would not result in construction emissions in excess of SCAQMD's significance thresholds. Also, the Project would not produce operational pollutant emissions in excess of SCAQMD's significance thresholds. As such, the Project's contribution to cumulative pollutant emissions would not be considerable.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant With Mitigation Incorporated. As discussed below, with implementation of Mitigation Measure AQ-1, Project impacts related to sensitive receptors would be less than significant.

Construction

As discussed previously, sensitive receptors in the vicinity of the Project Site include the following:

- Grand Central Apartments (306 West 3rd Street), a multi-story residential building about 165 feet northeast of the Project Site at approximately the same elevation.
- Metro 417 Apartments (417 South Hill Street), a multi-story apartment building about 270 feet west of the Project Site.
- South Spring Street Residences (408 South Spring Street), a multi-story multi-use building about 640 feet southeast of the Project Site.
- Angelus Plaza Retirement Community (255 South Hill Street), a multi-story retirement facility about 360 feet north of the Project Site, approximately 75 feet higher than the ground level of the Project Site.

As discussed in response to Checklist Question 3(b), with implementation of Mitigation Measure AQ-1, the Project would not result in construction emissions in excess of SCAQMD's significance thresholds.

Operation

Also, the Project would only marginally increase on-site emissions of localize pollutants from area sources (e.g., fireplaces, landscaping equipment) and energy sources (e.g., natural gas combustion). These emissions sources would generate about 1.9 pounds/day of NO_2, 36 pounds/day of CO, 0.3 pounds/day of PM_{10} and 0.3 pounds/day of $PM_{2.5}$ emissions that are substantially lower than the SCAQMD's LST thresholds and would not result in localized impacts at the locations of the sensitive receptors (refer to Table V-6). While long-term operation of the Project would generate traffic that produces off-site emissions, these emissions would not result in exceedances of CO air quality standards at roadways in the area due to three key factors. First, CO hotspots are extremely rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to this Project Site area. Second, auto-related emissions of CO continue to decline because of advances in fuel combustion technology

in the vehicle fleet. Finally, the Project would not contribute to the levels of congestion that would be needed to produce the amount of emissions needed to trigger a potential CO hotspot. Screening analysis guidelines for localized CO hotspot analyses from Caltrans recommend that projects in CO attainment areas focus on emissions from traffic intersections where air quality may get worse.[9] Specifically, projects that significantly increase the percentage of vehicles operating in cold start mode, significantly increase traffic volumes, or worsen traffic flow should be considered for more rigorous CO modeling. Traffic levels of service at the ten intersections studied in the vicinity of the Project would not be significantly impacted by traffic volumes from the development under existing or 2023 horizon scenarios, following implementation of congestion relief mitigation measures.[10] The Project would not significantly increase the percentage of vehicles operating in cold start mode or substantially worsen traffic flow.

With regard to TAC emissions on-site, the Project would not include typical sources of acutely and chronically hazardous TACs such as industrial manufacturing processes or automotive servicing facilities. As a result, the Project would not create substantial concentrations of TACs during its normal operation. The SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulate emissions (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[11] However, the uses proposed within the Project would not generate a substantial number of truck trips. In addition, the CARB-mandated regulations limit diesel-fueled commercial vehicles to idle no more than five minutes at any given time, further limiting diesel particulate emissions.

For these reasons, the Project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, Project impacts related to this issue would be less than significant.

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

Less Than Significant Impact. Potential sources that may emit odors during construction activities include equipment exhaust and architectural coatings. Odors from these sources would be localized and generally confined to the immediate area surrounding the Project Site. The Project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Construction of the Project would not cause an odor nuisance.

According to the SCAQMD CEQA Air Quality Handbook, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass

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[9] *Caltrans, Transportation Project-Level Carbon Monoxide Protocol, updated October 13, 2010.*

[10] *IBI Group, 340 South Hill Street Project Traffic Study; June 2017.*

[11] *SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.*

molding. The proposed land uses would not result in activities that create objectionable odors. Therefore, Project impacts related to odors would be less than significant.

Mitigation Measures (Air Quality)

To ensure that the Project's construction-related regional emissions impacts would be less than significant, the mitigation measure listed below is required (refer to Table V-7). Mitigation Measure AQ-1 requires the use of construction equipment that meets EPA Tier 4 standards for 50 horsepower engines and above. Tier 4-certified engines have been phased-in nationwide since 2008 for all engine types. Today, all off-road engines are required to be manufactured to meet these standards using available technologies that reduce NO_x and particulate emissions by 99 percent from pre-1996 standards. The Project construction contractor would be required to ensure that newer construction equipment is used that uses engines certified to Tier 4 standards, by providing the Department of Building and Safety certified tier specifications for construction equipment. Tier 4 equipment is commercially-available product from multiple manufacturers. Mitigation Measure AQ-1 is technologically feasible. As illustrated on Table V-7, Mitigation Measure AQ-1 would effectively reduce the NO_x and particulate emissions associated with the Project's construction phase and would contribute toward reducing the estimated emissions to below SCAQMD's significance thresholds.

Table V-7
Estimated Daily Construction Emissions - Mitigated

Construction Phase Year	Pounds Per Day					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2018	5	67	117	<1	6	3
2019	16	47	177	<1	6	2
2020	15	45	174	<1	6	2
Maximum Regional Total	**16**	**37**	**177**	**<1**	**6**	**3**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	No	No	No	No	No	No
Maximum Localized Total	**10**	**21**	**89**	**<1**	**3**	**2**
Localized Significance Threshold	**--**	**74**	**680**	**--**	**5**	**3**
Exceed Threshold?	N/A	No	No	N/A	Yes	Yes

Source: DKA Planning, 2017 based on CalEEMod 2016.3.1 model runs. LST analyses based on 1-acre site with 25-meter distances to receptors in Central LA source receptor area. Refer to Appendix E.

MM-AQ-1: All off-road construction equipment greater than 50 hp shall meet USEPA Tier 4 emission standards to reduce NO_x, PM_{10}, and $PM_{2.5}$ emissions at the Project Site. In addition, all construction equipment shall be outfitted with Best Available Control Technology devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. At the time of mobilization of each applicable unit of equipment, a copy of each unit's certified tier specification, BACT

documentation, and CARB or SCAQMD operating permit shall be provided to the Department of Building and Safety.

Cumulative Impacts

As discussed in response to Checklist Question 3(b), with mitigation, the Project would generate emissions below SCAQMD's significance thresholds. As such, the Project would not contribute considerably to any potential cumulative impact. Therefore, cumulative impacts related to air quality would be less than significant.

4. BIOLOGICAL RESOURCES

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

Less Than Significant Impact. The Project Site is located in an urbanized and developed area of the City. The site is developed with an 850-square-foot restaurant and surface parking lot and does not support any sensitive species. However, the Project Site contains 29 trees that would be removed as part of the Project (refer to the Street Tree Report in Appendix D). These trees could potentially provide nesting sites for migratory birds. Thus, the Project would be required to comply with the Migratory Bird Treaty Act (MBTA) (Title 33, United States Code, Section 703 et seq., see also Title 50, Code of Federal Regulation, Part 10) and Section 3503 of the California Department of Fish and Wildlife Code, which requires the following to ensure that significant impacts to migratory birds would not occur.

- Conduct vegetation removal associated with construction from September 1st through January 31st, when birds are not nesting. Initiate grading activities prior to the breeding season (which is generally February 1st through August 31st) and keep disturbance activities constant throughout the breeding season to prevent birds from establishing nests in surrounding habitat (in order to avoid possible nest abandonment); if there is a lapse in activities of more than five days, pre-construction surveys shall be necessary as described in the bullet below.

  OR…

- Conduct pre-construction surveys for nesting birds if vegetation removal or grading is initiated during the nesting season. A qualified wildlife biologist shall conduct weekly pre-construction bird surveys no more than 30 days prior to initiation of grading to provide confirmation on the presence or absence of active nests in the vicinity (at least 300 to 500 feet around the individual construction site, as access allows). The last survey should be conducted no more than three days prior to the initiation of clearance/construction work. If active nests are encountered, clearing and construction in the vicinity of the nests shall be deferred until the young birds have fledged and there is no evidence of a second attempt at nesting. A minimum buffer of 300 feet (500 feet for raptor nests) or as determined by a qualified biologist shall be

maintained during construction depending on the species and location. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel and activities restricted from the area. Construction personnel should be instructed on the sensitivity of the area. A survey report by the qualified biologist documenting and verifying compliance with the mitigation and with applicable state and federal regulations protecting birds shall be submitted to the City and County, depending on within which jurisdiction the construction activity is occurring. The qualified biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas to ensure that no inadvertent impacts on these nests would occur.

Compliance with these existing regulations would ensure impacts would be less than significant.

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

No Impact. The Project Site is located in an urbanized area of the City and developed with a surface parking lot and an 850-square-foot restaurant. The Project Site does not contain any riparian habitat or sensitive natural community. Development of the Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. Therefore, no impacts related to this issue would occur.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The Project Site is located in an urbanized area of the City. The site is developed with a surface parking lot and an 850-square-foot restaurant and does not contain any wetlands or other areas subject to the jurisdiction of the US Army Corps of Engineers, California Department of Fish and Wildlife, or State Water Resources Control Board under the Clean Water Act. Therefore, no impacts related to this issue would occur.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. The Project Site is located in an urbanized area of the City and is surrounded by existing development. The site is developed with a surface parking lot and an 850 square foot restaurant and is not part of a significant wildlife corridor. Additionally, there are no waterways located in the Project area that are used by migratory fish, and there are no wildlife nursery sites in the area. Also, as discussed previously, the Project would be required to comply with the MBTA, to reduce potential impacts to migratory bird species. Therefore, with the adherence to the MBTA regulations described previously, the Project would not interfere substantially with the movement of any native resident or migratory fish, wildlife species, or with

established native resident or migratory wildlife corridors, and/or impede the use of native wildlife nursery sites. Project impacts related to this issue would be less than significant.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. No oak trees or other protected trees are located on or adjacent to the Project Site (refer to the Tree Report in Appendix D). In accordance with the LAMC Section 17.02 protected trees are defined as follows:

Any of the following Southern California native tree species, which measures four inches or more in cumulative diameter, four and one half feet above the ground level at the base of the tree:

(a) Oak tree including Valley Oak *(Quercus lobata)* and California Live Oak *(Quercus agrifolia),* or any other tree of the oak genus indigenous to California but excluding the Scrub Oak *(Quercus dumosa).*
(b) Southern California Black Walnut *(Juglans californica var. californica).*
(c) Western Sycamore *(Platanus racemosa).*
(d) California Bay *(Umbellularia californica).*

As stated above, 23 trees are located on the Project Site and 6 in the public right away. None of the trees, including the 11 Mexican Fan Palms (*Washingtonia robusta)*, nine London Plane trees (*Platanus x acerifolia*), and three Indian Laurel Fig trees (*Ficus microcarpa "nitida")* located on the Project Site, as well as the six London Plane trees located in the public right away, along Hill Street (i.e., street trees), are protected species as defined above (refer to the Tree Report in Appendix D). These 29 trees (including the 6 street trees) would be removed during construction of the Project. However, the Project Applicant would be required to plant replacement trees at a minimum of a one-to-one ratio and adjacent to the Project Site in conformance with the City's Urban Forestry Division requirements for Project landscaping and street tree replacement and planting.

Prior to the issuance of a Certificate of Occupancy, the Project Applicant would be required to show proof to the Urban Forestry Division of a Tree Removal Permit and a subsequent Tree Planting Permit, as well as approval from the Board of Public Works for all street trees being removed and replaced. The landscape plans for the Project shall identify the trees within the Project Site that would be removed. Compliance with the City's requirements would ensure no significant impacts related to biological resources, in particular trees, would occur.

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

No Impact. The Project Site is located in an urbanized area of the City. There are no identified Significant Ecological Areas (SEAs) within the vicinity of the Project Site and the site is not subject

to a Habitat Conservation Plan, a Natural Community Conservation Plan, or other such plan.[12] Therefore, the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Cumulative Impacts

As discussed, 26 non-protected trees are located on the Project Site and 6 within the public right of way; no other significant biological resources are located on the Project Site. However, the Project Applicant would be required to plant replacement trees at and adjacent to the Project Site in conformance with the City's Urban Forestry Division requirements for Project landscaping and street tree replacement and planting. All of the related projects listed on Table II-3 in Section II (Project Description) are located in highly urban areas and likely do not contain significant biological resources, such as special status species, riparian habitat, sensitive natural communities, and wetlands, and are not part of a wildlife corridor or SEA or subject to a Habitat Conservation Plan, a Natural Community Conservation Plan, or other such plan. Because the Project would not result in any impacts related to biological resources, the Project does not have the potential to contribute to any cumulative biological resources impacts. Therefore, cumulative impacts related to biological resources would be less than significant.

5. CULTURAL RESOURCES

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less Than Significant Impact. The analysis below of Project impacts related ot historical resources is primarily based on the following documents (refer to Appendix F):

- *342 South Hill Street, Historical Resource Evaluation Report, GPA Consulting, September 2014.*
- *4th and Hill, Historical Resource Report, GPA Consulting, November2015.*

Section 15064.5 of the CEQA Guidelines 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 California Register of Historical Resources; (2) a resource listed in a local register of historical resources or identified as significant in an historical resource survey meeting certain state guidelines; or (3) an object, building, structure, site, area, place, record or manuscript that a lead agency determines to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the lead agency's determination is supported by substantial evidence in light of the whole record. The Project Site is developed with a 109 space surface parking lot and an 850-square-foot restaurant, which was built in 1961, and due to its age, potentially could be a significant historical resource. The Project Site is not located in a Historic Preservation Overlay Zone.

[12] *City of Los Angeles General Plan Conservation Element, Exhibit B2.*

On-Site Impacts

A Historical Resource Evaluation Report was prepared for the Project by GPA Consulting to assess the potential for the existing restaurant structure is a significant historical structure under CEQA (refer to Appendix F).[13] A review of the City's ZIMAS showed that development of the Project Site would require "historic preservation review," because the restaurant structure is listed in the California Office of Historic Preservation Historical Resources Inventory with the California Resource Status Code of 2S2 ("Determined eligible for separate listing by a consensus determination"). Further research conducted by GPA Consulting concluded that listing was an error and instead belonged to a structure on the property located at 324 South Hill Street (since demolished). The restaurant structure on the Project Site was constructed in 1961 as a vending machine shelter. The structure is not currently designated as a landmark at the national, state, or local levels, and was not identified by SurveyLA.

The restaurant structure was evaluated by GPA Consulting, using the National Register of Historic Plans (National Register) and the California Register of Historical Resources (California Register) criteria, as well as the Los Angeles Historic-Cultural Monument criteria. The primary contexts used to evaluate the building were social history, restaurant development, and mid-century modern architecture.

After careful research and evaluation, GPA Consulting concluded that the restaurant structure is ineligible for listing in the Nation or California Registers due to a lack of significance as well as a lack of integrity, nor is the structure eligible for designation as a Los Angeles Historic-Cultural Monument. Thus, the restaurant structure on the Project Site is not a significant historical resource under CEQA. Therefore, Project impacts related to on-site historical resources would be less than significant.

Off-Site Impacts

GPA Consulting prepared an additional Historical Resources Report to determine if the Project would directly or indirectly impact any historical resources located near the Project Site (refer to Appendix F). The study area established for the report includes the Project Site and a one block area in each direction; 3rd Street to the north, 5th Street to the south, Olive Street to the west, and Broadway to the east. As stated previously, GPA Consulting concluded that the existing building on the Project Site (the Ye Olde Taco House #1) is ineligible for listing in the National or California Registers due to a lack of significance as well as a lack of integrity, nor is it eligible for designation as a Los Angeles Historic-Cultural Monument. Therefore, the building is not a historical resource subject to CEQA.

[13] *The Office of Historic Resources reviewed the Historical Resource Evaluation Report for the Project and confirmed the conclusions of the report on May 8, 2018.*

There are ten historical resources in the study area and a portion of one historic district within the study area (refer to Figures V-7, V-8, and V-9). Angel's Flight is located across Hill Street from the Project Site, mid-block between 3rd and 4th Streets. The Broadway Theater and Commercial District, listed in the National Register of Historic Places, is located east of the Project Site along Broadway.

Five contributing resources to this district fall within the study area: Grand Central Market, Million Dollar Theater, Broadway Department Store, Wilson Building, and Metropolitan Building. South of 4th Street along Hill Street are four additional historical resources: the Pershing Square Building, Hotel Clark, Subway Terminal Building, and the Title Guarantee & Trust Building.

Thresholds of Significance

The thresholds for determining significant impacts on historical resources are as follows:

The State CEQA Guidelines set the standard for determining the significance of impacts to historical resources in CCR, Title 14, Section 15064.5(b), which states:

> *A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.*

CCR, Title 14, Section 15064.5(b)(1) further clarifies "substantial adverse change" as follows:

> *Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.*

CCR, Title 14, Section 15064.5(b)(1) in turn explains that a historical resource is "materially impaired" when a project:

> *Demolishes or materially alters in an adverse manner those physical characteristics that convey its significance and that justify its inclusion in or eligibility for inclusion in the California Register, local register, or its identification in a historic resources survey.*

According to *National Register Bulletin 15*, to be eligible for listing in the National Register, a property must not only be shown to be significant under National Register criteria, but it must also have integrity. Integrity is defined as the ability of a property to convey its significance. As such, the test for determining whether or not a proposed project will have a significant impact on an identified historical resource is whether or not it will materially impair the physical integrity of the historical resource such that it would no longer be eligible for listing in the National or California Registers or other landmark programs such as the list of Los Angeles Historic-Cultural Monuments.

Figure V-7
Historic Resources Study Area

Source: GPA, 2017.

Project Site Study Area Historical Resource

True North Project North

Base Image Courtesy of Google Maps.

Non-Historical Resources in Study Area (Not including Non-Contributing Resources to the Broadway Theater and Commercial District)				
#	Address	APN	Year Built	Use/Notes
1	Various	5149-027-013, 5149-028-003, 5149-028-004, 5149-028-009, 5149-028-011, 5149-028-012, 5149-028-013	N/A	Seven separate legal parcels comprising one, large, surface parking lot
2	406 S. Olive Street	5149-027-901	N/A	Two-story parking garage
3	417 S. Hill Street	5149-027-020	N/A	Parking garage; shares parcel with Subway Terminal Building
4	N/A	5149-010-939	c. 1993	Pershing Square Metro Stop entrance
5	N/A	5149-010-939	N/A	Angel's Knoll Park
6	255 S. Hill Street	5149-010-264	1979	Angelus Plaza, senior affordable housing
7	320 W. 3rd Street	5149-015-035	1995	Grand Central Square, multi-story parking structure
8	324 S. Hill Street	5149-015-011	N/A	Surface parking lot with gate structure
9	336 S. Hill Street	5149-015-009	1897	La Cita Bar; Assessor's date of 1897 is incorrect. Building appears to have been rebuilt at a later date and heavily altered over time.
10	N/A	N/A	N/A	Alley
11	5149-015-901, 5149-015-902, 5149-015-028, 5149-015-029	N/A	c. 1993	Pershing Square Metro Stop entrance
12	400 S. Hill Street	5149-025-004	N/A	Surface parking lot
13	Various	5149-026-007, 5149-026-009, 5149-026-011	N/A	Three separate legal parcels comprising one surface parking lot.
14	444 S. Hill Street	5149-026-010	1987	1980s commercial building

Figure V-8
Historic Resources in the Study Area

Source: GPA, 2017.

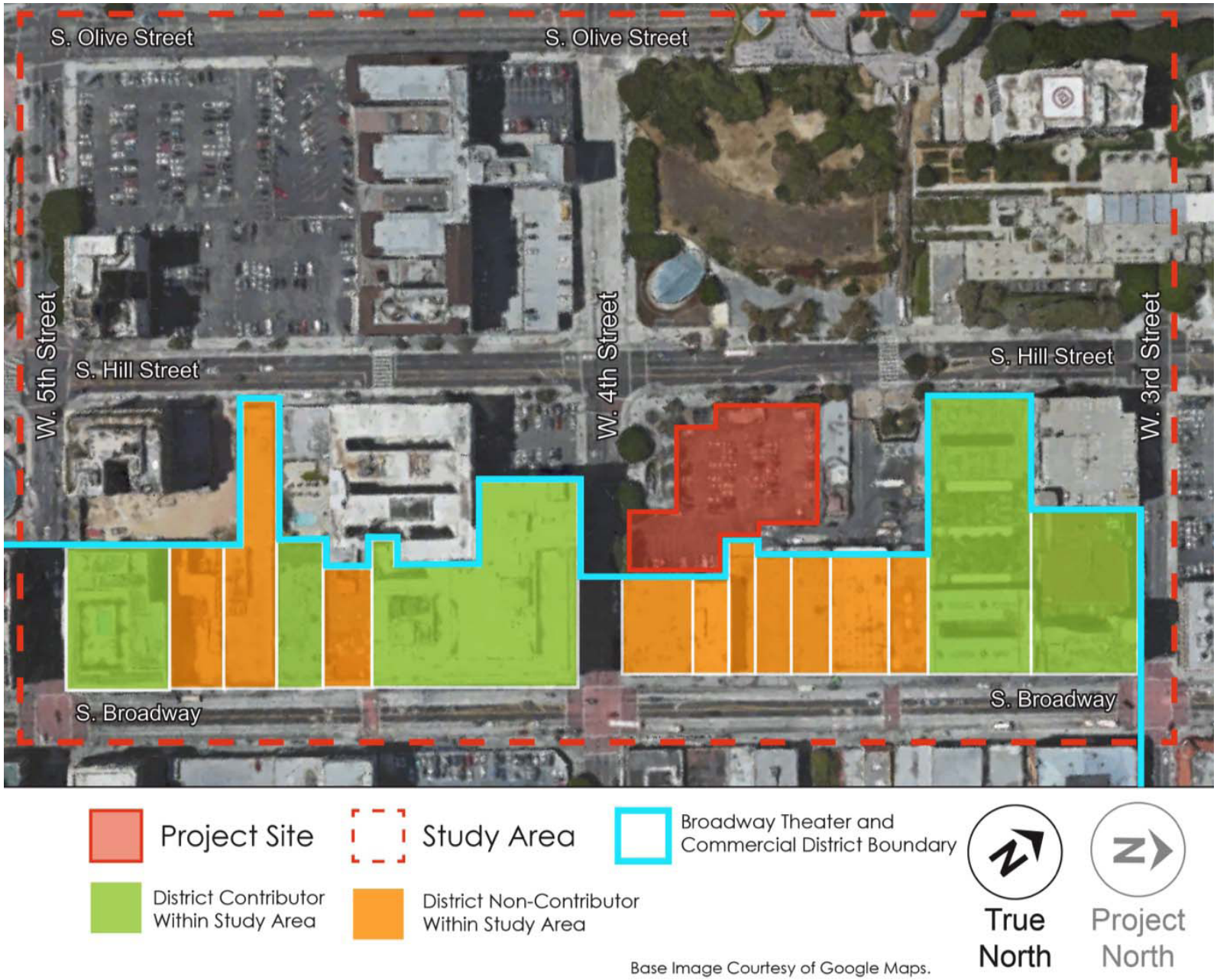

Figure V-9
Contributors and Non-Contributors to the Broadway Theater and Commercial District within the Study Area

Source: GPA, 2017.

The following factors are set forth in the City's Thresholds Guide, which states that a project would normally have a significant impact on historical resources if it would result in a substantial adverse change in the significance of a historical resource. A substantial adverse change in significance occurs if the project involves:

- Demolition of a significant resource;
- Relocation that does not maintain the integrity and (historical/architectural) significance of a significant resource;
- Conversion, rehabilitation, or alteration of a significant resource which does not conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; or
- Construction that reduces the integrity or significance of important resources on the site or in the vicinity.

Secretary of the Interior's Standards

Projects that may affect historical resources are considered mitigated to a level of less than significant if they conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards). Projects with no other potential impacts qualify for a Class 31 exemption under CEQA if they meet the Standards. The Standards were issued by the National Park Service. They were not intended to be prescriptive, but to "...promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources." The Standards are accompanied by Guidelines for four types of treatments for historical resources: Preservation, Rehabilitation, Restoration, and Reconstruction.

The definition of rehabilitation assumes that at least some repair or alteration of the historical resource will be needed in order to provide for an efficient contemporary use; however these repairs and alterations must not damage or destroy materials, features or finishes that are important in defining the resource's historic character.

The Standards for Rehabilitation apply to all historical resource types and are as follows:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other buildings, will not be undertaken.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Significant archeological resources affected by a project will be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials that characterize the property. The new work shall be differentiated from the old and will be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The Standards are not intended to be prescriptive, but instead provide general guidance. They are intended to be flexible and adaptable to specific project conditions to balance continuity and change, while retaining materials and features to the maximum extent feasible. Their interpretation requires exercising professional judgment and balancing the various opportunities and constraints of any given project. Not every Standard necessarily applies to every aspect of a project, nor is it necessary to comply with every Standard to achieve compliance. For a project to comply with the Standards, it must achieve a balance of continuity and change.

Project Impacts

The Project would have no direct impacts on historical resources. No historical resources would be demolished, destroyed, or relocated as a result of the project. Thus, the analysis below addresses the potential indirect impacts the Project could have on the ten historical resources in the study area. As stated previously, there is a portion of one historic district in the study area, the Broadway Theater and Commercial District. Five of the 10 historical resources within the study area are contributing resources to this district, which, as the name suggests, is centered on Broadway. All historical resources in the study area are on parcels across a street or alley from the Project Site, and/or are separated by multiple parcels in between.

The indirect impacts the Project could have had on nearby historical resources have been reduced to a less than significant level through the application of the Standards. Related new construction is primarily addressed in Standards #9 and #10, which provide guidelines for materials, size, scale, and massing. The Project Site is also subject to the Historic Downtown Los

Angeles Design Guidelines, which are based on the Standards. Below is an analysis of the schematic design of the Project as it relates to historical resources in the study area. As demonstrated below, the Project complies with the Standards and would have no indirect impacts on nearby historical resources.

Compliance to Standard #9

The Standard states: "New additions, exterior alterations, or related new construction will not destroy historic materials, features, or spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, massing, size, scale and proportion, and architectural features to protect the historic integrity of the property and its environment."

The parcels abutting the Project Site do not contain any historical resources.[14] Adjacent parcels contain Angels Flight and the Broadway Department Store, which are physically separated from the proposed building by Hill Street and 4th Street, respectively. The Grand Central Market and Million Dollar Theater are located on the same block as the Project Site, but are situated to the north and are physically separated by multiple parcels and an alley. The Hotel Clark and the Subway Terminal Building are located south of the Project Site, across the intersection of Hill and 4th Streets and are further south on Hill Street. The Metropolitan, Pershing Square, and Title Guarantee & Trust Buildings are located even further south on Hill Street at 5th Street, one block south of the Project Site. The nearest historical resource is the Broadway Department Store, which is located across 4th Street and is oriented to the intersection of 4th Street and Broadway, a parallel street to the east of Hill Street.

Given the physical and visual separation from nearby historical resources, the proposed new building would not affect their historic integrity or setting. The proposed building would be horizontally organized into two masses with different heights: a wide base five stories in height, and a narrower tower that would extend 31 stories in height. The five-story base would be comparable to the historical resources in the study area, which range from three to thirteen stories in height, and very similar to the Broadway Department Store building, which ranges from eight to ten stories in height. The 31-story portion of the new building would be placed towards the Spring Street frontage at mid-block, creating as much physical and visual separation from the adjacent historical resources as possible. When viewed from the nearby Broadway Theater and Commercial District, the tower of the new building would be visually similar to the existing high-rises on Bunker Hill to the west.

The primary exterior material of the proposed building would be a window wall system with spandrel glass. Metal would be applied as vertical fins and perforated screens on the five-story base, and as posts and caps on the glass railings of the building's outdoor spaces. The metal fins would be used to create a vertical datum in a similar manner as the terracotta and cast stone pilasters found on the historical resources nearby. In particular, these vertical elements recall the strong vertical elements of the nearby Art Deco style Title Guarantee & Trust Building. The

[14] *4th and Hill Historical Resource Report, GPA Consulting September 2015, page 29. Refer to Appendice G-2.*

materials and architectural features of the proposed building are contemporary in nature and are clearly differentiated from the historic buildings in the study area. While the new building's materials and architecture cannot necessarily be characterized as compatible with the existing historical resources, this is less important given the particulars of the new building's location relative to these resources. Using complementary materials is more important for situations where the old and new construction would be in very close proximity or there is an established architectural style and palette of materials, such as additions to a historic property or within a historic district. Although the new building would not strictly comply with this particular aspect of Standard #9, the Project not reduce the integrity or significance of nearby historical resources.

For these reasons, the Project would comply with Standard #9, because the proposed building does not physically alter the ten historical resources on nearby parcels. The proposed building would be differentiated from the old by its contemporary materials and design. However, the proposed building would be compatible in massing and scale with historical resources in the vicinity.

Compliance to Standard #10

The Standard states: "New additions and adjacent or related new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired."

The Project would comply with Standard #10. The proposed building would be sufficiently separated from the historical resources in the vicinity by other parcels, roadways, and alleys. There are no historical resources on abutting parcels. If the proposed buildings were removed in the future, the adjacent historical resources would not be materially affected. The essential form and integrity of the historical resources and their environment would be unimpaired.

Compliance with Historic Downtown Los Angeles Design Guidelines

The Historic Downtown Los Angeles Design Guidelines are based on the Standards. Infill construction is addressed in the New Construction Guidelines chapter (pages 130-135). The Project's consistency with these applicable guidelines is discussed below.

- *Consult with design professionals who have expertise in design within historic districts.*

The Project designer, TCA Architects, has experience in working with historical resources, including at least four adaptive reuse projects in the City. These include 1100 Wilshire, Lincoln Place, Mercury, and Metro 417. The conceptual design plans for the Project were reviewed for potential impacts to historical resources by individuals at GPA Consulting who meet the Secretary of the Interior's Professional Qualification Standards for Architectural History.

- *Consider the value of an existing building, even if it is not historic, and its potential for rehabilitation before making any decision to demolish and rebuild.*

The existing restaurant building on the Project Site was assessed for its historical significance and was found to not be a significant historical resource under CEQA. (Refer to the analysis included on page V-35.)

- *Document existing signs and murals on building walls where they will be lost or covered due to new construction.*

The building to the southeast of the Project Site has a mural on the façade that faces the Project Site The proposed building facades would not physically touch this façade, and the façade would remain visible from 4th Street. Thus, no existing signs or murals on building walls would be lost or covered by new construction.

- *Construct new buildings, of compatible design with the surrounding neighborhood, on parking lot sites. Corner sites, because of their importance in defining the urban grid, should be the first priority for infill construction.*

The Project Site is both a parking lot and a corner site and is identified on page 134 of the Historic Downtown Los Angeles Design Guidelines as an "Infill Construction Opportunity." The proposed building design would be compatible in massing and scale with the surrounding historic buildings. A contemporary design and materials are proposed, which would differentiate from, but not impair, historical resources in the vicinity due to the physical and visual separation between the Project Site and historical resources (refer to Compliance to Standard #9, above).

- *Pursue creative and innovative contemporary designs for new buildings in the Historic Downtown, especially on Broadway where bold design will complement the exuberance of the street's historic theaters.*

The proposed building design would be contemporary in nature, yet would make creative references to the historic context with architectural features and massing. For example, metal fins would be used to create a vertical datum in a similar manner as the terracotta and cast stone pilasters found on historic buildings nearby. Also, the organization of the building mass would include a substantial ground level and a five-story base, creating a visual reference to the surrounding historic buildings, which have one-and-a-half or double height storefronts with two to twelve stories above. An innovation on this typical building arrangement is proposed for the upper floors, which would be a narrower tower form clad entirely in glass to create a lighter appearance where the new building rises above the street wall datum.

- *Build consistently with the street wall, particularly at corner sites.*

The proposed building footprint would be built up to the sidewalk's edge with no setback. This would be consistent with the established street wall along Hill and 4th Streets.

- *Design new buildings to respond to the existing building context within a block, and provide continuity to the overall streetscape. Frequently, a new building will be inserted on a site between two existing buildings of disparate scale and design.*

The proposed building design would respond to the massing of surrounding buildings on Hill and 4th Streets. The building footprint would come up to the sidewalk, and not deviate from the established street wall along these two street frontages. The proposed five-story base would be comparable to the general height of existing historic buildings nearby. The tower that rises above the base would reference the high-rise structures on Bunker Hill to the immediate west. As the Project Site is currently a surface parking lot with a small-scale walk-up food stand, the proposed building would help to re-establish the street wall where it currently does not exist. The result would be improved continuity of the overall streetscape.

- *Use compatible types of masonry such as terra cotta when constructing new structures in the Historic Downtown.*

Masonry is not a primary material proposed for the new building. Instead, its contemporary design would be rendered in glass with some metal elements. There would be some minimal concrete surfaces on the secondary elevations. Although the new building would not use the same materials palette as historic buildings in the vicinity, this would not be detrimental to these resources because the new construction is not abutting a historic building or within a historic district.

- *Employ durable, locally produced permanent, natural, and recycled materials in new construction.*

Durable materials would be employed for the building exterior, including an aluminum-glass window wall system with decorative aluminum fins and some decorative stained concrete walls. These materials – metal, glass, and concrete – are enduring materials that would maintain a high-quality appearance for years to come.

- *Employ modern terrazzo as decorative paving in new construction projects.*

The building's outdoor spaces at the ground floor are expected to be very high pedestrian traffic areas, due to the location of the Metro subway portals. As the glossy, smooth finish of terrazzo paving may present a slip hazard in such conditions, the Project design team has instead specified a Lithocrete type contemporary decorative concrete paving to be installed on the sidewalk and Metro plaza.

- *Set back upper floors, especially when a taller building is permitted by code, so that dominant roof and cornice lines remain consistent along the street wall.*

The first five stories of the proposed building would have a footprint that would occupy the entire lot, consistent with established street wall along Hill and 4th Streets. A narrower tower that would extend up to a total of 31 stories in height would be placed towards the Hill Street frontage, creating as much physical and visual separation from the surrounding historical resources as possible. This also situates the tower element closer to Bunker Hill, where similar high-rise buildings are located. The exterior is clad entirely in glass, to create a lighter visual appearance where the tower rises above the established street wall. This combination of massing setbacks and horizontal articulation would allow the code-permitted taller building to be visually consistent with the dominant roof and cornice lines along Hill and 4th Streets.

- *Explore options for multi-use buildings, combining residential, commercial, and other compatible uses where appropriate.*

The proposed building would be mixed-use, incorporating commercial uses on the ground floor with parking and residential uses above. The Metro subway portal also would be integrated with the Project Site plan, bringing public transportation in to the mix of uses on the property.

- *Provide multi-tenant retail space and other public uses at the street level. These should be accessible directly from the sidewalk, rather than through common interior lobbies.*

Retail spaces and the Metro subway portal are proposed at the ground level, and would be directly accessible from the sidewalk via street-level entries.

- *When developing vacant sites, consider incorporating through-block public arcades or "paseos," like those of the Broadway-Spring Arcade or the Grand Central Market. Arcades encourage pedestrian movement across the downtown area and provide opportunities for burgeoning retail businesses in an open market-like venue.*

As the Project Site is not a through-lot, the creation of a through-block public passage is not physically possible at this location. However, the Grand Central Market is located on the same block as the subject site, and provides through-block access for pedestrians in this area.

- *Provide easy-to-locate building entrances on all street-facing facades. Where a building extends through an entire block or is located at a corner, connect its entrances with a suitably scaled public lobby. Highlight entrances with signage and lighting to distinguish them from storefronts.*

The primary residential entrance is proposed for the Hill Street façade, and would lead to the main resident lobby. This entrance would be marked by double doors and a projecting canopy with address signage. Entrances to the retail space and a secondary residential entry are proposed for the 4th Street facade and would be accessed via a large pedestrian plaza that would occupy the corner of Hill and 4th Streets and would incorporate the Metro subway portal. The retail entry would be highlighted with tenant signage to distinguish it as a storefront. The secondary residential entry would lead to a small residential lobby that would provide access to the bicycle storage room along 4th Street, and a corridor that would connect this entry to the main resident lobby along Hill Street.

- *Design infill parking structures with retail use at the street level, when practical. Facades of parking structures that face public streets should be designed to the same standards as any other new construction, with particular attention to fenestration.*

The proposed mixed-use building would include parking in three subterranean levels (levels B1-B3), and in the first five floors of the building (levels 1-5). Retail space and public lobbies occupy the ground floor at the street level, with parking located towards the rear of the building footprint. On floors two through four, perforated metal screens would camouflage the parking on these levels. Floors six through eight would have residential units lining the building frontage to hide the parking located beyond. Both street-facing facades are designed to the same standards as any

other new construction, including the parking levels. Fenestration on the parking levels would be highly articulated and aligned in vertical bands that complement the rhythm of the surrounding buildings and is integrated with the other levels of the proposed building.

- *New infill parking structures should have minimal curb cuts on major thoroughfares; encourage parking structure entries at side streets.*

The existing surface parking on the Project Site has two curb cuts: one along Hill Street, near the northwest corner of the site, and one along 4th Street, near the southeast corner of the site. The proposed building would maintain the number and location of curb cuts associated with the Project Site to provide access to the parking garage from Hill and 4th Streets.

- *Consider locating entrances to and exits from parking structures in alleys or the numbered side streets because these access points are inappropriate along primary pedestrian routes, for both visual and safety reasons.*

As described above, one of the two existing curb cuts that would lead to the parking garage would be accessed from a numbered side street (4th Street). In addition, there is a third parking garage entry accessed from the alley. This would not be relied upon as a primary means of access to the garage, however, as the alley is heavily used by delivery trucks servicing the nearby Grand Central Market.

- *Consider the differences of the four major north south streets in the study area (Hill, Broadway, Spring and Main) when designing infill construction.*

As described in "Appendix Three: Street Character of the Area" of the *Historic Downtown Los Angeles Design Guidelines*, "Hill Street links the new skyscrapers to the west and the Historic Downtown to the east." This is especially evident at the intersection of Hill and 4th Streets, where the Historic Core, Jewelry District, Financial District, and Bunker Hill converge. As a result, "there are a few high rise commercial buildings from the late twentieth century on Hill Street that are generally not found elsewhere in the [Historic Downtown Los Angeles Design Guidelines] study area." Hill Street is also characterized by a fairly continuous street wall that results from buildings constructed at the property line and consistent building heights. Buildings on Hill Street are also larger in scale than the other major streets, as they tend to be wider and with taller storefronts.

With this context in mind, the proposed building would be built out to the sidewalk, with a wide five-story base and tall storefronts at the ground level. The upper floors would be constructed as a narrower tower that rises above the base. As a result of these design choices, the infill construction would maintain the established street wall pattern, and visually reference the tall storefronts and high-rise commercial buildings unique to Hill Street and adjacent Bunker Hill. The two-tier horizontal organization and the contemporary design and materials also would complement the role of Hill Street as a connection between downtown's historic buildings and more recent construction.

Conclusion

As the Project would comply with the Standards and meet the City's Historic Downtown Los Angeles Design Guidelines, it would have a less than significant impact on the identified historical resources in the study area. Furthermore, the Project would not negatively affect the physical integrity of any nearby historical resources. All of the identified historical resources in the vicinity of the Project Site would remain listed or eligible for listing under the relevant landmark program. The ability of these historical resources to convey their significance would not be materially impaired by the Project.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?

Less Than Significant Impact. Section 15064.5(a)(3)(D) of the CEQA Guidelines generally defines archaeological resources as any resource that "has yielded, or may be likely to yield, information important in prehistory or history." Archaeological resources are features, such as tools, utensils, carvings, fabric, building foundations, etc., that document evidence of past human endeavors and that may be historically or culturally important to a significant earlier community. The Project Site is located within an urbanized area of downtown Los Angeles and has been subject to grading and development in the past.

Based on a records search conducted by the South Central Coast Information Center (SCCIC), 11 archaeological sites have been recorded within a 0.5-mile radius of the Project Site. However, no archaeological sites and/or resources have been recorded at the Project Site (refer to Appendix F). During the Project's construction phase, excavation of the Project Site to approximately 40 feet below ground surface would occur to develop the proposed subterranean parking levels. According to the Geotechnical Report (refer to Appendix H prepared for the Project, the first 5 to 10 feet of soils below ground surface are artificial fill materials underlain by alluvium. As such, the likelihood for archaeological resources to exist within the artificial fill would be remote. However, given the relative sensitivity of the Project region, it is possible that unknown archaeological resources could exist at the Project Site and could be encountered during grading and excavation activities. Nonetheless, the Project Applicant would be required to comply with the City's standard condition of approval related to inadvertent discovery of unknown archaeological resources. In the event that any subsurface cultural resources are encountered at the Project Site during construction or the course of any ground disturbance activities, all such activities shall halt immediately, pursuant to State Health and Safety Code Section 7050.5. At which time the applicant shall notify the City and consult with a qualified archaeologist who shall evaluate the find in accordance with federal, state, and local guidelines, including those set forth in the California Public Resources Code Section 21083.2, and shall determine the necessary findings as to the origin and disposition to assess the significance of the find. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined to be unnecessary or infeasible by the City. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Compliance with this condition would ensure that Project impacts related to unknown archaeological resources would be less than significant.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. The Project Site is developed with a surface parking lot and an 850-square-foot restaurant. While the Project Site has been subject to grading and development in the past, the Project would require excavations at a depth of approximately 40 feet below ground surface. A significant adverse effect could occur if grading or excavation activities associated with a project could disturb human remains. However, no human remains are known to exist at the Project Site. In accordance with the State's Health and Safety Code Section 7050.5, in the event of discovery or recognition of any human remains at the Project Site, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Los Angeles County Coroner has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the PRC. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Through compliance with the regulatory standards described above, potential Project impacts to human remains would be less than significant.

Cumulative Impacts

It is possible that some of the related projects listed on Table II-3 in Section II (Project Description), could result in significant impacts on historical resources, including impacts to a historic district. However, as discussed above, the Project would not result in indirect or direct impacts to any significant historical resource, and the Project Site is not located within a historical district. Thus, the Project would not have the potential to contribute toward any significant cumulative impacts related to historical resources, including a historical district. Impacts related to archaeological resources and human remains are site-specific and are assessed on a site-by-site basis. All development in the City (including the proposed Project and the related projects) that involves ground-disturbing activities is required to comply with the City's standard condition of approval related to the discovery of unknown archaeological resources, and existing state and City regulations related to human remains. For these reasons, cumulative impacts related to archaeological resources and human remains would not be cumulatively considerable and less than significant.

6. ENERGY

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. With regard to Checklist Question 8 a), the discussion of this issue relies on Appendix F of the CEQA Guidelines as well as the Thresholds Guide. The Thresholds Guide states that a determination of significance shall be made on a case-by case basis, considering the following factors:

- The extent to which the project would require new (off-site) energy supply facilities and distribution infrastructure; or capacity-enhancing alterations to existing facilities;
- Whether and when the needed infrastructure was anticipated by adopted plans; and
- The degree to which the project design and/or operations incorporate energy-conservation measures, particularly those that go beyond City requirements.

In accordance with Appendix F and the Thresholds Guide, the following will be considered in determining the significance of the Project's energy impacts:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources;
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives;
- The degree to which the project design and/or operations incorporate energy-conservation measures, particularly those that go beyond City requirements; and
- Whether the Project conflicts with adopted energy conservation plans.

With regard to Checklist Question b), the Project will be evaluated for consistency with adopted energy conservation plans and policies relevant to the Project. Such adopted energy conservation plans and policies include Title 24 energy efficiency requirements, the California Green Building Standards Code (CalGreen) and City building codes. Also, as discussed in response to Checklist Question 8 b) (i.e., consistency with GHG emissions reduction plans), the Project would also be consistent with SCAG's 2016-2040 RTP/SCS, which includes goals to reduce VMT and corresponding decrease in fuel consumption.

Existing Conditions

Electricity

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100-W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is one million W, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is one billion Wh.

The Los Angeles Deparmtment of Water and Power (LADWP) provides electrical service throughout the City and many areas of the Owens Valley, serving approximately 4.0 million people within a service area of approximately 465 square miles, excluding the Owens Valley. Electrical service provided by the LADWP is divided into two planning districts: Valley and Metropolitan. The Valley Planning District includes LADWP's service area north of Mulholland Drive, and the Metropolitan Planning District includes LADWP's service area south of Mulholland Drive. The Project Site is located within LADWP's Metropolitan Planning District. LADWP generates power from a variety of energy sources, including hydropower, coal, gas, nuclear sources, and renewable resources, such as wind, solar, and geothermal sources. According to LADWP's 2017 Power Strategic Long-Term Resource Plan (2017 Resource Plan), LADWP has a net dependable generation capacity greater than 7,531 MW.[15] In 2017, LADWP's power system experienced an instantaneous peak demand of 6,431 MW.[16] Approximately 29 percent of LADWP's 2016

[15] *2017 Power Strategic Long-Term Resource Plan, LADWP, December 2017.*

[16] *Ibid.*

electricity purchases were from renewable sources, which is similar to the 25 percent statewide percentage of electricity purchases from renewable sources.[17]

Existing Electricity Consumption at the Project Site

Electricity is provided to the Project site via underground 4.8-kilovolt (kV) circuits adjacent to the Project site along Hill and 4th Streets and underground 34.5-kV circuits adjacent to the site along 4th Street.[18] Based on CalEEMod calculations for the existing uses, the restaurant on the Project Site consumes approximately 37,519 kilowatt-hours (kw-h) per year.[19]

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the state, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network and thus, resource availability is typically not an issue. Natural gas provides almost one-third of the state's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel.

Natural gas is provided to the Project Site by the Southern California Gas Company (SCG). SCG is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SCG serves approximately 21.6 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout Central and Southern California, from the City of Visalia to the Mexican border.

SCG receives gas supplies from several sedimentary basins in the western United States and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada as well as local California supplies. The traditional, southwestern United States sources of natural gas will continue to supply most of SCG's natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and the use of Canadian sources provides only a small share of SCG supplies due to the high cost of transport. Gas supply available to SCG from California sources averaged 323 million cubic feet (cf) per day in 2017 (the most recent year for which data are available).[20]

Existing Natural Gas Consumption at the Project Site

SCG supplies natural gas to the Project Site from natural gas service lines located in the vicinity of the Project Site. Natural gas is provided to the Project Site through a network of underground

[17] *LADWP, 2017 Retail Electric Sales and Demand Forecast, p. 6.*

[18] *LADWP May 15, 2017. Refer to Appendix K.*

[19] *Refer to Appendix E.*

[20] *2018 California Gas Report, California Gas and Electric Utilities, 2018.*

pipelines that are operated and maintained by SCG. Based on CalEEMod calculations for the existing uses, the existing food service building consumes approximately 537 thousand British thermal units (kBTU) per year.[21]

Transportation Energy

According to the California Energy Commission (CEC), transportation accounts for nearly 39 percent of California's total energy consumption in 2015.[22] In 2018, California consumed approximately 15.5 billion gallons of gasoline and 3.0 billion gallons of diesel fuel.[23] Petroleum-based fuels currently account for 91 percent of California's transportation energy sources.[24] However, the state is now working on developing flexible strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce VMT. Accordingly, gasoline consumption in California has declined. According to CARB's EMFAC Web Database, Los Angeles County on-road transportation sources consumed 712 million gallons of gasoline and 712 million gallons of diesel fuel in 2015.[25]

The existing restaurant on the Project Site currently generates a demand for transportation-related fuel use as a result of vehicle trips to and from the site. The estimate of annual VMT associated with this use is 153,234 per year.[26] A study by Caltrans found that the statewide average fuel economy for all vehicle types (automobiles, trucks, and motorcycles) is approximately 20.4 miles per gallon (mpg) of gasoline and approximately 5.71 mpg of diesel.[27] Thus, the existing VMT associated with existing Project Site conditions translates to the consumption of approximately 6,197 gallons of gasoline and approximately 2,415 gallons of diesel for transportation per year.[28]

Project Impacts

The analysis below considers the eight criteria identified in Appendix F of the CEQA Guidelines.

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[21] *Refer to Appendix E.*

[22] *2017 Integrated Energy Poliy Report, California Energy Commission, February 2018.*

[23] *California Board of Equalization, Net Taxable Gasoline and Diesel Gallons 10-Year Report.*

[24] *2018-2019 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, California Energy Commission, May 2018.*

[25] *CARB, EMFAC2014 Web Database, www.arb.ca.gov/emfac/2014/*

[26] *Refer to the CalEEMod calculations in Appendix E that include existing VMT.*

[27] *Caltrans, 2007 California Motor Vehicle Stock, Travel and Fuel Forecast, Table 7, http://www.energy.ca.gov/2008publications/CALTRANS-1000-2008-036/CALTRANS-1000-2008-036.PDF.*

[28] *Refer to Appendix G for detailed calculations.*

1) *The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.*

The Project would consume energy during construction and operational activities. Sources of energy for these activities would include electricity usage, natural gas consumption, and transportation fuels such as diesel and gasoline. The analysis below includes the Project's energy requirements and energy use efficiencies by fuel type for each stage of the Project (construction, operations, maintenance and removal activities).

For purposes of this analysis, Project maintenance would include activities such as repair of structures, landscaping, and architectural coatings. Energy usage related to Project maintenance activities are assumed to be included as part of Project operations. Project removal activities would include demolition or abandonment of the site. However, it is not known when the Project would be removed. Thus, analysis of energy usage related to Project removal activities would be speculative. For this reason, energy usage related to Project removal was not analyzed.

Construction

During Project 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 the new building, typically do not involve the consumption of natural gas. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities).

As shown on Table V-8 and as discussed further below, Project construction would consume approximately a total of 705 kWh of electricity, 233,697 gallons of gasoline, and 1,507,788 gallons of diesel. Project construction is expected to be completed by 2023.

Electricity

During construction of the Project, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, electronic equipment, and other construction activities necessitating electrical power. Electricity would be supplied to the Project Site by LADWP and would be obtained from the existing electricity infrastructure that connects to the Project Site. This would be consistent with suggested measures in the Threshold Guide to use electricity from power poles rather than temporary gasoline or diesel-powered generators.

Table V-8
Summary of Energy Use During Project Construction

Fuel Type	Quantity
Electricity	
Water Consumption	705 kWh
Lighting, electronic equipment, and other construction activities necessitating electrical power	N/A
Total Electricity	**705 kWh**
Gasoline	
On-Road Construction Equipment	233,697 gallons
Off-Road Construction Equipment	0 gallons
Total Gasoline	***233,697 gallons***
Diesel	
On-Road Construction Equipment	1,405,505gallons
Off-Road Construction Equipment	102,274 gallons
Total Diesel	***1,507,788 gallons***
Total Petroleum-Based Fuel	**1,741,476 gallons**

kWh = kilowatt-hours
Note: Numbers have been rounded to the nearest whole number. Detailed calculations are included in Appendix G.

As shown on Table V-8, a total of approximately 705 kWh of electricity is anticipated to be consumed during Project 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, electric equipment would be powered off so as to avoid unnecessary energy consumption.

The estimated construction electricity usage represents approximately 0.005 percent of the estimated net annual operational demand, which is discussed below, would be within the supply and infrastructure service capabilities of LADWP. Moreover, construction electricity usage would replace the existing electricity usage at the Project Sites during construction.

Natural Gas

Construction activities, including the construction of the new building, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities; thus there would be no demand generated by construction.

Transportation Energy

The petroleum-based fuel use summary provided above on Table V-8 represents the amount of transportation energy that could potentially be consumed during Project construction based on a conservative set of assumptions outlined in Appendix G of this SCEA. As shown, on- and off-road vehicles would consume an estimated 233,697 gallons of gasoline and approximately 1,507,788 gallons of diesel fuel throughout the Project's construction. For comparison purposes, the fuel usage during Project construction would represent approximately 0.006 percent of the 2018

annual on-road gasoline-related energy consumption and 0.2 percent of the 2018 annual diesel fuel-related energy consumption in Los Angeles County, as shown in Appendix G of this SCEA.

Operation

During operation of the Project, energy would be consumed for multiple purposes, including, but not limited to HVAC; refrigeration; lighting; and the use of electronics, equipment, and machinery. Energy would also be consumed during Project operations related to water usage, solid waste disposal, and vehicle trips. As shown on Table V-9, the Project's net demand for electricity would be approximately 4,102,475 kWh per year. As shown on Table V-10, the Project's net demand for natural gas would be 5,653,336 kBTU per year. As shown on Table V-11, the Project's net demand for gasoline and diesel would be 290,504 and 113,214 gallons per year, respectively.

Table V-9
Estimated Project Electricity Demand

Land Use	Size	Total (kw-h/yr)[1]
Residential	428 du	1,802,970
Retail	2,980 sf	36,452
Office	2,630 sf	39,694
Open Space/Recreation	41,378 sf	533,278
Enclosed Parking	435,000 sf	1,1727,600
	Project Total	**14,139,994**
	Less Existing	***37,519***
	Net Total	**14,102,475**

kw-h = kilowatt-hour yr = year du = dwelling unit sf =square feet

[1] *Calculated via CalEEMod. Refer to Appendix E.*

Note: LADWP does not provide or comment on consumption rates to provide an estimate of demand.

Table V-10
Estimated Project Natural Gas Demand

Land Use	Size	Total (kBTU/yr)[1]
Residential	428 du	4,766,440
Retail	2,980 sf	43,40
Office	2,630 sf	31,171
Open Space/Recreation	41,378 sf	856,262
Enclosed Parking	435,000 sf	0
	Project Total	**5,653,873**
	Less Existing	***537***
	Net Total	**5,653,336**

kBTU = 1,000 British Thermal Units yr = year du = dwelling unit sf =square feet

[1] *Calculated via CalEEMod. Refer to Appendix E.*

Note: SCG does not provide or comment on consumption rates to provide an estimate of demand.

Table V-11
Estimated Project Transportation Petroleum-Based Fuel

Fuel Type	Gallons Per Year
Gasoline	
Project	296,701
Less Existing	*6,197*
Net Total Gasoline	***290,504***
Diesel	
Project	115,629
Less Existing	*2,415*
Net Total Diesel	***113,214***
Total Fuel	**403,718**

Detailed calculations are included in Appendix G.

Electricity

With compliance with 2016 Title 24 standards and applicable requirements of the City's Green Building Code, buildout of the Project would result in a projected net increase in the on-site demand for electricity totaling approximately 14,102,475kWh per year (refer to Table V-9). As stated previously, existing uses on the Project Site currently consume 37,519 kWh per year. In addition, LADWP is required to procure at least 33 percent of their energy portfolio from renewable sources by 2020. The current sources procured by LADWP include wind, solar, and geothermal sources. These sources account for 29 percent of LADWP's overall energy mix in 2017, the most

recent year for which data are available.[29] This represents the available off-site renewable sources of energy that would meet the Project's energy demand.

Based on LADWP's 2017 Resource Plan, LADWP forecasts that its total energy sales in the 2023-2024 fiscal year (the Project's buildout year) will be 23,033 GWh of electricity.[30] As such, the Project-related net increase in annual electricity consumption of 14,102,475 kWh per year would represent approximately 0.06 percent of LADWP's projected sales in 2023-2024.

Natural Gas

With compliance with 2016 Title 24 standards and applicable requirements of the City's Green Building Code, buildout of the Project is anticipated to generate a net increase in the on-site demand for natural gas totaling approximately 5,653,336 kBTU per year, or approximately 15,489 kBTU per day (15,185 cf per day).[31] Existing uses on the Project Site currently consume approximately 537 kBTU per day. Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SCG's planning area will be approximately 2,480 million cf per day in 2023.[32] The Project's natural gas consumption would account for approximately 0.0006 percent of the forecasted 2023 consumption in SCG's planning area.

Transportation Energy

During operation, Project-related traffic would result in the consumption of petroleum-based fuels related to vehicular travel to and from the Project Sites. As shown on Table V-11, the Project's net demand for gasoline and diesel would be 290,504 and 113,214 gallons per year, respectively. The Project Site is located in a High Quality Transit Area (HQTA) designated by SCAG that indicates that the Project Site is an appropriate site for increased density and employment opportunities from a "smart growth" regional planning perspective. Extensive public bus and rail transit service is provided within the Project study area. The Project is located near several transit routes that would promote use of transit in lieu of vehicular travel. More specifically, a staircase leading down to the Pershing Square Station, which provides access to the Metro Red and Purple rail lines, is located directly in front of the Project site. There is also a transit stop located adjacent to the Project site on Hill Street that is served by Metro Local, Rapid and Express buses. The following bus lines stop within 1/8 mile (a 2 minute walk) from the Project site:

- Metro Local Line 2
- Metro Local Line 4

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[29] *Utility Annual Power Content Labels for 2017, California Energy Commission, July 2018.*

[30] *2017 Power Strategic Long-Term Resource Plan, LADWP, December 2017.*

[31] *kBTU = 1,000 BTU. One BTU equals 1,020 cubic feet. 5,653,336 x 1,000 = 5,653,336,000 BTU. 5,653,366 BTU/1,020 cf = 5,542,486 cf. 5,542,486/365 days = 15,185 cf/day.*

[32] *2018 California Gas Report, California Gas and Electric Utilities, 2018.*

- Metro Local Line 10
- Metro Local Line 28
- Metro Local Line 30
- Metro Local Line 35
- Metro Local Line 40
- Metro Local Line 45
- Metro Local Line 81
- Metro Local Line 83
- Metro Local Line 90
- Metro Local Line 91
- Metro Local Line 94
- Metro Local Line 330
- Metro Rapid Line 728
- Metro Rapid Line 745
- Metro Rapid Line 794
- LADOT Commuter Express Line 419

The existing transit services in the vicinity of the Project Site would provide Project employees, residents, and guests with various public transportation opportunities in lieu of driving. Additionally, the Project would provide bicycle storage areas for Project residents and guests. The Project would also incorporate characteristics that would reduce trips and VMT as compared to standard ITE trip generation rates. The Project characteristics listed below are consistent with the California Air Pollution Control Officers Association (CAPCOA) guidance document, *Quantifying Greenhouse Gas Mitigation Measures*, which provides emission reduction values for recommended GHG emissions reduction measures, and would reduce vehicle trips and VMT associated with the Project. These Project characteristics would result in a corresponding reduction in VMT and associated transportation energy consumption and reduce the potential for inefficient, wasteful, and unnecessary use of energy. Qualifying measures applicable to the Project include the following:

- **Increase Density (LUT-1):** Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the

implementation of other strategies, such as enhanced transit services. The Project would increase the density from an 850-square-foot restaurant and surface parking to 428 dwelling units and up to 5,610 square feet of commercial uses.

- **Increase Diversity of Urban and Suburban Developments (Mixed-Uses) (LUT-3):** The Project would introduce new residential and commercial uses on the Project Site. The Project would locate complementary commercial and residential land uses in proximity to other existing off-site commercial and residential uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging non-automotive forms of transportation (i.e. walking and biking), which would result in corresponding reductions in transportation-related emissions.

- **Increase Destination Accessibility (LUT-4):** The Project Site is located in an area that offers access to multiple nearby retail and entertainment destinations. In addition, the Project Site is located in Downtown Los Angeles, a primary job center, also easily accessible by public transportation. The access to multiple destinations in proximity to the Project Site would reduce vehicle trips and VMT and would encourage walking and non-automotive forms of transportation, and would result in corresponding reductions in transportation-related emissions.

- **Increase Transit Accessibility (LUT-5):** As stated previously, extensive public bus and rail transit service is provided within the Project study area. The Project is located near several transit routes that would promote use of transit in lieu of vehicular travel. More specifically, a staircase leading down to the Pershing Square Station, which provides access to the Metro Red and Purple rail lines, is located directly in front of the Project site. There is also a transit stop located adjacent to the Project site on Hill Street that is served by Metro Local, Rapid and Express buses. The following bus lines stop within 1/8 mile (a 2 minute walk) from the Project site:

    - Metro Local Line 2
    - Metro Local Line 4
    - Metro Local Line 10
    - Metro Local Line 28
    - Metro Local Line 30
    - Metro Local Line 35
    - Metro Local Line 40
    - Metro Local Line 45
    - Metro Local Line 81

- Metro Local Line 83
- Metro Local Line 90
- Metro Local Line 91
- Metro Local Line 94
- Metro Local Line 330
- Metro Rapid Line 728
- Metro Rapid Line 745
- Metro Rapid Line 794
- LADOT Commuter Express Line 419

The Project would also provide adequate bicycle parking spaces for residential and commercial uses to encourage utilization of alternative modes of transportation.

- **Improve Design of Development (LUT-9)**: The Project would include improved design elements including developing ground floor retail, open space, and improved streetscape which would enhance walkability in the Project Site vicinity. The Project would also locate a development in an area with a high level of street accessibility and connectivity.

- **Provide Pedestrian Network Improvements (SDT-1):** Providing links and minimizing barriers to the Project Siteswith existing or planned external streets would encourage people to walk instead of drive. The Project would link to the existing off-site pedestrian network, including existing off-site sidewalks, to encourage and increase pedestrian activities in the area that would further reduce VMT and associated transportation-related emissions. Furthermore, the Project would result in an improved and aesthetically appealing streetscape that would promote pedestrian activity.

- **Traffic Calming Measures (SDT-2):** Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift results in a decrease in VMT. Streets within a half mile of the Project Site are equipped with sidewalks, and approximately many of the intersections include marked crosswalks and/or count-down signal timers that calm traffic.

Summary of Energy Requirements and Energy Use Efficiencies

Appendix F of the CEQA Guidelines recommends quantification of a project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed. The Project's energy requirements were calculated based on the methodology contained in CalEEMod for electricity and natural gas usage. Project VMT data was calculated based on CAPCOA guidelines. The calculations also

took into account energy efficiency measures such as Title 24, CalGreen, and vehicle fuel economy standards. Tables V-8 through V-11 provide a summary of Project construction and operational energy usage. During Project construction activities, a total of 705 kWh of electricity would be consumed along with approximately 1,741,476 gallons of transportation fuel (gasoline and diesel). During Project operations, a total of 14,102,475 kWh of electricity, 5,563,336 kBTU of natural gas, and 408,718 gallons of transportation fuel would be consumed on an annual basis. The Project-related net increase in annual electricity consumption of 14,102,475 kWh per year would represent approximately 0.06 percent of LADWP's projected sales in 2023-2024. The Project's natural gas consumption would account for approximately 0.0006 percent of the forecasted 2023 consumption in SCG's planning area.

2) *The effects of the project on local and regional energy supplies and on requirements for additional capacity.*

Construction

As discussed above, electricity would be intermittently consumed during the conveyance of the water used to control fugitive dust, as well as to provide electricity for temporary lighting and other general construction activities. 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, electric equipment would be powered off so as to avoid unnecessary energy consumption. The estimated construction electricity usage represents approximately 0.005 percent of the estimated net annual operational demand and would be within the supply and infrastructure service capabilities of LADWP. Furthermore, the electricity demand during construction would be somewhat offset with the removal of the existing on-site uses which currently generate a demand for electricity. Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities; thus there would be no demand generated by construction, resulting in a net decrease when compared to existing operations. Transportation fuel usage during Project construction activities would represent approximately 0.006 percent of gasoline usage and 0.2 percent of diesel usage within Los Angeles County, respectively.[33] As energy consumption during Project construction activities would be relatively negligible, the Project would not likely affect regional energy consumption in years during the construction period.

Operation

As stated previously, based on LADWP's 2017 Resource Plan, LADWP forecasts that its total energy sales in the 2023–2024 fiscal year (the Project's buildout year) will be 23,033 GWh of electricity. As such, the Project-related net increase in annual electricity consumption of 14,102,475 kWh per year would represent approximately 0.06 percent of LADWP's projected sales in 2023-2024.

[33] *Refer to County fuel calculations in Appendix G.*

As stated above, the Project's estimated net increase in demand for natural gas is 5,653,336 kBTU per year or approximately 15,489 kBTU per day (9,753 cf per day). Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SCG's planning area will be approximately 2,480 million cf per day in 2023. The Project would account for approximately 0.0006 percent of the forecasted 2023 consumption in SCG's planning area.

At buildout, the Project would consume a net total of 290,504 gallons of gasoline and 113,214 gallons of diesel per year, or a net total of 408,718 gallons of petroleum-based fuels per year. For comparison purposes, the transportation-related fuel usage for the Project would represent approximately 0.009 percent of the 2017 annual on-road gasoline- and diesel-related energy consumption in Los Angeles County, as shown in Appendix G of this SCEA.

In sum, energy consumption during Project operations would be relatively negligible, and energy requirements would be within LADWP's and SCG's service provision.

3) The effects of the project on peak and base period demands for electricity and other forms of energy.

As discussed above, electricity demand during construction and operation of the Project would have a negligible effect on the overall capacity of LADWP's power grid and base load conditions. With regard to peak load conditions, LADWP's power system experienced an all time high peak of 6,432 MW on August 31, 2017.[34] LADWP also estimates a peak load based on two years of data known as base case peak demand to account for typical peak conditions. Based on LADWP estimates for 2017, the base case peak demand for the power grid is 5,854 MW.[35] Under peak conditions, the Project would consume 14,102,475 kWh on an annual basis, equivalent to 1,610 kW. In comparison to the LADWP power grid base peak load of 5,854 MW in 2017, the Project would represent approximately 0.00002 percent of the LADWP base peak load conditions. In addition, LADWP's annual growth projection in peak demand of the electrical power grid of 0.4 percent would be sufficient to account for future electrical demand by the Project.[36] Thus, Project electricity consumption during operational activities would have a negligible effect on peak load conditions of the power grid.

4) The degree to which the project complies with existing energy standards.

The Building Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) were first adopted in 1976 and have been updated periodically since then as directed by statute. The Building Energy Efficiency Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. PRC Sections 25402 (Subdivisions (a) and (b)) and 25402.1 emphasize the importance of building design and construction flexibility by

[34] *2017 Power Strategic Long-Term Resource Plan, LADWP, December 2018.*

[35] *Ibid.*

[36] *Ibid.*

requiring the California Energy Commission (CEC) to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Building Energy Efficiency Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Building Energy Efficiency Standards that contain data and other information that helps builders comply with the Building Energy Efficiency Standards.

The 2016 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential Building Energy Efficiency Standards include improvements for attics, walls, water heating, and lighting, as well as alignment with the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) 90.1 2013 national standards. New efficiency requirements for elevators and direct digital controls are included in the nonresidential Building Energy Efficiency Standards. The 2016 Building Energy Efficiency Standards also include changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language. The Building Energy Efficiency Standards are enforced through the local building or individual agency permit and approval processes.[37]

Part 11 of the Title 24 California Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the 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 positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." As of January 1, 2011, compliance with the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code was updated in 2016 to include mandatory measures for nonresidential development related to site development; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. These updates came into effect on January 1, 2017.

On December 20, 2016, the Los Angeles City Council approved Ordinance No. 184,692, which amended Chapter IX (Green Building Code) of the Los Angeles Municipal Code (LAMC), by amending certain provisions of Article 9 to reflect local administrative changes and incorporating by reference portions of the 2016 CALGreen Code. This is referred to as the Los Angeles Green Building Code (LAGBC). Projects filed on or after January 1, 2017, must comply with the provisions of the LAGBC. Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) nonresidential and high-rise residential buildings; and (3) additions and alterations to nonresidential and high-rise residential buildings.

[37] *CEC, 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, June 2015.*

Article 9, Division 5 includes mandatory measures for newly constructed nonresidential and high-rise residential buildings.

Although Title 24 requirements typically apply to energy usage for buildings, construction equipment would also comply with Title 24 requirements where applicable. Electricity and natural gas usage during Project operations presented on Tables V-8 through V-11 would comply with 2016 Title 24 standards and applicable 2016 CalGreen Code requirements and the City's Green Building Code. Thus, Project construction and operational activities would comply with existing energy standards with regards to electricity and natural gas usage.

Additionally, the Project would be designed and constructed to achieve LEED v4 Building Design and Construction, Multifamily Midrise Gold standards. Example measures that could be employed to meet the standard include the following:[38]

- High-efficiency window glazing, with u-values as low as 0.30 and Solar Heat Gain Coefficients as low as 0.16
- Cool roof with high aged solar reflectance
- Water source heat pump with Energy Efficiency Rating of 15.2 or greater and high-efficiency fan motors in blowers
- High-efficiency boilers for domestic hot water with 95 percent efficiency
- Predominantly lit with LED lighting
- Grade I Insulation
- Energy Star Appliances in dwelling units
- Additional diagnostic testing to ensure:
    - Tight duct systems
    - Tight envelope design that minimizes air to the outside of each dwelling unit

With regard to transportation fuels, trucks and equipment used during proposed construction activities, the Project would comply with CARB's anti-idling regulations as well as the In-Use Off-Road Diesel-Fueled Fleets regulation. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in efficient use of construction-related energy. During Project operations, vehicles travelling to and from the Project Site are assumed to comply with CAFE fuel economy standards. Project-

[38] *The measures listed here are included for example purposes only. The exact measures included as part of the Project to achieve the LEED v4 Building Design and Construction, Multifamily Midrise Gold standard would be determined through the United States Green Building Council (USGBC) LEED certification process.*

related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards, which are designed to reduce vehicle GHG emissions but would also result in fuel savings in addition to CAFE standards. Therefore, Project construction and operational activities would comply with existing energy standards with regards to transportation fuel consumption.

5) Effects of the Project on Energy Resources

As discussed above, LADWP's electricity generation is derived from a mix of non-renewable and renewable sources such as coal, natural gas, solar, geothermal, wind, and hydropower. LADWP's 2017 Resource Plan identifies adequate resources (i.e., natural gas and coal) to support future generation capacity.

Natural gas supplied to the Southern California is mainly sourced from out of state with a small portion originating in California. Sources of natural gas for the Southern California region are obtained from locations throughout the western United States as well as Canada.[39] According to the U.S. Energy Information Administration (EIA), the United States currently has over 80 years of natural gas reserves based on 2018 production.[40] Compliance with energy standards is expected to result in more efficient use of natural gas (lower consumption) in future years. Thus, Project construction and operation activities would have a negligible effect on natural gas supply.

Transportation fuels (gasoline and diesel) are produced from crude oil, which is imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of consumption.[41] The Project would also comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards, which are designed to reduce vehicle GHG emissions but would also result in fuel savings in addition to CAFE standards. Thus, Project construction and operation activities would have a negligible effect on the transportation fuel supply.

One of the objectives of Senate Bill 350 (SB 350) (the clean Energy and Pollution Reduction Act of 2015) is to increase procurement of California's electricity from renewable sources from 33 percent to 50 percent by 2030. Accordingly, LADWP is required to procure at least 50 percent of their energy portfolio from renewable sources by 2030. The current sources of renewable energy procured by LADWP include wind, solar, and geothermal sources. These sources account for 29 percent of LADWP's overall energy mix in 2017, the most recent year for which data are available.[42] This represents the available off-site renewable sources of energy that would meet the Project's energy demand.

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[39] *California Gas and Electric Utilities, 2016 California Gas Report, 2016.*

[40] *U.S. Energy Information Administration, Frequently Asked Questions, www.eia.gov/tools/faqs/faq.php?id=58&t=8, accessed July 31, 2019.*

[41] *BP Global, Oil reserves, https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/oil/oil-reserves.html, accessed July 31, 2019.*

[42] *Utility Annual Power Content Labels for 2017, LADWP, July 2018.*

With regard to on-site renewable energy sources, as required under the City's Green Building Code, the Project would include the provision of conduit that is appropriate for future photovoltaic and solar thermal collectors. However, due to the Project Site's location, other on-site renewable energy sources would not be feasible to install on-site as there are no local sources of energy from the following sources: biodiesel, biomass hydroelectric and small hydroelectric, digester gas, fuel cells, landfill gas, municipal solid waste, ocean thermal, ocean wave, and tidal current technologies, or multi- fuel facilities using renewable fuels. Furthermore, while methane is a renewable derived biogas and was found beneath the Project Site, it is not available on the Project Sites in commercially viable quantities or form, and its extraction and treatment for energy purposes would result in secondary impacts. Additionally, wind-powered energy is not viable on the Project Site due to the lack of sufficient wind in the Los Angeles basin.

Specifically, based on a map of California's wind resource potential, the Project Site is not identified as an area with wind resource potential.[43]

6) The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

The Project's high-density design and proximity to job centers and retail uses would allow for more residents to live closer to work and shopping areas, reducing associated VMT. The design of the Project, which includes dedicated bicycle parking facilities and an improved streetscape with pedestrian amenities, also would encourage non-automotive forms of transportation such as walking or biking to destinations. In addition, As stated previously, extensive public bus and rail transit service is provided within the Project study area. The Project is located near several transit routes that would promote use of transit in lieu of vehicular travel. More specifically, a staircase leading down to the Pershing Square Station, which provides access to the Metro Red and Purple rail lines, is located directly in front of the Project site. There is also a transit stop located adjacent to the Project site on Hill Street that is served by Metro Local, Rapid and Express buses. The following bus lines stop within 1/8 mile (a 2 minute walk) from the Project site:

- Metro Local Line 2
- Metro Local Line 4
- Metro Local Line 10
- Metro Local Line 28
- Metro Local Line 30

[43] *National Renewable Energy Laboratory (NREL) Wind Prospector, California Energy Commission, https://maps.nrel.gov/wind-prospector/?aL=lJt8A-%255Bv%255D%3Dt%26kM6jR-%255Bv%255D%3Dt%26kM6jR-%255Bd%255D%3D1%26xY_VBM%255Bv%255D%3Dt%26xY_VBM%255Bd%255D%3D2%26qCw3hR%255Bv%255D%3Dt%26qCw3hR%255Bd%255D%3D3&bL=groad&cE=0&lR=0&mC=34.01282694464166%2C-117.31063842773436&zL=10, accessed July 31, 2019.*

- Metro Local Line 35
- Metro Local Line 40
- Metro Local Line 45
- Metro Local Line 81
- Metro Local Line 83
- Metro Local Line 90
- Metro Local Line 91
- Metro Local Line 94
- Metro Local Line 330
- Metro Rapid Line 728
- Metro Rapid Line 745
- Metro Rapid Line 794
- LADOT Commuter Express Line 419.

As shown on Table V-55 (refer to Response to Checklist Question 17a] [Transportation]), due to the Project Site's proximity to transit, the Project would result in a reduction of approximately 729 daily trips, resulting in an associated reduction of VMT. Thus, the Project would encourage the use of efficient transportation alternatives.

7) The degree to which the project design and/or operations incorporate energy-conservation measures, particularly those that go beyond City requirements.

The City's current Green Building Code requires compliance with the CalGreen Code and California's Building Energy Efficiency Standards (Title 24). The Project would be required to comply with the City's Green Building Code.

The City has also adopted several plans and regulations to promote the reduction, reuse, recycling, and conversion of solid waste going to disposal systems. These regulations include the City of Los Angeles Solid Waste Management Policy Plan, the RENEW LA Plan, and the Exclusive Franchise System Ordinance (Ordinance No. 182,986). These solid waste reduction programs and ordinances help to reduce the number of trips associated with hauling solid waste, thereby reducing the amount of petroleum-based fuel consumed. Furthermore, recycling efforts indirectly reduce the energy necessary to create new products made of raw material, which is an energy- intensive process. Thus, through compliance with the City's construction-related solid waste recycling programs, the Project would contribute to reduced fuel-related energy consumption.

8) Whether the Project conflicts with adopted energy conservation plans.

As discussed in response to Checklist topic 8 (Greenhouse Gas Emissions), the City has published the LA Green Plan/ClimateLA in 2007 which outlines goals and actions by the City to reduce GHG emissions. To facilitate implementation of the LA Green Plan/Climate LA, the City adopted the Green Building Code. The Project would comply with applicable regulatory requirements for the design of new buildings, including the provisions set forth in the 2016 CALGreen Code and California's Building Energy Efficiency Standards, which have been incorporated into the City's Green Building Code.

With regard to transportation uses, the Project design would reduce vehicle trips and VMT and encourage use of alternative modes of transportation. The Project would be consistent with regional planning strategies that address energy conservation. SCAG's 2016-2040 RTP/SCS focuses on creating livable communities with an emphasis on sustainability and integrated planning, and identifies mobility, economy, and sustainability as the three principles most critical to the future of the region. As part of the approach, the 2016-2040 RTP/SCS focuses on reducing fossil fuel use by decreasing VMT, reducing building energy use, and increasing use of renewable sources. The Project would be consistent with the energy efficiency policies emphasized in the 2016-2040 RTP/SCS. Most notably, the Project would be a mixed-use development, consisting of residential and commercial uses in in Downtown Los Angeles, an area of the City that includes employment and retail opportunities and is characterized by a high degree of pedestrian activity. The Project would be well-served by existing public transportation, including Metro and LADOT bus lines and rail lines. This is evidenced by the Project Site's location within a designated HQTA.

The introduction of new housing and job opportunities within an HQTA, as proposed by the Project, is consistent with numerous policies in the 2016-2040 RTP/SCS. The 2016-2040 RTP/SCS is estimated to result in an 8-percent decrease in VMT by 2020, an 18-percent decrease in VMT by 2035, and a 21-percent decrease in VMT by 2040. In March 2018, CARB adopted updated targets requiring a 19-percent decrease in VMT for the SCAG region by 2035. As the CARB targets were adopted after the 2016-2040 RTP/SCS, it is expected that the updated targets will be incorporated into the next RTP/SCS. The 2016-2040 RTP/SCS and/or the next RTP/SCS are expected to fulfill and exceed SB 375 compliance with respect to meeting the State's GHG emissions reduction goals. Thus, consistent with both the 2016-2040 RTP/SCS and CARB's updated targets adopted in March 2018, the Project would reduce daily trips by 729 in comparison to a standard project as estimated by CalEEMod, and, consequently, the Project's petroleum-based fuel usage would be reduced.

These VMT reducing measures are also consistent with the goals of the Sustainable City pLAn which targets GHG emissions generated by city owned buildings and properties. Although the Sustainable City pLAn targets City generated GHG emissions, the Project would also comply with or not conflict with measures to reduce GHG emission. In addition, the Project would comply with state energy efficiency requirements, would be capable of achieving LEED v4 Building Design and Construction, Multifamily Midrise Gold standards, and would use electricity from LADWP, which has a current renewable energy mix of 30 percent. All of these features would serve to reduce the consumption of electricity, natural gas, and transportation fuel. Based on the above, the Project would be consistent with adopted energy conservation plans.

Conclusion

As demonstrated in the analysis of the eight criteria discussed above, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy during construction or operation. In addition to compliance with the City's Green Building Code, the Project would be capable of achieving LEED v4 Multifamily Midrise Gold standards. The Project's energy requirements would not significantly affect local and regional supplies or capacity. The Project's energy usage during peak and base periods would also be consistent with electricity and natural gas future projections for the region. Electricity generation capacity and supplies of natural gas and transportation fuels would also be sufficient to meet the needs of Project-related construction and operations. During operations, the Project would comply with existing energy efficiency requirements such as CalGreen as well as include energy conservation measures beyond requirements such as those associated with LEED v4 Multifamily Midrise Gold standards. In summary, the Project would comply with existing energy efficiency standards and would not result in wasteful, inefficient, or unnecessary use of energy. **Therefore, Project impacts related to energy would be less than significant.**

Cumulative Impacts

Wasteful, Inefficient, and Unnecessary Use of Energy)

Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. Based on the information presented in on Table II-3 in Section II (Project Description), there are 172 related projects located within the vicinity of the Project Site. The geographic context for the cumulative analysis of electricity is LADWP's service area and the geographic context for the cumulative analysis of natural gas is SCG's service area. While the geographic context for transportation-related energy use is more difficult to define, it is meaningful to consider the Project in the context of countywide consumption. Growth within these geographies is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure, such as new or expanded energy facilities.

Electricity

Buildout of the Project, related projects, and additional forecasted growth in LADWP's service area would cumulatively increase the demand for electricity supplies and infrastructure capacity. As stated previously, LADWP forecasts that its total energy sales for the 2023-2024 fiscal year (the Project buildout year) will be 23,033 GWh of electricity. Based on the Project's estimated net new electrical consumption of 14,102,475 kWh per year, the Project would account for approximately 0.06 percent of LADWP's total projected sales for the Project's buildout year. Thus, although Project development would result in the use of renewable and non-renewable electricity resources during construction and operation, which could limit future availability, the use of such resources would be on a relatively small scale, would be reduced by measures making the Project more energy-efficient, and would be consistent with growth expectations for LADWP's service area. Furthermore, as with the Project, during construction and operation, other future

development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CalGreen and state energy standards under Title 24, and incorporate mitigation measures, as necessary. As such, the Project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of electricity would not be cumulatively considerable and thus, would be less than significant.

Natural Gas

Buildout of the Project, related projects, and additional forecasted growth in SCG's service area would cumulatively increase the demand for natural gas supplies and infrastructure capacity. As stated previously, based on the 2018 California Gas Report, the CEC estimates natural gas consumption within SCG's planning area will be approximately 2,480 million cf per day in 2023. The Project would account for approximately 0.0006 percent of the forecasted 2023 consumption in SCG's planning area. SCG's forecasts take into account projected population growth and development based on local and regional plans. Although Project development would result in the use of natural gas resources, which could limit future availability, the use of such resources would be on a relatively small scale, would be reduced by measures rendering the Project more energy-efficient, and would be consistent with regional and local growth expectations for SCG's service area. Furthermore, future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CalGreen and state energy standards under Title 24, and incorporate mitigation measures, as necessary. **As such, the Project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of natural gas would not be cumulatively considerable and thus, would be less than significant.**

Transportation Energy

Buildout of the Project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. As described above, at buildout, the Project would consume a net total of 290,504 gallons of gasoline and 113,214 gallons of diesel per year, or a total of 408,718 gallons of petroleum-based fuels per year. For comparison purposes, the transportation-related fuel usage for the Project would represent approximately 0.008 percent of the 2018 annual on-road gasoline- and diesel-related energy consumption in Los Angeles County, as shown in Appendix G of this SCEA.

Additionally, as described above, petroleum currently accounts for 90 percent of California's transportation energy sources. However, over the last decade the state has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce VMT, which would reduce reliance on petroleum fuels. According to the CEC, gasoline consumption has declined by 6 percent since 2008, and the CEC predicts that the demand for gasoline will continue to decline over the next 10 years and that there will be an increase in the use of alternative fuels, such as natural gas, biofuels, and electricity. As with the Project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions. Therefore, the Project's contribution to any potential cumulative impacts related to wasteful,

inefficient and unnecessary use of transportation fuel would not be cumulatively considerable and would be less than significant.

Consistency with State or Local Plans

Related and future projects within the Project Site area would be required to comply with energy conservation and renewable energy plans and polices described above, including Title 24, CALGreen, and the City's Green Building Code. As related projects would be required to meet the same energy consumption standards, there would be no significant cumulative impacts with regard to consistency with energy conservation plans.

Furthermore, as described above, the Project would be consistent with the policies emphasized by the 2016-2040 RTP/SCS. The Project would be a mixed-use Project and located in a transit-rich area that would result in a reduction of vehcle trips and associated VMT. As discussed in response to Checklist Question 17 a) (Transportation), the Project would result in a reduction of 729 daily trips in comparison to a standard project as estimated by CalEEMod, which would be consistent with the reduction in VMT and associated emissions per capita provided in the 2016-2040 RTP/SCS and with CARB's updated 2035 target. Therefore, the Project's contribution to any potential cumulative impacts related consistency with state or local plans would not be cumulatively considerable and would be less than significant.

7. GEOLOGY AND SOILS

In 2015, the California Supreme Court in CBIA v. BAAQMD, held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of the project. The City's revised thresholds are intended to comply with this decision. Specifically, the decision held that an impact from the existing environment to the project, including future users and/or residents, is not an impact for purposes of CEQA. However, if the project physically exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. Thus, in accordance with Appendix G of the State CEQA Guidelines and the CBIA v. BAAQMD decision, the Project would have a significant impact related to geology and soils if it would result in any of the following impacts to future residents or users in the Central City Community Plan Area.

a) Would the project exacerbate existing conditions so as to directly or indirectly 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, caused in whole or in part by the project's exacerbation of the existing environmental conditions? Refer to Division of Mines and Geology Special Publication 42.**

Less Than Significant Impact. Fault rupture occurs when movement on a fault deep within the earth breaks through to the surface. Based on criteria established by the California Geological Survey (CGS), faults can be classified as active, potentially active, or inactive. Active faults are those having historically produced earthquakes or shown evidence of movement within the past

11,000 years (during the Holocene Epoch). Potentially active faults have demonstrated displacement within the last 1.6 million years (during the Pleistocene Epoch) while not displacing Holocene Strata. Inactive faults do not exhibit displacement younger than 1.6 million years before the present. In addition, there are buried thrust faults, which are faults with no surface exposure. Due to their buried nature, the existence of buried thrust faults is usually not known until they produce an earthquake.

The CGS establishes regulatory zones around active faults, called Alquist-Priolo Earthquake Fault Zones (previously called Special Study Zones). These zones, which extend from 200 to 500 feet on each side of the known fault, identify areas where a potential surface fault rupture could prove hazardous for buildings used for human occupancy. Development projects located within an Alquist-Priolo Earthquake Fault Zone are required to prepare special geotechnical studies to characterize hazards from any potential surface ruptures. In addition, the City designates Fault Rupture Study Areas along the sides of active and potentially active faults to establish areas of potential hazard due to fault rupture. According to the Geotechnical Feasibility Report, the Project Site is not located within an Alquist-Priolo Earthquake Fault Zone, and no known faults exist on the Project Site.[44] The Elysian Park fault, located 1.4 miles from the site, is the closest fault to the site the Project Site. Thus, the Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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 on the Project Site. Furthermore, given that no active or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the site, the Project would not exacerbate existing fault rupture conditions. Compliance with the existing state and local regulations, including the 2016 California Building Code and the Los Angeles Building Code (LABC), would ensure the Project is consistent with applicable seismic design criteria and with existing seismic safety regulations. Further, the 2010 LABC (as amended in 2017), with which the Project would be required to comply, contains construction requirements to ensure that structures are built to a level such that they can withstand acceptable seismic risk. Therefore, the Project would not expose people or structures to substantial adverse effects associated with fault rupture, and would not cause or exacerbate seismic conditions on the Project Site. As such, impacts with respect to fault rupture would be less than significant.

(ii) Strong seismic ground shaking caused in whole or in part by the project's exacerbation of the existing environmental conditions?

Less Than Significant Impact. The Project Site is located in a seismically active Southern California region. Known regional active faults that could produce significant ground shaking at the site include the faults shown on Table V-12.

[44] *Geotechnical Feasibility Report, Leighton and Associates, Inc., June 12, 2014. (Refer to Appendix H.)*

Table V-12
Faults Near the Project Site

Fault	Distance from Project Site
Elysian Park	1.4 miles
Puente Hills Blind Thrust	3.8 miles
Hollywood	4.5 miles
Raymond	5.1 miles
Newport-Inglewood	7.3 miles
Source: Geotechnical Feasibility Report, Leighton and Associates, Inc., June 12, 2014. (Refer to Appendix H.)	

Given the Project Site's location in a seismically active region, the Project Site could experience seismic groundshaking in the event of an earthquake. Additionally, construction of the Project would be required to adhere to the seismic safety requirements contained in the LABC, as well as the applicable recommendations provided in the geotechnical investigations required by the City to minimize seismic-related hazards. In addition, based on the Geotechnical Feasibility Report, the Project is deemed feasible from a geotechnical perspective.[45] As such, the Project would not exacerbate existing environmental conditions with regard to seismic ground shaking. For these reasons, impacts associated with seismic ground shaking would be less than significant.

(iii) Seismic-related ground failure, including liquefaction caused in whole or in part by the project's exacerbation of the existing environmental conditions?

Less Than Significant Impact. Liquefaction is a form of earthquake-induced ground failure that occurs primarily in relatively shallow, loose, granular, water-saturated soils. Liquefaction can occur when these types of soils lose their shear strength due to excess water pressure that builds up during repeated seismic shaking. A shallow groundwater table, the presence of loose to medium dense sand and silty sand, and a long duration and high acceleration of seismic shaking are factors that contribute to the potential for liquefaction. Liquefaction usually results in horizontal and vertical movements from lateral spreading of liquefied materials.

Review of the Seismic Hazard Zone Report for the Los Angeles Quadrangle indicates the northern half of the Project Site is located within an area that has been identified by the State of California as being potentially susceptible to the occurrence of liquefaction and located within a liquefaction zone. Additionally, ZIMAS identifies the Project Site as located within a liquefaction zone.[46] However, as disclosed in the preliminary Geotechnical Feasibility Report (refer to Appendix H), borings encountered bedrock consisting of claystone/siltstone at depths of 15 to 20 feet below

[45] *Geotechnical Feasibility Report, Leighton and Associates, Inc., page 2, June 12, 2014. (Refer to Appendix H.)*

[46] *ZIMAS, City of Los Angeles, http://zimas.lacity.org/*

existing grade (above the historically high groundwater table of 20 to 40 feet).[47] The bedrock is hard and not considered susceptible to liquefaction.

Construction of the Project will be subject to the City's current Building Code requirements, recommendations included in the Final Geotechnical Report, and the conditions contained within the City of Los Angeles Department of Building and Safety's Geology and Soils Approval Letter, which would minimize all potential impacts associated with liquefaction. As such, liquefaction potential for the Project Site is considered low. Based on the above, development of the Project would not cause or exacerbate geologic hazards, including liquefaction. Therefore, Project impacts related to liquefaction would be less than significant.

(iv) Landslides caused in whole or in part by the project's exacerbation of the existing environmental condition?

No Impact. Landslide potential is generally the greatest for areas with steep and/or high slopes, low sheer strength, and increased water pressure. The Project Site and adjacent properties are flat and do not contain any slopes or hillsides.[48] Thus, the Project would not result in any impacts related to landslides. Based on the above, development of the Project would not cause or exacerbate geologic hazards, including landslides.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The Project Site is currently completely developed with impervious surfaces and does not contain any topsoil. During the Project's construction phase, activities such as excavation to depths of up to 40 feet, grading, and site preparation could leave soils at the Project Site susceptible to soil erosion. The Project Applicant would be required to comply with SCAQMD Rule 403 – Fugitive Dust to minimize wind and water-borne erosion at the site, as well as prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Associated with Construction Activity and Land Disturbance Activities. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during Project construction. The SWPPP would include best management practices (BMPs) and erosion control measures to prevent pollution in storm water discharge. Typical BMPs that could be used during construction include good-housekeeping practices (e.g., street sweeping, proper waste disposal, vehicle and equipment maintenance, concrete washout area, materials storage, minimization of hazardous materials, proper handling and storage of hazardous materials, etc.) and erosion/sediment control measures (e.g., silt fences, fiber rolls, gravel bags, storm water inlet protection, and soil stabilization measures, etc.). The SWPPP would be subject to review and approval by the City for compliance with the City's Development Best Management Practices Handbook, Part A, Construction Activities. Additionally, all Project construction activities would comply with the City's grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction

[47] *Geotechnical Feasibility Report, Leighton and Associates, Inc., June 12, 2014. (Refer to Appendix H.)*

[48] *Ibid.*

occurs during rainy season, as well as inspections to ensure that sedimentation and erosion is minimized. Through compliance with these existing regulations, the Project would not result in any significant impacts related to soil erosion during the construction phase. Additionally, during the Project's operational phase, most of the Project Site would be developed with impervious surface, and all stormwater flows would be directed to storm drainage features and would not come into contact with bare soil surfaces. Therefore, with compliance with applicable regulatory requirements, impacts regarding soil erosion or the loss of topsoil would be less than significant, and no mitigation measures are required.

c) Would the project 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?

Less Than Significant Impact. As discussed above, review of the most recent Seismic Hazard Zone Report for the Los Angeles Quadrangle indicates the northern half of the Project Site is located within an area that has been identified by the State of California as being potentially susceptible to the occurrence of liquefaction and located within a liquefaction zone. However, borings encountered bedrock consisting of claystone/siltstone at depths of 15 to 20 feet below existing grade (above the historically high groundwater table of 20 to 40 feet). The bedrock is hard and not considered susceptible to liquefaction. As such, liquefaction potential for the Project Site is considered low. The preliminary Geotechnical Feasibility Report prepared for the Project includes lateral earth pressure estimates to be considered in the design of the retaining structures that would be part of the Project building. The Preliminary Geotechnical Feasibility Report has been reviewed by the Los Angeles Department of Building and Safety, which concurred with the conclusions and recommendations of the report.[49] The Project Applicant would be required by the City of Los Angeles Department of Building and Safety, as part of the permitting process, to prepare (or have prepared) a Final Geotechnical Report that would address the building standards and recommendations that shall be followed in order to construct the proposed structure in accordance with building standards that apply to building within the types of soils found at the site, including areas prone to geologic or soil instability. Through compliance with the City's building code, recommendations included in the Final Geotechnical Report, and the conditions contained within the City of Los Angeles Department of Building and Safety's Geology and Soils Approval Letter, impacts related to geologic and soil instability would be less than significant. Based on the above, development of the Project would not cause or exacerbate geologic hazards.

d) Would the project be located on expansive soil, as identified on Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact. Expansive soils are typically associated with fine-grained clayey soils that have the potential to shrink and swell with repeated cycles of wetting and drying. According to the Geotechnical Feasibility Study prepared for the Project (refer to Appendix H), a representative

[49] *Soils Report Apprlvial Letter, April 20, 2015, City of Los Angeles Department of Building and Safety.Soils Report Approval Letter, City of Los Angeles Department of Building Safety, June 8, 2016. (Refer to Appendix H.)*

sample of the near surface soil was subjected to Expansion Index testing to evaluate the expansive potential.[50] The results of the testing indicate the soils at the Project Site exhibit "low" expansion potential. In addition, the Project would be designed and constructed in conformance with the City's current Building Code requirements. Thus, the Project would not be constructed on expansive soil and would not create a substantial risk to individuals and/or property. Based on the above, development of the Project would not cause or exacerbate geologic hazards. Therefore, no impacts related to this issue would occur as a result of the Project.

e) Would the project 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 wastewater?

No Impact. The Project Site is located within a community served by existing sewage infrastructure. The Project would connect to the City's existing sewer system and would not require the use of septic tanks or alternative wastewater disposal systems. Thus, the Project would not result in any impacts related to soils that are incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. Therefore, no impacts related to this issue would occur.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. The Project Site is in a highly urbanized area of the City and is currently developed with a restaurant building and surface parking lot. There are no unique geologic features on the Project Site. Paleontological resources are the fossilized remains of organisms that have lived in a region in the geologic past and whose remains are found in the accompanying geologic strata. This type of fossil record represents the primary source of information on ancient life forms, since the majority of species that have existed on earth from this era are extinct. Section 5097.5 of the PRC specifies that any unauthorized removal of paleontological remains is a misdemeanor. Furthermore, California Penal Code Section 622.5 includes penalties for damage or removal of paleontological resources.

A records search was conducted with the Los Angeles County Natural History Museum to determine the likelihood for unique paleontological resources to occur at the Project Site (refer to Appendix I). The records search revealed that no paleontological resources are known to exist at the Project Site. During the Project's construction phase, excavation of the Project Site to approximately 40 feet below ground surface would occur to develop the proposed subterranean parking levels. According to the Geotechnical Report (refer to Appendix I) prepared for the Project, the first 5 to 10 feet of soils below ground surface are artificial fill materials underlain by alluvium. As such, the likelihood for paleontological resources to exist within the artificial fill would be remote. However, fossils have been found in the sedimentary deposits that exist within the Project area and at the Project Site. As such, there is a possibility for unknown paleontological resources to be encountered within the underlying alluvium. Nonetheless, the Project Applicant would be required to comply with the City's standard condition of approval related to the inadvertent

[50] *Geotechnical Feasibility Report, Leighton and Associates, Inc., June 12, 2014. (Refer to Appendix H.)*

discovery of unknown paleontological resources. In the event that any paleontological resources are encountered at the Project Site during construction or the course of any ground disturbance activities, all such activities shall halt immediately, at which time the applicant shall notify the City and consult with a qualified paleontologist to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined to be unnecessary or infeasible by the City. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Compliance with this condition would ensure that Project impacts related to unknown paleontological resources would be less than significant.

Cumulative Impacts

Geotechnical impacts related to future development in the City involve hazards related to site-specific soil conditions, erosion, and ground-shaking during earthquakes. The impacts on each site are specific to that site and its users and would not be in common or contribute to (or shared with, in an additive sense) the impacts on other sites. In addition, development on each site is subject to uniform site development and construction standards that are designed to protect public safety. Further, impacts related to paleontological resources are also site-specific and are assessed on a site-by-site basis. All development in the City (including the proposed Project and the related projects) that involves ground-disturbing activities is required to comply with the City's standard condition of approval related to the discovery of unknown paleontological resources. Therefore, Project cumulative geology and soils impacts related would be less than significant.

8. GREENHOUSE GAS EMISSIONS

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. The global nature of climate change creates unique challenges for assessing the Project's climate change impact under CEQA, which focuses on cause and effect. When compared to the cumulative inventory of greenhouse gas (GHG) emissions across the globe, a single project's impact will be negligible. To further complicate this, there is debate about whether a project's emissions are adding to the net emissions worldwide, or simply redistributing emissions that would have occurred anyway somewhere in the world.

Climate change analyses are also unique because emitting carbon dioxide (CO_2) into the atmosphere is not itself an adverse environmental effect. It is the increased concentration of CO_2 in the atmosphere resulting in global climate change and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although it is possible to estimate a project's incremental contribution of CO_2 into the atmosphere, it is typically not possible to determine whether or how an individual project's relatively small incremental contribution might translate into physical effects on the environment. Nevertheless, effects related to implementation of the Project are discussed below.

Greenhouse Effect and Influence of Various Greenhouse Gases

Various gases in the Earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the Earth's surface temperature. Solar radiation entering Earth's atmosphere is absorbed by the Earth's surface. When the Earth emits this radiation back toward space, the radiation changes from high-frequency solar radiation to lower-frequency infrared radiation. GHGs are transparent to solar radiation and absorb infrared radiation. As a result, radiation that otherwise would escape back into space is now retained, warming the atmosphere. This phenomenon is known as the greenhouse effect.

GHGs that contribute to the greenhouse effect include the following:

- Carbon Dioxide (CO_2) is released to the atmosphere when solid waste, fossil fuels (oil, natural gas, and coal), and wood and wood products are burned. CO_2 emissions from motor vehicles occur during operation of vehicles and operation of air conditioning systems. CO_2 comprises over 80 percent of GHG emissions in California.[51]

- Methane (CH_4) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in solid waste landfills, raising livestock, natural gas and petroleum systems, stationary and mobile combustion, and wastewater treatment. Mobile sources represent 0.5 percent of overall methane emissions.[52]

- Nitrous Oxide (N_2O) is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels. Mobile sources represent about 14 percent of N_2O emissions.[53] N_2O emissions from motor vehicles generally occur directly from operation of vehicles.

- Hydrofluorocarbons (HFCs) are one of several high global warming potential (GWP) gases that are not naturally occurring and are generated from industrial processes. HFC (refrigerant) emissions from vehicle air conditioning systems occur due to leakage, losses during recharging, or release from scrapping vehicles at end of their useful life.

- Perfluorocarbons (PFCs) are another high GWP gas that are not naturally occurring and are generated in a variety of industrial processes. Emissions of PFCs are generally negligible from motor vehicles.

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[51] *California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006, p. 11.*

[52] *United States Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2003, April 2005 (EPA 430-R-05-003).*

[53] *United States Environmental Protection Agency, U.S. Adipic Acid and Nitric Acid N_2O Emissions 1990-2020: Inventories, Projections and Opportunities for Reductions, December 2001*

- Sulfur Hexafluoride (SF_6) is another high GWP gas that is not naturally occurring and are generated in a variety of industrial processes. Emissions of SF_6 are generally negligible from motor vehicles.

For most non-industrial development projects, motor vehicles make up the bulk of GHG emissions, particularly CO_2, CH_4, N_2O, and HFCs.[54] As illustrated on Table V-13, the other GHGs are less abundant but have higher GWP than CO_2. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. Expressing GHG emissions in CO_2 equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. High GWP gases such as HFCs, PFCs, and SF_6 are the most heat-absorbent.

Table V-13
Global Warming Potential for Greenhouse Gases

Greenhouse Gas	Global Warming Potential Factor (100-Year)
Carbon Dioxide (CO_2)	1
Methane (CH_4)	28
Nitrous Oxide (N_2O)	265
Perfluorocarbons (PFCs)	7,390-12,200
Hydrofluorocarbons (HFCs)	124-14,800
Sulfur Hexafluoride (SF_6)	22,800

Source: Southern California Association of Governments, Draft Program EIR for the 2016-2040 RTP/SCS, November 24, 2015.
Note: Global warming potential measures how much heat a GHG traps in the atmosphere, in this case, over a 100-year period.

The effects of increasing global temperature are far-reaching and difficult to quantify. If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. According to a CEC report, the snowpack portion of the supply could potentially decline by 70 to 90 percent by the end of the 21st century. This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the state; however, since this increase would likely come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system. Sea level has risen approximately seven inches during the last century and, according to the CEC report, it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels. If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands. As the existing

[54] *California Air Resources Board, Climate Change Emission Control Regulations, 2004.*

climate throughout California changes over time, mass migration of species, or worse, failure of species to migrate in time to adapt to the perturbations in climate, could also result.

While efforts to reduce the rate of GHG emissions continue, the State has developed a strategy to adapt the State's infrastructure to the impacts of climate change. The 2009 California Climate Adaptation Strategy (Strategy) analyzes risks and vulnerabilities and proposes strategies to reduce risks. The Strategy analyzed two components of climate change: projecting the amount of climate change that may occur using computer-based global climate models, and assessing the natural or human systems' abilities to cope with and adapt to change by examining past experience with climate variability and extrapolating from this to understand how the systems may respond to the additional impact of climate change. The Strategy's key preliminary adaptation recommendations included the following:

- Appointment of a Climate Adaption Advisory Panel;
- Improved water management in anticipation of reduced water supplies, including a 20 percent reduction in per capita water use by 2020 from 2011 levels;
- Consideration of project alternatives that avoid significant new development in areas that cannot be adequately protected from flooding due to climate change;
- Preparation of agency-specific adaptation plans, guidance or criteria by September 2010;
- Consideration of climate change impacts for all significant State projects;
- Assessment of climate change impacts on emergency preparedness;
- Identification of key habitats and development of plans to minimize adverse effects from climate change;
- Development of guidance by the California Department of Public Health by September 2010 for use by local health departments to assess adaptation strategies;
- Amendment of General Plans and Local Coastal Plans to address climate change impacts and to develop local risk reduction strategies; and
- Inclusion of climate change impact information into fire program planning by State fire fighting agencies.

Regulatory Setting

International

Kyoto Protocol

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In 1992, the U.S. joined other countries around the world in signing

the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling greenhouse gas emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHG emissions in the U.S. The plan currently consists of more than 50 voluntary programs for member nations to adopt.

The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. Some have estimated that if the commitments outlined in the Protocol are met, global GHG emissions could be reduced an estimated five percent from 1990 levels during the first commitment period of 2008-2012. Notably, while the U.S. is a signatory to the Kyoto protocol, Congress has not ratified the Protocol and the U.S. is not bound by the Protocol's commitments. In December 2009, international leaders from 192 nations met in Copenhagen to address the future of international climate change commitments post-Protocol.

The Protocol's major feature is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions. The targets amount to an average of five percent reduction levels against 1990 levels over the five-year period 2008-2012. The major distinction between the Protocol and the UNFCCC is that while the UNFCCC encouraged industrialized countries to stabilize GHG emissions, the Protocol commits them to do so. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

On December 12, 2015, a Conference of the Parties to the UNFCCC and the 11th session of the Kyoto Protocol negotiated an agreement in Paris that would keep the rise of temperature below 2 degrees Celsius. While 195 countries participated and published their action plans detailing how they plan to reduce their GHG emissions, these reductions would still result in up to three degrees Celsius of global warming. The Paris agreement asks all countries to review their plans every five years from 2020, acknowledges that $100 billion is needed each year to enable countries to adapt to climate change. The agreement was opened for signature on April 22, 2016 and will be enforced when 55 countries that account for 55 percent of global emissions have signed on. In May 2017, President Donald Trump announced the United States would withdraw from the Paris climate accord.

The Western Regional Climate Action Initiative

The Western Regional Climate Action Initiative (WCI) is a partnership among seven states, including California, and four Canadian provinces to implement a regional, economy-wide cap-and-trade system to reduce global warming pollution. The WCI will cap GHG emissions from the region's electricity, industrial, and transportation sectors with the goal to reduce the heat trapping emissions that cause global warming to 15 percent below 2005 levels by 2020. When the WCI adopted this goal in 2007, it estimated that this would require 2007 levels to be reduced worldwide between 50 percent and 85 percent by 2050. California is working closely with the other states and provinces to design a regional GHG emissions reduction program that includes a cap-and-trade approach. CARB's planned cap and-trade program, discussed below, is also intended to link California and the other member states and provinces.

Federal

The USEPA has historically not regulated GHG emissions because it determined the CAA did not authorize it to regulate emissions that addressed climate change. In 2007, the U.S Supreme Court found that GHG emissions could be considered within the CAA's definition of a pollutant.[55] In December 2009, the USEPA issued an endangerment finding for GHG emissions under the CAA, setting the stage for future regulation. In September 2009, the National Highway Traffic Safety Administration (NHTSA) and USEPA announced a joint rule that would tie fuel economy to GHG emission reduction requirements.

In June 2013, President Obama announced a Climate Action Plan that calls for a number of initiatives, including funding $8 billion in advanced fossil energy efficiency projects, calls for federal agencies to develop new emission standards for power plants, investments in renewable energy sources, adaptation programs, and leading international efforts to address climate change. In September 2013, the USEPA announced its first steps to implement a portion of the Obama Climate Action Plan by proposing carbon pollution standards for new power plants. However, in March 2017, President Trump signed an executive order that rescinded the 2013 Plan.

Vehicle Standards

Other regulations have been adopted to address vehicle standards including the USEPA and the NHTSA joint rulemaking for vehicle standards.

- On March 30, 2009, the NHTSA issued a final rule for model year 2011.[56]
- On May 7, 2010, the USEPA and the NHTSA issued a final rule regulating fuel efficiency and GHG emissions pollution from motor vehicles for cars and light-duty trucks for model years 2012–2016.[57]
- On August 9, 2011, USEPA and NHTSA issued a Supplemental Notice of Intent announcing plans to propose stringent, coordinated federal GHG emissions and fuel economy standards for model year 2017-2025 light-duty vehicles.[58]
- NHSTA intends to set standards for model years 2022-2025 in a future rulemaking.[59]

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[55] *Massachusetts v. Environmental Protection Agency et al (127 S. Ct. 1438 [2007]).*

[56] *NHSTA. 2009. Average Fuel Economy Standards Passenger Cars and Light Trucks Model Year 2011, Final Rule. 75 Fed. Reg. 25324.*

[57] *USEPA. 2010. Light Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, Final Rule. 75 Fed. Reg. 25324.*

[58] *Available https://www.gpo.gov/fdsys/pkg/FR-2011-08-09/pdf/2011-19905.pdf, accessed August 5, 2019.*

[59] *NHSTA. 2012. 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards. 77 Fed. Reg. 62624.*

- In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the USEPA and the NHTSA announced fuel economy and GHG emissions standards for medium- and heavy-duty trucks that applies to vehicles from model year 2014–2018.[60]

Energy Independence and Security Act

The Energy Independence and Security Act (EISA) is intended to aid in the reduction of national GHG emissions, both mobile and non-mobile through the following strategies:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.

2. Prescribe or revise 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.

3. While superseded by NHTSA and USEPA actions described above, EISA also set miles per gallon targets for cars and light trucks and directed the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

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

State

Assembly Bill 1493

California has adopted a series of laws and programs to reduce emissions of GHGs into the atmosphere. Assembly Bill (AB) 1493 was enacted in September 2003 and requires regulations to achieve "the maximum feasible reduction of greenhouse gases" emitted by vehicles used for personal transportation.

[60] *USEPA Office of Transportation and Air Quality. 2011. EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium-and Heavy-Duty Vehicles. Available: https://nepis.epa.gov/Exe/ZyNET.exe/P100BOT1.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000000%5CP100BOT1.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL, accessed August 5, 2019.*

Executive Order S-3-05

On June 1, 2005, Governor Schwarzenegger issued Executive Order S-3-05, which set the following GHG emission reduction 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. The California Environmental Protection Agency (Cal EPA) formed a Climate Action Team (CAT) that recommended strategies that can be implemented by state agencies to meet GHG emissions targets. The Team reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the Executive Order.[61] Furthermore, the report provided to Governor Schwarzenegger in 2006, referenced above, indicated that smart land use and increased transit availability should be a priority in the State of California.[62] According to the California Climate Action Team, smart land use is an umbrella term for strategies that integrate transportation and land-use decisions. 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.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued an executive order setting a Statewide GHG emissions reduction target of 40 percent below 1990 levels by 2030. This action aligns the State's GHG emissions reduction targets with those set in October 2014 by the European Union and is intended to help the State meets its target of reducing GHG emissions 80 percent below 1990 levels by 2050, consistent with Executive Order S-3-05. This order also aligns with scientifically established levels needed in the U.S. to limit global warming below 2.0 degrees Celsius.[63] The measure calls on State agencies to implement measures accordingly and directs CARB to update the Climate Change Scoping Plan.

Assembly Bill 32

In September 2006, AB 32 was signed into law by Governor Arnold Schwarzenegger, focusing on achieving GHG emissions equivalent to statewide levels in 1990 by 2020. It mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved.

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[61] *California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.*

[62] *California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006, p. 57.*

[63] *CARB, Frequently Asked Questions about Executive Order B-30-15, 2030 Carbon Target and Adaptation FAQs, revised April 29, 2015.*

AB 32 charges CARB with the responsibility to monitor and regulate sources of GHG emissions. On June 1, 2007, CARB adopted three early action measures: setting a low carbon fuel standard, reducing refrigerant loss from motor vehicle air conditioning maintenance, and increasing methane capture from landfills.[64] On October 25, 2007, CARB approved measures improving truck efficiency (i.e., reducing aerodynamic drag), electrifying port equipment, reducing PFCs from the semiconductor industry, reducing propellants in consumer products, promoting proper tire inflation in vehicles, and reducing sulfur hexaflouride emissions from the non-electricity sector. CARB also developed a mandatory reporting program on January 1, 2008 for large stationary combustion sources that emit more than 25,000 metric tons of CO_2 per year and make up 94 percent of the point source CO_2 emissions in California.

CARB developed an AB 32 Scoping Plan that contains strategies to achieve the 2020 emissions cap. This Scoping Plan, which was developed by CARB in coordination with the CAT, was first published in October 2008 (2008 Scoping Plan). The 2008 Scoping Plan proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce the state's dependence on oil, diversify the state's energy sources, save energy, create new jobs, and enhance public health. It accommodated the State's projected population growth. Moreover, it expressly encouraged called for coordinated planning of growth, including the location of dense residential projects near transportation infrastructure, including public transit.

An important component of the plan is a cap-and-trade program covering 85 percent of the state's emissions. Additional key recommendations of the 2008 Scoping Plan include strategies to enhance and expand proven cost-saving energy efficiency programs; implementation of California's clean cars standards and increasing the amount of clean and renewable energy used to power the state. Furthermore, the 2008 Scoping Plan proposes full deployment of the California Solar Initiative, high-speed rail, water-related energy efficiency measures, and a range of regulations to reduce emissions from trucks and from ships docked in California ports. As required by AB 32, CARB must update its Scoping Plan every five years to ensure that California remains on the path toward a low carbon future.

In order to assess the scope of reductions needed to return to 1990 emissions levels, CARB first estimated the 2020 "business-as-usual" (BAU) GHG emissions in the 2008 Scoping Plan. These are the GHG emissions that would be expected to result if there were no GHG emissions reduction measures, and as if the state were to proceed on its pre-AB 32 GHG emissions track. After estimating that statewide 2020 BAU GHG emissions would be 596 metric tons, the 2008 Scoping Plan then identified recommended GHG emissions reduction measures that would reduce BAU GHG emissions by approximately 174 metric tons (an approximately 28.4 percent reduction) by 2020.

On August 19, 2011, following legal action in opposition to the Scoping Plan, CARB updated the Scoping Plan through a Final Supplement to the AB 32 Scoping Plan Functional Equivalent

[64] *California Air Resources Board, Proposed Early Action Measures to Mitigate Climate Change in California, April 20, 2007.*

Document (FED or 2011 Scoping Plan).[65] CARB updated their 2020 BAU emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions achieved through implementation of regulations recently adopted for motor vehicles, building energy efficiency standards, and renewable energy.[66] Under that scenario, the State would have had to reduce its BAU GHG emissions by approximately 21.7 percent by 2020 (down from 28.4 percent).

On May 22, 2014, CARB approved its first update to the AB 32 Scoping Plan, recalculating 1990 GHG emissions using IPCC Fourth Assessment Report (AR4) released in 2007. It states that based on the AR4 global warming potentials, the 427 million metric tons of CO_2e ($MMTCO_2e$) 1990 emissions level and 2020 GHG emissions limit would be slightly higher than identified in the Scoping Plan, at 431 $MMTCO_2e$. Based on the revised estimates of expected 2020 emissions identified in the 2011 supplement to the FED and updated 1990 emissions levels identified in the draft first update to the Scoping Plan, achieving the 1990 emission level would require a reduction of 76 $MMTCO_2e$ (down from 507 $MMTCO_2e$) or a reduction by approximately 15.3 percent (down from 28.4 percent) to achieve in 2020 emissions levels in the BAU condition. CARB's First Update "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," and many of the emission reduction strategies recommended by CARB would serve to reduce the Project's post-2020 emissions level to the extent applicable by law by focusing on reductions from several sectors.[67,68] CARB will be doing a second update to the Scoping Plan to reflect the 2030 targets set by Executive Order B-30-15 and codified by SB 32.

Senate Bill 1368

Senate Bill (SB) 1368, requires the California Public Utilities Commission and the California Energy Commission to establish GHG emissions performance standards for the generation of electricity. These standards will also apply to power that is generated outside of California and imported into the state.

Senate Bill 375

On September 30, 2008, SB 375 was instituted to help achieve AB 32 goals through regulation of cars and light trucks. SB 375 aligns three policy areas of importance to local government: (1) regional long-range transportation plans and investments; (2) regional allocation of the obligation

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[65] *California Air Resources Board, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED), Attachment D, August 19, 2011.*

[66] *California Air Resources Board, Greenhouse Gas Inventory – 2020 Emissions Forecast, https://www.arb.ca.gov/cc/inventory/data/bau.htm. Accessed April 3, 2019.*

[67] *CARB, First Update, p. 4, May 2014. See also id. at pp. 32–33 [recent studies show that achieving the 2050 goal will require that the "electricity sector will have to be essentially zero carbon; and that electricity or hydrogen will have to power much of the transportation sector, including almost all passenger vehicles."]*

[68] *CARB, First Update, Table 6: Summary of Recommended Actions by Sector, pp. 94-99, May 2014.*

for cities and counties to zone for housing; and (3) a process to achieve GHG emissions reductions targets for the transportation sector. It establishes a process for CARB to develop GHG emissions reductions targets for each region (as opposed to individual local governments or households). SB 375 also requires Metropolitan Planning Organizations to prepare an SCS within the RTP that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. While SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.[69]

Under SB 375, when going forward with an SCEA (such as this document), project-specific and cumulative impacts associated with cars and light trucks on global warming are not required to be assessed, pursuant to PRC Sections 21155.2(b) and 21159.28(a).

On October 24, 2008, CARB published draft guidance for setting interim GHG emissions significance thresholds. This was the first step toward developing the recommended statewide interim thresholds of significance for GHG emissions that may be adopted by local agencies for their own use. The guidance does not attempt to address every type of project that may be subject to CEQA, but instead focuses on common project types that are responsible for substantial GHG emissions (i.e., industrial, residential, and commercial projects). CARB's preliminary proposal consisted of a quantitative threshold of 7,000 metric tons (MT) of CO_2e per year for operational emissions (excluding transportation), and performance standards for construction and transportation emissions. Further, CARB's proposal sets forth draft thresholds for industrial projects that have high operational stationary GHG emissions, such as manufacturing plants, or uses that utilize combustion engines.[70] There is currently no timetable for finalized thresholds.

On September 23, 2010, CARB adopted regional targets for the reduction of GHG emissions applying to the years 2020 and 2035.[71] For the area under SCAG's jurisdiction - including the Project Site area - CARB adopted Regional Targets for reduction of GHG emissions by 8 percent for 2020 and by 13 percent for 2035. On February 15, 2011, the CARB's Executive Officer approved the final targets.[72]

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[69] *American Planning Association, California Chapter, Analysis of SB 375, http://www.calapa.org/-en/cms/?2841, accessed March 30, 2009.*

[70] *California Air Resources Board. http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf*

[71] *California Air Resources Board. Notice of Decision: Regional Greenhouse Gas Emissions Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.*

[72] *California Air Resources Board. 2011. Executive Order No. G-11-024: Relating to Adoption of Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.*

In October 2017, CARB released its final report recommending updates to the SB 375 GHG emissions reduction targets across the state.[73] This addresses several statutory, technological, and policy factors that have changed since the original 2010 targets. The proposed 2020 targets for the SCAG region remain at 8 percent reductions, while the proposed 2035 target could increase from a 13 percent to a 21 percent reduction.

Senate Bill 32

On September 7, 2016, Governor Brown signed SB 32 into law, a measure that extended AB 32 another ten years to 2030 and increases the State's objectives. SB 32 calls on Statewide reductions in GHG 40 percent below 1990 levels by 2030. As a result, CARB adopted a Scoping Plan in November 2017 to reflect the 2030 targets set by Executive Order B-30-15 and codified by SB 32. This update calls for strategies that cap the State's GHG emissions at 260 $MMTCO_2e$ by 2030, which would represent a 40 percent reduction from 1990 levels. This includes the following several key elements:

- Relying on California's previously-codified statutory commitment to generate at least half of its electricity from renewable resources by 2030;
- Making more stringent CARB's pioneering Low Carbon Fuel Standard;
- Depending on the California Energy Commission to strengthen dramatically the state's already-stringent building and appliance efficiency standards;
- Enforcing strong new rules to reduce state methane and other short-lived climate pollutants that are especially pernicious;
- Supporting and preserving California's natural and working landscapes in order to enhance carbon sequestration; and
- Devising transformative changes to California's public and private transportation sectors, including a ramped-up conversion of private vehicles from carbon-based to alternative fuels, increased public transit opportunities and progressive land use policies that allow Californians to live closer to their workplaces, thus reducing individual and statewide vehicle miles traveled.
- Continuing the State's cap-and-trade program.

As shown on Table V-14, GHG emissions reductions are to come from a variety of sectors, including energy, transportation, high-global warming potential sources, waste, and the State's cap-and-trade emissions program.

Nearly all reductions are to come from sources that are controlled at the statewide level by State agencies, including CARB, Public Utilities Commission, High Speed Rail Authority, and the CEC.

[73] *Final Staff Report Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets, CARB, October 2017.*

The few actions that are directly or indirectly associated with local government control are in the Transportation sector, which is charged with reducing 4.5 percent of baseline 2020 emissions. Of these actions, only one (i.e., GHG emissions reductions through coordinated planning) specifically identifies local governments as the responsible agency.

Cap-and-Trade

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020 and the more aggressive foals for 2030 pursuant to SB 32. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program's duration.

Table V-14
Emission Reductions Needed to Meet SB 32 Objectives in 2030

Sector	1990 Inventory ($MMTCO_2e$)	Percent Change from 1990 ($MMTCO_2e$)	Summary of Recommended Actions
Electric Power	108	-8	Reduce State's electric and energy utility emissions, reduce emissions from large industrial facilities, control fugitive emissions from oil and gas production, reduce leaks from industrial facilities
Transportation	152	-32	Phase 2 heavy-duty truck GHG emissions standards, ZEV action plan for trucks, construct High Speed rail system from San Francisco to Los Angeles, coordinated land use planning, Sustainable Freight Strategy
Industrial	98	-15	Reduce use of high-GWP compounds from refrigeration, air conditioning, aerosols, etc.
Waste	7	-29	Eliminate disposal of organic materials at landfills, in-State infrastructure development, address challenges with composting and anaerobic digestion, additional methane control and landfills

Source: California Environmental Protection Agency, California's 2017 Climate Change Scoping Plan, November 2017.

Under the Cap-and-Trade Program, covered entities that emit more than 25,000 metric tons CO_2e per year must comply with the Cap-and-Trade Program. Triggering of the 25,000 metric tons CO_2e per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions. CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits.

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate.

In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85 percent of California's GHG emissions. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program.

On July 25, 2017, Governor Brown signed AB 398, which extends the program through 2030. AB 398 calls for half of emissions offsets to be generated in California and prohibits CARB and air districts from regulating CO_2 from sources under the Cap-and-Trade Program.

California Renewables Portfolio Standard Program

The California Renewable Portfolio Standard Program (RPS Program) (2002, SB 1078) required that 20 percent of available energy supplies are from renewable energy sources by 2017. In 2006, SB 1078 accelerated the 20 percent mandate to 2010. These mandates apply directly to investor-owned utilities. On April 12, 2011, California Governor Jerry Brown signed into law SB 2X, which modified California's RPS program to require that both public and investor-owned utilities in California receive at least 33 percent of their electricity from renewable sources by the year 2020. California SB 2X also requires regulated sellers of electricity to meet an interim milestone of procuring 25 percent of their energy supply from certified renewable resources by 2016.

This is conservative, given the 2018 chaptering of SB 100, which requires electricity providers to provide renewable energy for at least 60 percent of their delivered power by 2030 and 100 percent use of renewable energy and zero-carbon resources by 2045. SB 100 also increases existing renewable energy targets to 44 percent by 2024 and 52 percent by 2027.

Title 24 Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Nonresidential Buildings, located at Title 24, Part 6 of the CCR and commonly referred to as "Title 24," were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

California Green Building Standards

The California Green Building Standards Code, which is Part 11 of the CCR, is commonly referred to as the CALGreen Code. CALGreen was added to Title 24 to represent base standards for reducing water use, recycling construction waste, and reducing polluting materials in new buildings. In contrast, Title 24 focuses on promoting more energy-efficient buildings and considers the building envelope, heating and cooling, water heating, and lighting restrictions. The first edition of the CALGreen Code in 2008 contained only voluntary standards. The 2010 edition included mandatory requirements for state-regulated buildings and structures throughout California, including requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation and more. The CALGreen Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The CALGreen Code also requires building commissioning which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems are functioning at their maximum efficiency. The current 2016 CALGreen Code became effective January 1, 2016 and includes new requirements for additions to existing residential and non-residential development. It promotes best practices for a number of areas of development that reduce GHG emissions through energy efficiency. For example, it includes standards for provision of bicycle parking, accommodating clean air vehicles, outdoor lighting, water-conserving plumbing fixtures, reduction of GHG emissions from construction waste recycling, etc.

Regional

SCAQMD Recommendations for Significance Thresholds

SCAQMD convened a GHG CEQA Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. Members included government agencies implementing CEQA and representatives from stakeholder groups that provides input on developing GHG CEQA significance thresholds. On December 5, 2008, the SCAQMD Governing Board adopted interim GHG significance threshold for projects where the SCAQMD is lead agency. This threshold uses a tiered approach to determine a project's significance, with 10,000 metric tons of CO_2 equivalent ($MTCO_2e$) as a screening numerical threshold for stationary sources.

SCAQMD has not adopted guidance for CEQA projects under other lead agencies. In September 2010, the Working Group released additional revisions that recommended a screening threshold of 3,500 $MTCO_2e$ for residential projects, 1,400 $MTCO_2e$ for commercial projects, and 3,000

$MTCO_2e$ for mixed-use projects. Additionally, the Working Group identified project-level efficiency target of 4.8 $MTCO_2e$ per service population as a 2020 target and 3.0 $MTCO_2e$ per service population as a 2035 target. The recommended area wide or plan-level target for 2020 was 6.6 $MTCO_2e$ and the plan-level target for 2035 was 4.1 $MTCO_2e$. The SCAQMD has not established a timeline for formal consideration of these thresholds.[74] In the meantime, the project level thresholds can be used as a non-binding guide.

The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG emissions reductions. However, these rules address boilers and process heaters, forestry, and manure management projects, none of which are proposed or required by the Project.

SCAG's 2016-2040 RTP/SCS

SCAG's adopted the 2016-2040 RTP/SCS on April 6, 2016. The 2016-2040 RTP/SCS calls for a continuation of integrated planning for land use and transportation that will help achieve the State's goal of reducing per capita GHG emissions by eight percent by 2020 compared to 2005 levels, by 18 percent by 2035, and 21 percent by 2040. The Plan calls for public transportation improvements that will reduce GHG emissions from passenger vehicles and light duty trucks per household by up to 30 percent, one percent reduction in GHG from having zero emission vehicles, neighborhood vehicles, and car-sharing/ride-sourcing make up two percent of the vehicle fleet by 2040. It is important to note that there is nothing in SB 375 that requires a city's "land use policies and regulations…to be consistent with the regional transportation plan or an alternative planning strategy."[75]

City

In May 2007, the City released its Green LA Plan that sets a goal to reduce the generation of GHG emissions 35 percent below 1990 levels by 2030. Key strategies include increasing the generation of renewable energy, improving energy conservation and efficiency, and changing land use patterns to reduce dependence on autos.

The City adopted a Green Building Ordinance in April 2008 that calls for reduction of the use of natural resources for new development.[76] Larger projects must be certified at the LEED-certified level. The City's ordinance affects the following types of development:[77]

- New non-residential building or structure of 50,000 gross square feet or more of floor area;

[74] *SCAG, Final PEIR for the 2012-2035 RTP/SCS, Appendix G. Accessible at http://rtpscs, scag.ca.gov/Documents/peir/2012fPEIR_AppendixG_ExampleMeasures.pdf*

[75] *California Gov't. Code §65080(b)(2)(E).*

[76] *City of Los Angeles, Ordinance No. 179820, added to LAMC as Section 16.10 (Green Building Program).*

[77] *Projects that voluntarily commit to LEED certification at the Silver level or higher received expedited processing from the City.*

- New mixed-use or residential building of 50,000 gross square feet or more in excess of six stories;

- New mixed-use or residential building of six or fewer stories consisting of at least 50 dwelling units in a building, which has at least 50,000 gross square feet of floor area, and in which at least 80 percent of the building's floor area is dedicated to residential units;

- The alteration or rehabilitation of 50,000 gross square feet or more of floor area in an existing non-residential building for which construction costs exceed a valuation of 50 percent of the replacement cost of the existing building;

- The alteration of at least 50 dwelling units in an existing mixed-use or residential building, which has at least 50,000 gross square feet of floor area, for which construction costs exceed a valuation of 50 percent of the replacement cost of the existing building.

The City's Green Building Ordinance has several requirements that foster reductions in GHG emissions, through enhanced efficiencies in energy use, water use, and solid waste generation from new non-residential and high-rise residential buildings, including the following:

Section 99.04.304.1. Irrigation Controllers. When automatic irrigation system controllers for landscaping are provided and installed at the time of final inspection, the controllers shall comply with the following:

1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change;

2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor that connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input. Buildings on sites with over 2,500 square feet of cumulative irrigated landscaped areas shall have irrigation controllers that meet the criteria in Section 99.04.304.1.

Section 99.04.303.4. Wastewater Reduction. Each building shall reduce by 20 percent wastewater by one of the following methods:

1. The installation of water conserving fixtures (water closets, urinals)

2. Utilizing non-potable water systems (captured rainwater, graywater, and municipally treated wastewater) complying with the current edition of the Los Angeles Plumbing Code or other methods.

Section 99.04.304.2. Outdoor Potable Water. Building on sites with 1,000 square feet or more of cumulative landscaped areas shall have separate meters or submeters for indoor and outdoor potable water use.

Section 99.04.304.3. Irrigation Design. Buildings on sites with 1,000 square feet or more of cumulative irrigated landscaped areas shall have irrigation controllers and sensors which include the following criteria and the manufacturer's recommendations.

Section 99.05.407.1. Weather Protection. Provide a weather-resistant exterior wall and foundation envelope as required by the Los Angeles Building Code section 1403.2 (Weather Protection) and California Energy Code Section 150, manufacturer's installation instructions, or local ordinance, whichever is more stringent.

Section 99.05.408. Construction Waste Reduction, Disposal And Recycling. Construction Waste Reduction of at Least 50 Percent. Comply with Section 66.32 et seq. of the LAMC.

Section 99.05.408.4. Excavated Soil and Land Clearing Debris. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project and when approved by the Department, such material may be stockpiled on site until the storage site is developed.

Section 99.05.410.1. Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals.

Section 99.05.504.3. Covering of Duct Openings and Protection of Mechanical Equipment During Construction. At the time of rough installation, or during storage of the construction site and until final startup of the heating and cooling equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the Department to reduce the amount of dust or debris which may collect in the system.

Section 99.05.504.4.6. Resilient Flooring Systems. For 50 percent of floor area receiving resilient flooring, install resilient flooring complying with the VOC-emission limits defined in the 2009 Collaborative for High Performance Schools criteria and listed on its Low-emitting Materials List or certified under the Resilient Floor Covering Institute FloorScore program.

On January 20, 2016, the City adopted its Mobility Plan 2035, a transportation element of its General Plan. The Plan calls for strategies that advance five goals: 1) Safety First, 2) World Class Infrastructure, 3) Access for All Angelenos, 4) Collaboration, Communication, and Informed Choices, and 5) Clean Environments and Healthy Communities.

While the Mobility Plan focuses on developing a multi-modal transportation system, its key policy initiatives include considering the strong link between land use and transportation and targeting mobile-source GHG reductions through a more sustainable transportation system. As such, the Mobility Plan's call for integrated land use planning, clean fuel vehicles are consistent with State and regional plans calling for more compact growth in areas with transportation infrastructure.

Existing Emissions

The Project Site is currently developed with 850-square-feet of restaurant uses with surface parking. As shown on Table V-15, the existing land uses on the Project Site generate about 75 metric tons of CO_2e annually.

Table V-15
Existing Annual CO_2e Greenhouse Gas Emissions
(Metric Tons Per Year)

Scenario and Source	CO_2	CH_4	N_2O	CO_2e
Area Sources	<1	0	0	<1
Energy Sources	31	<1	<1	31
Mobile Sources	75	<1	0	75
Waste Sources	2	<1	0	5
Water Sources	2	<1	<1	2
Total Emissions	111	<1	<1	114
Source: DKA Planning, 2019, based on CalEEMod 2016.3.2. Refer to Appendix E.				

Methodology

The methodology utilized for this analysis is based on a Technical Advisory released by OPR on June 19, 2008 titled *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review*. Both one-time emissions and indirect emissions are expected to occur each year after build-out of the Project. One-time emissions from construction and vegetation removal were amortized over a 30-year period because no significance threshold has been adopted for such emissions. The Project emission reductions are results of Project's commitments and regulatory changes, which include the implementation of the Renewables Portfolio Standard (RPS) of 33 percent, the Pavley regulation and Advanced Clean Cars program mandating higher fuel efficiency standards for light-duty vehicles, and the Low Carbon Fuel Standard (LCFS).

The California Climate Action Registry (Climate Registry) General Reporting Protocol provides basic procedures and guidelines for calculating and reporting GHG emissions from a number of general and industry-specific activities.[78] The General Reporting Protocol is based on the "Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" developed by the World Business Council for Sustainable Development and the World Resources Institute through "a multi-stakeholder effort to develop a standardized approach to the voluntary reporting of GHG emissions."[79] The General Reporting Protocol provides a basic framework for calculating and reporting GHG emissions from the project. Information provided in this analysis is consistent with the General Reporting Protocol's reporting requirements.

[78] *California Climate Action Registry, General Reporting Protocol Version 3.1, January 2009, www.sfenvironment.org/sites/default/files/fliers/files/ccar_grp_3-1_january2009_sfe-web.pdf, accessed August 1, 2016.*

[79] *Ibid.*

The General Reporting Protocol recommends the separation of GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include the following:

Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).

Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.

Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy (e.g., energy used to convey, treat, and distribute water and wastewater).[80]

The General Reporting Protocol provides a range of basic calculations methods. However, the General Reporting Protocol calculations are typically designed for existing buildings or facilities. These retrospective calculation methods are not directly applicable to planning and development situations where buildings do not yet exist.

CARB recommends consideration of indirect emissions to provide a more complete picture of the GHG footprint of a facility. Annually reported indirect energy usage aids the conservation awareness of a facility and provides information to CARB to be considered for future strategies.[81] For example, CARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, the Office of Planning and Research has noted that lead agencies "should make a good-faith effort, based on available information, to calculate, model, or estimate… GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities."[82] Thus, direct and indirect emissions have been calculated for the Project.

GHG emissions were quantified from construction and operation of the Project using SCAQMD's CalEEMod. Operational emissions include both direct and indirect sources including mobile sources, water use, solid waste, area sources, natural gas, and electricity use emissions. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model is considered by the SCAQMD to be an accurate

[80] *Embodied energy is a scientific term that refers to the quantity of energy required to manufacture and supply to the point of use a product, material, or service.*

[81] *California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), Planning and Technical Support Division Emission Inventory Branch, October 19, 2007, www.arb.ca.gov/regact/2007/ghg2007/isor.pdf, accessed August 2, 2017.*

[82] *OPR Technical Advisory, p. 5.*

and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.[83]

Significance Criteria

CARB, SCAQMD, and the City have yet to adopt project-level significance thresholds for GHG emissions that would be applicable to the Project.[84] As a result, this analysis relies on primary direction from the CEQA Guidelines. OPR's amendments to the CEQA Guidelines for GHGs were adopted by the Resources Agency on December 30, 2009, indicating that a project could have a significant impact if the project would do the following:

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

2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.[85]

Section 15064.4 of the CEQA Guidelines was adopted to assist lead agencies in determining the significance of the impacts of GHGs. It urges the quantification of GHG emissions where possible and includes language necessary to avoid an implication that a "life-cycle" analysis is required. It also recommends considering other qualitative factors that may be used in the determination of significance (i.e., extent to which the project may increase or reduce GHG emissions; whether the project exceeds an applicable significance threshold; and extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs). Further, it states that the following:

1. A lead agency should consider the following factors, among others, when assessing the significance of greenhouse gas emissions on the environment:

    a. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

    b. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

    c. 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 greenhouse gas emissions. Such requirements must be adopted by the relevant

[83] *See www.caleemod.com.*

[84] *The South Coast Air Quality Management District formed a GHG Significance Threshold Working Group. Information on this Working Group is available at www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds/page/2.*

[85] *A recent opinion by the California Supreme Court on November 30, 2015 (Center for Biological Diversity v. California Department of Fish and Wildlife) has suggested that environmental analyses need to support its assumptions and provide evidentiary support to find consistency with a "Business as Usual" approach with the AB 32 Scoping Plan.*

public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Lead agencies are to establish thresholds in which a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7[c]). The CEQA Guidelines amendments also clarify that the effects of GHG emissions are cumulative. The CEQA Guidelines were amended in response to Senate Bill 97 to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.[86] Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions."[87] Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project compiles with the California Cap-and-Trade Program and/or other regulatory schemes to reduce GHG emissions.[88]

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen

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[86] *Ibid.*

[87] *Ibid. (emphasis added).*

[88] *See San Joaquin Valley Air Pollution Control District, CEQA Determinations of Significance tor Projects Subject to ARB's GHG Cap-and-Trade Regulation, APR—2030 (June 25, 2014), where the SJVAPCD "determined that GHG emissions increases that are covered under ARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA…" Further, SCAQMD has taken this position as a lead agency, preparing three Negative Declarations and one Draft EIR that applied its 10,000 MTCO$_2$e/yr. significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See SCAQMD, Final Negative Declaration for Ultramar Inc. Wilmington Refinery Cogeneration Project, SCH #2012041014 (www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2014/ultramar_neg_dec.pdf?sfvrsn=2) (October 2014); SCAQMD, Final Negative Declaration tor Phillips 66 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014) (www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2014/phillips-66-fnd.pdf?sfvrsn=2); Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2014/exide-mnd_final.pdf?sfvrsn=2) (December 2014); and Draft Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2015/deir-breitburn-chapters-1-3.pdf?sfvrsn=2) (April 2014).*

the cumulative problem within the geographic area of the project.[89] With regard to GHG emissions reduction plans, there are no locally approved plans or mitigation programs that have specific requirements that address cumulative GHG emissions within the vicinity of the Project Site.

The statewide greenhouse gas reduction goals include cutting greenhouse gas emissions by approximately 40 percent from the BAU emission levels projected for 2030. The 2017 Scoping Plan sets forth the BAU projection, which assumes no conservation or regulatory efforts beyond what was in place when the forecast was made. A lead agency may use the BAU projection as the baseline to compare a project's expected greenhouse gas emissions rather than using a baseline of emissions in the existing physical environment. However, the lead agency must provide substantial evidence to show that a project's specific *project-level* reduction in greenhouse gas emissions as compared to the BAU projection will actually meet the *statewide* goals of greenhouse gas reductions.

There are three ways a lead agency could make that showing. First, a lead agency may evaluate the data behind the Scoping Plan's BAU model to determine how a specific project in a proposed location would contribute to the statewide greenhouse gas reduction goals. Second, a lead agency may assess a project's consistency with AB 32's goals in whole or in part by considering a project's compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities, such as building efficiency and conservation standards. Third, a lead agency may rely on existing numerical thresholds of significance for greenhouse gas emissions reductions.

Thus, in the absence of any adopted, quantitative threshold, the City, as Lead Agency and in the exercise of its lawful discretion, has determined that significance of the Project's GHG-related impacts will be assessed by evaluating the Project's consistency with the following applicable regulatory plans and policies to reduce GHG emissions:

- AB 32 Scoping Plan;
- SCAG's 2016-2040 RTP/SCS;
- City of Los Angeles Mobility 2035 Plan;
- City of Los Angeles ClimateLA implementation plan; and
- City of Los Angeles Green Building Ordinance

Project Impacts

Construction Emissions

Construction of the Project would generate GHG emissions through the combustion of fossil fuels by heavy-duty construction equipment and through vehicle trips generated by construction

[89] *14 CCR § 15064(h)(3).*

workers and vendors traveling to and from the Project Site. These emissions would vary day to day over the estimated 29-month duration of construction activities. As illustrated on Table V-16, construction emissions of CO_2 would peak in 2023 when up to 3,286 metric tons of CO_2e per year are anticipated, following implementation of Mitigation Measure AQ-1. These emissions are further incorporated in the assessment of long-term operational impacts by amortizing them over a 30-year period, pursuant to guidance from the State and SCAQMD.

Table V-16
Estimated Construction Emissions – Mitigated (Metric Tons per Year)

Construction Year[1]	CO_2	CH_4	N_2O	CO_2e
2021	1,848	<1	0	1,852
2022	3,279	<1	0	3,286
2023	2,052	<1	0	2,056
Source: DKA Planning, 2019, based on CalEEMod 2016.3.2. Refer to Appendix E.				

Operational Emissions

GHG emissions were calculated for the Project's long-term operation. Both one-time emissions and indirect emissions are expected to occur each year after build-out of the Project. One-time emissions from construction and vegetation removal were amortized over a 30-year period because no significance threshold has been adopted for such emissions. The Project emission reductions are results of Project's commitments and regulatory changes, which include the implementation of the Renewables Portfolio Standard (RPS) of 33 percent, the Pavley regulation and Advanced Clean Cars program mandating higher fuel efficiency standards for light-duty vehicles, and the Low Carbon Fuel Standard (LCFS).

Operational emissions are organized under six key source categories, discussed below.

Area Source Emissions

Area source emissions were calculated using the CalEEMod emissions inventory model, which includes hearths and landscape maintenance equipment.

Electricity and Natural Gas Generation Emissions

GHG emissions are generated 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 GHG emissions directly into the atmosphere. When this occurs in a building, the related GHG emissions constitute a direct emission source associated with that building. GHG emissions are also generated 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 and natural gas emissions were 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 LADWP

were selected in CalEEMod. The carbon intensity (i.e., pounds per megawatt hours) for electricity generation was calculated for the Project buildout year based on LADWP projections. A straight-line interpolation was performed to estimate the LADWP carbon intensity factor for the Project buildout year. LADWP's carbon intensity projections also take into account SB 350 RPS requirements for renewable energy.

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 in 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 office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting.

CalEEMod electricity and natural gas usage rates are based on the CEC-sponsored California Commercial End-Use Survey (CEUS) and the California Residential Appliance Saturation Survey (RASS) studies.[90] The data are specific for climate zones; therefore, Zone 11 was selected for the Project Site based on the zip code tool. Since these studies are based on older buildings, adjustments have been made to account for changes to Title 24 building codes but do not reflect 2016 Title 24 standards. For the Project scenario, an adjustment was made to account for the 2016 Title 24 standards. The 2016 Title 24 standards would be applicable to the Project as the Project would be built after January 1, 2017, when the 2016 Title 24 standards went into effect. The 2016 Title 24 standards are 28 percent more efficient (for electricity) than the 2013 Title 24 standards for residential construction and 5 percent more efficient (for electricity) for non-residential construction.[91]

Mobile Source Emissions

Mobile-source emissions were calculated using the SCAQMD-recommended CalEEMod emissions inventory model. CalEEMod calculates the emissions associated with on-road mobile sources associated with residents, employees, visitors, and delivery vehicles visiting the Project Site based on the number of daily trips generated and VMT.

Mobile source operational GHG emissions were calculated using CalEEMod and are based on the Project trip-generation estimates. To calculate daily trips, the number of residential units and amount of building area for the commercial retail and restaurant uses were multiplied by the applicable trip-generation rates based on the Institute of Transportation Engineers (ITE)'s *Trip Generation, 9th Edition*.

Waste Generation Emissions

Emissions related to solid waste were calculated using the CalEEMod emissions inventory model, which multiplies an estimate of the waste generated by applicable emissions

[90] *CEC, Commercial End-Use Survey, March 2006, and California Residential Appliance Saturation Survey, October 2010.*

[91] *CEC, 2016 Building Energy Efficiency Standards, Frequently Asked Questions.*

factors provided in Section 2.4 of the USEPA's AP-42, Compilation of Air Pollutant Emission Factors. CalEEMod solid waste generation rates for each applicable land use were selected for this analysis.

Water Emissions

GHG emissions are related to the energy used to convey, treat, and distribute water, and treat wastewater. Thus, these emissions are generally indirect emissions from the production of electricity to power these systems. Three processes are necessary to supply potable water; these include: (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, energy is used as the wastewater is treated and reused as reclaimed water.

Emissions related to water usage and wastewater generation were calculated using the CalEEMod emissions inventory model, which multiplies an estimate of the water usage by the applicable energy intensity factor to determine the embodied energy necessary to supply potable water.[92] GHG emissions are then calculated based on the amount of electricity consumed multiplied by the GHG intensity factors for the utility provider. In this case, embodied energy for Southern California supplied water and GHG intensity factors for LADWP were selected in CalEEMod. Water usage rates were calculated consistent with the requirements under City Ordinance No. 184,248, 2016 California Plumbing Code, 2016 CALGreen, 2017 Los Angeles Plumbing Code, and 2017 Los Angeles Green Building Code, and reflect an approximately 20 percent reduction as compared to the base demand.

Construction Emissions

Cumulative emissions from the 29-month construction processed are amortized over a 30-year period, pursuant to CARB and SCAQMD guidance. This allows emissions from all phases of construction to be considered in the annualized estimate of GHG emissions that contribute to climate change.

This analysis compares the Project's GHG emissions to the emissions that would be generated by the Project in the absence of any GHG reduction measures (i.e., the No Action Taken ["NAT"] Scenario. This approach is consistent with the concepts used in the CARB's *Climate Change Scoping Plan* for the implementation of AB 32. This methodology is used to analyze consistency with applicable GHG emissions reduction plans and policies and demonstrate the efficacy of the measures contained therein, but it is not a threshold of significance.

The analysis in this section includes potential emissions under NAT scenarios and from the Project at build-out based on actions and mandates expected to be in force in 2020. Early-action measures identified in the *Climate Change Scoping Plan* that have not been approved were not

[92] *The intensity factor reflects the average pounds of CO_2e per megawatt generated by a utility company.*

credited in this analysis. By not speculating on potential regulatory conditions, the analysis takes a conservative approach that likely overestimates the Project's GHG emissions at build-out.

The NAT scenario is used to establish a comparison with project-generated GHG emissions. The NAT scenario does not consider site-specific conditions, project design features, or prescribed mitigation measures. As an example, a NAT scenario would apply a base ITE trip-generation rate for a project and would not consider site-specific benefits resulting from the proposed mix of uses or close proximity to public transportation. The analysis below establishes NAT as complying with the minimum performance level required under Title 24's 2016 standards, which became effective January 2017.. The NAT scenario also considers State mandates that were already in place when CARB prepared the *Supplemental FED* (e.g., Pavley I Standards, full implementation of California's Statewide Renewables Portfolio Standard beyond current levels of renewable energy, and the California LCFS).

For informational purposes only, Table V-17 shows the estimated GHG emissions that include mobile source emissions. Because mobile source GHG emissions are directly dependent on the number of vehicle trips, a decrease in the number of Project generated trips as a result of project features provide a proportional reduction in mobile source GHG emissions. This scenario conservatively did not include actions and mandates that are not already in place but are expected to be in force in 2020 (e.g., Pavley II), which could further reduce GHG emissions from use of light-duty vehicles by 2.5 percent.

Table V-17
Estimated Annual CO_2e Greenhouse Gas Emissions
(Metric Tons per Year)

Scenario and Source	NAT Scenario*	As Proposed Scenario	Reduction from NAT Scenario	Change from NAT Scenario
Area Sources	7	7	-	0%
Energy Sources	3,974	2,305	-1,669	-42%
Mobile Sources	4,301	3,019	-1,282	-30%
Waste Sources	237	237	-	0%
Water Sources	393	393	-	0%
Construction	240	240	-	0%
Total Emissions	9,152	6,202	-2,951	-32%
Net Emissions	**-**	**6,088**	**N/A**	**N/A**

Note: Pursuant to SB 375, mobile source GHG emissions are not required to be analyzed for the Project. The mobile source GHG emissions shown on this table are provided for informational purposes only.

Daily construction emissions amortized over 30-year period pursuant to SCAQMD guidance. Annual construction emissions derived by taking total emissions over duration of activities and dividing by construction period.

** NAT scenario does not assume 30% reduction in in mobile source emissions from Pavley emission standards (19.8%), low carbon fuel standards (7.2%), vehicle efficiency measures 2.8%); does not assume 42% reduction in energy production emissions from the State's renewables portfolio standard (33%), natural gas extraction efficiency measures (1.6%), and natural gas transmission and distribution efficiency measures (7.4%).*

Source: DKA Planning, 2019.

The methodology used here compares the Project's emissions as proposed to the Project's emissions if the Project were built using a NAT approach in terms of design, methodology, and technology. This means the Project's emissions were calculated taking into consideration the mixed-use nature of the Project and the Project Site's proximity to transit, which reduce GHG emissions from vehicle travel, and with several regulatory measures adopted in furtherance of AB 32.

While the AB 32 Scoping Plan's cumulative statewide objectives were not intended to serve as the basis for project-level assessments, this analysis finds that its NAT comparison based on the Scoping Plan is appropriate, because it demonstrates the GHG-emissions-reducing benefits of the Project's attributes as a Transit Priority Project. Specifically, the Project's location in an urban setting provides opportunities to reduce transportation-related emissions. It would eliminate about 25 percent of vehicle trips because travel to and from the Project Site could be captured by public transit and pedestrian travel instead.

As illustrated on Table V-18 (provided for informational purposes only), the Project's profile as an urban infill project with proximity to substantial public transit would produce substantial vehicle trip reductions over land uses that are located in a more typical suburban-scale community that does not have a well developed transit infrastructure. The projected reductions in vehicle trips and VMT would represent 25 percent reductions in the Project's mobile-based GHG emissions from the substantial mode share from public transit. This represents a larger percentage reduction than the State's AB 32 Scoping Plan goal of a 4.5 percent reduction from the overall transportation sector by 2020.

Table V-18
Daily Vehicle Travel Reductions Associated with the Project

Land Use	Reduction from Internal Capture	Reduction from Pass-By Trips	Reduction from Transit/Walk-In Trips
Apartments	0%	0%	25%
Office	0%	0%	25%
Retail/Restaurant	0%	0%	25%
Source: IBI Group 2017.			

Even without the benefit of SB 375 reductions from mobile sources, the Project would result in an approximately 34 percent reduction in CO_2e emissions from all other sources. This is exclusively due to the reductions from energy-related GHG emissions instituted by the State of California and the City that are reducing substantial emissions from the generation of natural gas and electricity.

It should be noted that each source category of GHG emissions from the Project would be subject to a number of regulations that directly or indirectly reduce climate change-related emissions:

- *Stationary and area sources*. Emissions from small on-site sources are subject to specific emission reduction mandates and/or are included in the State's Cap and Trade program.

- *Transportation*. Both construction and operational activities associated with the Project would generate transportation-related emissions from combustion of fossil fuels that are covered in the State's Cap and Trade program.

- *Energy use*. Both construction and operational activities associated with the Project would generate energy-related emissions that are covered by the State's renewable portfolio mandates, including SB 350, which requires that at least 50 percent of electricity generated and sold to retail customers from renewable energy sources by December 31, 2030.

- *Building structures*. Operational efficiencies would be incorporated into the Project that reduce energy use and waste, as mandated by the City's Green Building Code, such as use of energy efficient windows and construction materials.

- *Water and wastewater use*. The Project would be subject to drought-related water conservation emergency orders and related State Water Quality Control Board restrictions. This analysis conservatively does not assume the Project would reduce GHG emissions beyond a NAT scenario.

- *Major appliances*. The Project would include major appliances that are regulated by California Energy Commission requirements for energy efficiency.

- *Solid waste management*. The Project would be subject to solid waste diversion policies that reduce GHG emissions, such as the City's recycling program. This analysis conservatively does not assume the Project would reduce GHG emissions beyond a NAT scenario.

As described throughout this analysis, the mixed-use nature of the Project, its proximity to transit, and implementation of regulatory compliance measures would reduce the Project's GHG emissions profile and would represent improvements vis-à-vis the NAT scenario. As a result of this and the analysis of net emissions, the Project's contribution to global climate change would not be "cumulatively considerable," and impacts would be less than significant.

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

Less Than Significant Impact. Below is a discussion of the Project's consistency with relevant plans and policies that govern climate change, including the following:

- AB 32 Scoping Plan;

- SCAG's 2016-2040 RTP/SCS;

- City of Los Angeles Mobility 2035 Plan;

- City of Los Angeles ClimateLA implementation plan; and

- City of Los Angeles Green Building Ordinance

Consistency with the AB 32 Scoping Plan

The AB 32 Scoping Plan provides the basis for policies that will reduce cumulative GHG emissions within California to 1990 levels by 2020. Table V-19 includes a discussion of the Project's consistency with the AB 32 Scoping Plan to determine whether the Project would result in adverse cumulative impacts to global climate change. The Project is consistent with the AB 32 Scoping Plan's focus on emission reductions from several key sectors and would indirectly benefit from these:

Energy Sector: Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the Project's emissions level.[93] Additionally, further additions to LADWP's renewable resource portfolio would favorably influence the Project's emissions level.[94]

Transportation Sector: Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to indirectly reduce the Project's mobile emissions level.[95]

Water Sector: Indirect GHG emissions associated with distant extraction, treatment, and transmission of water to meet the Project's water demands will be reduced as a result of further desired enhancements to water conservation technologies compared to technology in 1990.[96]

Waste Management Sector: Participation in City programs to further improve recycling, reuse, and reduction of solid waste will indirectly reduce the Project's emissions related to decomposition of wastes at landfills that generate methane gas.[97]

[93] *CARB, First Update, pp. 37-39, 85, May 2014.*

[94] *CARB, First Update, pp. 40-41, May 2014.*

[95] *CARB, First Update, pp. 55-56, May 2014.*

[96] *CARB, First Update, p. 65, May 2014.*

[97] *CARB, First Update, p. 69, May 2014.*

Table V-19
Project Consistency with AB 32 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
California Cap-and-Trade Program. Implement a broad-based California cap-and-trade program to provide a firm limit on emissions.	**Not Applicable.** The statewide program is not relevant to the Project.
California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted Pavley standards and planned second phase of the system. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	**Not Applicable.** The development of standards is not relevant to the Project.
Energy Efficiency. Maximize energy efficiency building and appliance standards and pursue additional efficiency efforts including new technologies, and new policy and mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	**Consistent.** The Project would be designed to meet Cal Green building standards by including several measures designed to reduce energy consumption, such as multiple electric vehicle charging spaces and use of ENERGY STAR certified appliances.
Renewables Portfolio Standard. Achieve 33 percent renewable energy mix statewide.	**Consistent.** The Project would utilize energy from LADWP, which has goals to diversify its portfolio of energy sources to increase the use of renewable energy, which currently makes up 25 percent of its portfolio. LADWP is subject to the California Renewable Energy Resources act and thus, is required to commit to the use of renewable energy sources, as defined in its 2013 Renewables Portfolio Standard Policy and Enforcement Program. LADWP has committed to meeting the requirement to procure at least 33 percent of their energy portfolio from renewable sources by 2020 as fiscal constraints, renewable energy pricing, system integration limits, and transmission constraints permit.[98]
Low-Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	**Not Applicable.** The statewide program is not relevant to the proposed Project.
Regional Transportation-Related Greenhouse Gases. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.	**Not Applicable/Not Inconsistent.** The development of regional planning goals is not relevant to the proposed Project.
Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	**Not Applicable.** State agencies are responsible for implementing efficiency measures.
Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	**Not Applicable.** State agencies are responsible for implementing

[98] *https://www.greentechmedia.com/articles/read/ladwp-looks-at-33-percent-renewables-by-2020.*

Table V-19
Project Consistency with AB 32 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
	regulations and promoting efficiency in goods movement.
Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	**Not Consistent.** The Project does not include solar roofs and is not part of the proposed statewide initiative. It is noted, however, that in accordance with the City's Green Building Ordinance, an electrical conduit would be provided from the electrical service equipment to an accessible rooftop area suitable for future connection to a solar system. The conduit shall be labeled as per the Los Angeles Fire Department requirements. The electrical panel shall be sized to accommodate the installation of a future electrical solar system. Per the City's Green Building Code, a minimum of 250 square feet of contiguous unobstructed roof area will be provided for the installation of future photovoltaic or other electrical solar panels. The location shall be suitable for installing future solar panels as determined by the designer.
Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	**Not Applicable.** State agencies are responsible for implementing efficiency measures.
Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission.	**Not Applicable.** This strategy applies to industrial facilities, which are not included as part of the Project.
High Speed Rail. Support implementation of a high speed rail system.	**Not Applicable.** This calls for the California High Speed Rail Authority and stakeholders to develop a statewide rail transportation system.
Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	**Consistent.** The Project is designed to meet Cal Green and 2016 Title 24 (Part 6) building standards and will include several measures designed to reduce energy consumption, such as electric vehicle (EV) charging, solar ready roof, water conserving plumbing, fixtures, and fittings, achieving an energy design rating, use of quality insulation, etc.
High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	**Not Applicable.** State agencies are responsible for implementing these measures.

Table V-19
Project Consistency with AB 32 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials and mandate commercial recycling. Move toward zero waste.	**Consistent.** The Project must participate in the Solid Resources Citywide Recycling Division's recycling program, which has been effective at diverting 76.4 percent of the solid waste in the City from landfills to recycling and composting centers.
Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	**Not Applicable.** Resource Agency departments are responsible for implementing this measure. Also, the Project Site and surrounding areas are highly urbanized and do not contain any forestland.
Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	**Consistent.** The Project would use water-efficient landscaping and irrigation systems. The Project would comply with CalGreen requirements of the California Building Code and the LAGBC, the Water Management Ordinance (Ordinance No. 170,978), and the LID Ordinance, which are designed to reduce the Project's energy and water use.
Agriculture. In the near-term, encourage investment in manure digester and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	**Not Applicable.** The Proposed Project does not include agricultural facilities.
Source: DKA Planning, 2017.	

Based on the information presented above, the Project would be consistent with all feasible and applicable strategies recommended in the AB 32 Scoping Plan.

Consistency with SCAG's 2016-2040 RTP/SCS

At the regional level, the 2016-2040 RTP/SCS represents the region's Climate Action Plan that defines strategies for reducing GHGs. In order to assess the Project's potential to conflict with the 2016-2040RTP/SCS, this section analyzes the Project's land use profile for consistency with those in the Sustainable Communities Strategy. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as SCAG's 2016-2040 RTP/SCS, if projects are compatible with the general intent of the plans and would not preclude the attainment of their primary goals.

The Project is an infill development that is consistent with the 2016-2040 RTP/SCS and its focus on integrated land use planning. Specifically, the Project Site's location near substantial local transit bus services, and within 0.25 miles of a Metro Red Line station places it in a High Quality Transit Area (HQTA). The 2016-2040 RTP/SCS forecasts that these areas, while comprising only

three percent of land area in the region, make up 46 percent of future household growth and 55 percent of future job growth. Further, the vertical integration of land uses on the Project Site would produce substantial reductions in auto mode share to and from the Project Site that would help the region accommodate growth and promote public transit ridership that minimizes GHG emission increases and reduces per capita emissions consistent with the 2016-2040 RTP/SCS. Further, the inclusion of electric vehicle charging infrastructure in the parking garage would support the penetration of electric zero-emission vehicles into the vehicle fleet.

Table V-20 demonstrates the Project's consistency with the applicable actions and strategies set forth in the 2016-2040 RTP/SCS. The Project also would be consistent with the applicable goals and principles set forth in the 2016-2040 RTP/SCS and the Compass Growth Vision Report. Therefore, the Project would be consistent with the 2016-2040 RTP/SCS.

Table V-20
Project Consistency with SCAG's 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
Land Use Strategies		
Reflect the changing population and demands, including combating gentrification and displacement, by increasing housing supply at a variety of affordability levels.	Local jurisdictions	**Consistent.** The Project would include residences that would add to the supply of housing in metropolitan Los Angeles County.
Focus new growth around transit.	Local Jurisdictions	**Consistent.** The Project is an infill development that includes redevelopment of the Project Site in Downtown Los Angeles with a mixed-use development, including 428 residential dwelling units and 5,610 square feet of commercial land uses (including an approximately 2,980-square-foot leasing office and up to 2,630 square feet of neighborhood-serving retail land uses). The Project Site is in close proximity to existing bus lines (including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines.) The Project Site is directly adjacent to the Metro Red Line subway portal. In addition, the Project would be located near commercial uses and employment areas in Downtown Los Angeles.
Plan for growth around livable corridors, including growth on the Livable Corridors network.	SCAG, Local Jurisdictions	**Consistent.** The Project is an infill development that would be consistent with the 2016-2040 RTP/SCS focus on focusing growth along the 2,980 miles of Livable Corridors in the region, including the Grand Avenue corridor located two blocks to the west of the Project Site.
Provide more options for short trips through	SCAG, Local Jurisdictions	**Consistent.** The Project would help further jobs/housing balance objectives that can improve

Table V-20
Project Consistency with SCAG's 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
Neighborhood Mobility Areas and Complete Communities.		the use of Neighborhood Electric Vehicles for short trips. The Project is also generally consistent with the Complete Communities initiative that focuses on creation of mixed-use districts in growth areas. Although the Project would be a part of a designated"mixed-use district," the Project supports Complete Communities by including infill development of a mix of residential units and neighborhood-serving retail, adjacent to numerous transit options and near places of employment and other retail options.
Support local sustainability planning, including developing sustainable planning and design policies, sustainable zoning codes, and Climate Action Plans.	Local Jurisdictions	**Not Applicable.** While this strategy calls on local governments to adopt General Plan updates, zoning codes, and Climate Action Plans to further sustainable communities, the Proposed Project would not interfere with such policymaking and would be consistent with those policy objectives.
Protect natural and farm lands, including developing conservation strategies.	SCAG Local Jurisdictions	**Not Applicable.** The Project Site and surrounding area are already developed. The Project is an infill development that would help reduce demand for growth in urbanizing areas that threaten greenfields and open spaces.
Transportation Strategies		
Preserve our existing transportation system.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** While this strategy calls on investing in the maintenance of our existing transportation system, the Proposed Project would not interfere with such policymaking. The Project would support the existing transportation system, including the adjacent transit options, and has been designed to take advantage of it.
Manage congestion through programs like the Congestion Management Program, Transportation Demand Management, and Transportation Systems Management strategies.	County Transportation Commissions Local Jurisdictions	**Not Applicable**. This strategy is aimed at government entities that are responsible for managing the region's transportation networks.
Promote safety and security in the transportation system.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** While this strategy aims to improve the safety of the transportation system and protect users from security threats, the Project would not interfere with such policymaking.
Complete our transit, passenger rail, active transportation, highways	SCAG	**Not Applicable.** This strategy calls for transportation planning partners to implement major capital and operational projects that are designed to

Table V-20
Project Consistency with SCAG's 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
and arterials, regional express lanes, goods movement, and airport ground transportation systems.	County Transportation Commissions Local Jurisdictions	address regional growth. The Project would not interfere with this larger goal of investing in the transportation system.
Technological Innovation and 21st Century Transportation		
Promote zero-emissions vehicles.	SCAG Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the Project would include pre-wiring for electric vehicle charging infrastructure.
Implement shared mobility programs.	SCAG Local Jurisdictions	**Not Applicable.** While this strategy is designed to integrate new technologies for last-mile and alternative transportation programs, the Proposed Project would not interfere with these emerging programs.

Source: Southern California Association of Governments; 2016–2040 RTP/SCS, Chapter 5: The Road to Greater Mobility and Sustainable Growth; April 2016.

Consistency with the City of Los Angeles Mobility Plan 2035

While the Mobility Plan 2035 focuses on developing a multi-modal transportation system, its key policy initiatives include considering the strong link between land use and transportation and targeting GHG through a more sustainable transportation system. The strategic location of this infill Project would reduce GHG emissions from private passenger vehicles through proximity to various transit options.

Consistency with the City of Los Angeles ClimateLA Plan

The Project would be consistent with the intent of the ClimateLA Plan to reduce and recycle trash (including construction waste). The Project would promote this goal by complying with waste reduction measures mandated by CALGreen and City's Green Building Code, as well as solid waste diversion policies administered by CalRecycle that in turn reduce GHG emissions.

Long-term operations of the Project also would be consistent with the ClimateLA Plan's focus on transportation, energy, water use, land use, waste, open space and greening, and economic factors to achieve emissions reductions.

With regard to transportation, the Project would be consistent with the ClimateLA Plan's focus on reducing emissions from private vehicle use. Specifically, the Project Site's infill location with immediate access to significant public transit, pedestrian, and bicycle facilities results in a transit-oriented development that would reduce auto dependence. Further, the mixed-use nature of the Project would be consistent with the Plan's land use policies that promote high density near transportation, transit-oriented development, and making underutilized land available for housing and mixed-use development, especially when near transit.

To reduce GHG emissions from energy usage, the Project would be consistent with the ClimateLA Plan and its focus on increasing the amount of renewable energy provided by LADWP; presenting a comprehensive set of green building policies to guide and support private sector development; and helping citizens to use less energy. Both construction and operational activities from the Project Site would generate energy-related GHG emissions that are reduced by the State's renewable portfolio mandates, including SB 350, which requires that at least 50 percent of electricity generated and sold to retail customers come from renewable energy sources by December 31, 2030. This includes use of glass with energy-conservation-based coatings, articulation of facades to minimize heat gain and use of building skin with more solid panels and continuous cantilevered balconies that double as a sun shade.

With regard to water, the Project would be consistent with reducing water demand from growth through water conservation and recycling; reducing per capita water consumption by 20 percent; and implementing the City's water and wastewater integrated resources plan that would increase conservation and maximize the capture and reuse of storm water. This includes several water-conserving strategies needed to achieve LEED Gold certification, including but not limited to low-flow toilets, showerheads, and other fixtures, low-flow pre-rinse spray values, and low-flow clothes washers. Specifically, the Project would be subject to drought-related water conservation emergency orders and related State Water Quality Control Board restrictions, as well as CALGreen and City Green Building Code that call for water-conserving fixtures and processes. These elements of the Project would be consistent with goals set forth in the ClimateLA Plan.

With regard to waste, the Project would be consistent with the ClimateLA Plan's goal of reducing and of trash. Operational efficiences will be built into the Project that reduce energy use and waste, as mandated by the City's Green Building Code and CALGreen building code. With regard to ongoing operations, the Project would be subject to solid waste diversion policies (i.e., the Solid Waste Integrated Resources Plan or the Zero Waste Plan), promoted by CalRecycle and administered by the City that reduce GHG emissions.

Consistency with the City of Los Angeles Green Building Ordinance

The Los Angeles Green Building Ordinance requires that all Projects filed on or after January 1, 2014 comply with the Los Angeles Green Building Code as amended to comply with the 2013 CALGreen Code. Mandatory measures under the Green Building Ordinance that would help reduce GHG emissions include short- and long-term bicycle parking measures and electric vehicle supply wiring. The Project would comply with these mandatory measures, as the Project would provide on-site bicycle parking spaces. Furthermore, the Green Building Ordinance includes measures that would increase energy efficiency on the Project Site, including installing Energy Star rated appliances and installation of water-conserving fixtures. Therefore, the Project is consistent with the Los Angeles Green Building Ordinance.

The Project would comply with the City's Green Building Ordinance standards that compel LEED certification, reduce emissions beyond a NAT scenario, and are consistent with the AB 32 Scoping Plan's recommendation for communities to adopt building codes that go beyond the State's codes. The Project would include design, construction, maintenance, and operation at the certified LEED Homes Gold level. Projects that are LEED certified generally exceed Title 24 (2013)

standards by at least 10 percent.[99] Under the City's Green Building Code, the Project must incorporate several measures and design elements that reduce the carbon footprint of the development; these are listed below.

1. **GHG Emissions Associated with Planning and Design.** The Project must have measures to reduce storm water pollution, provide designated parking for bicycles and low-emission vehicles, have wiring for electric vehicles, reduce light pollution, and design grading and paving to keep surface water from entering buildings. This would include the following:

    - Reduced parking based on compliance with the City's bicycle parking ordinance.

    - Access to several public transportation lines. The area is well-served Metro's Red Line station at Pershing Square, along with a number of local and commuter express buses that serve the Downtown area.

    - Located near residential neighborhoods. The Project Site's proximity to medium- and high-density residential neighborhoods increases the likelihood that more travel to and from the development will be made by non-motorized modes that will reduce potential GHG emissions.

2. **GHG Emissions Associated with Energy Demand.** The Project must at least meet 2016 Title 24 standards (Part 6) standards that became effective January 2017 or newer Title 24 standards that could come into effect at the time of final Project design. Current Title 24 standards include use of Energy Star appliances, pre-wiring for future solar facilities, and off-grid pre-wiring for future solar facilities. This includes the following:

    - Equipment and fixtures will comply with the following where applicable:

        - Installed gas-fired space heating equipment will have an Annual Fuel Utilization Ratio of 0.90 or higher.

        - Installed electric heat pumps will have a Heating Seasonal Performance Factor of 8.0 or higher.

        - Installed cooling equipment will have a Seasonal Energy Efficiency Ratio higher than 13.0 and an Energy Efficiency Ratio of at least 11.5.

        - Installed tank type water heaters will have an Energy Factor higher than .6.

        - Installed tankless water heaters will have an Energy Factor higher than .80.

        - Perform duct leakage testing to verify a total leakage rate of less than 6 percent of the total fan flow.

[99] *U.S. Green Building Council. "Interpretation 10396" accessed at http://www.usgbc.org/leed-interpretations?keys=10396 February 26, 2015.*

- Building lighting in the kitchen and bathrooms within the dwelling units will consist of at least 90 percent ENERGY STAR qualified hard-wired fixtures (luminaires).

- An electrical conduit will be provided from the electrical service equipment to an accessible location in the attic or other location suitable for future connection to a solar system. The conduit shall be adequately sized by the designer but shall not be less than one inch. The conduit shall be labeled as per the Los Angeles Fire Department requirements. The electrical panel shall be sized to accommodate the installation of a future electrical solar system.

- A minimum of 250 square feet of contiguous unobstructed roof area will be provided for the installation of future photovoltaic or other electrical solar panels. The location shall be suitable for installing future solar panels as determined by the designer.

- Appliances will meet ENERGY STAR if an ENERGY STAR designation is applicable for that appliance.

3. **GHG Emissions Associated with Water Use.** The Project would be required to provide a schedule of plumbing fixtures and fixture fittings that reduce potable water use within the development by at least 20 percent. It must also provide irrigation design and controllers that are weather- or soil moisture-based and automatically adjust in response to weather conditions and plants' needs. Wastewater reduction measures must be included that help reduce outdoor potable water use. This would include the following:

    - A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by at least 20 percent shall be provided. The reduction shall be based on the maximum allowable water use per plumbing fixture and fitting as required by the California Building Standards Code. The 20 percent reduction in potable water use shall be demonstrated by one of the following methods:

    - Each plumbing fixture and fitting shall meet reduced flow rates specified on Table 4.303.2; or

        - A calculation demonstrating a 20 percent reduction in the building "water use" baseline will be provided.

        - When single shower fixtures are served by more than one showerhead, the combined flow rate of all the showerheads will not exceed specified flow rates.

    - When automatic irrigation system controllers for landscaping are provided and installed at the time of final inspection, the controllers shall comply with the following:

- Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change;

- Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor that connects or communicates with the controller(s).

4. **GHG Emissions Associated with Solid Waste Generation.** The Project is subject to construction waste reduction of at least 50 percent. Solid waste from the Project's operations would contribute toward the City's AB 939 requirements to divert 50 percent of solid waste to landfills through source reduction, recycling, and composting. The Project would be required by the California Solid Waste Reuse and Recycling Access Act of 1991 to provide adequate storage areas for collection and storage of recyclable waste materials.

5. **GHG Emissions Associated with Environmental Quality.** The Project must meet strict standards for any fireplaces and woodstoves, covering of duct openings and protection of mechanical equipment during constructions, and meet other requirements for reducing emissions from flooring systems, any CFC and halon use, and other project amenities.[100] This would include the following:

    - Openings in the building envelope separating conditioned space from unconditioned space needed to accommodate gas, plumbing, electrical lines and other necessary penetrations must be sealed in compliance with the California Energy Code.

    - Provide flashing details on the building plans which comply with accepted industry standards or manufacturer's instructions around windows and doors, roof valley, and chimneys to roof intersections.

Taken together, these strategies encourage providing housing, employment, recreational, and local-retail shopping and dining all within a relatively short distance; providing employment near current and planned transit stations and neighborhood commercial centers; and supporting alternative fueled and electric vehicles. As a result, the Project would be consistent with applicable State, regional and local GHG reduction strategies. Given that the Project would generate GHG emissions that are less than significant, and given that GHG emission impacts are cumulative in nature, the Project's incremental contribution to GHG emissions would not be than cumulatively considerable, and impacts would be less than significant.

Cumulative Impacts

The emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. In that sense,

[100] *The Project would not include any fireplaces or woodstoves.*

GHG emissions are cumulative in nature, as their impact is combined with biogenic and anthropogenic emissions from the entire globe. The consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change. The State has mandated a goal of reducing 30 percent of statewide emissions to 1990 levels by 2020 and 40 percent by 2030, even though statewide population and commerce is predicted to continue to expand. In order to achieve this goal, CARB is in the process of establishing and implementing regulations to reduce statewide GHG emissions.

The Project would be consistent with the approach outlined in CARB's 2017 *Climate Change Scoping Plan*, particularly its emphasis on the identification of emission reduction opportunities that promote economic growth while achieving greater energy efficiency and accelerating the transition to a low-carbon economy. In addition, as recommended by CARB's *Climate Change Scoping Plan*, the Project would use "green building" features as a framework for achieving cross-cutting emissions reductions as new buildings and infrastructure would be designed to achieve the standards of CALGreen.

Currently, there are no applicable CARB, SCAQMD, or City significance thresholds or specific reduction targets, and no approved policy or guidance to assist in determining significance at the project or cumulative levels. Therefore, consistent with CEQA Guideline Section 15064h(3), the City as Lead Agency has determined that the Project's contribution to cumulative GHG emissions and global climate change would be less than significant if the Project would be consistent with the applicable regulatory plans and policies to reduce GHG emissions:

- AB 32 Scoping Plan;
- SCAG's 2016-2040 RTP/SCS;
- City of Los Angeles ClimateLA implementation plan; and
- City of Los Angeles Green Building Ordinance.

As noted earlier, the Project would be consistent with these plans and regulations at the State, regional, and local level. As such, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. In the absence of adopted standards and established significance thresholds, and given this consistency, it is concluded that the Project's impacts are not cumulatively considerable.

9. HAZARDS AND HAZARDOUS MATERIALS

In 2015, the California Supreme Court in CBIA v. BAAQMD, held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of the project. On the other hand, if a project exacerbates a condition in the existing environment, the lead agency is required to analyze that impact of that exacerbated condition on future residents and users of the project (as well as other impacted individuals).

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. The types of hazardous materials that would be used during construction of the Project would be typical of those hazardous materials necessary for construction of a mixed-use development (e.g., paints, solvents, fuel for construction equipment, building materials, etc.). Although construction of the Project would require the routine transport, use, and disposal of hazardous waste, construction activities associated with Project would be required to comply with all applicable federal, state, and local regulations governing such activities. The existing 850-square-foot restaurant on the Project Site was built in 1961, prior to the current asbestos and lead regulations, and thus could contain asbestos-containing materials (ACMs) and lead-based pain (LBP). Pursuant to SCAQMD Rule 1403, prior to the issuance of any demolition and/or alteration permits, the Project Applicant shall provide a letter to the City of Los Angeles Department of Building and Safety from a qualified asbestos abatement consultant indicating that no ACMs are present on the Project Site. If ACMs are discovered on site, during demolition or construction proper abatement regulations shall be followed. Because the Project would be required to comply with the SCAQMD Rule 1403, which regulates the removal of ACMs to ensure that asbestos fibers are not released into the air during demolition and/or renovation activities, as well as other applicable state and federal regulations, impacts from ACMs would be less than significant. Additionally, demolition and removal of the existing buildings would be required to comply with CCR, Title 8, Section 1532 et seq., which requires that all LBP be abated and removed by a licensed lead contractor. Standard handling and disposal practice shall be implemented pursuant to CALOSHA regulations. Prior to issuance of a demolition permit, a LBP survey shall be performed and approved by the City of Los Angeles Department of Building and Safety. Thus, construction of the Project would not result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

The Project includes the development of 428 multi-family residential units and up to a maximum of 5,610 square feet of leasing office/neighborhood-serving retail. The types of hazardous materials that would be found on the Project Site during the Project's operational phase would be typically associated with residential and retail land uses – paints, cleaning supplies, small amounts of petroleum products. The Project would not require routine transport, use, or disposal of hazardous materials that would create a significant hazard to the public or the environment. Therefore, impacts related to this issue would be less than significant.

b) Would the project create significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant With Mitigation Incorporated. A Phase I Environmental Site Assessment (ESA) and a Limited Phase II ESA (refer to Appendix I) were prepared for the Project Site by Langan Engineering & Environmental Services (Langan Engineering), and a Phase II Focused Site Investigation (FSI) was prepared for the Project Site by Blackstone Consulting (Blackstone) (refer to Appendix I).

The Phase I ESA revealed evidence of recognized environmental concerns (RECs) in connection with the Project Site. The findings of the Phase I ESA indicated the presence of two Environmental Database Research, Inc. (EDR) US Hist Cleaners sites within the vicinity of the Project Site. An EDR US Hist Cleaners site located at 354 South Hill Street reportedly operated in 1924 and was located in the southwestern portion of the Property. A second EDR US Hist Cleaners site was located adjacent to the Property, at 321 West 4th Street, and reportedly operated in 1933. These former EDR US Hist Cleaners sites are RECs, because of their proximity to the Project Site; because cleaners may use hazardous materials such as chlorinated solvents; and because no waste management regulations were enacted during historical cleaners operations.

A subsurface geotechnical investigation performed from May 21-23, 2014 revealed gray-stained soil with a distinct hydrocarbon odor in one boring at a depth of approximately 15 feet below ground surface (bgs) in the northern portion of the Project Site. Soil samples collected at depths of 10 and 20 feet bgs did not reveal any evidence of petroleum hydrocarbon contamination. Soil samples from borings elsewhere on the Project Site did not reveal evidence of petroleum hydrocarbon contamination. No potential on-site or adjacent sources of petroleum hydrocarbons were identified in EDR records or during agency file reviews. Due to the historical presence of commercial buildings at the Project Site since at least the early 1900s, heating oil tanks may have been present at the site during its history. The presence of petroleum hydrocarbon contamination in on-site soil is a REC.

Soil sampling results from subsurface investigation performed from May 21-23, 2014 indicated that lead concentrations in two samples (200 milligrams per kilogram [mg/kg], LB-1 at 5 feet depth; 510 mg/kg, LB-2 at 5 feet depth) exceed the residential Environmental Screening Level (ESL) of 80 mg/kg. In addition, arsenic concentration in one sample (15 mg/kg, LB-2 at 20 feet depth) exceeds the residential ESL of 10 mg/kg. The presence of elevated lead and arsenic in three samples is a REC.

Due to the 1961 construction date for the on-site restaurant, this building is assumed to contain asbestos-containing material and lead-based paint. ACM and LBP are not part of ASTM conditions for a REC but should be addressed prior to demolition.

Based on the findings of the Phase I ESA, the preparers of the assessment recommended a Phase II Subsurface Investigation should be conducted to evaluate if soil, soil vapor, or groundwater beneath the Project Site has been impacted by the apparent presence of a petroleum hydrocarbon release at the site by the presence of two EDR US Hist Cleaners sites or the potential presence of methane.

Based on the findings of the Phase I ESA, Langan Engineering performed soil, soil vapor, and groundwater sampling at the Project Site. Langan collected soil samples for waste characterization, conducted methane and soil vapor sampling according to the Los Angeles Department of Building and Safety (LADBS) methane specification, and evaluated suspected RECs and historic areas of potential concern identified at the site, as noted during a Phase I ESA.

Laboratory analytical results of the sampling from the Project Site indicate that limited portions of site soil contain concentrations of total petroleum hydrocarbons (TPH) and metals that exceed

residential soil ESLs. Lead concentration in soil in the northwestern portion of the Project Site exceeds the lead soluble limit threshold concentration (SLTC) for classification as California non-Resource Conservation and Recovery Act (RCRA) hazardous waste. The approximate depth of lead-impacted soil is within the upper 10 feet. The approximate lateral extent of lead-impacted soil is delineated to the southeast by borings LB3-SGS and LB-3, which does not have ESL exceedances. Soil and rock below 20 feet bgs does not appear to contain elevated concentrations of TPH and metals.

Groundwater is present in a perched zone located approximately 14.5 to 19 feet bgs beneath the Project Site. Groundwater analytical results revealed elevated levels of metals in two samples. Elevated metals concentrations in groundwater may be due to submittal of unfiltered samples to the lab.

Soil vapor analytical results did not identify any exceedances for volatile organic compounds (VOCs) or TPH. Low levels of methane (11 parts per million by volume [ppmv]) were detected in two shallow (5 feet bgs) soil vapor samples at the Project Site.

To resolve data gaps in previous environmental documents prepared for the Project Site and to assist the Project Applicant with obtaining additional subsurface data at the site to support redevelopment needs, such as the handling and disposal of exhumed soil and groundwater from construction dewatering, Blackstone conducted a FSI for the Project Site. The scope of work included the completion of twelve soil vapor sampling points and eight soil borings, four of which were converted into temporary groundwater wells, and the retrieval of soil vapor, soil and groundwater samples from these borings for laboratory analyses. A summary of the findings, conclusions, and recommendations made by Blackstone in the FSI are as follows:

Historical on- and off-site drycleaner - The FSI revealed no detectable VOCs in soil vapor or soil at the Project Site and no detectable concentrations of VOCs in groundwater typical of dry cleaning chemicals. Given this, the FSI revealed no evidence of releases related to the historical operation of the on- or off-site drycleaner. The previous investigation reported trace concentrations of PCE in soil vapor but elevated concentrations of leak detection compounds, which suggest improper seal on the vapor borings. Given that the FSI revealed no detectable VOCs in the 12 soil vapor samples collected throughout the Project Site and no evidence of leak check compound in the vapor borings, the past detections of PCE in soil vapor are nullified.

Heating oil tank - The geophysical survey revealed no subsurface anomalies consistent with an in-place heating oil UST or a former UST excavation at the site.

Unspecified Origins of Detected Compounds - The previous subsurface investigation identified isolated medium- and high-range hydrocarbons and elevated concentrations of lead, barium, and arsenic in soil. The FSI revealed only elevated concentrations of lead in soil. Specifically, the FSI found site-wide, elevated concentrations of lead limited to the upper 5 feet bgs; soil samples retrieved from greater than 7 feet bgs did not exceed screening thresholds. The observed distribution of lead in soil is consistent with contaminated fill and is not uncommon in this area of Los Angeles with greater than 100

years of developed history. The previous soil findings may be attributable to decontamination procedures from co-locating the environmental borings with geotechnical investigation.

Groundwater condition - The previous investigation identified elevated concentrations of metals, notably lead, in groundwater. The FSI yielded no elevated concentrations of metals in groundwater, despite high turbidity and elevated concentrations of lead in soil. The previous elevated concentrations of metals in groundwater are likely attributable to particulates in unfiltered groundwater samples. The absence of elevated lead in groundwater as found from this FSI suggests the existing hardscape at the site restricts surface water infiltration and leaching of elevated concentrations of lead in soil to underlying groundwater. The FSI also identified a trace concentration of benzene at one groundwater sampling location that is considered representative of background groundwater conditions typical of poor quality, perched zone in the Project area.

Given resolution of the previously identified data gaps, based on the findings of this FSI, Blackstone offered the following considerations for the Project:

Soil Management Plan (SMP) – Blackstone understands that the City of Los Angeles Building Department requires submittal and approval of a Soil Management Plan (SMP) prior to the issuance of grading permits for the proposed redevelopment as standard regulatory protocol. The information presented in the FSI can form the basis of the development of the SMP. The SMP shall detail the proposed management of soil during construction, monitoring, further waste characterization sampling and appropriate disposal; any exhumed soil that exceeds the Soluble Threshold Limit Concentrations (STLC) limit shall be managed as California hazardous waste, and any soil that exceeds the Toxicity Characteristic Leaching Procedure (TCLP) shall be managed as Federal hazardous waste. The SMP also shall detail the remaining waste sampling necessary to achieve the density typically required by a soil receiving facility.

Groundwater quality – Given that the groundwater encountered at the Project Site is shallow and inconsistently present, first encountered groundwater beneath the site is likely a poor-quality perched zone that is not a drinking water source. The limited groundwater quality evaluation performed as part of this scope of work identified elevated settleable and total suspended solids in analyzed groundwater samples. Although low-flow field methods were used, this turbidity may be attributable to grab-groundwater sampling methodology. Regardless, the groundwater quality data obtained from this FSI, including the background trace benzene detection at SB-5, should be shared with the future construction dewatering contractor for incorporation into a dewatering program designed to account for elevated solids and trace VOCs. After demolition and removal of existing structures from the Project Site, wells would be installed to appropriate depths at the site to pump the perched groundwater from the site. This water would be stored in tanks on the Project Site, tested, and disposed of based on existing Los Angeles Regional Water Quality Control Board (LARWQCB) General NPDES Permit and General Waste Discharge requirements, which include provisions mandating notification, sampling and analysis,

onsite treatment (if needed), and reporting of dewatering prior to discharge to the storm drain. No long-term dewatering would be required after Project buildout.

Based on the above conclusions, Project impacts related to hazards and hazardous materials could be significant. However, with implementation of Mitigation Measure HAZ-1, Project impacts would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. The Project includes the development of 428 multi-family residential units and up to 5,610 square feet of leasing office/neighborhood-serving retail. The Green Dot Public School, located approximately 0.3 miles northeast of the Project Site, is the closest school to the Project Site.

As discussed previously, the existing 850-square-foot restaurant on the Project Site was built in 1961 and could contain ACMs and LBP. Prior to the issuance of any demolition and/or alteration permits, the Project Applicant shall provide a letter to the City of Los Angeles Department of Building and Safety from a qualified asbestos abatement consultant indicating that no ACMs are present on the Project Site. If ACMs are discovered on site during demolition or construction, proper abatement regulations shall be followed. Because the Project would be required to comply with SCAQMD Rule 1403, which regulates the removal of ACMs to ensure that asbestos fibers are not released into the air during demolition and/or renovation activities, as well as other applicable state and federal regulations, impacts from ACMs would be less than significant. Further, demolition and removal of the existing buildings would be required to comply with CCR, Title 8, Section 1532 et seq., which requires that all LBP be abated and removed by a licensed lead contractor. In addition, standard handling and disposal practice shall be implemented pursuant to CALOSHA regulations. Prior to issuance of a demolition permit, a LBP survey shall be performed and approved by the Department of Building and Safety.

As discussed above, under Checklist Question 9(a), operation of the Project would not require routine transport, use, or disposal of hazardous materials. Thus, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, impacts related to this issue would be less than significant.

d) Would the project 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 create a significant hazard to the public or the environment caused in whole or in part from the project's exacerbation of existing environmental conditions?

In 2015, the California Supreme Court in CBIA v. BAAQMD, held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of the project. The revised thresholds are intended to comply with this decision. Specifically, the decision held that an impact from the existing environment to the project, including future users and/or residents, exacerbates existing conditions that already exist, that

impact must be assessed, including how it might affect future users and/or residents of the project. For example, if construction of the project on a hazardous waste site will cause the potential dispersion of hazardous waste in the environment, the EIR should assess the impacts of that dispersion to the environment, including to the project's residents.

Thus, in accordance with Appendix G of the State CEQA Guidelines and the CBIA v. BAAQMD decision, the analysis associated with existing hazardous conditions below focuses on whether the Project would exacerbate these environmental conditions so as to increase the potential to expose people to impacts.

No Impact. California Government Code Section 65962.5 requires various state agencies, including but not limited to, the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB), to compile lists of hazardous waste disposal facilities, unauthorized releases from underground storage tanks, contaminated drinking water wells and solid waste facilities where there is known migration of hazardous waste and submit such information to the Secretary for Environmental Protection on at least an annual basis. The Project Site is not included on any list compiled pursuant to Government Code Section 65962.5.[101][102] Thus, construction and operation of the Project would not create a significant hazard to the public or the environment, as a result of being on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Based on the above, development of the Project would not cause or exacerbate a significant hazard to the public or the environment. Therefore, no impacts related to this issue would occur.

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?

Less Than Significant Impact. The Project Site is not located within two miles of a public airport. The closest airport is the Bob Hope Airport located approximately 15.4 miles northwest of the site. Due to the height of the proposed building, the City would be required to send a copy of the Notice of Preparation (NOP) to the Federal Aviation Administration (FAA) and would be required to file Form 7460 with the FAA, as well as obtain a Determination of No Hazard to Air Navigation from the FAA. The Determination of No Hazard to Air Navigation from the FAA would be submitted to the City of Los Angeles Department of Building and Safety prior to issuance of any building permits. Thus, the Project would not result in a safety hazard associated with an airport for people residing or working in the Project area. Based on the above, development of the Project would not have the potential to exacerbate current environmental conditions as to result in a safety hazard for people residing or working the Project area. Therefore, no impacts related to this issue would occur.

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[101] *Department of Toxic Substances Control, Envirostor, https://www.envirostor.dtsc.ca.gov, July 22, 2017.*

[102] *Ibid.*

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The City's General Plan Safety Element addresses public protection from unreasonable risks associated with natural disasters (e.g., fires, floods, earthquakes) and sets forth guidance for emergency response. Specifically, the Safety Element includes Exhibit H, Critical Facilities and Lifeline Systems, which identifies emergency evacuation routes, along with the location of selected emergency facilities. According to the Safety Element of the General Plan, the Project Site is not located along a designated disaster route.[103] The closest disaster routes include 4th Street and Broadway.

While it is expected that the majority of construction activities for the Project would be confined to the Project Site, temporary and limited off-site construction activities may occur in adjacent street rights-of-way during certain periods of the day, which could potentially affect emergency access adjacent to the Project Site. The Project could require temporary roadway lane closures and temporary closure of the alley that runs adjacent to the eastern boundary of the Project Site.

However, access to the Project Site and surrounding area during construction of the Project would be maintained in accordance with standard construction management plans that would be implemented to ensure adequate circulation and emergency access. Furthermore, prior to the issuance of a building permit, the Project Applicant would be required by the City of Los Angeles Fire Department (LAFD) and the City of Los Angeles Department of Building and Safety to develop an emergency response plan for the Project in consultation with the LAFD. The emergency response plan shall include but not be limited to the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments. Preparation and implementation of the Project-specific emergency response plan would ensure that Project impacts related to emergency response would be less than significant.

g) Would the project exacerbate existing environmental conditions so as to increase the potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires?

No Impact. The Project is located in a highly urbanized area of the City that is not subject to wildland fires. Therefore, the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Based on the above, development of the Project would not have the potential to exacerbate existing environmental conditions so as to increase the potential to expose people or structures to significant risk of loss, injury or death involving wildland fires.

[103] *City of Los Angeles Department of Planning General Plan Safety Element, November 26, 1996, Exhibit H, Critical Facilities and Lifeline Systems.*

Mitigation Measures (Hazards and Hazardous Materials)

To ensure that impacts related to hazards and hazardous materials would be less than significant, the following mitigation measures are required:

MM-HAZ-1: Prior to issuance of a grading permit, the Project Applicant shall prepare a Soil Management Plan (SMP) for the Project. The SMP shall be approved by the Los Angeles Fire Department and the Department of Public Works. The SMP shall address the delineation of the vertical and lateral extent of identified TPH and metals impacts in Project Site soil. Soil management procedures shall be described so that hazardous soil can be separated from non-hazardous soil during excavation tasks. Also, contingency procedures shall be presented in the event that unanticipated hazardous materials issues such as USTs are identified during excavation. The SMP shall describe the transport and disposal of the soil at an appropriate waste management facility(ies). Soil management procedures outlined in the SMP shall be followed during the Project's excavation and development phases to properly manage the various classes of soil and to minimize risk to workers and the public during construction. Prior to issuance of a building permit, the Department of Building and Safety shall confirm that all contaminated soil has been removed from the Project Site.

Cumulative Impacts

The geographic extent of the Project's environmental impacts is limited to the Project Site and would not contribute to any other potential environmental impact that may occur beyond the Project Site boundaries. All related projects would be subject to discretionary or ministerial review by their respective jurisdictions, which would be responsible for assessing potential hazards risks associated with those related projects, and if necessary, the applicants of those projects would be required to implement measures appropriate for the type and extent of hazardous materials present and the land use proposed to reduce the risk associated with the hazardous materials to an acceptable level. As stated previously, with mitigation, the Project would not result in any significant impacts related to hazards and hazardous materials. Therefore, no significant Project cumulative impacts related to hazards and hazardous materials would occur.

10. HYDROLOGY AND WATER QUALITY

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. During construction of the Project, particularly during the grading and excavation phases, stormwater runoff from precipitation events could cause exposed and stockpiled soils to be subject to erosion and convey sediments into municipal storm drain systems. In addition, on site watering activities to reduce airborne dust could contribute to pollutant loading in runoff. Pollutant discharges relating to the storage, handling, use and disposal of chemicals, adhesives, coatings, lubricants, and fuel could also occur. Thus, a significant impact could occur if the Project discharges water that does not meet the quality standards of agencies that regulate surface water quality and water discharge into storm water drainage systems, or would not comply

with all applicable regulations as governed by the Los Angeles Regional Water Quality Control Board (LARWQCB). The Project is a mixed-use development with 428 multi-family residential units and up to 5,610 square feet of leasing office/neighborhood-serving land uses.

During construction, groundwater dewatering would be required on the Project Site and would occur in compliance with requirements of the Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2008-0032 National Pollutant Discharge Elimination System No. CAG994004) or subsequent permit. (No long-term dewatering would be required after Project buildout). However, during grading and excavation activities, stockpiled soils could be subject to erosion during precipitation events. Thus, Project-related construction activities could have the potential to impact stormwater runoff and water quality.

The Project would be required to comply with the NPDES General Construction Permit including the preparation of a SWPPP and implementation of BMPs, required to minimize soil erosion and sedimentation from entering the storm drains during the construction period. In addition, the Project would be subject to the City's Stormwater and Urban Runoff Pollution Control regulations (Ordinance No. 172,176 and No. 173,494) to ensure pollutant loads from the Project Site would be minimized for downstream receiving waters. Compliance with the NPDES and implementation of the SWPPP and BMPs, as well as the City's discharge requirements would ensure that construction stormwater runoff would not violate water quality and/or discharge requirements.

Stormwater runoff generated during operation of the Project has the potential to introduce small amounts of pollutants typically associated with mixed-use developments (e.g., household cleaners, landscaping pesticides, and vehicle petroleum products) into the stormwater system. Stormwater runoff from precipitation events could carry urban pollutants into municipal storm drains, however during operation the Project would be required to comply with the City's Low Impact Development (LID) Ordinance. The LID Ordinance applies to all development and redevelopment in the City that requires a building permit. LID Plans are required to include a site design approach and BMPs that address runoff and pollution at the source. Further, to comply with LID Ordinance the Project would be required to capture and treat the first 3/4-inch of rainfall in accordance with established stormwater treatment priorities. Compliance with the LID Ordinance would reduce the amount of surface water runoff leaving the Project Site as compared to the current conditions. Compliance with the LID Plan and Standard Urban Stormwater Mitigation Plan (SUSMP), including the implementation of BMPs, would ensure that operation of the Project would not violate water quality standard and discharge requirements or otherwise substantially degrade water quality.

Conformance with these regulations would ensure construction and operational activities would result in less-than-significant impacts and would not violate water quality standards, waste discharge requirements, or otherwise substantially degrade water quality.

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

No Impact. The Project Site is developed with a surface parking lot and an 850-square-foot restaurant. There are no permeable surfaces on the Project Site. During a storm event stormwater runoff flows to the adjacent roadways where it is directed into the City's storm drain system. As such, the Project Site is not a source of groundwater recharge. Following redevelopment of the Project Site, groundwater recharge would remain negligible, similar to existing conditions.

The regional aquifer in the Los Angeles Basin that is a supply of drinking water for the region is located anywhere from approximately 300 to 1,000 feet below the surface of the Project Site.[104] The Project includes excavation to approximately 30 below ground surface. Groundwater encountered within this depth would be perched groundwater, which is isolated groundwater trapped within soil or rock.[105] Perched groundwater is typically of poor water quality, because of its inability to flow and filter. Perched groundwater at the Project Site would be pumped from the ground and removed from the site in accordance with applicable LARWQCB requirements, as discussed above. (No long-term dewatering would be required after Project buildout.) Additionally, all water consumption associated with the Project would be supplied by LADWP and not from groundwater beneath the Project Site. Thus, there would be no impact to groundwater supplies or recharge.

c) Would the 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:

(i) Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. A significant impact could occur if the Project substantially altered the drainage pattern of the site or an existing stream or river, so that substantial erosion or siltation would result on-or off-site. The Project Site is located in a highly urbanized area of the City. There are no natural watercourses on the Project Site or in the vicinity of the site. As discussed above, the Project Site is developed with paved surfaces and is considered 100 percent impervious. Current stormwater runoff flows to the local storm drain system.

Under the post-Project condition, the Project Site also would be considered 100 percent impervious, and drainage patterns would be much the same as under the existing condition. The Project Applicant would be required to prepare a SWPPP and implement BMPs to reduce runoff and preserve water quality during construction of the Project. While grading and construction activities may temporarily alter the existing drainage patterns of the site, BMPs would be implemented to minimize soil erosion impacts during Project grading and construction activities.

[104] *Sarah L. Denton, PG, CHG, CEM, Senior Associate, Blackstone Consulting, LLC, telephone conversation, April 13, 2016.*

[105] *Ibid.*

In addition, the Project would be required to implement a LID Plan (during operation), which would reduce the amount of surface water runoff leaving the Project Site after a storm event. Specifically, the LID Plan would require the implementation of stormwater BMPS to retain or treat the runoff from a storm event producing 3/4-inch of rainfall in a 24-hour period. Therefore, the Project would result in a less than significant impact in relation to surface water hydrology and would not 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?

Less Than Significant Impact. A significant impact could occur if the Project resulted in increased surface water runoff volumes during construction, or if operation of the Project would result in flooding conditions affecting the Project Site or nearby properties. Grading and construction activities on the Project Site may temporarily alter the existing drainage patterns of the site and reduce off-site flows. However, construction and operation of the Project would not result in a significant increase in site runoff or any changes in the local drainage patterns that would result in flooding on- or off-site. The Project would be required to prepare a SWPPP and implement BMPs to reduce runoff and preserve water quality during construction of the Project. Compliance with the LID Ordinance would also reduce the amount of surface water runoff leaving the Project Site as compared to the current conditions. Impacts would be less than significant.

(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?

Less Than Significant Impact. A significant impact could occur if the Project would increase the volume of stormwater runoff to a level that exceeds the capacity of the storm drain system serving the Project Site, or if the Project would introduce substantial new sources of polluted runoff. Runoff from the Project Site currently is and would continue to be collected on the site and directed towards existing storm drains in the Project vicinity that have adequate capacity to serve the site. Currently, drains and catch basins maintained by the City are located on Hill Street, adjacent to the Project Site's southwestern boundary. Pursuant to local practice and City policy, stormwater retention would be required as part of the LID/SUSMP implementation features (despite no increase of imperviousness surfaces on the site). Any contaminants gathered during routine cleaning of construction equipment would be disposed of in compliance with applicable stormwater pollution prevention permits. Further, pollutants from the subterranean parking garage and surface parking lot would be subject to the requirements and regulations of the NPDES and applicable LID Ordinance requirements. Accordingly, the Project would be required to demonstrate compliance with LID Ordinance standards and retain or treat the first three-quarters inch of rainfall in a 24-hour period. The Project would not create or contribute surface runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant.

(iv) Impede or redirect flood flows?

No Impact. The Project Site is located in an area of minimal flood risk (Zone X) and is not located within a 100-year zone, as mapped by the Federal Emergency Management Agency (FEMA).[106] Thus, the Project would not have the potential to impede or redirect flood flows. Therefore, no impacts related to this issue would occur.

d) Would the project risk release of pollutants due to inundation associated with a flood hazard, tsunami, or seiche zones?

No Impact. As discussed above, the Project Site is not located within a designated 100-year flood plain. In addition, the Safety Element of the General Plan does not map the Project Site as being located in any area susceptible to floods associated with a levee or dam.[107] Further, the Project Site is not located near an ocean or other large body of water that would make the site potentially susceptible to tsunamis or seiches. Thus, the Project would not risk release of pollutants due to inundation associated with a flood hazard, tsunami, or seiche zones. Therefore, Project impacts related to this issue 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?

Less Than Significant Impact. As discussed previously, during construction, groundwater dewatering would be required on the Project Site and would occur in compliance with requirements of the Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2008-0032 National Pollutant Discharge Elimination System No. CAG994004) or subsequent permit. (No long-term dewatering would be required after Project buildout.) In addition, during grading and excavation activities, stockpiled soils could be subject to erosion during precipitation events. Thus, Project-related construction activities could have the potential to impact stormwater runoff and water quality.

The Project would be required to comply with the NPDES General Construction Permit including the preparation of a SWPPP and implementation of BMPs, required to minimize soil erosion and sedimentation from entering the storm drains during the construction period. In addition, the Project would be subject to the City's Stormwater and Urban Runoff Pollution Control regulations (Ordinance No. 172,176 and No. 173,494) to ensure pollutant loads from the Project Site would be minimized for downstream receiving waters. Compliance with the NPDES and implementation of the SWPPP and BMPs, as well as the City's discharge requirements would ensure that

[106] *FEMA, https://msc.fema.gov/portal/search?AddressQuery=350%20Hill%20street%2C%20los%20angeles%2C%20ca#searchresultsanchor, effective on 9-26-2008; and City of Los Angeles General Plan Safety Element, Exhibit F.*

[107] *Los Angeles General Plan Safety Element, Exhibit G, Inundation and Tsunami Hazard Areas.*

construction stormwater runoff would not violate water quality and/or discharge requirements. Construction related impacts would be less than significant.

Stormwater runoff generated during operation of the Project has the potential to introduce small amounts of pollutants typically associated with mixed-use developments (e.g., household cleaners, landscaping pesticides, and vehicle petroleum products) into the stormwater system. Stormwater runoff from precipitation events could carry urban pollutants into municipal storm drains, however during operation the Project would be required to comply with the City's LID Ordinance. The LID Ordinance applies to all development and redevelopment in the City that requires a building permit. LID Plans are required to include a site design approach and BMPs that address runoff and pollution at the source. Further, to comply with LID Ordinance the Project would be required to capture and treat the first 3/4-inch of rainfall in accordance with established stormwater treatment priorities. Compliance with the LID Ordinance would reduce the amount of surface water runoff leaving the Project Site as compared to the current conditions. Compliance with the LID Plan and SUSMP, including the implementation of BMPs, would ensure that operation of the Project would not violate water quality standard and discharge requirements or otherwise substantially degrade water quality. Impacts would be less than significant.

Cumulative Impacts

The sites of the proposed Project and the related projects are located in an urbanized area where most of the surrounding properties are already developed. The existing storm drainage system serving this area has been designed to accommodate runoff from an urban built-out environment. When new construction occurs it generally does not lead to substantial additional runoff, since new developments is required to control the amount and quality of stormwater runoff coming from their respective sites. Additionally, all new development in the City is required to comply with the City's LID Ordinance and incorporate appropriate stormwater pollution control measures into the design plans to ensure that water quality impacts are minimized. Therefore, Project cumulative impacts related to hydrology and water quality would be less than significant.

11. LAND USE AND PLANNING

a) Would the project physically divide an established community?

No Impact. The Project Site is located in a fully urbanized area of Los Angeles, in the Central City Community Plan Area. The Project Site is currently developed with a 109 space surface parking lot and an 850-square-foot restaurant. Specific uses surrounding the Project Site include restaurant, retail, office, institutional/government, and residential. There is a fully developed street network adjacent to and surrounding the Project Site, along with all basic urban infrastructure systems. The Project would not create a physical barrier causing an impediment to travel or access the area surrounding the Project Site. Rather, the Project includes removal of the existing land uses from the Project Site and development of the site with residential and commercial land uses. There would be no impact involving a physical separation of or other disruption to the physical structure of adjacent properties or the surrounding community, as development of the Project would occur within the boundaries of the existing Project Site. Thus, the Project would

not physically divide, disrupt, or isolate an established community. Therefore, no impacts related to this issue would occur.

b) Would the project 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?

Less Than Significant Impact. As discussed below, the Project would be substantially consistent with all of the applicable plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect associated with development of the Project Site. Therefore, Project impacts related to land use and planning would be less than significant.

Regulatory Setting

Regional

Southern California Association of Governments

SCAG is the Metropolitan Planning Organization for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The SCAG region encompasses a population exceeding 18 million persons in an area of more than 38,000 square miles. As the federally-designated Metropolitan Planning Organization, SCAG is mandated to research and create plans for transportation, growth management, hazardous waste management, and air quality. Applicable SCAG publications are discussed below.

SCAG 2016-2040 RTP/SCS

On September 30, 2008, SB 375 was passed to help achieve AB 32 goals related to the reduction of greenhouse gases through regulation of cars and light trucks. SB 375 aligns three policy areas of importance to local government: (1) regional long-range transportation plans and investments; (2) regional allocation of the obligation for cities and counties to zone for housing; and (3) a process to achieve GHG emissions reductions targets for the transportation sector.[108] It establishes a process for CARB to develop GHG emissions reductions targets for each region (as opposed to individual local governments or households). SB 375 also requires Metropolitan Planning Organizations to prepare an SCS within the RTP that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions.

On September 23, 2010, CARB adopted regional targets for the reduction of GHG emissions applying to the years 2020 and 2035. For the area under the SCAG jurisdiction, including the Project area, CARB adopted Regional Targets for reduction of GHG emissions by eight percent

[108] *AB 32 was signed into law in 2006 and focuses on achieving GHG emissions equivalent to Statewide levels in 1990 by 2020.*

for 2020 and by 13 percent for 2035. On February 15, 2011, CARB's Executive Officer approved the final targets.[109]

On April 7, 2016, the Regional Council of SCAG adopted the 2016-2040 RTP/SCS. For the past three decades, SCAG has prepared RTPs with the primary goal of increasing mobility for the region's residents and visitors. Through the 2016-2040 RTP/SCS SCAG continues to emphasize sustainability and integrated planning, whose vision encompasses three principles that collectively work as the key to the region's future: mobility, economy, and sustainability.

The 2016-2040 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the NAAQS as set forth by the Federal Clean Air Act. As such, the 2016-2040 RTP/SCS contains a regional commitment for the broad deployment of zero- and near-zero-emission transportation technologies in the 2016-2040 time frame and clear steps to move toward this objective. This is especially critical for the goods movement system. The development of a world-class, zero- or near-zero-emission freight transportation system is necessary to maintain economic growth in the region, to sustain quality of life, and to meet federal air quality requirements. The 2016-2040 RTP/SCS puts forth an aggressive strategy for technology development and deployment to achieve this objective. This strategy will have many co-benefits, including energy security, cost certainty, increased public support for infrastructure, GHG emissions reduction, and economic development.

The 2016-2040 RTP/SCS includes a significant consideration of the economic impacts and opportunities provided by the transportation infrastructure plan set forth in the 2016-2040 RTP/SCS, considering not only the economic and job creation impacts of the direct investment in transportation infrastructure, but also the efficiency gains in terms of worker and business economic productivity and goods movement. The 2016-2040 RTP/SCS outlines a transportation infrastructure investment strategy that will benefit Southern California, the State, and the nation in terms of economic development, competitive advantage, and overall competitiveness in the global economy in terms of attracting and retaining employers in the Southern California region.

The 2016-2040 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play, and how they will move around. It is designed to promote safe, secure, and efficient transportation systems to provide improved access to opportunities, such as jobs, education, and healthcare. Its emphasis on transit and active transportation is designed to allow residents to lead a healthier, more active lifestyle. Its goal is to create jobs, ensure the region's economic competitiveness through strategic investments in the goods movement system, and improve environmental and health outcomes for its residents by 2040. More importantly, the 2016-2040 RTP/SCS is also designed to preserve what makes the region special, including stable and successful neighborhoods and array of open spaces for future generations.

The 2016-2040 RTP/SCS also includes examples of measures that could reduce impacts from planning, development, and transportation. It notes, however, that the example measures are not

[109] *CARB, Executive Order No. G-11-024, Relating to Adoption of Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.*

intended to serve as any kind of checklist to be used on a project-specific basis. Since every project and project setting is different, project-specific analysis is needed to identify applicable and feasible mitigation. These mitigation measures are particularly important where streamlining mechanisms under SB 375 are utilized.

Local

City of Los Angeles General Plan

The City of Los Angeles General Plan (General Plan), adopted December 1996 and re-adopted August 2001, provides general guidance on land use issues for the entire City. The General Plan consists of a Framework Element, a Land Use Element, and 10 citywide elements.

City of Los Angeles Framework Element

The City's General Plan Framework Element, adopted in December 1996 and readopted in August 2001, contains goals, policies, and objectives that address land use and serves as a guide to update the community plans and the citywide elements. The Framework Element provides a base relationship between land use and transportation, and provides guidance for future updates to the various elements of the General Plan, but does not supersede the more detailed community and specific plans. The Land Use chapter of the Framework Element contains Long Range Land Use Diagrams that depict the generalized distribution of centers, districts, and mixed-use boulevards throughout the City, but the community plans determine the specific land use designations. The Land Use Element of the General Plan is contained within 35 community plans.

City of Los Angeles Health and Wellness Element

The Plan for a Healthy Los Angeles (Plan) lays the foundation to create healthier communities for all residents of the City. As an Element of the General Plan, it provides high-level policy vision, along with measurable objectives and implementation programs, to elevate health as a priority for the City's future growth and development. Through a new focus on public health from the perspective of the built environment and City services, the City seeks to achieve better health and social equity through its programs, policies, plans, budgeting, and community engagement.

With a focus on public health and safety, the Plan provides a roadmap for addressing the most basic and essential quality-of-life issues: safe neighborhoods, a clean environment, access to health services, affordable housing, healthy and sustainably produced food, and the opportunity to thrive.

The Plan accomplishes two policy objectives: it elevates existing health-oriented policies in the General Plan and, where policy gaps exist, creates new policies to reinforce the City's goal of creating healthy, vibrant communities. The Plan acknowledges the relationship between public health and issues such as transportation, housing, environmental justice, and open space, among

others, by reviewing the relevant policies in the General Plan and identifying where further policy direction is needed to achieve the goal of creating a healthy and sustainable City.[110]

The Plan is underpinned by seven goals and identifies new policies and possible programs that serve as the implementation blueprint for creating healthier neighborhoods.

Central City Community Plan

The Central City Community Plan (Community Plan) area is located south of Sunset Boulevard/Cesar Chavez Avenue, north of the Santa Monica Freeway (Interstate 10), east of the Harbor Freeway (Interstate 110) and west of Alameda Street. It is bordered by the communities of Central City North, Silver Lake-Echo Park, Westlake, Southeast and South Central Los Angeles. Central City is the second smallest community plan area, representing less than one percent of the land in the City (approximately 2,161 acres or 3.38 square miles). Since this area is the governmental, financial, and the industrial hub of Los Angeles, land has primarily dedicated to these uses. Consequently this area has a smaller residential population in comparison with the rest of the City, though dwelling units and resident population are growing as people find a renewed interest in urban living and existing vacant and often historic commercial and industrial buildings are being converted to residential uses.

The Community Plan promotes an arrangement of land use, infrastructure, and services intended to enhance the economic, social, and physical health, safety, welfare, and convenience of the people who live, work and invest in the community. By serving to guide development, the Plan encourages progress and change within the community to meet anticipated needs and circumstances, promotes balanced growth, builds on economic strengths and opportunities while protecting the physical, economic, and social investments in the community to the extent reasonable and feasible.

The land use designation for the Project Site in the Community Plan is Regional Center Commercial (refer to Figure II-29 in Section II [Project Description]).

Downtown Design Guide: Design for a Livable Downtown

The Downtown Design Guide: Design for a Livable Downtown (Downtown Design Guide) is an interdepartmental project among Department of City Planning, Community Redevelopment Agency, LADOT, and Public Works. Together with urban design, transportation and environmental consultants, the Urban Design Studio, and City Team is advancing new context-sensitive street standards which emphasize walkability, sustainability and transit options; and simple but critical urban design standards to reinforce the community character of Downtown Los Angeles' many neighborhoods and districts. The purpose of the Downtown Design Guide is to coordinate and orchestrate the overall development of the City core, so that projects help each

[110] *Implementation of the Plan is addressed through programs, ordinances, and Community Plans, among other planning policy documents, which allow for the flexibility needed to address the specific needs of the City's diverse communities. References to neighborhoods usually reflect the Community Plan Area boundaries used by the Department of City Planning, but the City recognizes the fluidity and diversity of the City's neighborhoods.*

other succeed and result in a better, livable downtown. The Downtown Design Guide is intended to provide guidance for creating a livable downtown.

City of Los Angeles General Provisions and Zoning Code

All development activity on the Project Site is subject to the LAMC, particularly Chapter 1, General Provisions and Zoning, also known as the City of Los Angeles Planning and Zoning Code (Zoning Code). The Zoning Code includes development standards for the various districts in the City of Los Angeles. As shown on Figure II-28 in Section II (Project Description), the Project Site is currently zoned C2-4D (Commercial, Height District 4 with Development Limitation).

Project Consistency Discussion

2016-2040 RTP/SCS

A discussion of the Project's consistency with the policies applicable to individual development projects in the 2016-2040 RTP/SCS is presented on Table V-21. While the 2016-2040 RTP/SCS focuses on transportation investments in the SCAG region, as demonstrated, the Project would be substantially consistent with the applicable 2016-2040 RTP/SCS policies and therefore, no significant impacts would occur.

Table V-21
SCAG 2016-2040 RTP/SCS Consistency Analysis

Goal	Consistency Discussion
Maximize mobility and accessibility for all people and goods in the region.	**Consistent.** The Project would reduce VMT by providing a higher density infill development in close proximity to existing bus lines (including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines.) The Project Site is directly adjacent to the Metro Red Line subway portal. In addition, the Project would be located near commercial uses and employment areas in Downtown Los Angeles. Finally, the Project would encourage bicycling with the inclusion of approximately 512 bicycle parking spaces and a bicycle repair station.
Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent.** The Project would reduce VMT by providing a higher density infill development in close proximity to existing bus lines (including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines.) The Project Site is directly adjacent to the Metro Red Line subway portal. In addition, the Project would be located near commercial uses and employment areas in Downtown Los Angeles. Finally, the Project would encourage bicycling with the inclusion of 512 bicycle parking spaces and a bicycle repair station.

Table V-21
SCAG 2016-2040 RTP/SCS Consistency Analysis

Goal	Consistency Discussion
Actively encourage and create incentives for energy efficiency, where possible.	**Consistent.** The Project would comply with CalGreen requirements of the California Building Code, for water and energy conservation. The Project would meet or exceed Title 24 standards with compliance with the City's Green Building Ordinance. In addition, the Project would also be consistent with the City of Los Angeles Building Code, including the LAGBC, which contain measures to reduce the Project's energy and water uses, including specified flow rate plumbing fixtures, regulations regarding irrigation controllers and design, and requirements for provision of roof space for future electrical solar systems.
Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent.** The Project would reduce VMT by providing a higher density infill development in close proximity to existing bus lines (including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines.) The Project Site is directly adjacent to the Metro Red Line subway portal. In addition, the Project would be located near commercial uses and employment areas in Downtown Los Angeles. Finally, the Project would encourage bicycling with the inclusion of approximately 512 bicycle parking spaces and a bicycle repair station, which would further promote non-motorized transportation.
Source: Southern California Association of Governments, Regional Transportation Plan/Sustainable Communities Strategy, April 2016.	

AQMP

The Project's consistency with the AQMP is discussed in response to Checklist Question 3(a). As discussed there, the Project would be consistent with the AQMP, and impacts would be less than significant.

CMP

Consistency of the Project with the CMP is discussed in response to Checklist Question 17(b). As discussed there, the Project would be consistent with the CMP, and impacts would be less than significant.

General Plan Framework Element

The Project's consistency with the General Plan Framework Element land use policies is discussed on Table V-22. As shown therein, the Project would be substantially consistent with the applicable policies and therefore, no significant impacts would occur.

Table V-22
Project Consistency with Applicable Policies of the Framework Element

Objective	Project Consistency
Framework Element: Land Use Chapter	
3.1.1 Identify areas on the Long-Range Land Use Diagram and in the community plans sufficient for the development of a diversity of uses that serve the needs of existing and future residents (housing, employment, retail, entertainment, cultural/institutional, educational, health, services, recreation, and similar uses), provide job opportunities, and support visitors and tourism.	**Consistent.** The Project would introduce a mixed-use development to the Project Site. The Project Site is within walking and/or biking distance of an existing job center (Downtown Los Angeles) and the retail uses located at Figueroa Street and Olympic Boulevard. The Project would provide housing and employment opportunities, as well as commercial and hotel uses, to serve current residents in the Project area and future residents and other users of the Project Site.
3.2.2 Establish, through the Framework Long-Range Land Use Diagram, community plans, and other implementing tools, patterns and types of development that improve the integration of housing with commercial uses and the integration of public services and various densities of residential development within neighborhoods at appropriate locations.	**Consistent.** The Project is an infill development that includes redevelopment of the Project Site with a mixed-use development, including an integration of 428 residential dwelling units and up to 5,610 square feet of commercial land uses (including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines.) The Project Site is directly adjacent to the Metro Red Line subway portal. In addition, the Project would be located near commercial uses and employment areas in Downtown Los Angeles. Finally, the Project would encourage bicycling with the inclusion of 512 bicycle parking spaces and a bicycle repair station.
3.2.3 Provide for the development of land use patterns that emphasize pedestrian/bicycle access and use in appropriate locations.	**Consistent.** The Project Site area experiences a high level of pedestrian activity, particularly along the key corridors such as Hill and 4th Streets near the Project Site. Based on the existing level of pedestrian activity in the area and the proximity of transit and sources of employment and retail opportunities, it is anticipated that there would continue to be a high level of pedestrian activity in the area as well as to and from the Project Site. The Project would be designed to encourage pedestrian activity and walking and cycling as a transportation mode. As indicated on Figure II-5 (refer to Section II, Project Description), the Project would be designed to provide connections to the adjacent public sidewalks and would include site enhancements to promote walkability. The Project Site would be accessible from nearby public bus and rail transit stops as well as other amenities along nearby major corridors. The majority of pedestrian access to the Project Site would occur via the existing public sidewalks provided along every street in the Downtown Los Angeles area. Use of bicycles as a transportation mode to and from the Project Site would be encouraged as Part of the Project by the provision of ample and safe parking. The type of spaces and dimensions would be provided based on LAMC Sections 12.21.A.16 and 12.21 A.4(c), as well as to meet the needs of

Table V-22
Project Consistency with Applicable Policies of the Framework Element

Objective	Project Consistency
	a variety of bicycles. The bicycle spaces would be provided in a readily accessible location(s). Appropriate lighting would be provided to increase safety and provide theft protection during nighttime parking. The short-term and long-term bicycle parking requirements of the LAMC would be satisfied both for the residential and commercial land use components of the Project.
3.4.1 Conserve existing stable residential neighborhoods and lower-intensity commercial districts and encourage the majority of new commercial and mixed-use (integrated commercial and residential) development to be located (a) in a network of neighborhood districts, community, regional, and downtown centers, (b) in proximity to rail and bus transit stations and corridors, and (c) along the City's major boulevards, referred to as districts, centers, and mixed-use boulevards, in accordance with the Framework Long-Range Land Use Diagram.	**Consistent.** The Project is an infill development that includes redevelopment of the Project Site in Downtown Los Angeles with a mixed-use development, including 428 residential dwelling units and up to 5,610 square feet of commercial land uses. The Project Site is in close proximity to existing bus lines (including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines.) The Project Site is directly adjacent to the Metro Red Line subway portal. In addition, the Project would be located near commercial uses and employment areas in Downtown Los Angeles. Finally, the Project would encourage bicycling with the inclusion of 512 bicycle parking spaces and a bicycle repair station.
Source: City of Los Angeles General Plan.	

General Plan Health and Wellness Element

The Project's consistency with the General Plan Health and Wellness Element land use policies is discussed on Table V-23. As shown therein, the Project would be substantially consistent with the applicable policies and therefore, no significant impacts would occur.

Table V-23
Project Consistency with Applicable Policies of the Health and Wellness Element

Policy	Project Consistency
1.3 Promote healthy communities by focusing on prevention, interventions, and by addressing the root causes of health disparities and inequities in Los Angeles.	**Consistent.** The Project would introduce a mixed-use development to Downtown Los Angeles, including 428 residential housing units and 5,610 square feet of commercial land uses, providing housing and employment opportunities to the community within walking distance to existing transit, helping to reduce dependence of vehicles and the air pollutants generated by car traffic. Consistent with the Downtown Housing Incentive Ordinance, the Project would set-aside Restricted Affordable units, including 22 units (5 percent of the total number of units) for Very-Low-Income households and one of the following: 1) 10 percent of the total number of units for Low Income households; 2) 15 percent of the total number of units for Moderate Income households; or 3) 20 percent of the total number of units for Workforce

Table V-23
Project Consistency with Applicable Policies of the Health and Wellness Element

Policy	Project Consistency
	Income households. Further, the Project includes approximately 41,378 square feet of open space, in the form of various common open space areas and private open space (balconies). The Project would be designed to encourage pedestrian activity and walking as a transportation mode. As indicated on Figure II-5 (refer to Section II, Project Description), the Project would be designed to provide connections to the adjacent public sidewalks and would include site enhancements to promote walkability. The Project Site would be accessible from nearby public bus and rail transit stops as well as other amenities along nearby major corridors. The majority of pedestrian access to the Project Site would occur via the existing public sidewalks provided along every street in the Downtown Los Angeles area. Use of bicycles as a transportation mode to and from the Project Site would be encouraged as Part of the Project by the provision of ample and safe parking. The type of spaces and dimensions would be provided based on LAMC Sections 12.21.A.16 and 12.21 A.4(c), as well as to meet the needs of a variety of bicycles. The bicycle spaces would be provided in a readily accessible location(s). Appropriate lighting would be provided to increase safety and provide theft protection during nighttime parking. The short-term and long-term bicycle parking requirements of the LAMC would be satisfied both for the residential and commercial land use components of the Project.
1.5 Improve Angelenos' health and well-being by incorporating a health perspective into land use, design, policy, and zoning decisions through existing tools, practices, and programs.	**Consistent.** The Project would introduce a mixed-use development to Downtown Los Angeles, including 428 residential housing units and 5,610 square feet of commercial land uses, providing housing and employment opportunities to the community within walking distance to existing transit, helping to reduce dependence of vehicles and the air pollutants generated by car traffic. Consistent with the Downtown Housing Incentive Ordinance, the Project would set-aside Restricted Affordable units, including 22 units (5 percent of the total number of units) for Very-Low-Income households and one of the following: 1) 10 percent of the total number of units for Low Income households; 2) 15 percent of the total number of units for Moderate Income households; or 3) 20 percent of the total number of units for Workforce Income households. Further, the Project includes approximately 41,378 square feet of open space, in the form of various common open space areas and private open space (balconies).

Table V-23
Project Consistency with Applicable Policies of the Health and Wellness Element

Policy	Project Consistency
	The Project would be designed to encourage pedestrian activity and walking as a transportation mode. As indicated on Figure II-5 (refer to Section II, Project Description), the Project would be designed to provide connections to the adjacent public sidewalks and would include site enhancements to promote walkability. The Project Site would be accessible from nearby public bus and rail transit stops as well as other amenities along nearby major corridors. The majority of pedestrian access to the Project Site would occur via the existing public sidewalks provided along every street in the Downtown Los Angeles area. Use of bicycles as a transportation mode to and from the Project Site would be encouraged as Part of the Project by the provision of ample and safe parking. The type of spaces and dimensions would be provided based on LAMC Sections 12.21.A.16 and 12.21 A.4(c), as well as to meet the needs of a variety of bicycles. The bicycle spaces would be provided in a readily accessible location(s). Appropriate lighting would be provided to increase safety and provide theft protection during nighttime parking. The short-term and long-term bicycle parking requirements of the LAMC would be satisfied both for the residential and commercial land use components of the Project.
2.1 Enhance opportunities for improved health and well-being for all Angelenos by increasing the availability of and access to affordable goods and services that promote health and healthy environments, with a priority on low-income neighborhoods.	**Consistent.** The Project would introduce a mixed-use development to Downtown Los Angeles, 428 residential housing units and 5,610 square feet of commercial land uses, providing housing and employment opportunities to the community within walking distance to existing transit, helping to reduce dependence of vehicles and the air pollutants generated by car traffic. Consistent with the Downtown Housing Incentive Ordinance, the Project would set-aside Restricted Affordable units, including 22 units (5 percent of the total number of units) for Very-Low-Income households and one of the following: 1) 10 percent of the total number of units for Low Income households; 2) 15 percent of the total number of units for Moderate Income households; or 3) 20 percent of the total number of units for Workforce Income households. Further, the Project includes approximately 41,378 square feet of open space, in the form of various common open space areas and private open space (balconies).
2.2 Promote a healthy built environment by encouraging the design and rehabilitation of buildings and sites for healthy living and working conditions, including promoting enhanced pedestrian-oriented circulation, lighting, attractive and open stairs, healthy building	**Consistent.** The Project Site area experiences a high level of pedestrian activity, particularly along the key corridors such as Hill and 4th Streets near the Project Site. Based on the existing level of pedestrian activity in the area, it is anticipated that there would continue to be a high level of

Table V-23
Project Consistency with Applicable Policies of the Health and Wellness Element

Policy	Project Consistency
materials and universal accessibility using existing tools, practices, and programs.	pedestrian activity in the area as well as to and from the Project Site. The Project would be designed to encourage pedestrian activity and walking as a transportation mode. As indicated on Figure II-5 (refer to Section II, Project Description), the Project would be designed to provide connections to the adjacent public sidewalks and would include site enhancements to promote walkability. The Project Site would be accessible from nearby public bus and rail transit stops as well as other amenities along nearby major corridors. The majority of pedestrian access to the Project Site would occur via the existing public sidewalks provided along every street in the Downtown Los Angeles area. Use of bicycles as a transportation mode to and from the Project Site would be encouraged as Part of the Project by the provision of ample and safe parking. The type of spaces and dimensions would be provided based on LAMC Sections 12.21.A.16 and 12.21 A.4(c), as well as to meet the needs of a variety of bicycles. The bicycle spaces would be provided in a readily accessible location(s). Appropriate lighting would be provided to increase safety and provide theft protection during nighttime parking. The short-term and long-term bicycle parking requirements of the LAMC would be satisfied both for the residential and commercial land use components of the Project.
2.3 Strive to eliminate barriers for individuals with permanent and temporary disabilities to access health care and health resources.	**Consistent.** Design of the Project would comply with all existing federal, state, and local regulations including the Americans with Disabilities Act.
2.11 Lay the foundation for healthy communities and healthy living by promoting infrastructure improvements that support active transportation with safe, attractive, and comfortable facilities that meet community needs; prioritize implementation in communities with the greatest infrastructure deficiencies that threaten the health, safety, and well-being of the most vulnerable users.	**Consistent.** The Project is an infill development that includes redevelopment of the Project Site in Downtown Los Angeles with a mixed-use development, including 428 residential housing units and 5,610 square feet of commercial land uses. The Project Site is in close proximity to existing bus lines (including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines). The Project Site is directly adjacent to the Metro Red Line subway portal. In addition, the Project would be located near commercial uses and employment areas in Downtown Los Angeles. Finally, the Project would encourage bicycling with the inclusion of approximately 512 bicycle parking spaces and a bicycle repair station. The Project Site area experiences a high level of pedestrian activity, particularly along the key corridors such as Hill and 4th Streets near the Project Site. Based on the existing level of

Table V-23
Project Consistency with Applicable Policies of the Health and Wellness Element

Policy	Project Consistency
	pedestrian activity in the area, it is anticipated that there would continue to be a high level of pedestrian activity in the area as well as to and from the Project Site. The Project would be designed to encourage pedestrian activity and walking as a transportation mode. As indicated on Figure II-5 (refer to Section II, Project Description), the Project would be designed to provide connections to the adjacent public sidewalks and would include site enhancements to promote walkability. The Project Site would be accessible from nearby public bus and rail transit stops as well as other amenities along nearby major corridors. The majority of pedestrian access to the Project Site would occur via the existing public sidewalks provided along every street in the Downtown Los Angeles area. Use of bicycles as a transportation mode to and from the Project Site would be encouraged as Part of the Project by the provision of ample and safe parking. The type of spaces and dimensions would be provided based on LAMC Sections 12.21.A.16 and 12.21 A.4(c), as well as to meet the needs of a variety of bicycles. The bicycle spaces would be provided in a readily accessible location(s). Appropriate lighting would be provided to increase safety and provide theft protection during nighttime parking. The short-term and long-term bicycle parking requirements of the LAMC would be satisfied both for the residential and commercial land use components of the Project.
3.8 Support public, private, and nonprofit partners in the ongoing development of new and innovative active spaces and strategies to increase the number of Angelenos who engage in physical activity across ages and level of abilities.	**Consistent.** The Project would introduce a mixed-use development to Downtown Los Angeles, including 428 residential housing units and 5,610 square feet of commercial land uses, providing housing and employment opportunities to the community within walking distance to existing transit, helping to reduce dependence of vehicles and the air pollutants generated by car traffic. Consistent with the Downtown Housing Incentive Ordinance, the Project would set-aside Restricted Affordable units, including 22 units (5 percent of the total number of units) for Very-Low-Income households and one of the following: 1) 10 percent of the total number of units for Low Income households; 2) 15 percent of the total number of units for Moderate Income households; or 3) 20 percent of the total number of units for Workforce Income households. Further, the Project includes approximately 41,378 square feet of open space, in the form of various common open space areas and private open space (balconies), which would be available to users of the Project Site.

Table V-23
Project Consistency with Applicable Policies of the Health and Wellness Element

Policy	Project Consistency
	The Project would be designed to encourage pedestrian activity and walking as a transportation mode. As indicated on Figure II-5 (refer to Section II, Project Description), the Project would be designed to provide connections to the adjacent public sidewalks and would include site enhancements to promote walkability. The Project Site would be accessible from nearby public bus and rail transit stops as well as other amenities along nearby major corridors. The majority of pedestrian access to the Project Site would occur via the existing public sidewalks provided along every street in the Downtown Los Angeles area. Use of bicycles as a transportation mode to and from the Project Site would be encouraged as Part of the Project by the provision of ample and safe parking. The type of spaces and dimensions would be provided based on LAMC Sections 12.21.A.16 and 12.21 A.4(c), as well as to meet the needs of a variety of bicycles. The bicycle spaces would be provided in a readily accessible location(s). Appropriate lighting would be provided to increase safety and provide theft protection during nighttime parking. The short-term and long-term bicycle parking requirements of the LAMC would be satisfied both for the residential and commercial land use components of the Project.
5.1 Reduce air pollution from stationary and mobile sources; protect human health and welfare and promote improved respiratory health.	**Consistent.** The Project is an infill development that includes redevelopment of the Project Site in Downtown Los Angeles with a mixed-use development, including 428 residential housing units and 5,610 square feet of commercial land uses. The Project would reduce dependence on car travel and air pollutants generated by car traffic through the Project Site's close proximity to existing bus lines (including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines). The Project Site is directly adjacent to the Metro Red Line subway portal. In addition, the Project would be located near commercial uses and employment areas in Downtown Los Angeles. Finally, the Project would encourage bicycling with the inclusion of 512 bicycle parking spaces and a bicycle repair station.
5.3 Reduce exposure to second-hand smoke by promoting smoke-free environments and market and support public, private, and nonprofit cessation programs and services.	**Consistent.** The Project would reduce exposure to second-hand smoke in accordance with applicable law.
5.4 Protect communities' health and well-being from exposure to noxious activities (for example, oil and gas extraction) that emit odors, noise, toxic, hazardous, or contaminant substances, materials, vapors, and others.	**Consistent.** As discussed in response to Checklist Question 3(c), the following air-quality-sensitive receptors are located near the Project Site:

Table V-23
Project Consistency with Applicable Policies of the Health and Wellness Element

Policy	Project Consistency
	• Grand Central Apartments (306 West 3rd Street), a multi-story residential building about 165 feet northeast of the Project Site at approximately the same elevation. • Metro 417 Apartments (417 South Hill Street), a multi-story apartment building about 270 feet west of the Project Site. • South Spring Street Residences (408 South Spring Street), a multi-story multi-use building about 640 feet southeast of the Project Site. • Angelus Plaza Retirement Community (255 South Hill Street), a multi-story retirement facility about 360 feet north of the Project Site, approximately 75 feet higher than the ground level of the Project Site. As in detail there, the Project would not expose sensitive receptors to pollutant emissions in excess of SCAQMD's significance thresholds. As discussed in response to Checklist Question 13(a), without mitigation, the Project's construction activities could generate noise in excess of the City's significance thresholds. However, implementation of Mitigation Measures NOISE-1 and NOISE-2 would reduce the construction noise levels to below the City's thresholds. Thus, the Project would not result in a substantial temporary or periodic increase in ambient noise levels in excess of City noise standards. Therefore, Project impacts related to temporary or periodic noise increase would be less than significant. Also, the Project's commercial uses would not include hazardous materials, such as a dry cleaner. As discussed in response to Checklist Question 3(a), the Project would not result in any impacts related to odors.
5.7 Promote land use policies that reduce per capita greenhouse gas emissions, result in improved air quality and decreased air pollution, especially for children, seniors and others susceptible to respiratory diseases.	**Consistent.** As discussed in response to Checklist Question 8(a), the mixed-use nature of the Project, its proximity to transit, and implementation of regulatory compliance measures would reduce the Project's GHG emissions profile and would represent improvements vis-à-vis the NAT scenario. The Project would result in a reduction of 34 percent of GHG emissions over the NAT scenario. As discussed in in detail there, Project impacts related to GHG emissions would be less than significant.
7.2 Continue to promote the development and implementation of comprehensive strategies that foster safe passages in neighborhoods with	**Consistent.** The Project would include adequate lighting provided (in accordance with LAMC requirements, including LAMC Section 91.8607) to

Table V-23
Project Consistency with Applicable Policies of the Health and Wellness Element

Policy	Project Consistency
high crime and gang activity to ensure that all Angelenos can travel with confidence and without fear.	ensure safe lighting for pedestrian paths. Numerous windows would be located on the streets surrounding the Project Site, as well as along the Project's internal circulation, placing "eyes on the street." Additionally, prior to issuance of a building permit, the Project Applicant would be required to coordinate with the LAPD and incorporate all safety features into the design of the Project to maximize safety at the Project Site.
Source: City of Los Angeles, Health and Wellness Element of the General Plan, March 2015.	

Central City Community Plan

The Project's consistency with the Central City Community Plan is discussed on Table V-24. As shown therein, the Project would be substantially consistent with the applicable policies and therefore, no significant impacts would occur.

Table V-24
Project Consistency with the Central City Community Plan

Guideline	Consistency Discussion
Residential	
1-1.1 Maintain zoning standards that clearly promote housing and limit ancillary commercial to that meets the needs of neighborhood residents or is compatible with residential uses.	**Consistent.** The Project is an infill, mixed-use development to Downtown Los Angeles, including 428 residential housing units and 5,610 square feet of commercial land uses, providing housing, employment, and retail opportunities to the existing and future community within walking distance to existing transit. Consistent with the Downtown Housing Incentive Ordinance, the Project would set-aside Restricted Affordable units, including 22 units (5 percent of the total number of units) for Very-Low-Income households and one of the following: 1) 10 percent of the total number of units for Low Income households; 2) 15 percent of the total number of units for Moderate Income households; or 3) 20 percent of the total number of units for Workforce Income households. The uses proposed as part of the Project are allowed existing land use designation and zoning for the Project Site. The Project would be compatible with other high-rise mixed-use/residential building in the vicinity of the Project Site, those in the Bunker Hill district.
1-2.1 Promote the development of neighborhood work/live housing.	**Consistent.** The Project is an infill development that includes redevelopment of the Project Site in Downtown Los Angeles with a mixed-use development, including 428 residential housing units and 5,610 square feet of commercial land uses. Consistent with the Downtown Housing Incentive Ordinance, the Project would set-aside Restricted Affordable units, including 22 units (5 percent of the total number of units) for Very-

Table V-24
Project Consistency with the Central City Community Plan

Guideline	Consistency Discussion
	Low-Income households and one of the following: 1) 10 percent of the total number of units for Low Income households; 2) 15 percent of the total number of units for Moderate Income households; or 3) 20 percent of the total number of units for Workforce Income households. The Project would reduce dependence on car travel and air pollutants generated by car traffic through the Project Site's close proximity to existing bus lines (including Metro 14, 20, 28, 30/330, 37, 51/52/352, 60, 66, including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines). The Project Site is directly adjacent to the Metro Red Line subway portal. In addition, the Project would be located near commercial uses and employment areas in Downtown Los Angeles. Finally, the Project would encourage bicycling with the inclusion of 512 bicycle parking spaces and a bicycle repair station.
1-5.1 Monitor the supply of low-income housing stock to guard against loss of units through demolition, conversion, and deterioration of units.	**Consistent.** The Project Site is currently developed with a restaurant and a surface parking lot; these uses would be removed as part of the Project. Consistent with the Downtown Housing Incentive Ordinance, the Project would set-aside Restricted Affordable units, including 22 units (5 percent of the total number of units) for Very-Low-Income households and one of the following: 1) 10 percent of the total number of units for Low Income households; 2) 15 percent of the total number of units for Moderate Income households; or 3) 20 percent of the total number of units for Workforce Income households.
Commercial	
2-1.2 To maintain a safe, clean, attractive, and lively environment.	**Consistent.** The Project includes infill development of multi-family residential commercial land uses that are allowed under the existing land use designation and zoning in downtown Los Angeles. The Project would include on-site maintenance and security systems. The Project would be designed and constructed to meet the City's design and landscaping standards.
2-2.1 Focus on attracting businesses and retail uses that build on existing strengths of the area in terms of both the labor force, and businesses.	**Consistent.** The Project includes neighborhood-serving retail that would support the proposed residential land uses and would provide employment.
2-2.3 Support the growth of neighborhoods with small, local retail services.	**Consistent.** The Project includes neighborhood-serving retail that would support the proposed residential land uses, as well as existing residents in the Project Site area, and would provide employment.
Police Protection	
5-1.1 Consult with the Police Department as part of the review of significant development projects and General	**Consistent.** The LAPD was consulted in preparation of this SCEA (refer to Appendix K).

Table V-24
Project Consistency with the Central City Community Plan

Guideline	Consistency Discussion
Plan amendments affecting land use to determine the impact on law enforcement service demands.	As discussed in response to Checklist Question 15(a)(ii), Project impacts related to LAPD services would be less than significant.
5-2.1 Promote the safety and security of personal property through proper design and effective use of the built environment which can lead to a reduction in the incidence and fear of crime, reduction in calls for police service, and to an increase in the quality of life.	**Consistent.** The Project developer would be required to refer to "Design Out Crime Guidelines: Crime Prevention Through Environmental Design," published by the LAPD. The Project would include standard security measures such as adequate security lighting, controlled residential access, and secure parking facilities. These measures for the Project shall be approved by the LAPD prior to the issuance of building permits.
Fire Protection	
6-1.1 Coordinate with the City of Los Angeles Fire Department during the review of significant development projects and General Plan amendments affecting land use to determine the impacts on service demands.	**Consistent.** The LAFD was consulted in preparation of this SCEA (refer to Appendix K). As discussed in response to Checklist Question 15(a)(i), Project impacts related to LAFD services would be less than significant.
Source: City Central Community Plan.	

Downtown Design Guide

As part of the Project's Master Land Use Applicant, the Project Applicant was required to complete a copy of the Downtown Design Guide Checklist, which includes all of the design guidelines from the Downtown Design Guide and an indication (checkmark) of whether the Project complies or does not comply with each design guideline or whether the design guideline is not applicable to the Project. The Project Applicant must provide a written justification for any instances where the Project does not comply with a particular design guideline or where the design guideline is not applicable. On May 7, 2017, the Urban Design Studio (part of the Department of City Planning) reviewed the Project's Downtown Design Guide Checklist and confirmed that the Project does comply with the Downtown Design Guide. (A copy of the Project's Checklist that was reviewed and approved by the Urban Design Studio is included in Appendix L.) Therefore, no significant impacts would occur.

Zoning Code

The Project Site is zoned C2-4D (Commercial Zone, Height District 4, Development Limitations) (refer to Figure II-28 in Section II, Project Description). The C2 zone allows for development of commercial and multi-family land uses at the Project Site. The Project includes development of the Project Site with 428 multi-family housing units and up to 5,610 square feet of commercial land uses, land uses that are allowed under the existing zoning for the site. The Development Limitation associated with the existing zoning of the Project Site limits the FAR to 6:1. However, the Downtown Housing Incentive Ordinance allows a floor area bonus for projects that voluntarily provide a prescribed percentage of units for affordable housing. The Downtown Housing Incentive Ordinance also allows the definition of floor area to exclude any public area accessible to all residents. The Project includes 22 very-low-income housing units and one of the following:

1) 10 percent of the total number of units for Low Income households; 2) 15 percent of the total number of units for Moderate Income households; or 3) 20 percent of the total number of units for Workforce Income households, and pursuant to the Downtown Housing Incentive Ordinance, is allowed a 9.6:1 FAR. The Project's proposed FAR is 9.6:1 and as such, falls within the permitted density for the Project Site.

Additionally, as shown on Tables II-1 and II-2 in Section II (Project Description), the Project would comply with the City's parking and open space requirements, respectively. Also, the Project would comply with all setback and height requirements. As such, the Project would be substantially consistent with the City's Zoning Code. Therefore, Project impacts related to consistency with the Zoning Code would be less than significant.

Cumulative Impacts

As discussed previously, the Project would not result in any inconsistencies with any of the applicable plans, policies, or regulations associated with development of the Project Site. The City would assess the consistency of the related projects with all applicable plans, policies, and regulations associated with those sites, individually. Regardless of any potentially inconsistencies the related projects may result in, because the Project would not result in any inconsistencies, the Project would not have the potential to contribute to any cumulative inconsistency impacts.

12. MINERAL RESOURCES

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

No Impact. The Project Site is located in an urbanized area of the City. There are no known mineral resources on the Project Site or in the vicinity.[111] Thus, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, no impacts related to issue would occur.

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

No Impact. The Project Site is located in an urbanized area of the City. The Project Site is not identified as a mineral resource recovery site.[112] Thus, the Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Therefore, no impacts related to issue would occur.

[111] *City of Los Angeles General Plan, Conservation Element, Exhibit A.*

[112] *Ibid.*

Cumulative Impacts

As discussed previously, the Project would not result in any impacts related to mineral resources. Regardless to what degree the related projects could result in impacts related to mineral resources, because the Project would not result in any impacts related to mineral resources, the Project would not have the potential to contribute to any cumulative impacts.

13. NOISE

In 2015, the California Supreme Court in CBIA v. BAAQMD, held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of the project. On the other hand, if a project exacerbates a condition in the existing environment, the lead agency is required to analyze that impact of that exacerbated condition on future residents and users of the project (as well as other impacted individuals).

Introduction to Noise

Sound can be described in terms of its loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel, abbreviated dB. Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted scale (dBA) is used to reflect the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA. Table V-25 provides examples of A-weighted noise levels from common sources for illustrative purposes only.

Table V-25
A-Weighted Decibel Scale

Typical A-Weighted Sound Levels	Sound Level (dBA, L_{eq})
Threshold of Pain	140
Jet Takeoff at 100 Meters (328.1 feet)	125
Jackhammer at 15 Meters (49.2 feet)	95
Heavy Diesel Truck (idling) at 15 Meters (49.2 feet)	85
Conversation at 1 Meter (3.2 feet)	60
Soft Whisper at 2 Meters (6.6 feet)	35
Note: The example noise levels shown on this table are for illustrative purposes only.	
Source: United States Occupational Safety & Health Administration, Noise and Hearing Conversation Technical Manual, 1999.	

Noise Definitions

This noise analysis discusses sound levels in terms of Equivalent Noise Level (L_{eq}) and Community Noise Equivalent Level (CNEL).

Equivalent Noise Level: L_{eq} represents the average noise level on an energy basis for a specific time period. Average noise level is based on the energy content (acoustic energy) of sound. For example, the L_{eq} for one hour is the energy average noise level during that hour. L_{eq} can be thought of as a continuous noise level of a certain period equivalent in energy content to a fluctuating noise level of that same period. L_{eq} is expressed in units of dBA.

Community Noise Equivalent Level: CNEL is an adjusted noise measurement scale of average sound level during a 24-hour period. Due to increased noise sensitivities during evening and night hours, human reaction to sound between 7:00 P.M. and 10:00 P.M. is as if it were actually 5 dBA higher than had it occurred between 7:00 A.M. and 7:00 P.M. From 10:00 P.M. to 7:00 A.M., humans perceive sound as if it were 10 dBA higher. To account for these sensitivities, CNEL figures are obtained by adding an additional 5 dBA to evening noise levels between 7:00 P.M. and 10:00 P.M. and 10 dBA to nighttime noise levels between 10:00 P.M. and 7:00 A.M. Because of this, 24-hour CNEL figures are always higher than their corresponding actual 24-hour averages.

Effects of Noise

The degree to which noise can impact an environment ranges from levels that interfere with speech and sleep to levels that can cause adverse health effects. Most human response to noise is subjective. Factors that influence individual responses include the intensity, frequency, and pattern of noise; the amount of background noise present; and the nature of work or human activity exposed to intruding noise.

According to the National Institute of Health (NIH), extended or repeated exposure to sounds at or above 85 dB can cause hearing loss. Sounds of 75 dBA or less, even after continuous exposure, are unlikely to cause hearing loss.[113] The World Health Organization (WHO) reports that adults should not be exposed to sudden "impulse" noise events of 140 dB or greater. For children, this limit is 120 dB.[114]

Exposure to elevated nighttime noise levels can disrupt sleep, leading to increased levels of fatigue and decreased work or school performance. For the preservation of healthy sleeping environments, the WHO recommends that continuous interior noise levels not exceed 30 dBA L_{eq}, and that individual noise events of 45 dBA or higher be limited.[115] Assuming a conservative exterior to interior sound reduction of 15 dBA, continuous exterior noise levels should therefore not exceed 45 dBA L_{eq}. Individual exterior events of 60 dBA or higher should also be limited.

Audible Noise Changes

Small perceptible changes in sound levels begin with increase in noise of approximately 3 dBA. Changes of at least 5 dBA can be readily noticeable and may cause community reactions. Sound level increases of 10 dBA or greater are perceived as a doubling in loudness.[116]

Noise levels decrease as the distance from noise sources to receivers increases. For each doubling of distance, noise from stationary sources, commonly referred to as "point sources," can decrease by approximately 6 dBA over hard surfaces (i.e., reflective surfaces such as parking

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[113] *National Institute on Deafness and Other Communication Disorders, www.nidcd.nih.gov/health/noise-induced-hearing-loss.*

[114] *World Health Organization, Guidelines for Community Noise, 1999.*

[115] *Ibid.*

[116] *Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2006.*

lots) and 7.5 dBA over soft surfaces (i.e., absorptive surfaces such as soft dirt and grass). For example, if a point source produces a noise level of 89 dBA at a reference distance of 50 feet and over an asphalt surface, its noise level would be approximately 83 dBA at a distance of 100 feet, 77 dBA at 200 feet, etc. Noises generated by mobile sources decrease by approximately 3 dBA over hard surfaces and 4.5 dBA over soft surfaces for each doubling of distance.

Noise is most audible when traveling by direct line of sight, an unobstructed visual path between noise source and receptor. Barriers that break line of sight between sources and receivers, such as walls and buildings, can greatly reduce source noise levels allowing noise to reach receivers by diffraction only. As a result, sound barriers can reduce source noise levels by up to 20 dBA.[117] However, the effectiveness of barriers can be greatly reduced when they are not high or long enough to completely break line of sight from sources to receivers. In such cases, an unbroken sound path through an opening in a structure or over a short wall increases exposure to noise from the source.

Regulatory Framework

Federal

Currently, no federal noise standards regulate environmental noise associated with short-term construction activities or the long-term operations of development projects. As such, temporary and long-term noise impacts produced by the Project would be largely regulated by and evaluated with respect to State and City of Los Angeles standards designed to protect public well-being and health.

State

State of California 2003 General Plan

The State's 2017 General Plan Guidelines recommend land use compatibility guidelines for acceptable exterior noise levels based on land use. These standards have been incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities in the City's General Plan. Table V-26 illustrates State compatibility considerations between various land uses and exterior noise levels.

City

Los Angeles Municipal Code

As discussed in more detail below, the LAMC contains a number of regulations that would apply to the Project's temporary construction activities and long-term operations.

[117] *California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.*

Table V-26
State of California Noise/Land Use Compatibility Matrix

Land Use	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Single-family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	above 75
Multi-Family Homes	50 - 65	60 - 70	70 - 75	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	above 80
Transient Lodging – Motels, Hotels	50 - 65	60 - 70	70 - 80	above 75
Auditoriums, Concert Halls, Amphitheaters	---	50 - 70	---	above 70
Sports Arena, Outdoor Spectator Sports	---	50 - 75	---	above 75
Playgrounds, Neighborhood Parks	50 - 70	---	67 - 75	above 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 75	---	70 - 80	above 80
Office Buildings, Business and Professional Commercial	50 - 70	67 - 77	above 75	---
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	---

[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: Office of Planning and Research, State of California Genera Plan Guidelines, 2017, Appendix D, Figure 2, page 374.

SEC.41.40. NOISE DUE TO CONSTRUCTION, EXCAVATION WORK—WHEN PROHIBITED.

(a) No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power drive drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and willfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code.

(c) No person, other than an individual homeowner engaged in the repair or construction of his single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 A.M. or after 6:00 P.M. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair, or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specific…

Section 112.05 of the LAMC establishes noise limits for powered equipment and hand tools operated within 500 feet of residential zones. Of particular importance to Project construction would be subdivision (a), which institutes a maximum noise limit of 75 dBA at a distance of 50 feet from property zoned for residential uses for the types of construction vehicles and equipment that would be necessary for Project demolition and grading, especially. However, the LAMC goes on to note that these limitations would not necessarily apply if proven that the Project's compliance therewith would be technically infeasible despite the use of all feasible noise-reducing means or methods. All noise measurements are to be governed by the procedures and criteria in Section 111.02 of the LAMC.

SEC. 112.05. MAXIMUM NOISE LEVEL OF POWERED EQUIPMENT OR POWERED HAND TOOLS

Between the hours of 7:00 A.M. and 10:00 P.M., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:

(a) 75 dBA for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;

(b) 75 dBA for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;

(c) 65 dBA for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors.

Said noise limitations shall not apply where compliance therewith is technically infeasible. The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of all feasible measures (e.g., mufflers, shields, sound barriers and/or other noise reduction device or techniques) during the operation of the equipment.

Section 112.01 of the LAMC would prohibit any amplified noises, especially those from outdoor sources (e.g., outdoor speakers, stereo systems, etc.) from exceeding the ambient noise levels of adjacent properties by more than 5 dBA. Amplified noises would also be prohibited from being audible at any distance greater than 150 feet from the Project's property line.

SEC.112.01. RADIOS, TELEVISION SETS, AND SIMILAR DEVICES

(a) It shall be unlawful for any person within any zone of the City to use or operate any radio, musical instrument, phonograph, television receiver, or other machine or device for the producing, reproducing or amplification of the human voice, music, or any other sound, in such a manner, as to disturb the peace, quiet, and comfort of neighbor occupants or any reasonable person residing or working in the area.

(b) Any noise level caused by such use or operation which is audible to the human ear at a distance in excess of 150 feet from the property line of the noise source, within any residential zone of the City or within 500 feet thereof, shall be a violation of the provisions of this section.

(c) Any noise level caused by such use or operation which exceeds the ambient noise level on the premises of any other occupied property, or if a condominium, apartment house, duplex, or attached business, within any adjoining unit, by more than five (5) decibels shall be a violation of the provisions of this section.

Section 112.02(a), below, would prevent Project heating, ventilation, and air conditioning HVAC systems and other mechanical equipment from elevating ambient noise levels at neighboring residences by more than 5 dBA.

SEC.112.02. AIR CONDITIONING, REFRIGERATION, HEATING, PLUMBING, FILTERING EQUIPMENT

(a) It shall be unlawful for any person, within any zone of the city, to operate any air conditioning, refrigeration or heating equipment for any residence or other structure or to operate any pumping, filtering or heating equipment for any pool or reservoir in such manner as to create any noise which would cause the noise level on the premises of any other occupied property … to exceed the ambient noise level by more than five decibels.

Thresholds Guide

For this analysis, the City relies on the Appendix G Threshold questions listed above. Additionally, the analysis utilizes factors and considerations identified in the Thresholds Guide, as appropriate, to assist in responding to the Appendix G Threshold questions.

Construction

A project would normally have a significant impact on noise levels from construction if the following occurred:

- *Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use;*

- *Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or*

- *Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, before 8:00 A.M. or after 6:00 P.M. on Saturday, or at any time on Sunday.*

Operation

A project would normally have a significant impact on noise levels from operation if the following occurred:

- *The project causes ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category.*

- *The project causes the ambient noise levels measured at the property line of affected noise-sensitive uses to increase by 5 dBA in CNEL or greater for noise levels remaining within the "conditionally acceptable" or "normally acceptable"; or*

- *Project-related operational on-site (i.e., non-roadway) noise sources, such as outdoor building mechanical/electrical equipment, outdoor activities, loading, trash compactor, or parking facilities, increase the ambient noise level (hourly Leq) at noise-sensitive uses by 5 dBA, per the LAMC Noise Regulations (Sections 112.01, 112.02, 114.02).*

These "normally unacceptable" and "clearly unacceptable" categories refer to those outlined by the State's noise and land-use compatibility chart, shown on Table V-26.

The thresholds of significance used in the noise analysis for on-site operations presented below is an increase in the ambient noise level of 5 dBA (hourly L_{eq}) at the noise-sensitive uses, in accordance with the LAMC. The LAMC does not apply to off-site traffic (i.e., vehicles traveling on public roadways). Thus, based on the Thresholds Guide, the significance threshold for off-site traffic noise associated with Project operations is an increase in the ambient noise level by 3 dBA or 5 dBA in CNEL (depending on the land use category) at noise-sensitive uses. The threshold of significance for composite noise levels (on-site and off-site sources) is also based on the Thresholds Guide and is an increase in the ambient noise level of 3 dBA or 5 dBA in CNEL (depending on the land use category) for the Project's composite noise (both project-related on-site and off-site sources) at noise-sensitive uses.

Existing Conditions

Though the Project Site is located in a dense urban environment with high ambient noise levels, there are a number of noise-sensitive receptors in the vicinity of the Project Site. According to the Thresholds Guide, land uses sensitive to noise include residences, transient lodgings, schools,

libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks. The following noise-sensitive receptors were chosen specifically for detailed construction noise impact analysis given their potential sensitivities to noise and their proximity to the Project Site (refer to Figure V-10):

Angelus Plaza Retirement Community: This receptor consists of a large retirement community complex located at 255 South Hill Street. The nearest residential tower is approximately 360 feet north of the Project Site.

Grand Central Apartments: This multi-use residential receptor is located at 306 West 3rd Street, approximately 165 feet east of the Project Site.

Metro 417 Apartments: The residential receptor is located at 417 South Hill Street, approximately 270 feet west of the Project Site.

408 Spring Street Residences: The multi-use residential receptor is located at 408 South Spring Street, approximately 640 feet southeast of the Project Site.

DKA Planning took short-term noise readings at locations surrounding the Project Site to determine these receptors' ambient noise conditions.[118] For all noise monitoring locations, ambient noise was primarily attributable to vehicle traffic on nearby roadways, especially 4th Street and Hill Street. Ambient noise levels for all Project receptors are shown on Table V-27 for reference.

For the Angelus Plaza Retirement Community receptor, ambient noise levels were measured from a location near the upper terminus of the Angels Flight funicular railway. This location has a similar elevation as the Angelus Plaza residential tower closest to the Project Site and is also set back from Hill Street and other noise sources at a comparable distance. Ambient noise levels at this monitoring location are therefore likely to be consistent with ambient noise levels at the receptor itself. Angels Flight was not in operation at the time of the noise reading.

Because Grand Central Apartment residences are located atop other uses and elevated, ambient noise levels for this receptor were measured from the top floor of a nearby parking garage, located less than 100 feet west of the receptor. Ambient noise levels here are likely to be consistent with those at the receptor given their similar elevation and setback from surrounding noise sources. Noises from the parking garage itself had a negligible influence on measured ambient noise levels at this monitoring location, as the top floor had no vehicle activity during the time of the noise analysis.

[118] *Noise measurements were taken using a Quest Technologies SoundPro DL Sound Level Meter. The SoundPro meter complies with the American National Standards Institute (ANSI) and International Electrotechnical Commission (IEC) for general environmental measurement instrumentation. The meter was equipped with an omni-directional microphone, calibrated before the day's measurements, and set at approximately five feet above the ground.*

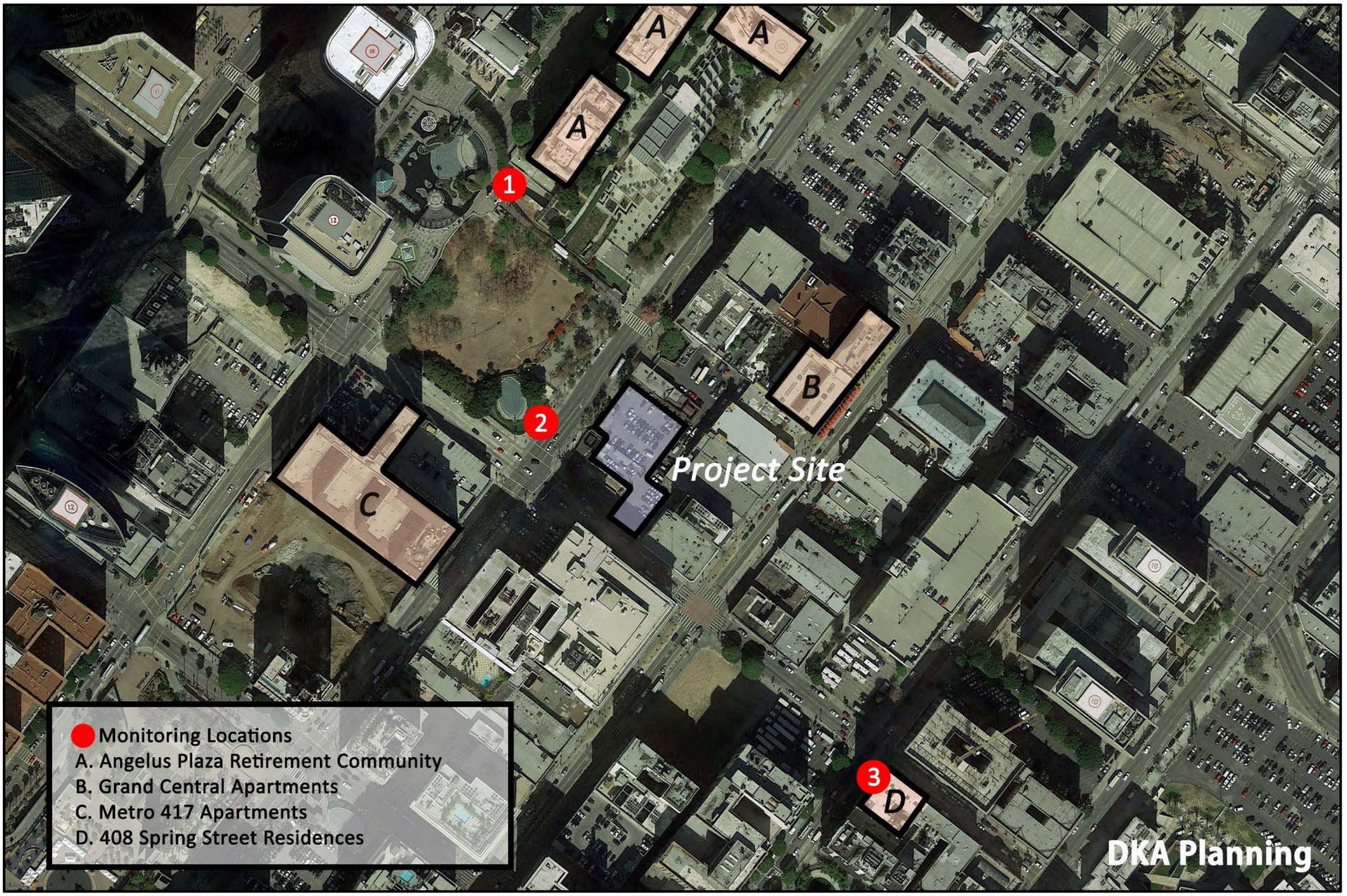


Figure V-10
Sensitive Noise Receptors Near the Project Site

Source: DKA Planning, 2018.

Table V-27
Existing Ambient Noise Levels

Sensitive Receptor	Existing Ambient Noise Level (dBA L_{eq})
Angelus Plaza Retirement Community	61.5
Grand Central Apartments	63.7
Metro 417 Apartments	69.7
408 Spring Street Residences	69.8
Source: DKA Planning, 2018.	

a) Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant With Mitigation Incorporated. The information and analysis in this section is based on noise modeling results prepared by DKA Planning (refer to Appendix J).

Construction Noise

Construction activity would result in temporary increases in ambient noise levels in the Project Site area on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Typical noise levels *derived from the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (FHWA RCNM 1.1 based for* various types of equipment that may be used during construction are listed on Table V-28. The table shows noise levels at distances of 50 and 100 feet from the construction noise source.

For the Project, noise impacts were modeled using the noise reference levels of excavators and front-end loaders, as these vehicles would be utilized extensively to excavate for the Project. Compounding their noise impacts is the fact that these vehicles commonly operate in tandem. Excavators remove soils and front-end loaders transport this matter to on-site stockpiles or haul trucks for off-site export. As a result, excavators and front-end loaders have the greatest potential to cause sustained and significant noise impacts at nearby receptors. The impacts of other construction equipment and vehicles would be neither as loud nor as extensive over the duration of the Project's grading or other phases. Thus, this analysis examines a conservative scenario; the noise impacts of all other construction equipment and phases would not exceed the impacts analyzed here. The projected noise impacts from excavators and front-end loaders are shown on Table V-29 and summarized below.

Table V-28
Approximate Construction Equipment Noise Levels

Noise Source	Noise Level (dBA, 1-hr L_{eq})					
	50 feet	100 feet	150 feet	200 feet	250 feet	300 feet
Auger Drill Rig	77.4	71.3	67.8	65.3	63.4	61.8
Backhoe	73.6	67.6	64.0	61.5	59.6	58.0
Concrete Mixer Truck	74.8	68.8	65.3	62.8	60.8	59.3
Concrete Pump Truck	74.4	68.4	64.9	62.4	60.4	58.8
Crane	72.6	66.6	63.0	60.6	58.6	57.0
Excavator	76.7	70.7	67.2	64.7	62.8	61.2
Front End Loader	75.1	69.1	65.6	63.1	61.2	59.6
Welder	70.0	64.0	60.5	58.0	56.0	54.5
Noise levels derived from the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (FHWA RCNM 1.1). The approximate construction equipment noise levels shown on this table are reference noise levels identified by the FHWA recommended for use in their noise model. Actual noise levels will vary depending on manufacturer and engine technology.						

Table V-29
Estimated Construction Noise Levels – Unmitigated

Sensitive Receptor	Distance from Site (feet)	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, L_{eq})	New Ambient (dBA, L_{eq})	Increase (dBA L_{eq})
Angelus Plaza Retirement Community	360	61.9	61.5	64.7	3.2
Grand Central Apartments	165	68.6	63.7	69.8	6.1
Metro 417 Apartments	270	64.4	69.7	70.8	1.1
408 S. Spring Street Residences	640	51.9	69.8	69.9	0.1
Source: DKA Planning, 2018.					

Angelus Plaza Retirement Community: This receptor is projected to experience exterior noise levels of up to 64.7 dBA as a result of the Project's grading activities, an increase of 3.2 dBA over existing ambient noise conditions. This would not exceed the 5 dBA noise increase threshold considered to be a significant impact by the Thresholds Guide for construction activities lasting more than ten days in a three-month period.

Grand Central Apartments: This receptor is projected to experience exterior noise levels of up to 69.8 dBA as a result of the Project's grading activities, an increase of 6.1 dBA over existing ambient noise conditions. This would exceed the 5 dBA noise increase threshold considered to be a significant impact by the Thresholds Guide for construction activities lasting more than ten days in a three month period.

Metro 417 Apartments: This receptor is projected to experience exterior noise levels of up to 70.8 dBA as a result of the Project's grading activities, an increase of 1.1 dBA over existing ambient noise conditions. This would not exceed the 5 dBA noise increase

threshold considered to be a significant impact by the Thresholds Guide for construction activities lasting more than ten days in a three month period.

408 Spring Street Residences: This receptor is projected to experience exterior noise levels of up to 69.9 dBA as a result of the Project's grading activities, an increase of 0.1 dBA over existing ambient noise conditions. This also would not exceed the 5 dBA noise increase threshold considered to be a significant impact by the Thresholds Guide for construction activities lasting more than ten days in a three month period.

As discussed above, Grand Central Apartments could experience construction-related noise increases in excess of 5 dBA as a result of the Project. Additionally, based on the estimated construction equipment noise levels shown on Table V-28, construction equipment used during the Project's construction phase would result in noise levels that exceed LAMC Section 112.05's 75 dBA limit for powered construction equipment operating within 500 feet of residential zones. However, these impacts could be reduced by the use of equipment mufflers and temporary noise barriers. As a result, the Project's construction noise impact would be considered significant but mitigable. Mitigation Measures NOISE-1 and NOISE-2 are required to reduce the Project's construction-related noise increases to below 5 dBA and to limit construction equipment source noise level to below 75 dBA (refer to Table V-34 later in this analysis).

With regard to off-site construction-related noise impacts, grading activities would necessitate up to approximately 75 haul trips per workday to export excavated soils from the Project Site to a regional landfill. Assuming a passenger car equivalent (PCE) factor of 2.5, haul trips would equate to approximately 188 daily car trips or approximately 23 trips per hour.[119] According to the Thresholds Guide, a 3 dBA increase (i.e., a noticeable increase in noise) in roadway noise levels requires an approximate doubling of roadway traffic volume, assuming that travel speeds and fleet mix remain constant. The addition of haul trucks would alter the fleet mix of the Project haul route. However, the addition to local roadways would not double those roads' traffic volumes, and would not result in a noticeable increase in traffic noise levels. As a result, off-site construction noise impacts related to haul trips would be less than significant.

Operational Noise

On-Site Noise Sources

Mechanical Equipment

Regulatory compliance with LAMC Sec.112.02 would ultimately ensure that noises from sources such as heating, air conditioning, and ventilation systems not increase ambient noise levels at neighboring occupied properties by more than 5 dBA. Given this regulation, high ambient noise in the Project's vicinity, distances to receptors, the relatively quiet operation of modern HVAC systems, and the Project's own height, these on-site noise sources would not be capable of causing the ambient noise levels of nearby uses to increase by 3 dBA CNEL to or within their

[119] *A Passenger Car Equivalent is the impact that a mode of transport (such as construction trucks) has on traffic variables (such as headway, speed, density) compared to a single car.*

respective Thresholds Guide's "Normally Unacceptable" or "Clearly Unacceptable" noise categories, or by 5 dBA or greater overall.

Commercial/Office Land Uses

Most noise generated by the proposed commercial and office uses would be internal, and audibility would be mostly confined to within the Project itself. The Project is located in a high-density urban environment with many other commercial office buildings and towers. The addition of the Project's commercial land uses would not substantially alter the noise profile of its surrounding environment.

Residential Land Uses

Noise from recurrent activities (e.g., conversation, consumer electronics, dog barking) and non-recurrent activities (e.g., social gatherings) at the Project Site could be audible to receptors passing by the site. Typical human conversations and residential-type noise levels are approximately 60 dB.[120] The height of the residential balconies would be approximately 50 feet above ground level, and the pool and pool court would be approximately 90 feet above ground level. The closest noise-sensitive receptor to the Project Site is approximately 165 feet from the Project Site. Given the attenuation associated with the distance of the proposed balconies and pool to the closest noise-sensitive receptor, residential noise from the Project likely would not be audible at the location of the receptor and would not result in a noticeable increase in noise levels.

Auto-Related Activities

Operational noises related to the proposed onsite parking would include intermittent noise events such as door slamming and vehicle engine start-ups. Project parking would be served by a 435-stall, 11-level parking garage, which includes 3 underground levels. Per FTA guidance, a parking facility with a maximum hourly usage of 435 vehicles would be expected to produce a noise level 52.8 dBA L_{eq} at a reference distance of 50 feet. This would not significantly elevate ambient noise levels at any nearby receptors, especially considering the unlikelihood that this parking structure would ever have an hourly usage equaling its total vehicle capacity.

The impact potential of these on-site operational noise sources would be less than significant.

Off-Site Noise Sources

The majority of the Project's operational noise impacts would be from off-site mobile sources associated with its 2,277 net new daily trips. On a typical weekday, the Project is forecast to generate an estimated 169 net new AM peak hour trips and 210 net new PM peak hour trips.[121] The noise impact of these vehicle trips was modeled using the Federal Highway Administration's (FHWA) Traffic Noise Model 2.5 (TNM 2.5). This noise prediction software uses traffic volumes, vehicle mix, average speeds, roadway geometry, and other inputs to calculate average noise

[120] *http://www.noisehelp.com/noise-level-chart.html.*

[121] *IBI Group, 340 South Hill Street Project Traffic Study, June 2017.*

levels along inputted roadway segments. For this analysis, an existing year (2017) no project scenario was compared to an existing year with project scenario. Tables V-30 and V-31 show the Project's estimated contributions to peak-hour ambient noise level increases along modeled roadway segments. As shown, Project-related traffic would not result increase the ambient noise level along the roadways used by Project traffic by 3 dBA in CNEL. Therefore, Project impacts related to traffic noise would be less than significant.

Table V-30
Estimated AM Peak-Hour Mobile Source Noise Levels

Roadway Segment	Estimated dBA, CNEL			
	No Project (2017)	With Project (2017)	Project Change	Significant Impact?
N/B Hill St., N of 5th St.	70.6	70.6	0.0	No
S/B Hill St., N of 5th St.	70.5	70.5	0.0	No
S/E Int. of Hill St. and 4th St.	75.9	75.9	0.0	No
S/W Int. of Hill St. and 4th St.	75.2	75.3	0.1	No
E/B 4th St., E of Hill St., S	72.3	72.3	0.0	No
E/B 4th St., E of Hill St., N	72.5	72.4	- 0.1[1]	No
N/B Hill St., N of 4th St.	69.6	69.6	0.0	No
S/B Hill St., N of 4th St.	70.1	70.2	0.1	No
S/E Int. of Hill St. and 3rd St.	74.7	74.7	<0.0	No
N/E Int. of Hill St. and 3rd St.	73.7	73.8	0.1	No
E/B 3rd St., E of Hill St., S	70.0	70.0	0.0	No
E/B 3rd St., E of Hill St., N	70.2	70.2	0.0	No
N/B Hill St., N of 3rd St.	70.6	70.6	0.0	No
S/B Hill St., N of 3rd St.	71.7	71.8	0.1	No

[1] *At this location, the Project itself would obstruct the existing line of sight to Hill St. and other noise sources, reducing the impact of these noise sources on ambient noise levels. In this instance, the addition of the Project is projected to reduce peak hour noise levels at this location, even with increased Project-related traffic.*

Source: DKA Planning, 2017.

Table V-31
Estimated PM Peak-Hour Mobile Source Noise Levels

Roadway Segment	Estimated dBA, CNEL			
	No Project (2017)	With Project (2017)	Project Change	Significant Impact?
N/B Hill St., N of 5th St.	72.5	72.6	0.1	No
S/B Hill St., N of 5th St.	71.3	71.3	0.0	No
S/E Int. of Hill St. and 4th St.	77.2	77.3	0.1	No
S/W Int. of Hill St. and 4th St.	75.9	76.0	0.1	No
E/B 4th St., E of Hill St., S	73.6	73.7	0.1	No
E/B 4th St., E of Hill St., N	73.7	73.8	0.1	No
N/B Hill St., N of 4th St.	70.6	70.7	0.1	No
S/B Hill St., N of 4th St.	70.7	70.8	0.1	No
S/E Int. of Hill St. and 3rd St.	75.4	75.5	0.1	No
N/E Int. of Hill St. and 3rd St.	74.0	74.1	0.1	No
E/B 3rd St., E of Hill St., S	69.2	69.3	0.1	No
E/B 3rd St., E of Hill St., N	69.5	69.5	0.0	No
N/B Hill St., N of 3rd St.	71.3	71.3	0.0	No
S/B Hill St., N of 3rd St.	72.1	72.1	0.0	No
Source: DKA Planning, 2017.				

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant With Mitigation Incorporated. The information and analysis in this section is based on the noise modeling results prepared by DKA Planning (refer to Appendix J).

Introduction to Vibration

Characteristics of Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, and acceleration. Unlike noise, vibration is not a common environmental problem, as it is unusual for vibration from vehicle sources to be perceptible. Common sources of vibration include trains, construction activities, and certain industrial operations.

Vibration Definitions

This noise analysis discusses vibration in terms of Peak Particle Velocity (PPV). PPV is commonly used to describe and quantify vibration impacts to buildings and other structures. PPV levels represent the maximum instantaneous peak of a vibration signal and are usually measured in inches per second.[122]

[122] *California Department of Transportation, Transportation and Construction Vibration Guidance Manual, September 2013.*

Effects of Vibration

High levels of vibration may cause physical personal injury or damage to buildings. However, ground-borne vibration levels rarely affect human health. Instead, most people consider ground-borne vibration to be an annoyance that can disrupt concentration or disturb sleep. Ground-borne vibration can also interfere with certain types of highly sensitive equipment and machines, especially imaging devices used in medical laboratories.

Perceptible Vibration Changes

Unlike noise, ground-borne vibration is not an environmental issue that most people experience every day. Background vibration levels in residential areas are usually well below the threshold of perception for humans, approximately 0.01 inches per second.[123] Perceptible indoor vibrations are most often caused by sources within buildings themselves, such as slamming doors or heavy footsteps. Common outdoor sources of ground-borne vibration include construction equipment, trains, and traffic on rough or unpaved roads. Traffic vibration from smooth and well-maintained roads is typically not perceptible.

Regulatory Framework

Federal

For the evaluation of construction-related vibration impacts, state standards set by the Federal Transit Administration (FTA) are used given the absence of federal, county, and city standards specific to construction activities.

Federal Transit Administration

In 2006, the FTA published the Transit Noise and Vibration Impact Assessment manual to aid in the estimation and analysis of vibration impacts. Typically, potential building and structural damages are the foremost concern when evaluating the impacts of construction-related vibrations. Table V-32 summarizes the FTA's vibration guidelines for building and structural damage.

Table V-32
FTA Vibration Damage Potential Threshold Criteria

Building Category	Construction Damage Vibration Criteria (PPV, in/sec)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12
Source: FTA, 2006.	

[123] *Ibid.*

Project Impacts

Construction Vibration

As discussed earlier, construction of the proposed Project would require equipment such as excavators and loaders. These types of heavy-duty vehicles can produce peak vibration velocities of up to 0.089 inches per second at a distance of 25 feet.[124] Auger drilling/boring rigs can produce similar vibration levels. Table V-33 shows the Project's estimated construction vibration impacts at the nearest off-site structures.

Table V-33
Potential Building Damage Vibration Levels At Off-Site Structures – Unmitigated

Off-Site Structures	Distance to Project Site (ft.)	Estimated PPV (in/sec)[1]	Structural Significance Threshold PPV (in/sec)	Significant?
Angelus Plaza Retirement Community	220	0.010	0.5	No
The Million Dollar Theater Building	280	0.008	0.3	No
Subway Terminal Building	160	0.014	0.3	No
Continental Building	640	0.003	0.3	No
La Cita Bar	5	0.445	0.2	Potential Impact
Juniperro Serra Building	45	0.049	0.3	No
Commercial Land Uses, S. Broadway St.	9	0.247	0.5	No
Homer Laughlin Building	130	0.017	0.3	No

[1] *These estimated vibration level estimates assume the concurrent operation of a large bulldozer and an auger drill bit operating on the northern property line of the Project Site and generation of a cumulative source PPV of 0.089 inches per second. Potential vibration levels at each off-site structure beyond the boundary would likely be less, as construction equipment generally must maintain some setback from a property line for maneuverability reasons.*

Source: DKA Planning, 2018.

Construction-related vibration activities would occur as close as approximately 2.0 feet from the boundary of the La Cita Bar (adjacent to the Project Site to the north), a non-engineered timber and masonry building that is over 115 years old. As shown on Table V-33, the site of La Cita Bar could experience groundborne vibrations in excess of FTA's recommended 0.2 inches per second PPV damage criteria. However, it should be noted that equations for the prediction of groundborne vibration can greatly overestimate vibration levels at distances nearer than 25 feet. Nonetheless, construction activities beyond 15 feet from La Cita Bar would not be projected to generate groundborne vibration levels in excess of 0.2 inches per second, based on the calucations of vibration levels from simultaneaous operation of two pieces of equipment (i.e., a large bulldozer

[124] *Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2006.*

and an auger drill rig) along the northern boundary of the Project Site.[125] Nevertheless, this impact would be significant but mitigable. Mitigation Measures NOISE-3 through NOISE-5 are required to reduce the Project's groundborne vibration impact at La Cita Bar to less than significant.

Operational Vibration

During Project operations, there would be no significant stationary sources of ground-borne vibration, such as heavy equipment or industrial operations. Operational ground-borne vibration in the Project's vicinity would be generated by its related vehicle travel on local roadways. However as previously discussed, road vehicles rarely create vibration levels perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps. Project-related traffic would expose nearby land uses and other sensitive receptors to vibrations far below levels associated with human annoyance or land-use disruption. As a result, the Project's long-term vibration impacts 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?

No Impact. The Project Site is not located within an airport land use plan or within two miles of a public airport or public use airport. The closest airport to the Project Site is the Bob Hope Airport located approximately 15.4 miles northwest of the site. Based on the above the Project would not exacerbate the existing airport noise conditions so as to expose people residing or working in the Project area to excessive noise levels. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels and no impact would occur.

Mitigation Measures (Noise)

Implementation of the following mitigation measures would ensure that the Project's construction-related noise impacts would be less than significant (refer to Table V-34):

MM-NOISE-1: All diesel-powered construction vehicles shall be equipped with exhaust mufflers or other suitable noise reduction devices capable of achieving a sound attenuation of at least 3 dBA.

MM-NOISE-2: All feasible measures, including erection of temporary sound barriers along the Project's boundaries and use of advanced muffler systems on construction equipmet, shall be used to ensure construction noise levels do not exceed 75 dBA at 50 feet of distrance from the source of noise to ensure compliance with LAMC Section 112.05.

[125] *Refer to the Noise and Vibration Technical data (pages 30-31) related to the projected vibration levels from concurrent operation of a large bulldozer and an auger drill rig in Appendix J.*

Table V-34
Estimated Construction Noise Levels – Mitigated

Sensitive Receptor	Distance from Site (feet)	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, L_{eq})	New Ambient (dBA, L_{eq})	Increase
Angelus Plaza Retirement Community	360	58.9	61.4	63.4	1.9
Grand Central Apartments	165	65.6	63.7	67.8	4.1
Metro 417 Apartments	270	61.4	69.7	70.3	0.6
408 S. Spring Street Residences	640	48.9	69.8	69.8	0.0
Source: DKA Planning, 2017.					

Implementation of the following mitigation measures would ensure that the Project's construction-related vibration impacts would be less than significant:

MM-NOISE-3: During the grading and excavation phase, a monitor shall ensure that construction activities that produce vibration, such as demolition, excavation, and earthmoving, shall be sequenced so that vibration sources within 15 feet of La Cita Bar building do not operate simultaneously. The monitor shall provide a daily field inspection sign-off and compliance report to the Department of Building and Safety.

MM-NOISE-4: Pre-construction surveys shall be performed to document the conditions at the boundary of the La Cita Bar building. A structural monitoring program shall be implemented and recorded during construction to ensure that groundborne vibration levels at the boundary of the Project Site adjacent to La Cita Bar building do not exceed 0.2 inches per second, PPV. The performance standards of the structure monitoring plan shall include the following:

- Documentation, consisting of video and/or photographic documentation of accessible and visible areas on the exterior of the building.
- A registered civil engineer or certified engineering geologist shall develop recommendations for a structure-monitoring program.
- The vibration monitoring system shall measure and continuously store the PPV in inches per second. Vibration data shall be stored on a one-second interval. The system shall also be programmed for two preset velocity levels: a warning level of 0.15 inches per second (PPV) and a regulatory level of 0.2 inches per second (PPV). The system shall also provide real-time alert when the vibration levels exceed either of the two preset levels.
- In the event that the warning level of 0.15 inches per second (PPV) is triggered, the contractor shall identify the source of vibration generation and provide steps to reduce the vibration level, including but not limited to halting/staggering concurrent activities and utilizing lower vibratory techniques.

- In the event that the regulatory level of 0.2 inches per second (PPV) is triggered, the contractor shall halt the construction activities in the vicinity of the La Cita Bar building and visually inspect the building for any damage. Results of the inspection shall be logged. The contractor shall identify the source of vibration generation and provide steps to reduce the vibration level. Vibration measurement shall be made with the new construction method to verify that the vibration level is below the warning level of 0.15 inch per second (PPV). Construction activities may then restart.

- The structure-monitoring program shall be submitted to the Department of Building and Safety and received into the case file for the associated discretionary action permitting the Project prior to initiating any construction activities.

Cumulative Impacts

Construction Noise

As discussed previously, construction activities would temporarily increase ambient noise levels at nearby receptors. Any other future developments that are built concurrently with the Project could further contribute to these temporary increases in ambient noise levels. However, given the high ambient noise levels in the Project Site's vicinity, it is unlikely that construction noises from concurrent development would be capable of contributing to cumulatively considerable noise increases at nearby receptors. Persistent traffic noise would mask any distant construction sounds in a manner largely similar to the effects of white noise, and the presence of numerous multi-story structures would further obstruct these sounds' line of sight travel. The Project's construction activities would not contribute substantially to any cumulative construction noise impacts. Therefore, Project cumulative construction-related noise impacts would be less than significant.

Operational Noise

The majority of the Project's long-term noise would come from traffic traveling to and from the Project Site. This addition of future traffic from any new developments in the Project Site area and overall ambient traffic growth would elevate ambient noise levels surrounding local roadways. However, the Project's individual contribution to permanent off-site ambient noise level increases would be minimal. As shown on Tables V-35 and V-36, with or without the addition of Project traffic, future roadside ambient noise levels would not increase by 3 dBA to or within their respective "Normally Unacceptable" or "Clearly Unacceptable" noise categories, or by 5 dBA or greater overall. Therefore, Project's cumulative operational noise impact would be less than significant.

Table V-35
Future + Project AM Peak-Hour Mobile Source Noise Levels

Roadway Segment	Estimated dBA, L_{eq} 1hr				
	Existing (2017)	No Project (2023)	With Project (2023)	Total Change	Significant Impact?
N/B Hill St., N of 5th St.	70.6	71.3	71.3	0.7	No
S/B Hill St., N of 5th St.	70.5	71.0	71.0	0.5	No
S/E Int. of Hill St. and 4th St.	75.9	76.6	76.6	0.7	No
S/W Int. of Hill St. and 4th St.	75.2	75.9	75.9	0.7	No
E/B 4th St., E of Hill St., S	72.3	73.0	73.1	0.8	No
E/B 4th St., E of Hill St., N	72.5	73.2	73.2	0.7	No
N/B Hill St., N of 4th St.	69.6	70.2	70.2	0.6	No
S/B Hill St., N of 4th St.	70.1	70.6	70.6	0.5	No
S/E Int. of Hill St. and 3rd St.	74.7	75.2	75.3	0.6	No
N/E Int. of Hill St. an 3rd St.	73.7	74.4	74.4	0.7	No
E/B 3rd St., E of Hill St., S	70.0	70.5	70.5	0.5	No
E/B 3rd St., E of Hill St., N	70.2	70.6	70.7	0.5	No
N/B Hill St., N of 3rd St.	70.6	71.0	71.1	0.5	No
S/B Hill St., N of 3rd St.	71.7	72.1	72.2	0.5	No
Source: DKA Planning, 2019.					

Table V-36
Future + Project PM Peak-Hour Mobile Source Noise Levels

Roadway Segment	Estimated dBA, L_{eq} 1hr				
	Existing (2017)	No Project (2023)	With Project (2023)	Total Change	Significant Impact?
N/B Hill St., N of 5th St.	72.5	73.2	73.3	0.8	No
S/B Hill St., N of 5th St.	71.3	72.0	72.0	0.7	No
S/E Int. of Hill St. and 4th St.	77.2	77.8	77.9	0.7	No
S/W Int. of Hill St. and 4th St.	75.9	76.7	76.8	0.9	No
E/B 4th St., E of Hill St., S	73.6	74.2	74.3	0.7	No
E/B 4th St., E of Hill St., N	73.7	74.3	74.4	0.7	No
N/B Hill St., N of 4th St.	70.6	71.4	71.5	0.9	No
S/B Hill St., N of 4th St.	70.7	71.4	71.5	0.8	No
S/E Int. of Hill St. and 3rd St.	75.4	76.0	76.0	0.6	No
N/E Int. of Hill St. an 3rd St.	74.0	74.7	74.8	0.8	No
E/B 3rd St., E of Hill St., S	69.2	69.9	69.9	0.7	No
E/B 3rd St., E of Hill St., N	69.5	70.1	70.1	0.6	No
N/B Hill St., N of 3rd St.	71.3	71.8	71.9	0.6	No
S/B Hill St., N of 3rd St.	72.1	72.6	72.7	0.6	No
Source: DKA Planning, 2019.					

14. POPULATION AND HOUSING

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

Less Than Significant Impact. A significant impact could occur if the Project would locate new development such as homes, businesses, and/or infrastructure, with the effect of substantially

inducing growth in the proposed area that would otherwise not have occurred as rapidly or in as great a magnitude. Based on the Thresholds Guide the determination of whether a project results in a significant impact on population and housing growth considers (a) the degree to which a project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds projected/planned levels for the year of project occupancy, and would result in an adverse physical change in the environment; (b) whether the project would introduce unplanned infrastructure that was not previously evaluated in the adopted Community Plan or General Plan; and (c) the extent to which growth would occur without implementation of the Project.

Growth Forecasts

The Project Site is located within SCAG's jurisdiction. SCAG's mandated responsibilities include development plans and policies with respect to the region's population growth, transportation programs, air quality, housing, and economic development. In April 2016, SCAG adopted 2016-2040 RTP/SCS. The 2016-2040 RTP/SCS is an update to the 2012-2035 RTP/SCS that reflects changes in economic, policy, and demographic conditions. The goals of the 2016-2040 RTP/SCS have remained unchanged from the goals presented in the 2012-2035 RTP/SCS. However, since the adoption of the 2012–2035 RTP/SCS, the development of the 2016 RTP/SCS has been influenced by: (1) a surface and transportation funding and authorization bill known as the Moving Ahead for Progress in the 21st Century Act (MAP-21), which was signed into law on July 6, 2012; (2) the rapid advancement of new technologies that encourage more efficient transportation choices, such multimodal transportation systems; and (3) the continuing emphasis on the reduction of greenhouse gas emissions as a result of the April 29, 2015, Executive Order B-30-15, which establishes a statewide GHG emissions reduction target of 40 percent (below 1990 levels) by 2030.

The 2012-2035 RTP/SCS includes a proposed growth forecast for population, households, and employment for the City in 2020 and 2035:[126]

- Population: 3,991,700 persons in 2020 and 4,320,600 in 2035;
- Households: 1,455,700 households in 2020 and 1,626,600 in 2035; and
- Employment: 1,817,700 jobs in 2020 and 1,906,800 in 2035.

The 2016–2040 RTP/SCS includes the following proposed growth forecast for population, households, and employment for the City in 2012 and 2040:[127]

- Population: 3,845,500 persons in 2012 and 4,609,400 in 2040;

[126] *SCAG, 2012-2035 Regional Transportation Plan, Growth Forecast, page 32: http://rtpscs.scag.ca.gov/Documents/2012/final/SR/2012fRTP_GrowthForecast.pdf.*

[127] *SCAG, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, Current Demographics and Forecast, Table 11, page 24: http://scagrtpscs.net/Documents/2016/draft/d2016RTPSCS_DemographicsGrowthForecast.pdf.*

- Households: 1,325,500 households in 2012 and 1,690,300 in 2040; and
- Employment: 1,696,400 jobs in 2012 and 2,169,100 in 2040.

According to analysis by the State's Housing and Community Development Department, prior to the recent economic downturn and foreclosure crisis, California had experienced decades of undersupply of housing, contributing to significant price escalation and the affordability crisis.[128] The factors contributing to California's continuing housing supply and affordability problems include a chronic mismatch between the existing housing stock and the demand for housing by type and location; lack of sufficient housing construction to meet demand; and persistently high housing costs relative to household incomes, even with the effects of the recent national recession.

Almost all future California population and household growth will occur in metropolitan areas, and most of that will occur in southern California. According to SCAG's 2008 growth forecast, the six-county region is projected to add about 4.6 million people and about 1.6 million households between 2010 and 2035. In Los Angeles County (County) alone, the forecast envisions about 1.7 million people and about 646,000 households between 2010 and 2035. As the largest city in the County, the City will receive most of the County's future growth.

SCAG's State-approved 5th Cycle 2014-2021 RHNA assigns 82,002 units of housing production needed for the City's 2013-2021 Housing Element (which actually covers a 7.5-year planning period), or an annual average of about 15,000 new dwelling units per year.[129]

The Housing Element of the City's General Plan notes that for over 10 years, the City has been pursuing a sustainable approach to accommodating long-range growth. This approach is established in the Framework Element of the General Plan, first adopted in 1995, which encourages sustainable growth in higher-intensity commercial and mixed-use districts, centers and boulevards, and in proximity to transit. The goals and policies of the Framework Element establish a balanced approach to growth by linking it to the land uses and infrastructure that will support the type of infill development that incurs the least economic, environmental, and social costs.

Population, housing, and employment forecasts for the Central City Community Plan Area are shown on Table V-37, as well as the number and percent change.

[128] *State of California – Business, Transportation and Housing Agency, The State of Housing in California 2012: Affordability Worsens, Supply Problems Remain, 2012.*

[129] *City of Los Angeles General Plan Housing Element, Housing Needs Assessment, December 3, 2013.*

Table V-37
Population, Housing, and Persons-Per-Household Forecasts for the Central City Community Plan Area

	Population	Housing	Persons Per Household
2016	47,716	25,234	1.89
2040	143,673	80,891	1.78
Change 2016 to 2040			
Number Changed	+95,957	+55,657	-0.11
Percent Changed	+301.1%	+320.5%	-6.1
Source: SCAG's 2016-2040 RTP/SCS.			

Table V-38 lists the 2020, 2035, and 2040 population, households, employment SCAG forecasts and subsequent persons/housing ratio, as well as the number and percent change.

Table V-38
Population, Housing, and Employment Forecasts for the City of Los Angeles

Year	Population	Households	Employment	Person/Households
2020[1]	3,991,700	1,455,700	1,817,700	2.74
2035[1]	4,320,600	1,626,600	1,906,800	2.66
2040[2]	4,609,400	1,690,300	2,169,100	2.72
Change 2020 to 2035				
Number Changed	+328,900	+170,900	+89,100	-0.08
Percent Changed	+8.2%	+11.7%	+4.9%	-2.9%
Change 2020 to 2040				
Number Changed	+617,700	+234,900	+351,400	-0.02
Percent Changed	+15.4%	+16.1%	+19.3%	0.72%

[1] *2020 and 2035: Based on SCAG's adopted 2012-2035 RTP/SCS, page 32.*
[2] *2040: Based on SCAG's adopted 2016 2016-2040 RTP/SCS, Appendix, page 24.*

Project Impacts

Construction

The construction activities associated with the Project would create temporary construction-related jobs. Nevertheless the work requirements of most construction activities are highly specialized, so that construction workers remain at a job site only for the time in which their specific skills are needed to complete a particular phase of the construction process. Thus, construction workers would not be anticipated to relocate their residence to the Project area and would not induce substantial population growth and/or require permanent housing. Therefore, the

Project's population growth impacts related to construction activities would be less than significant.

Operation

Indirect Growth

The Project is an infill development in Downtown Los Angeles, which is already developed with utility and roadway infrastructure. The Project would be served by existing infrastructure and would not require or include the development of any new utility or roadway infrastructure beyond what is required to accommodate the Project only. Thus, the Project would not indirectly induce substantial population growth, and no impacts related to indirect population growth would occur as a result of the Project.

Direct Growth

The Project includes the development of 428 multi-family residential units and up to a maximum of 5,610 square feet of leasing office/neighborhood-serving retail. As the Project is an infill development, the Project would not have indirect effects on growth through the extension of roadways and infrastructure. Based on the City's current household demographics (e.g., an average of 2.43 persons per household), the Project would add a residential population of approximately 1,040 people to the Project Site.[130] In addition, the Project would generate approximately 9 employees.[131]

As shown on Table V-39, the Project's residential population would represent approximately 1.53 percent of the forecasted growth between 2016 and 2040 in the Community Plan area. The Project's housing units would represent approximately 1.08 percent of forecasted growth between 2016 and 2040 in the Community Plan area. Thus, the Project's population growth would fall within the forecasted growth for the Community Plan area. As such, the Project would not represent substantial or significant growth as compared to projected growth for the Community Plan area.

As shown on Table V-40, the Project's residential population would represent 0.31 percent of the forecasted growth between 2020 and 2035 in the City and 0.16 percent of the forecasted growth between 2020 and 2040. The Project's housing units would represent approximately 0.25 percent of forecasted growth between 2020 and 2035 in the City and 0.18 percent between 2020 and 2040. Thus, the Project's population growth would fall within the forecasted growth for the City. Additionally, the amount of housing included as part of the Project would be consistent with the anticipated housing need identified in the City's Housing Element for the Community Plan area and the City (refer to Table V-40). Thus, the Project would not represent substantial or significant growth as compared to projected growth for the City.

[130] *2.43 persons per household x 428 residential dwelling units = 1,040 residences (a rounded number).*

[131] *Based on employee rates included in the 2018 Developer Fee Justification Study, Los Angeles School District, March 2018. 0.00153 employee/sf x 5,610 sf = 9 employees (a rounded number).*

Table V-39
Project Estimated Comparison for the Central City Community Plan Area

Project	Comparison Amount[1]	% of Comparison
As compared to Growth Forecast from 2016 to 2040		
1,040 residents	+67,628	1.53%
428 units	+39,268	1.08%

[1] *Refer to Table V-37.*
[2] *City of Los Angeles, Housing Element, 2013-2021, adopted December 3, 2013, Table 3.1, page 3-4.*
[3] *City of Los Angeles, Housing Element, 2013-2021, adopted December 3, 2013, page 3-3.*

Table V-40
Project Estimated Comparison for the City of Los Angeles

Project	Comparison Amount[1]	% of Comparison
As compared to Growth Forecast from 2020 to 2035		
1,040 residents	+328,900	0.31%
428 units	+170,900	0.25%
9 employees	+89,100	0.01%
As compared to Growth Forecast from 2020 to 2040		
1,040 residents	+617,700	0.16%
428 units	+234,900	0.18%
9 employees	+351,400	0.002%
As compared to City's 2013-2021 Housing Element		
428 units	17,893 (Central City Community Plan)[2]	2.29%
428 units	82,002 (Citywide)[3]	0.52%

[1] *Refer to Table V-38.*
[2] *City of Los Angeles, Housing Element, 2013-2021, adopted December 3, 2013, Table 3.1, page 3-4.*
[3] *City of Los Angeles, Housing Element, 2013-2021, adopted December 3, 2013, page 3-3.*

As shown on Table V-40, the Project's employment would represent approximately 0.01 percent of the forecasted growth between 2020 and 2035 in the City and 0.002 percent between 2020 and 2040. Thus, the Project's employment generation would fall within the forecasted growth for the City. Additionally, the type of employment opportunities associated with the Project's retail land uses would not require specialized skills that could compel people to relocate their place of residence to Los Angeles. Most, if not all, of the Project's employment could be accommodated by the workforce currently living in the Los Angeles area. As such, the Project's employment would not result in any substantial indirect population growth.

For the reasons discussed above, the Project would not indirectly or directly induce substantial population growth. Therefore, Project impacts related to population and housing would be less than significant.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. No housing exists on the Project Site. The Project Site is currently developed with a 109 space surface parking lot and an 850-square-foot restaurant. The Project would not displace any existing housing, necessitating the construction of replacement housing elsewhere. The Project would provide 428 new residential multi-family units. Thus, no impact would occur.

Cumulative Impacts

The related projects listed on Table II-3 in Section II (Project Description) include development of approximately 57,554 dwelling units throughout the City. It is possible that some of the sites of these related projects already include residential land uses that would be removed with implementation of the related projects and as such, the total net number of dwelling units that would be created would be created would be fewer than what has been estimated. However, for a conservative analysis, it is assumed that all estimated dwelling units would be net new units. With the Project, the number of cumulative housing units would be 57,982 cumulative housing units for the City (generating approximately 158,871 cumulative residents). Again, it is possible that some or all of these cumulative residents could already live in the Community Plan area and/or City. However, for a conservative analysis, it is assumed that these cumulative residents would be new to the Community Plan area and/or City.

As shown on Table V-41, cumulative residential population would represent 48.3 percent of the forecasted growth between 2020 and 2035 in the City and 25.7 percent of the forecasted growth between 2020 and 2040. Cumulative housing units would represent approximately 33.9 percent of forecasted growth between 2020 and 2035 in the City and 24.7 percent between 2020 and 2040. Thus, cumulative population growth would fall within the forecasted growth for the City.

Table V-41
Cumulative Estimated Comparison for the City of Los Angeles

Project	Comparison Amount[1]	% of Comparison
As compared to Growth Forecast from 2020 to 2035		
158,871 residents	+328,900	48.3%
57,982 units	+170,900	33.9%
As compared to Growth Forecast from 2020 to 2040		
158,871 residents	+617,700	25.7%
57,982 units	+234,900	24.7%
As compared to City's 2013-2021 Housing Element		
58,982 units	82,002 (Citywide)[2]	71.9%

[1] *Refer to Table V-38.*
[2] *City of Los Angeles, Housing Element, 2013-2021, adopted December 3, 2013, page 3-3.*

Additionally, as discussed previously, the Project's housing and population growth would be consistent with the anticipated growth for the Community Plan area and the City. The Project would not create unplanned growth, and impacts related to population and housing would be less than significant. As such, regardless of whether the related projects would result in unplanned growth, the Project would not have the potential to contribute to any potential cumulative impact.

15. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government 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 objective for any of the following public services:

(i) Fire protection?

Less Than Significant Impact. The LAFD provides fire and emergency medical protection services to the Project Site. The Project Site is currently developed with a surface parking lot and an 850-square-foot restaurant. The Project would result in the construction of 428 residential multi-family units and up to a maximum of 5,610 square feet of leasing office/neighborhood-serving retail. The Project would increase the number of residents and employees in the Project area and could increase the demand for fire protection services at the Project Site. Fire stations that serve the Project Site are shown on Table V-42.

Table V-42
Fire Stations Serving the Project Site

No.	Address	Distance from Project Site	Services/Equipment and Staff
3	108 Fremont Avenue	0.7 mile	Task Force Truck and Engine Company Paramedic Rescue Ambulance EMT Rescue Ambulance – Division Headquarters15 Staff
4	450 East Temple Street	1.2 miles	Task Force Truck and Engine Company Hazardous Materials Unit 14 Staff
9	430 East 7th Street	0.9 mile	Task Force Truck and Engine Company Paramedic Rescue Ambulance Battalion 1 Headquarters 13 Staff
10	1335 South Olive Street	1.4 miles	Task Force Truck and Engine Company Paramedic Rescue Ambulance EMT Rescue Ambulance 14 Staff
11	1819 West 7th Street	1.8 miles	Task Force Truck and Engine Company Paramedic Rescue Ambulance 12 Staff
Source: LAFD, Ralph M. Terrazas, Fire Chief, Correspondence, May 16, 2017. (Refer to Appendix K.)			

Construction

Construction activities associated with the Project may temporarily increase demand for fire protection and emergency medical services. Construction activities may also cause the occasional exposure of combustible materials, such as wood, plastics, sawdust, coverings and coatings, to heat sources from machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings.

To comply with California Department of Industrial Relations (Cal-OSHA) and Fire and Building Code requirements, construction managers and personnel would be trained in fire prevention and emergency response, and fire suppression equipment specific to construction would be maintained on-site.[132] Project construction would comply with all applicable codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, in light of City and State regulations and code requirements that would, in part, require personnel to be trained in fire prevention and emergency response, maintenance of fire suppression equipment, and implementation of proper procedures for storage and handling of flammable materials, construction impacts on fire protection and emergency medical services would be less than significant.

Construction activities also have the potential to affect fire protection services, such as emergency vehicle response times, by adding construction traffic to the street network and by necessitating partial lane closures during street improvements and utility installations. These impacts, while potentially adverse, are considered to be less than significant for the following reasons:

- Construction activities are temporary in nature and do not create continuing risks;
- General "good housekeeping" procedures employed by the construction contractors and the work crews (e.g., maintaining mechanical equipment, proper storage of flammable materials, cleanup of spills of flammable liquid) would minimize these hazards; and
- Partial lane closures would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete.

Impacts on traffic that could cause delays in emergency response times are addressed through a Construction Traffic Management Plan (CTMP), which includes traffic management strategies for Project construction. The CTMP would outline and dictate how construction operations would be carried out, and would identify specific actions to reduce effects on the surrounding community. The CTMP would be based on the nature and timing of specific construction activities and other projects in the vicinity.

[132] *https://www.dir.ca.gov/title8/1920.html*

In addition to traffic, there are a number of factors that influence emergency response times, including alarm transfer time, alarm answering and processing time, mobilization time, risk appraisal, geography, distance, traffic signals, and roadway characteristics. While even with the CTMP, it is acknowledged that the Project would incrementally increase traffic, which could potentially delay emergency response times, the Project's potential impacts are minimal given these other factors.

Overall, construction is not considered to be a high-risk activity, and the LAFD is equipped and prepared to deal with construction-related traffic and fires should they occur. Due to the limited duration of construction activities and compliance with applicable codes, Project construction would not be expected to adversely impact firefighting and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios, response times, or other performance objectives of the LAFD. Therefore, impacts associated with construction of the Project would be less than significant.

Operation

The Project would increase the amount of developed square footage on the Project Site, which in turn, would generate new residents, visitors, and employees at the Project Site, and could increase the need for fire protection services at the site. The paragraphs below discuss the criteria for determining the Project's impacts to fire protection services, including fire flow and response distance.

Fire Flow

Prior to construction of the Project, the Water Operations Division of LADWP would perform a detailed fire-flow study at the time of permit review (plan check) in order to ascertain whether further water system or site-specific improvements would be necessary. Preliminarily, the LAFD has determined that the fire-flow requirements for the Project would be 6,000 to 9,000 gallons per minute from four to six fire hydrants flowing simultaneously.[133] In addition, the LAFD would review the plans for compliance with applicable City Fire Code, California Fire Code, City of Los Angeles Building Code, and National Fire Protection Association standards, thereby ensuring that the Project would not create any undue fire hazard. Thus, fire flow to the Project Site would be adequate, and the associated impact would be less than significant.

Response Distance

The nearest fire station with an engine and truck company is Station No. 3, approximately 0.7 miles from the Project Site. Additional fire stations within 2.0 miles include Station Nos. 4, 9, 10, and 11 LAFD's ability to provide adequate fire protection and emergency response services to a site is determined by the response distance and the degree to which emergency response vehicles can successfully navigate the given access ways and adjunct circulation system, which is largely dependent on roadway congestion and intersection level of service (LOS) along the response route. If the response distance standard cannot be achieved for a specific location, then

[133] *LAFD, Ralph Terrazas, Fire Chief, Correspondence, May 16, 2017. (Refer to Appendix K.)*

fire sprinkler systems are required. Nonetheless, a fire sprinkler system would be included in the mixed-use building for all proposed land uses as part of the Project. Additionally, as stated previously, the Project would be required to comply with applicable City Fire Code, California Fire Code, City of Los Angeles Building Code, and National Fire Protection Association standards, and would be required to include features such as an emergency and standby power system, a fire command center, established emergency procedures, emergency stairways, appropriately-sized exterior graphics, automatic fire-extinguishing system, automatic smoke detection system, emergency voice/alarm communication system, manual alarm fire boxes, etc. Given the close proximity of the closest fire station with an engine and the fire protection systems that would be incorporated into the proposed building, Project impacts related to response distance would be less than significant.

Emergency Access

The LAFD would review the Project plans for compliance with the Los Angeles Fire Code, California Fire Code, City of Los Angeles Building Code, and National Fire Protection Association standards, thereby ensuring that the Project would not create any undue fire hazard. The Project would include an emergency response plan that would address the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, and locations of nearest hospitals and fire departments. Through compliance with applicable provisions of the Fire Code, Project impacts related to emergency access would be less than significant.

Cumulative Impacts

Implementation of the related projects on Table II-3 in Section II (Project Description) could result in a net increase in the number of residents and employees in the Project area and could further increase the demand for fire protection services. Cumulative development requires the LAFD to continually evaluate the need for new or physically altered facilities in order to maintain adequate service ratios. Similar to the proposed Project, the related projects would be subject to the Fire Code and other applicable regulations of the LAMC including, but not limited to, automatic fire sprinkler systems for high-rise buildings and/or residential projects located farther than 1.5 miles from the nearest LAFD Engine or Truck Company, and other recommendations made by the LAFD to ensure fire protection safety. Through the process of compliance, the ability of the LAFD to provide adequate facilities to accommodate future growth and maintain acceptable levels of service would be ensured.

With regard to cumulative impacts on fire protection, consistent with *City of Hayward v. Board Trustees of California State* University (2015) 242 Cal.App.4th 833 ruling and the requirements stated in the California Constitution Article XIII, Section 35(a)(2) in Subsection 3.b.(1) above, the obligation to provide adequate fire protection and emergency medical services is the responsibility of the City. Through the City's regular budgeting efforts, LAFD's resource needs, including staffing, equipment, trucks and engines, ambulances, other special apparatuses, and possibly station expansions or new station construction, would be identified and allocated according to the priorities at the time. At this time, LAFD has not identified that it will be constructing a new station in the area impacted by this Project either because of this Project or this Project and other projects in the service area. If LAFD determines that new facilities are necessary at some point in the

future, the City has determined that such facilities: (1) would occur where allowed under the designated land use; (2) would be located on parcels that are infill opportunities on lots that are between 0.5 and 1 acre in size and (3) could qualify for a categorical exemption or Mitigated Negative Declaration under CEQA Guidelines Section 15301 or 15332 and would not be expected to result in significant impacts.[134] Further analysis, including a specific location, would be speculative and beyond the scope of this document. Therefore, cumulative impacts related to fire protection services would be less than significant.

(ii) Police protection?

Less Than Significant Impact. The Los Angeles Police Department (LAPD) provides police protection services to the Project Site. As discussed above, the Project would increase the number of residents and employees in the Project area. Implementation of the Project could result in an increase in calls for police protection.

Construction

Construction sites can be sources of attractive nuisances, providing hazards, and inviting theft and vandalism. When not properly secured, construction sites can become a distraction for local law enforcement from more pressing matters that require their attention. This could result in an increase in demand for police protection services. Consequently, developers typically take precautions to prevent trespassing through construction sites. Most commonly, temporary fencing is installed around the construction site to keep trespassers out. Deployment of roving security guards is also sometimes used to prevent problems during a project's construction. When such precautions are taken, there is less of a need for local law enforcement at the construction site.

Although there is the potential for Project construction to create an increase in demand for police protection services, the Project would provide security on the Project Site as needed and appropriate during the phases and course of the construction process. This security includes perimeter fencing, lighting, and security guards, thereby reducing the demand for LAPD services. The specific type and combination of construction site security features would depend on the phase of construction. The Project Applicant would install temporary construction fencing to secure the Project Site during the construction phase to ensure that valuable materials (e.g., building supplies and metals such as copper wiring), as well as construction equipment are not easily stolen or abused.

During construction, emergency response vehicles can use a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Lights and other identifying noises compel traffic to pull to the side where available to provide access through traffic. In addition, due to the police deployment (i.e., a Basic Car unit in a smaller Reporting District), police service does not necessarily require travel through impacted intersections. Although minor traffic delays due to potential lane closures could occur during

[134] *Although an EIR was prepared for the construction of Fire Station 39, the EIR concluded there would be no significant impacts.* See, Notice of Determination for Van Nuys Fire Station 39, *at http://eng2.lacity.org/techdocs/emg/docs/vannuys_fs39/NOD_160701.pdf.*

construction, particularly during the construction of utilities and street improvements, impacts to police response times are considered to be less than significant for the following reasons:

(1) Emergency access would be maintained to the Project Site during construction through marked emergency access points approved by the LAPD;

(2) Construction impacts are temporary in nature and do not cause lasting effects; and

(3) Partial lane closures, if determined to be necessary, would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete.

Construction of the Project would not affect the LAPD's ability to respond to emergencies to the extent that there would be a need for any additional new or expanded police facilities, in order to maintain acceptable service ratios, response times, or other performance objectives of the LAPD. For these reasons, Project construction impacts on police services would be less than significant.

Operation

The Project would generate new residents, visitors, and employees, and would also increase the amount of developed square footage on the Project Site and would result in an increased need for police protection services at the Project Site. Although the LAPD does not maintain minimum officer-to-population ratio objectives, the data are a useful metric for gauging the effect a project might have on service levels and response times. The current officer-to-resident ratio in the Central Community is 1 officer per 108 residents. The Project would result in approximately 1,040 residents at the Project Site, requiring approximately 10 additional officers to maintain the same ratio. The addition of 10 officers to maintain the existing ratio represents an approximately 10 percent increase over existing staffing levels. This change would not require the construction of additional police facilities.

The Project would include security features within the parking facilities and exterior building areas such as appropriate lighting and gated access. The Project would include defensible spaces designed to reduce opportunity crimes and ensure safety and security. In addition, the lighting and landscaping design would ensure high visibility and the Project would provide for on-site security measures and controlled access systems for residents and tenants to minimize the demand for police protection services. The Project would incorporate crime prevention features into the design of the buildings and public spaces, such as lighting of entryways and public areas. The Project would feature the following:

- On-site security personnel;
- Security cameras;

- Perimeter lighting to supplement the street lighting and to provide increased visibility and security;

- Parking structure access control; and

- Residential units access control.

The Project would provide the LAPD with a diagram of each portion of the Project Site, showing access routes and additional access information as requested by the LAPD, to facilitate police response. Emergency access to the Project Site would be provided by the existing street system. The Project's direct minimal population increase and associated demand for police services, along with the provision of on-site security features, coordination with LAFD, and incorporation of crime prevention features, would not require the provision of new or physically altered police stations in order to maintain acceptable service ratios or other performance objectives for police protection. Additionally, the Project would also contribute to the General Fund, a portion of which is allocated to the LAPD and other public services. Therefore, Project impacts related to police protection services would be less than significant.

Cumulative Impacts

Implementation of the related projects listed on Table II-3 in Section II (Project Description) could result in a net increase in the number of residents and employees in the Project area and could further increase the demand for police protection services. Cumulative development requires the LAPD to continually evaluate the need for new or physically altered facilities in order to maintain adequate service ratios. Similar to the proposed Project, the related projects would be subject to the site plan review, recommendations of the LAPD related to crime prevention features, and other applicable regulations of the LAMC. Through the process of compliance, the ability of the LAPD to provide adequate facilities to accommodate future growth and maintain acceptable levels of service would be ensured Furthermore, the increased demands for additional LAPD staffing, equipment, and facilities would be funded via existing mechanisms (e.g., property taxes and government funding) to which the Project and related projects would contribute. Therefore, cumulative impacts related to police protection services would be less than significant.

(iii) Schools?

Less Than Significant Impact. Los Angeles Unified School District's (LAUSD) schools that serve the Project Site and area are shown on Table V-43. As shown on Table V-44, the Project would generate a total of approximately 112 students, including 54 elementary students, 30 middle school students, and 28 high school students. The elementary and high schools serving the Project Site are currently operating under capacity, the middle school serving the Project Site is operating over capacity. However, pursuant to the California Government Code, payment of the school fees established by the LAUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees would, by law, provide full and complete mitigation for any potential direct and indirect impacts to schools as a result of the Project. Therefore, Project impacts to school services would be less than significant.

Table V-43
LAUSD School's Serving the Project Area
Student Capacity and Enrollment

School Type (Grade)	School Name	Location	Capacity (students)	Actual Enrollment (students)	(-)Under / (+)Over Capacity (students)
Elementary School	9th Street Elementary School	835 Stanford Avenue	328	302	-26
Middle School	Liechty Middle School	650 South Union Avenue	1,066	1,081	+15
High School	Belmont High School Zone	Various	6,230	5,656	-574
Source: LAUSD, Rena Perez, Director, May 5, 2017 (refer to Appendix K).					

Table V-44
Estimated Project Student Generation

Land Use	Size	School Type	Student Generation Rate[1]	Total Students Generated
Residential	428 du	Elementary (K-5)	0.1266/du	54
		Middle (6-8)	0.0692/du	30
		High (9-12)	0.0659/du	28
			Total	**112**

du = dwelling unit
[1] *Los Angeles Unified School District, Student Generation Rate Calculation, Table 11, February 9, 2012.*

Cumulative Impacts

The related projects listed on Table II-3 in Section II (Project Description) could result in an increase in the number students in the Project area. However, similar to the applicant of the proposed Project, the applicants of all the related projects would be required to pay the applicable school fees to the LAUSD to ensure that no significant impacts to school services would occur. Therefore, cumulative impacts to school services would be less than significant.

(iv) Parks?

Less Than Significant Impact. The Los Angeles Department of Recreation and Parks (LADRP) operates and maintains park and recreational services and facilities in the Project area. Parks and recreational facilities that serve the Project Site and area are shown on Table V-45.

Table V-45
Parks and Recreation Facilities

Park/Recreation Facility Name	Address	Size
Pocket Parks (<1.0 acres and within 0.5 mile-radius)[1]		
Spring Street Park	824 S. Spring Street	0.80 acre
Neighborhood Parks (1.0-10 acres and within 1.0-mile radius)		
Alpine Recreation Center	817 Yale Street	1.88 acres
City Hall Park	200 N. Spring Street	1.71 acres
Pershing Square	525 S. Olive Street	4.44 acres
Vista Hermosa Soccer Field	1301 W. 1st Street	1.88 acres
Community Park (10-50 acres and within two mile radius)[1]		
Echo Park	751 N. Echo Park Boulevard	28.41 acres
Regional Park (>50 acres and within 2.0-mile radius)[1]		
Elysian Park	929 W. Academy Road	544.71 acres
	Total	**583.83**

[1] *Written correspondence from Ramon Barajas, Assistant General Manager, Los Angeles Department of Recreation and Parks, December 5, 2014.*

As shown on Table V-46, based on LAMC open space standards, the Project would be required to include a minimum of 45,950 square feet of open space. As a discretionary approval, the Project Applicant is requesting a no greater than 10 percent reduction (no more than 4,598 square feet) in the common open space requirement, resulting in a total of 41,378 square feet of open space to be provided as part of the Project. The types of open space provided as part of the Project include (but are not limited to) 10,100 square feet of private open space, a 14,332-square-foot courtyard, a 1,453-square-foot business lounge, a 5,179-square-foot club room, a 1,730-square-foot fitness room, a 5,508-square-foot sky deck, and a 3,126-square-foot sky lounge

Table V-46
Open Space Required of and Provided by the Project

Open Space Requirement	Project Units	Total Open Space
<3 habitable rooms = 100 sf/du	301 du	30,100 sf
3 habitable rooms = 125 sf/du	127 du	15,875 sf
	Total Required	*45,950 sf*
	Requested 10% Reduction	*4,598*
	Total Provided	**41,378 sf**

sf = square feet du = dwelling unit

The Project would consist of 428 residential dwelling units, which would add an estimated 1,040 residents to the Project Site. The standard minimum parkland-to-population ratio, provided in the

City's General Plan Framework Element, is two acres of parkland per 1,000 residents generated. Therefore, implementation of the Project would require approximately 2.08 acres of parkland.[135] However, in accordance with Ordinance 184,505, the Project Applicant shall be required to dedicate land or to pay a fee for the purpose of developing park and recreational facilities to mitigate the Project's demand for parks and recreational facilities. Through compliance with the LAMC, Project impacts related to parks and recreational facilities would be offset to a level of less than significant.

Cumulative Impacts

The related projects listed on Table II-3 in Section II (Project Description) could result in an increase demand for parks and recreational services. However, employees generated by the commercial projects and the commercial portions of mixed-use projects on the related projects list would not typically enjoy long periods of time during the workday to visit parks and/or recreational facilities. Therefore these related-project-generated employees would not contribute to the future demand on park and recreational facility services. The extent to which the related residential projects include parks/recreational amenities is unknown. However, the applicants of these projects would be subject to the parkland fees pursuant to LAMC Section 17.12, ensuring that any potential impacts to parks and recreational facilities would be less than significant. As stated previously, the Project would not result in any significant impacts related to parks and recreational facilities. Therefore, cumulative impacts to park and recreational facilities would be less than significant.

(v) Other public facilities?

Libraries

Less Than Significant With Mitigation Incorporated. The libraries that serve the Project area include those shown on Table V-47. On February 8, 2007, the Board of the Library Commissioners approved a new Branch Facilities Plan, which includes criteria for developing new libraries and recommends new size standards for the provision of Los Angeles Public Library (LAPL) facilities, including the following:

- A 12,500 square-foot facility for a community with less than 45,000 population.
- A 14,500 square-foot facility for a community with more than 45,000 population and up to a 20,000 square-foot for a Regional Branch.
- An additional Branch Library should be developed for a population equal to or in excess of 90,000 persons.

[135] *[(1,040 residents) ÷ (1,000)] = 1.040 thousand residents. [(2 acres of parkland) x (1.040 thousand residents)] = 2.08 required acres.*

Table V-47
Libraries Serving the Project Site Area

Library	Size (sf)	Collection Size/ Circulation	Staffing Levels	Service Population
Richard J. Riordan Central Library 630 5th Street	538,000	Volumes - 2.6 million Circulation – 1.2 million	390 staff	3,792,621 3,991,700
Chinatown Branch Library 639 N. Hill Street	14,500	Volumes - 74,709 Circulation – 238,872	13.5 staff	11,225
Echo Park Branch Library 1410 W. Temple Street	17,543	Volumes – 43,908 Circulation - 111,188	9.5 staff	52,842
Edendale Branch Library 2011 W. Sunset Blvd.	12,500	Volumes – 45,466 Circulation – 154,974	9 staff	23,254
Feipe de Neve Branch Library 2820 W. 6th Street	9,273	Volumes – 34,538 Circulation – 119,340	9 staff	110,861
Little Tokyo Branch Library 203 S. Los Angeles St.	12,500	Volumes – 66,634 Circulation – 143,317	10 staff	45,796
Pico Union Branch Library 1030 S. Alvarado St.	12,500	Volumes – 46,562 Circulation – 140,640	10.5 staff	41,457

sf = square feet

Source: Los Angeles Public Library, Thomas Jung, Management Analyst II, Jun 8, 2017. (Refer to Appendix K.)

As discussed previously, the Project would introduce approximately 1,040 residents to the Project Site. It should be noted that some or all of the 1,040 net residents could already live in the Project area or City with an existing demand for library services that would not be increased with implementation of the Project. Impacts of the Project on library services would be minimized as it is likely that the residents of the Project would have individual access to internet service, which provides information and research capabilities that studies have shown reduce demand at physical library locations.[136] [137] [138] Nonetheless, as shown on Table V-47, based on the LAPL's standards outlined above, libraries serving the Project area are serving populations in excess of

[136] *"To Read or Not To Read", see pg. 10: "Literary reading declined significantly in a period of rising Internet use": http://www.nea.gov/research/toread.pdf.*

[137] *"How and Why Are Libraries Changing?" Denise A. Troll, Distinguished Fellow, Digital Library Federation: http://old.diglib.org/use/whitepaper.htm.*

[138] *"Use and Users of Electronic Library Resources: An Overview and Analysis of Recent Research Studies", Carol Tenopir: http://www.clir.org/pubs/reports/pub120/contents.html.*

the sizing standards. However, implementation of Mitigation Measure LIBRARY-1 would ensure that Project impacts related to library services would be less than significant.

Mitigation Measures (Public Services)

To ensure that Project impacts related to library services would be less than significant, the following mitigation measure is required:

MM-LIBRARY-1: Prior to issuance of a Certificate of Occupancy, the Project Applicant shall pay the LAPL a fee of $200 per capita for the Project.

Cumulative Impacts

Implementation of the related projects listed on Table II-3 in Section II (Project Description) could increase the demand for library services in the Project area. The related residential projects would be subject to the standards to determine demand for library facilities used by the City, and would likely be required to implement mitigation where applicable. As such, the demand for library services created by these residential projects could be accommodated, and impacts would be less than significant. As stated previously, with implementation of Mitigation Measure LIBRARY-1, the Project would not result in any significant impacts related to library services. Therefore, cumulative impacts to library services would be less than significant.

16. RECREATION

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

Less Than Significant Impact. Refer to the response to Checklist Question 15(a)(iv) (Public Services - Parks). As discussed there, in accordance with Ordinance 184,505, the Project Applicant shall be required to dedicate land or to pay a fee for the purpose of developing park and recreational facilities to mitigate the Project's demand for parks and recreational facilities. Through compliance with the LAMC, Project impacts related to parks and recreational facilities would be less than significant.

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

Less Than Significant Impact. The Project includes development of private and public open space areas including, individual balconies, a pool court, and sky deck and lounge that are inclusive of the mixed-use development and are required to meet the City's open space requirement. The assessment of impacts associated with development of these open space facilities is inclusive of the assessment of impacts associated with the Project in its entirety. No direct significant impacts would occur as a result of development of the open space facilities.

Cumulative Impacts

Refer to discussion of cumulative impacts related to parks and recreational facilities under response to Checklist Question 15(a)(iv) (Public Services – Parks).

17. TRANSPORTATION

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant With Mitigation Incorporated. The analysis in this section is based on the following (refer to Appendix M):

- 340 South Hill Street Project Transportation Impact Study (Traffic Study), IBI Group June 9, 2017.
- 340 South Hill Street Project Transportation Impact Study Update, IBI Group, July 17, 2019.

The Traffic Study was approved by LADOT on August 7, 2017 (refer to Appendix M). Under SB 375, when going forward with an SCEA (such as this document), project-specific and cumulative impacts associated with cars and light trucks on the regional transportation network are not required to be assessed, pursuant to PRC 21155.2(b) and 21159.28(a). To the extent that these impacts are included herein is done so for informational purposes, only.

Study Intersections

Twelve study intersections were selected in consultation with the Los Angeles Department of Transportation (LADOT) for analysis in the Traffic Study. The lane geometry and signal control for each study intersection are illustrated on Figure V-11.

1. Olive Street & 2nd Street
2. Hill Street & 2nd Street
3. Broadway & 2nd Street
4. Hill Street & 3rd Street
5. Broadway & 3rd Street
6. Olive Street & 4th Street
7. Hill Street & 4th Street
8. Broadway and 4th Street
9. Grand Avenue & 5th Street
10. Olive Street & 5th Street

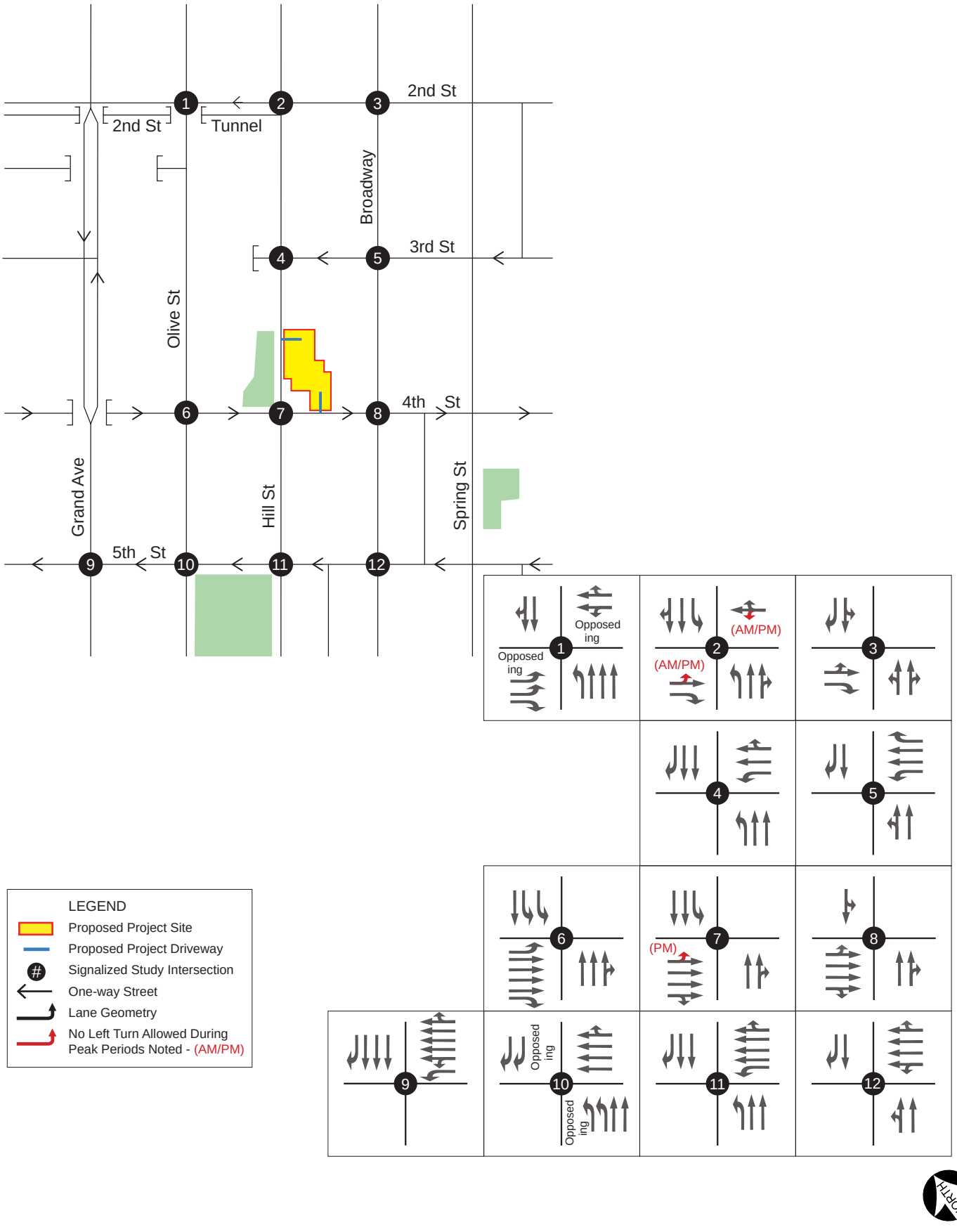


Figure V-11
Study Intersection Geometry and Control

Source: IBI Group, June 2017.

11. Hill Street & 5th Street

12. Broadway & 5th Street

Methodologies

Based on LADOT's current traffic study policies, this study uses the Critical Movement Analysis (CMA) methodology for the analysis and evaluation of traffic operations at signalized intersections under their jurisdiction, as detailed in Circular Number 212 published by the Transportation Research Board (TRB).[139] This analysis technique describes the operating characteristics of an intersection in terms of the "Level of Service" (LOS) based on intersection traffic volume and other variables such as number and type of signal phasing, lane geometries, and other factors which determine both the quantity of traffic that can move through an intersection (Capacity) and the quality of that traffic flow (LOS).

"Capacity" represents the maximum total hourly volume of vehicles in the critical lanes that has a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. Critical lanes are defined generally as those intersection movements or groups of movements which exhibit the highest "per lane" volumes, thus defining the maximum amount of vehicles attempting to travel through the intersection during a specific time period. The capacity of an intersection also varies based on the number of signal phases for the location; more signal phases generally result in more "lost" or "startup" time, as drivers exhibit slight reaction delays when signal indications change from "red" to "green." For the CMA analysis methodology, the intersection capacities associated with the various levels of service are therefore based on the number of traffic signal phases, as shown on Table V-48.

Table V-48
CMA Volume Ranges per LOS*

LOS	Maximum Sum of Critical Volumes (VPH) vs. Number of Signal Phases		
	Two Phases	Three Phases	For or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	NA	NA	NA

* *For planning applications only. Not appropriate for operations/design applications.*

For the intersection evaluation and transportation planning purposes of this traffic study, LADOT policy requires that the maximum "baseline" capacity of an intersection equate to the value associated with LOS E shown on Table V-48. This value represents the highest volume of traffic

[139] *Interim Materials on Highway Capacity, Circular Number 212, Transportation Research Board, Washington, D.C., 1980.*

that can be adequately accommodated through urban area intersections without a breakdown in operations, resulting in unstable traffic flows, high levels of congestion, and long delays.

The "Critical Movement" indices at an intersection are determined by first identifying the sum of the critical lane traffic volumes at the intersection. This total traffic *volume* value, which represents the most critical intersection demand, is then divided by the appropriate intersection *capacity* value for the type of signal control at the intersection, to determine the "CMA value" for the intersection that is roughly equivalent to its volume-to-capacity ratio.

LOS describes the quality of traffic flow through the intersection. LOS A through LOS C exhibit good traffic flow characteristics, with little congestion. LOS D is typically the level for which metropolitan area street systems are designated, and represents the highest level of acceptable congestion and delay. LOS E defines conditions at or near the capacity of an intersection, and is characterized by short-duration stoppages and unstable traffic flows at its upper range. LOS F occurs when a facility is overloaded, and is characterized by stop-and-go traffic with long duration delays. Note that the LOS definitions do not represent a single operating condition, but rather correspond to a range of CMA values, as shown on Table V-49.

Table V-49
LOS Definitions for Signalized Intersections (CMA Method)

LOS	Intersection Capacity Utilization	Definition
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	0.601 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 - 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Board, Transportation Research Circular No. 212, Interim Materials on Highway Capacity, 1980.

Existing Conditions

Roadway Network

Selected roadways within the Project study area are described in this section. Items of note include existing geometry, pedestrian and bicycle facilities, and adjacent land uses.

Hill Street has two northbound and two southbound lanes with a center two-way left-turn lane through most of the study area. Between 3rd and 4th Street there is a 90-foot-long raised landscaped median. In the northbound direction, on-street parking is prohibited in the afternoon (4-7 PM), but during the rest of the day the outside lane may be used for parking. In the southbound direction, there is an on-street parking lane, separate from the two travel lanes. Land uses along Hill Street include retail shops, restaurants, residential/mixed-use, and office space.

Broadway runs in a north-south direction through the Project area. The arterial was recently converted from a five-lane undivided roadway with three northbound lanes and two southbound lanes to a three-lane undivided roadway with two northbound lanes and one southbound lane. Widened sidewalks and on-street parking along the west side of the street have also been provided. Retail shops, restaurants, and historic theaters are located along Broadway.

2nd Street is a two-lane undivided roadway that runs in an east-west direction through the study area. On-street parking is not allowed throughout most of the street. However, there are certain areas where metered parking is allowed. Buffered bicycle lanes have recently been striped on 2nd Street west of Spring Street. Major land uses along 2nd Street consist of the Angelus Plaza, the proposed federal courthouse and LAPD Headquarters.

3rd Street is a three-lane roadway that travels one-way westbound. Metered parking is permitted along various sections of the street but otherwise prohibited. There are no bicycle lanes along 3rd Street through the study area. Adjacent land uses include Grand Central Square and Market, the Angelus Plaza, residential mixed-use and office buildings.

4th Street is a three-lane roadway that travels one-way eastbound. On-street parking is permitted at certain locations where meters are present. There are no bicycle lanes along 4th Street in the study area. The major land uses in the surrounding area are office buildings, Clark Hotel, and the Junipero Serra State Building. Angels Knoll Park is also located on 4th Street.

5th Street is a one-way street that travels in the westbound direction. Fifth Street is generally a three-lane roadway throughout the study area, but narrows to two lanes in areas where metered on-street parking is provided on both sides of the street and widens to four lanes in areas where on-street parking is prohibited. No bicycle lanes are provided along 5th Street within the study area. Adjacent land uses include Pershing Square, office buildings, and retail shops.

Existing (2017) Traffic Conditions

Manual intersection turning movement counts were collected in 15-minute intervals from 7:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m. on Thursday, April 6, 2017. The full classified vehicle, pedestrian and bicycle count reports are available in the appendix of the Traffic Study (refer to Appendix M). Existing (Year 2017) AM and PM peak-hour turning movement count volumes are presented on Figure V-12. Existing LOS conditions are shown on Tables V-50 and V-51.

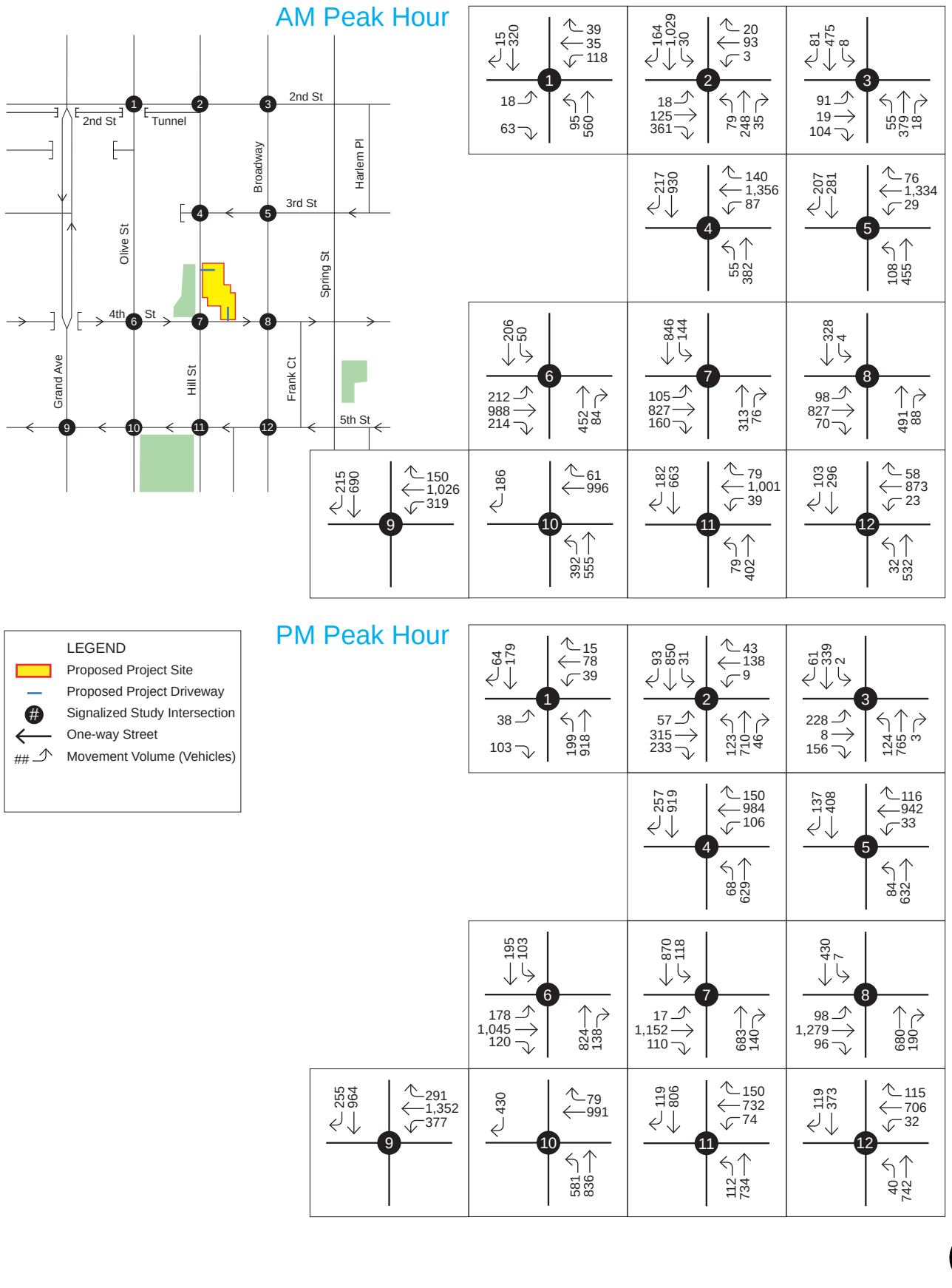


Figure V-12
Existing (Year 2017) Traffic Volumes - No Project

Source: IBI Group, June 2017.

Table V-50
Level of Service Analysis Results Summary - AM Peak Hour

	Intersection	Year 2017 Existing Traffic Conditions		Existing Plus Project		Change	Project Impact	Year 2023 Cumulative Base		Year 2023 Plus Project		Change	Project Impact
		V/C	LOS	V/C	LOS			V/C	LOS	V/C	LOS		
1	Olive St & 2nd St	0.209	A	0.209	A	0.000	NO	0.225	A	0.225	A	0.000	NO
2	Hill St & 2nd St.	0.597	A	0.606	B	0.009	NO	0.657	B	0.659	B	0.009	NO
3	Broadway & 2nd St	0.385	A	0.389	A	0.004	NO	0.429	A	0.433	A	0.005	NO
4	Hill St & 3rd St	0.729	C	0.743	C	0.014	NO	0.826	D	0.840	D	0.015	NO
5	Broadway & 3rd St	0.503	A	0.507	A	0.004	NO	0.577	A	0.581	A	0.004	NO
6	Olive St & 4th St	0.233	A	0.235	A	0.002	NO	0.281	A	0.283	A	0.003	NO
7	Hill St & 4th St	0.394	A	0.405	A	0.011	NO	0.465	A	0.476	A	0.011	NO
8	Broadway & 4th St	0.317	A	0.327	A	0.010	NO	0.379	A	0.389	A	0.011	NO
9	Grand Ave & 5th St	0.263	A	0.267	A	0.004	NO	0.310	A	0.314	A	0.004	NO
10	Olive St & 5th St	0.382	A	0.388	A	0.006	NO	0.423	A	0.429	A	0.006	NO
11	Hill St & 5th St	0.538	A	0.545	A	0.007	NO	0.604	B	0.611	B	0.004	NO
12	Broadway & 5th St	0.367	A	0.365	A	0.001	NO	0.408	A	0.412	A	0.004	NO

Source: IBI Group, June 2017 and July 2019. Refer to Appendix M.

Table V-51
Level of Service Analysis Results Summary - PM Peak Hour

	Intersection	Year 2017 Existing Traffic Conditions		Existing Plus Project		Change	Project Impact	Year 2023 Cumulative Base		Year 2023 Plus Project		Change	Project Impact
		V/C	LOS	V/C	LOS			V/C	LOS	V/C	LOS		
1	Olive St & 2nd St	0.216	A	0.216	A	0.000	NO	0.233	A	0.233	A	0.000	NO
2	Hill St & 2nd St.	0.581	A	0.592	A	0.011	NO	0.660	B	0.671	B	0.011	NO
3	Broadway & 2nd St	0.454	A	0.458	A	0.004	NO	0.507	A	0.510	A	0.003	NO
4	Hill St & 3rd St	0.610	B	0.629	B	0.019	NO	0.737	C	0.757	C	0.020	NO
5	Broadway & 3rd St	0.493	A	0.499	A	0.006	NO	0.597	A	0.603	B	0.006	NO
6	Olive St & 4th St	0.356	A	0.364	A	0.008	NO	0.421	A	0.429	A	0.008	NO
7	Hill St & 4th St	0.497	A	0.549	A	0.052	NO	0.593	A	0.645	B	0.052	NO
8	Broadway & 4th St	0.470	A	0.481	A	0.011	NO	0.563	A	0.574	A	0.011	NO
9	Grand Ave & 5th St	0.375	A	0.377	A	0.002	NO	0.461	A	0.463	A	0.002	NO
10	Olive St & 5th St	0.578	A	0.581	A	0.003	NO	0.632	B	0.636	B	0.004	NO
11	Hill St & 5th St	0.517	A	0.521	A	0.004	NO	0.607	B	0.611	B	0.004	NO
12	Broadway & 5th St	0.395	A	0.397	A	0.002	NO	0.468	A	0.476	A	0.008	NO

Source: IBI Group, June 2017 and July 2019. Refer to Appendix M.

Threshold of Significance

LADOT's significance criteria for determining intersection LOS impacts are shown on Table V-52.

Table V-52
LADOT Intersection Significance Thresholds

Intersection Conditions with Project Traffic		Project-related Increase in V/C Ratio
LOS	V/C	
C	0.701 - 0.800	Equal to or greater than 0.04
D	0.801 - 0.900	Equal to or greater than 0.02
E, F	> 0.900	Equal to or greater than 0.01
Source: LADOT.		

Project Impacts

Trip Generation

Project trips and trips generated by the existing site were estimated using the rates published in the ITE *Trip Generation*, 9th Edition. The ITE rates used in this study are summarized in Table V-53, and the Project trips generated by new uses are calculated in Table V-54.

Table V-53
Trip Generation Rates for Existing and Proposed Uses

Land Use	Code	Units	Daily	AM	In (%)	Out (%)	PM	In (%)	Out (%)
Family Affordable Housing	LADOT	DU	4.08	0.50	40%	60%	0.34	55%	45%
Apartment	ITE 220	DU	6.65	0.51	20%	80%	0.62	65%	35%
General Office	ITE 710	TSF	11.01	1.55	88%	12%	1.49	17%	83%
Quality Restaurant	ITE 931	TSF	89.95	0.81	50%	50%	7.49	67%	33%
High-Turnover Restaurant	ITE 932	TSF	127.15	11.52	52%	48%	11.15	59%	41%
DU = dwelling unit *TSF = thousand square feet*									
Source: IBI Group, 2017.									

Part of the existing site is a paid surface parking lot with approximately 109 spaces, including 48 tandem parking spaces. Parking lots serve adjacent land uses, but do not generate trips. When the lot is removed, the vehicles that currently park in the lot will still travel to the area, but will park in another nearby facility instead. The land uses generating the trips to the parking lot would

remain when the lot is removed, so no trip credits are associated with the redevelopment of the surface parking lot.

Table V-54
Project Trips Generated by New Uses

Land Use	Code	Qty	Units	Daily	AM			PM		
					IN	OUT	Total	IN	OUT	Total
Family Affordable Housing	LADOT	22	DU	90	4	7	11	4	3	7
Apartment	ITE 220	406	DU	2,700	41	166	207	164	88	252
General Office	ITE 710	2.98	TSF	33	4	1	5	1	4	5
Quality Restaurant	ITE 931	2.63	TSF	237	1	1	2	13	7	20
Total New Trips				**3,060**	**50**	**175**	**225**	**182**	**102**	**284**

DU = dwelling units *TSF = thousand square feet*

Source: IBI Group, 2017.

A small restaurant with a gross floor area of approximately 850 square feet is also located on the site, with frontage on Hill Street. The LADOT policy on pass-by trips is to apply a discount rate of 50 percent to retail and fast food restaurant uses that have a gross floor area of less than 50,000 square feet. The trips generated by the restaurant are subtracted from the trips generated by the new residential tower to estimate the net project generated trips.

The Project includes 5,610 square feet of commercial land uses – 2,630 square feet of ground-floor retail and residential lobby and a 2,980-square-foot leasing office. To be conservative, the Project trip generation included in this analysis assumes that the ground-floor space may be used as quality sit down restaurant use, which generates the highest number of trips of the retail-type land uses. The General Office land use rate was used for the leasing office

Trip Credits

LADOT encourages developers to design and construct transit-friendly projects that provide safe and walkable sidewalks to and from transit stations for project patrons. LADOT's Traffic Analysis Guidelines place emphasis on transportation demand management strategies, trending away from automobile-centric solutions to trip reduction and on providing multi-modal solutions. In line with the City policy to promote the use of transit and walking, LADOT, at its discretion, may allow up to a 25 percent transit/walk trip credit subject to the following guidelines, on a case-by-case basis. Given the Project Site's proximity to the Metro Red Line's Pershing Square station entrance and 17 bus lines and given the Project's mix of residential and commercial land uses, the following trip credits are assumed for the Project:

- Transit Usage – 25 Percent
- Existing Active Land Use – Refer to Table V-55
- Pass-By Trips (Retail/Restaurant) – 50 Percent

Table V-55
Net Project Generated Trips With Trip Credits

Land Use	Code	Qty	Units	Daily	AM			PM		
					IN	OUT	Total	IN	OUT	Total
Proposed New Uses										
Apartment	ITE 220	406	DU	2,700	41	166	207	164	88	252
General Office	ITE 710	2.98	TSF	33	4	1	5	1	4	4
Quality Restaurant	ITE 931	2.63	TSF	237	1	1	2	13	7	20
Total New Trips (Not Including Affordable)				*2,970*	*46*	*167*	*214*	*177*	*99*	*276*
Existing Uses to be Removed										
Sit-Down Restaurant	932	0.85	TSF	-108	-5	-5	-10	-6	-4	-10
Pass-By Trips	932	*-50%*		*54*	*3*	*3*	*6*	*3*	*2*	*5*
Total Existing Trips to be Removed				*-54*	*-2*	*-2*	*-4*	*-3*	*-2*	*-5*
New Trips Minus Existing Use Trips (Total eligible for Transit Credit reduction)				*2,916*	*44*	*165*	*210*	*174*	*97*	*271*
Trip Credits (Transit)										
Transit Credit		*-25%*		*-729*	*-11*	*-41*	*-52*	*-43*	*-24*	*-68*
Affordable Housing										
Affordable Housing	LADOT	22	DU	90	4	7	11	4	3	7
Net Project Trips				**2,277**	**37**	**131**	**169**	**135**	**76**	**210**

DU = dwelling units *TSF = thousand square feet*

Affordable housing and pass-by trip discount rate from Attachment I of the LADOT Traffic Study Policies and Procedures

Source: IBI Group, 2017.

Transit Usage

A staircase leading down to the Pershing Square Station, which provides access to the Metro Red and Purple rail lines, is located directly in front of the Project Site. There is also a transit stop located adjacent to the Project Site on Hill Street that is served by Metro Local, Rapid and Express

buses with peak hour headways as short as five minutes. The maximum transit credit of 25 percent has been applied to this project.

Existing Active Land Use

Part of the existing site is a paid surface parking lot with approximately 109 spaces, including 48 tandem parking spaces. No trip credits are associated with the redevelopment of the surface parking lot. A small restaurant (Taco House) with a gross floor area of approximately 850 square feet is also located on the site, with frontage on Hill Street. The restaurant would be removed with the Project, and trip credits are assumed for the traffic generated by this use.

Pass-By Trips

The LADOT policy on pass-by trips is to apply a discount rate of 50 percent to retail and fast food restaurant uses that have a gross floor area of less than 50,000 square feet.

Affordable Housing

Consistent with the Downtown Housing Incentive Ordinance, the Project would set-aside Restricted Affordable units, including 22 units (5 percent of the total number of units) for Very-Low-Income households and one of the following: 1) 10 percent of the total number of units for Low Income households; 2) 15 percent of the total number of units for Moderate Income households; or 3) 20 percent of the total number of units for Workforce Income households.

Trip Distribution

The Project would have two access driveways leading to the parking garage - a driveway located on Hill Street that would lead to 296 residential parking spaces located in garage levels 1 through 8, and another driveway on 4th Street that would provide access to 139 residential parking spaces in the underground garage levels B1, B2 and B3. Both driveways would be located in the approximate locations where existing driveways currently serve the surface parking lot. It is assumed that 65 percent of the Project's trips would use the driveway on Hill Street, and 35 percent of the Project's trips would use the 4th Street driveway.

Regional trip distribution has been estimated using the factors presented in Appendix D of the 2010 Congestion Management Program for Los Angeles County. Trips generated by the Project are expected to follow existing ambient traffic patterns, and are not expected to change the regional distribution of traffic through the study area.

The Project's AM peak-hour inbound and outbound trip distribution percentages are illustrated on Figure V-13, and PM peak hour inbound and outbound trip distribution percentages are illustrated on Figure V-14. The AM and PM peak-hour Project trips through each study intersection are shown on Figure V-15. The Existing (Year 2017) With Project volumes during the AM and PM peak hours are shown on Figure V-16.

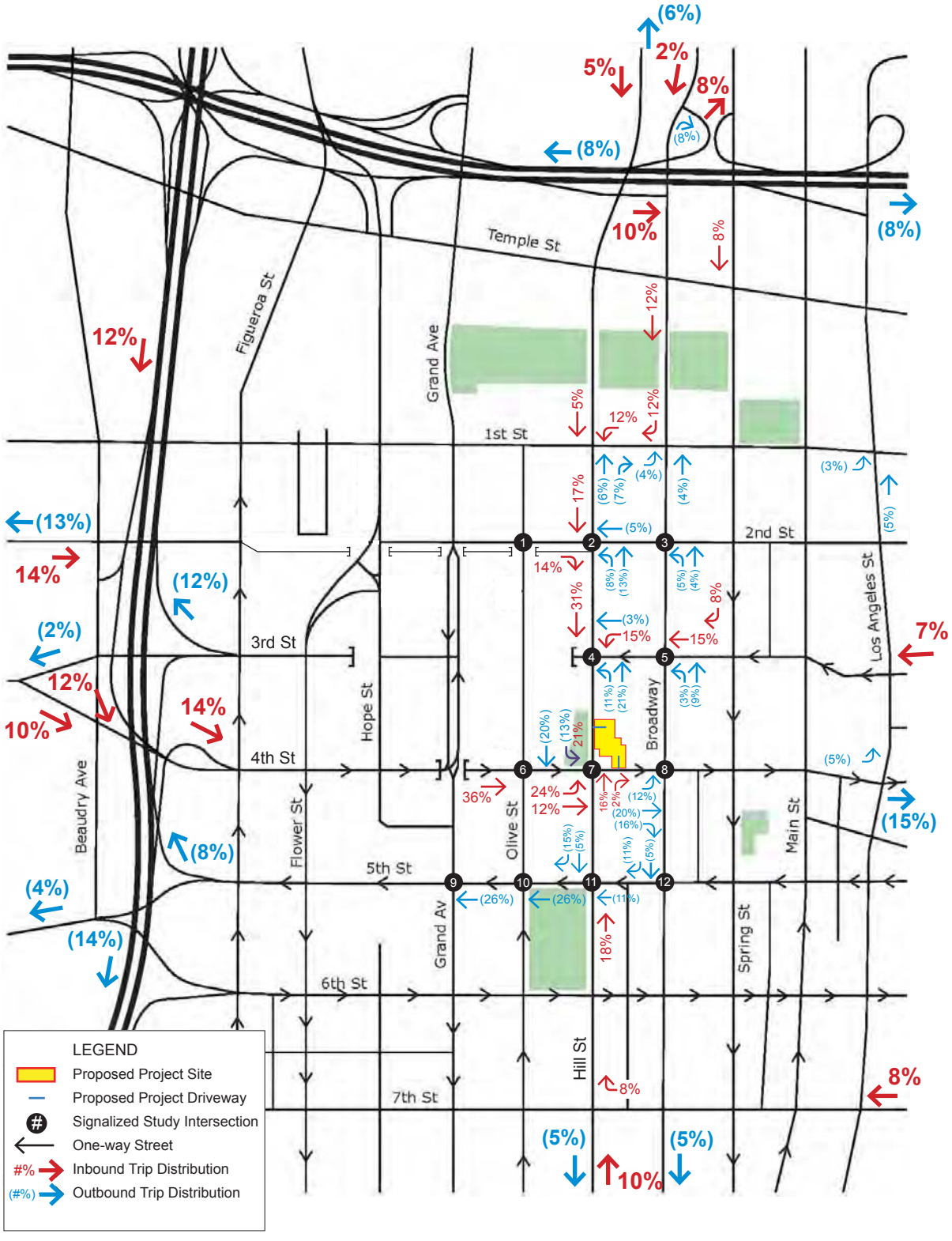


Figure V-13
Project Trip Distribution: AM Peak Hour

Source: IBI Group, June 2017.

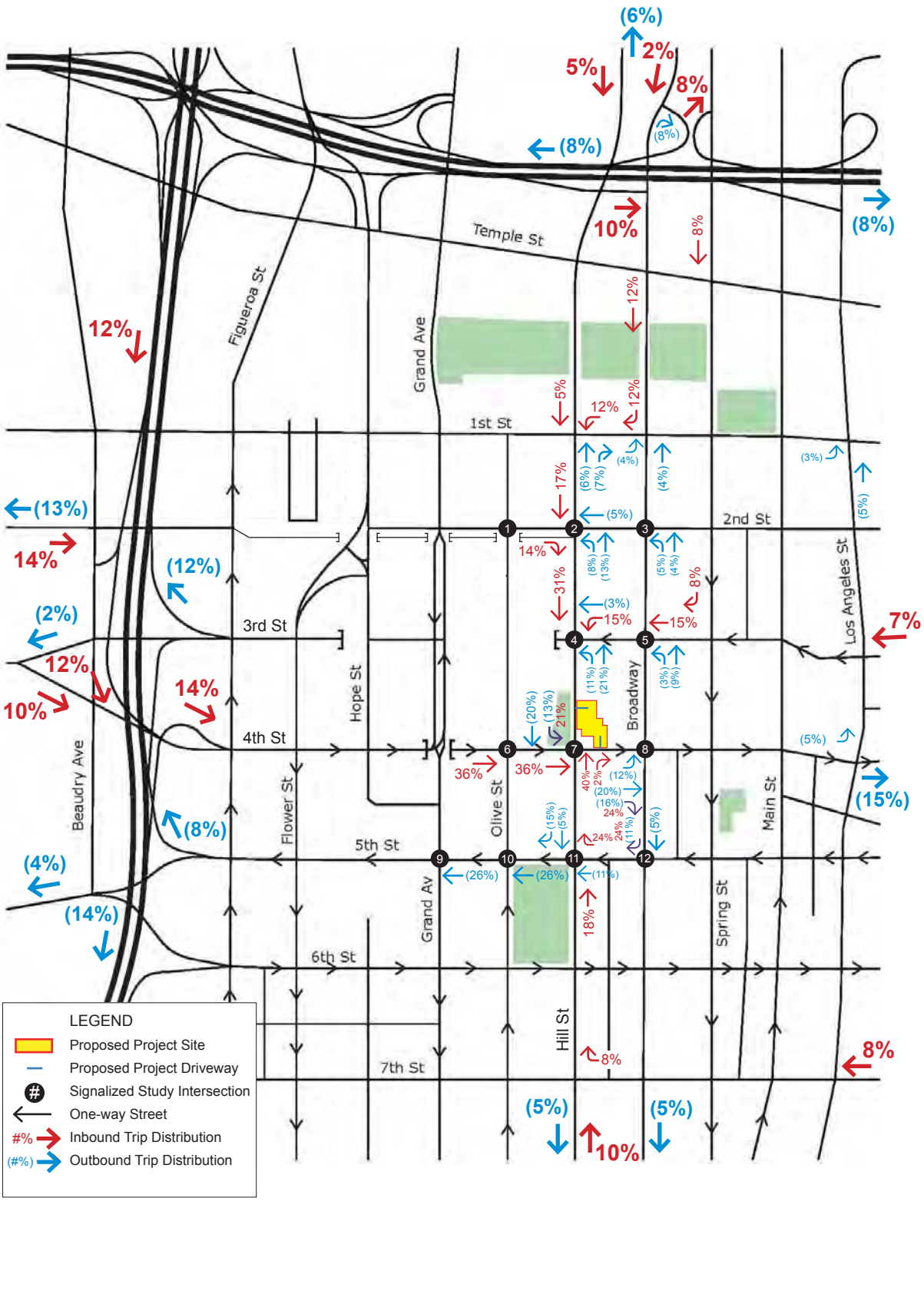
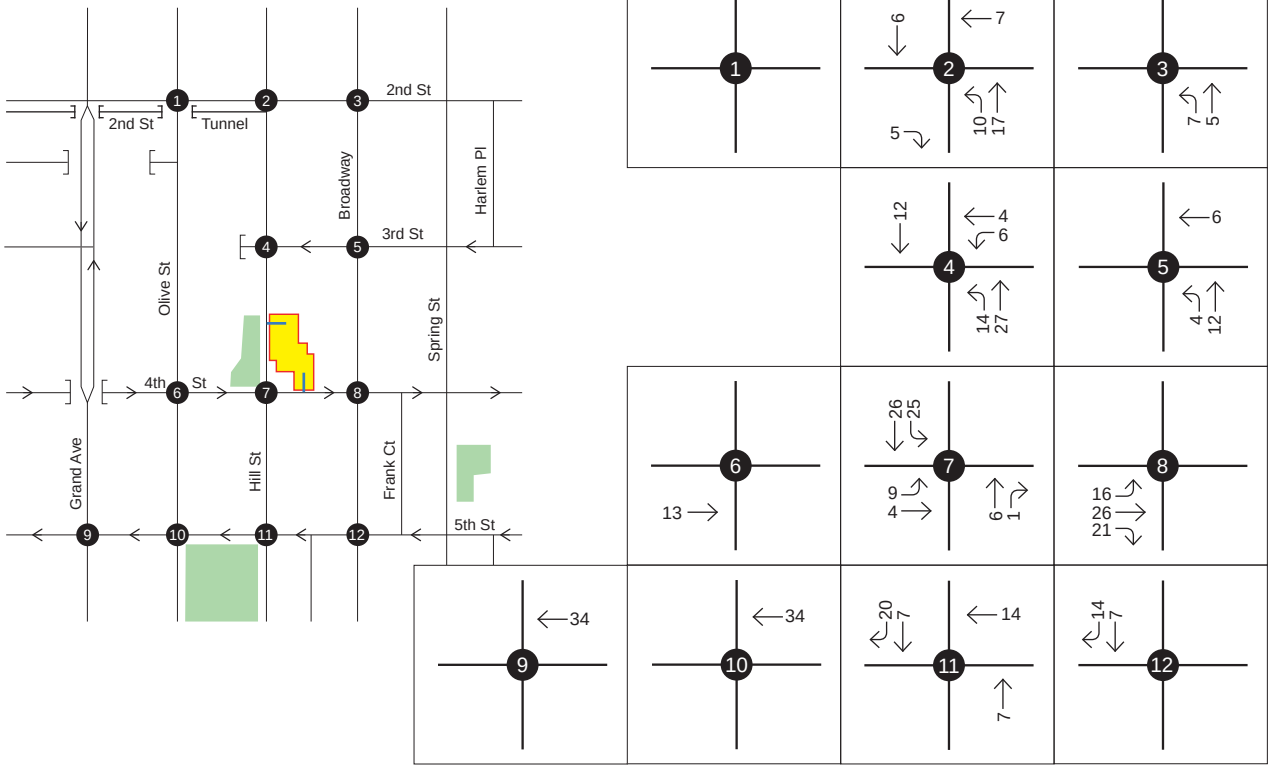


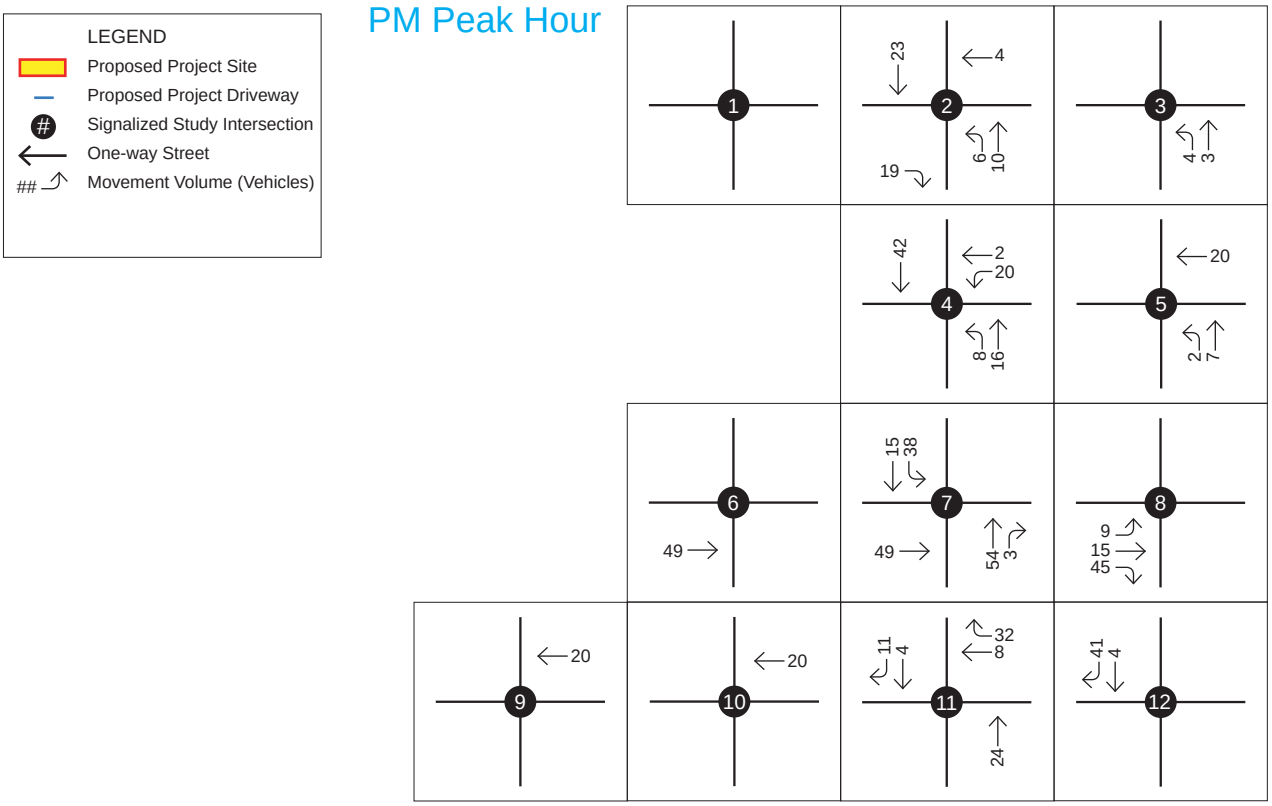
Figure V-14
Project Trip Distribution: PM Peak Hour

Source: IBI Group, June 2017.

AM Peak Hour



PM Peak Hour



LEGEND

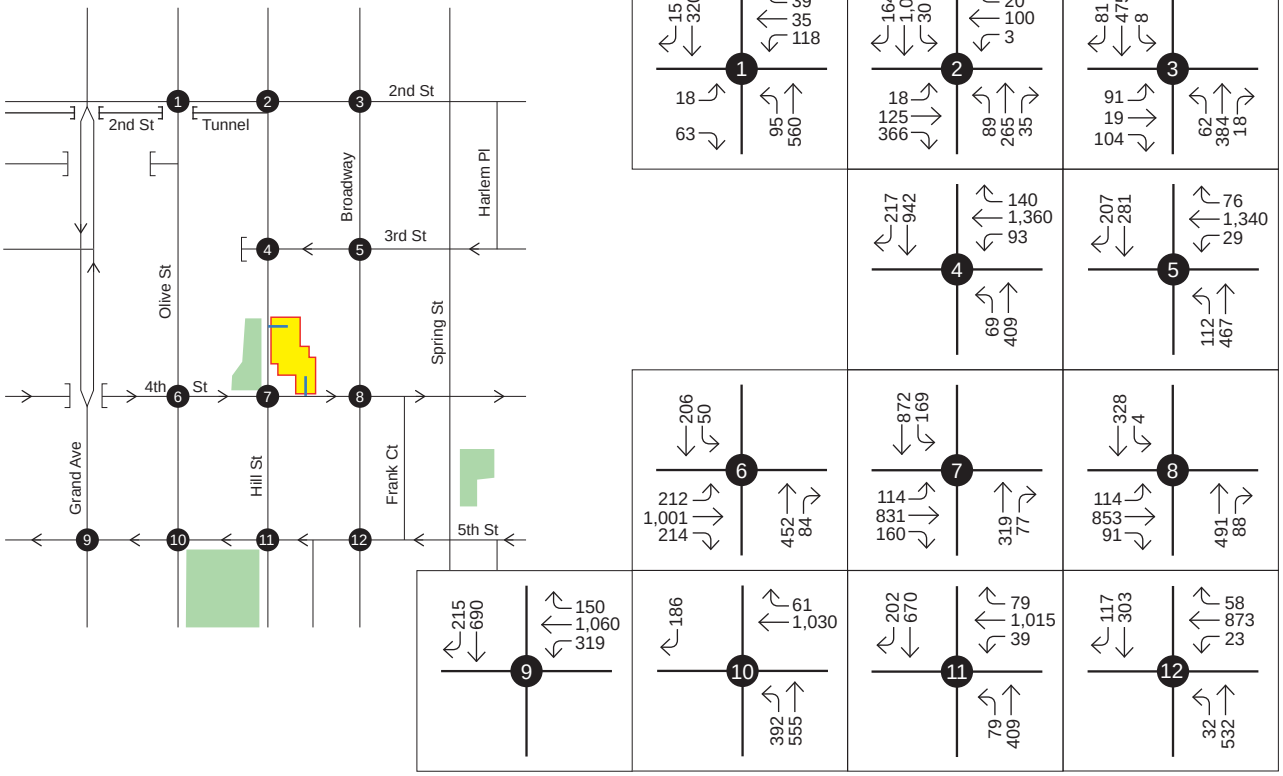
- Proposed Project Site
- Proposed Project Driveway
- # Signalized Study Intersection
- One-way Street
- ## Movement Volume (Vehicles)

NORTH

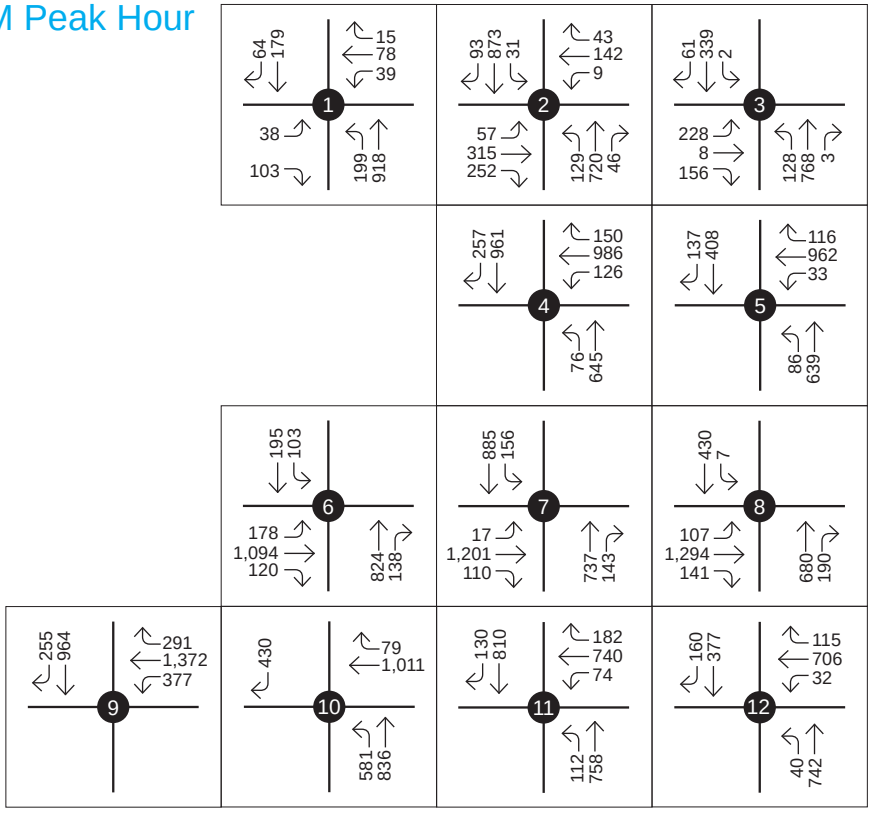
Figure V-15
Project Generated Trips

Source: IBI Group, June 2017.

AM Peak Hour



PM Peak Hour



LEGEND

- Proposed Project Site
- Proposed Project Driveway
- (#) Signalized Study Intersection
- One-way Street
- ## Movement Volume (Vehicles)

NORTH

Figure V-16
Existing (Year 2017) Traffic Volumes - With Project

Source: IBI Group, June 2017.

Existing (2017) With Project Impacts

The results of the intersection LOS analysis during the AM and PM peak hours are summarized on Tables V-50 and V-51, respectively. As shown, the Project would not result in any significant impacts in the Existing (Year 2017) conditions.

Future (2023) Impacts

Ambient Traffic Growth

An annual ambient traffic growth rate of 1.0018 percent is assumed for the study area based on factors published in Appendix D of the 2010 Congestion Management Program for Los Angeles County. The purpose of this growth rate is to account for: (a) potential unknown traffic growth that could occur between the date of the traffic counts were originally taken for the basis of existing conditions and the estimated buildout year of the Project, and (b) related projects that may never be developed and new related projects that might come online. Project Buildout (Year 2023) AM and PM peak hour volumes with ambient traffic growth only are shown on Figure V-17.

Related Projects

A list of 132 approved projects located with a 1.5-mile radius of the Project Site and trip generation data for each related project was provided by LADOT staff. Another 40 projects were provided by the Department of City Planning, bringing the related project lists total to 172. The reference number, project ID, project title, address and net trips for each related project are summarized on Table 2 in the Traffic Study (refer to Appendix M).[140] Existing data for land uses to be removed and project trip data was not provided by the Department of City Planning. So, the trip generation data included on Table 2 is estimated for projects numbered 133 through 172. The location of each related project is illustrated on Figure V-18, and the trips generated by the related projects through the study intersections are shown on Figure V-19. The peak-hour study intersection volumes for the Project Buildout (Year 2023) including ambient traffic growth and related project trips (the cumulative base traffic) are shown on Figure V-20.

[140] *The list of related projects was compiled around the same time traffic counts were taken for the Project's traffic analysis. Since that time, some of the related projects have been built out, are operational, are generating traffic trips, and are part of the existing condition. For purposes of a conservative analysis, these related projects have not been removed from the list and are accounted for in this SCEA. Inclusion of these related projects on the list provides for a conservative analysis in the event that their inclusion results in "double counting" of impacts, as the applicable significance thresholds for determining the point at which a significant impact would occur in Section V of this SCEA is triggered more easily.*

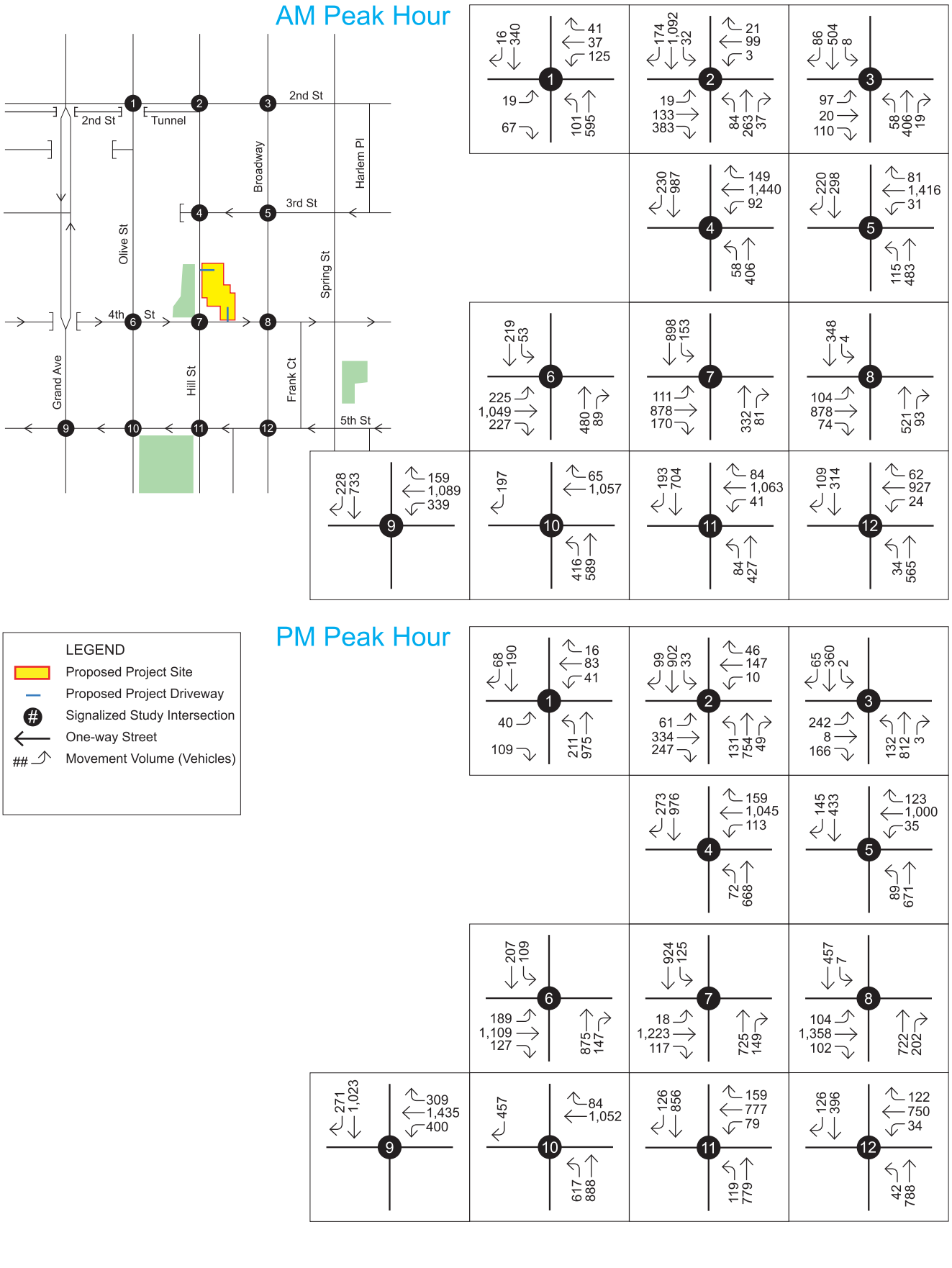


Figure V-17
Buildout (Year 2021) Volumes - Ambient Growth Only

Source: IBI Group, June 2019.

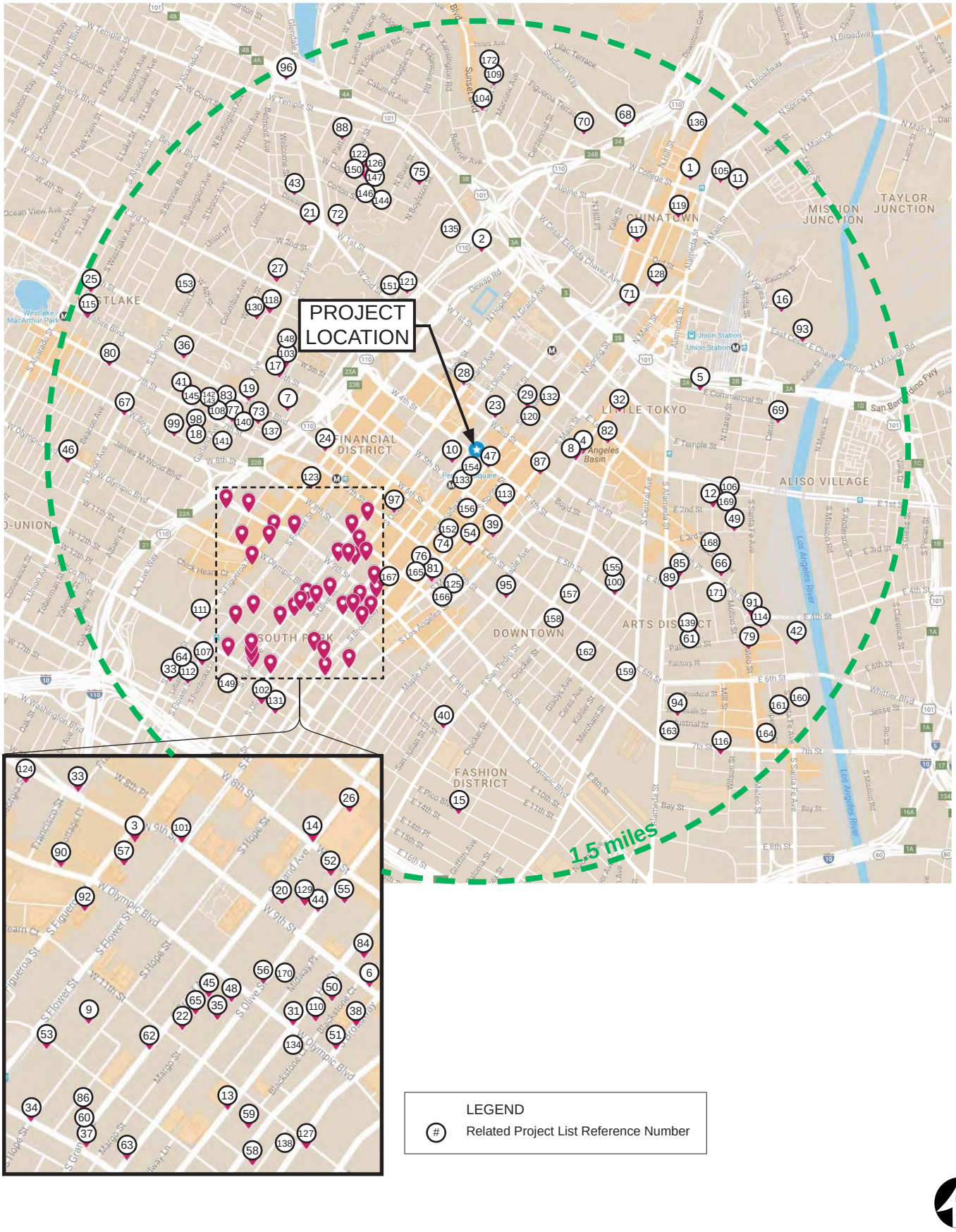
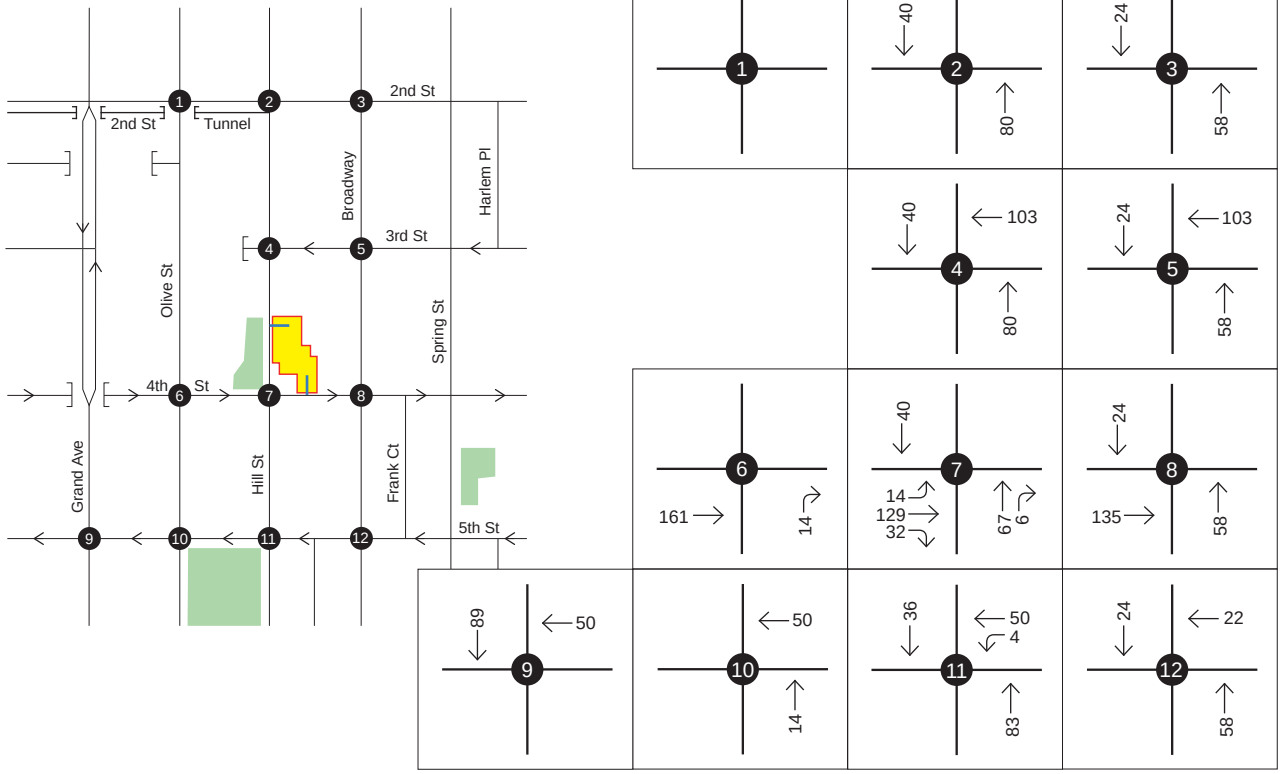


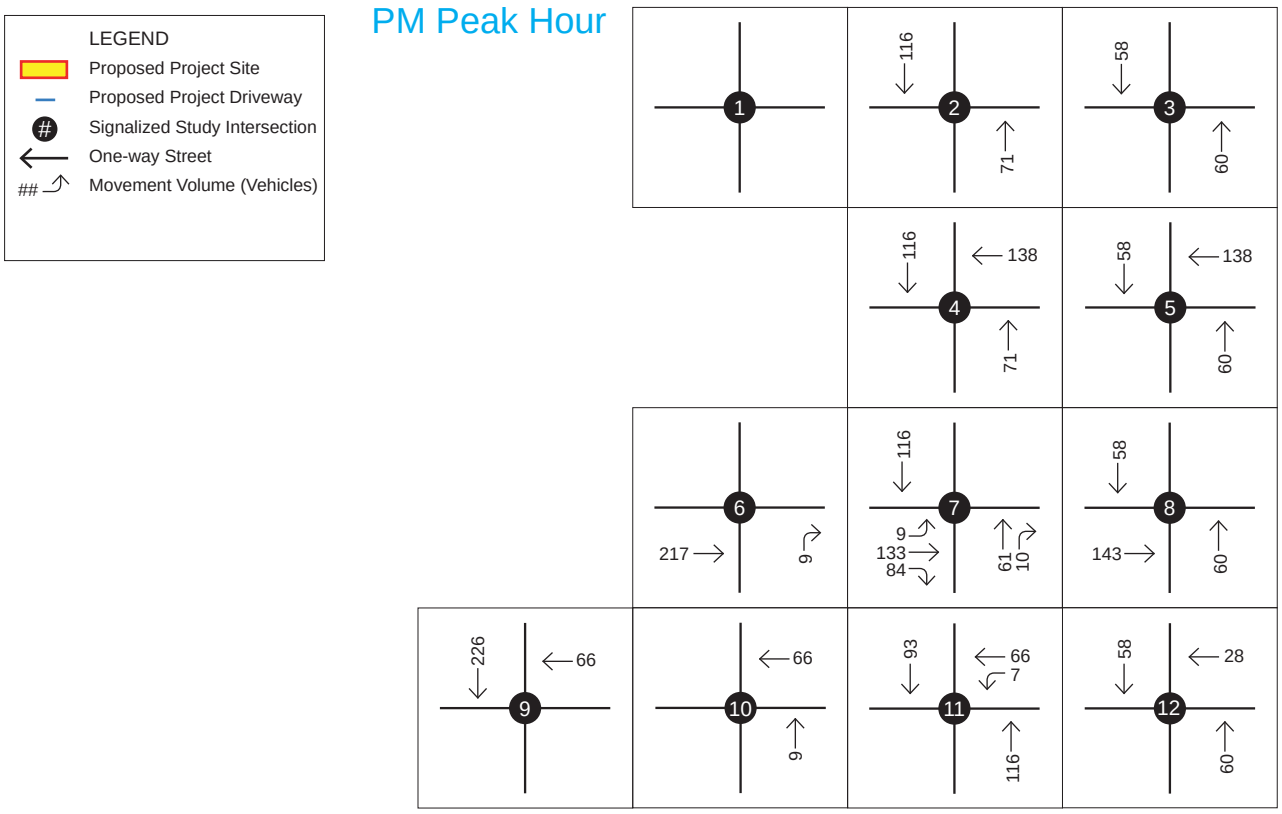
Figure V-18
Related Projects Locations

Source: IBI Group, June 2017.

AM Peak Hour



PM Peak Hour



LEGEND

- Proposed Project Site
- Proposed Project Driveway
- # Signalized Study Intersection
- One-way Street
- ## Movement Volume (Vehicles)

NORTH

Figure V-19
Cumulative Project Trips

Source: IBI Group, June 2017.

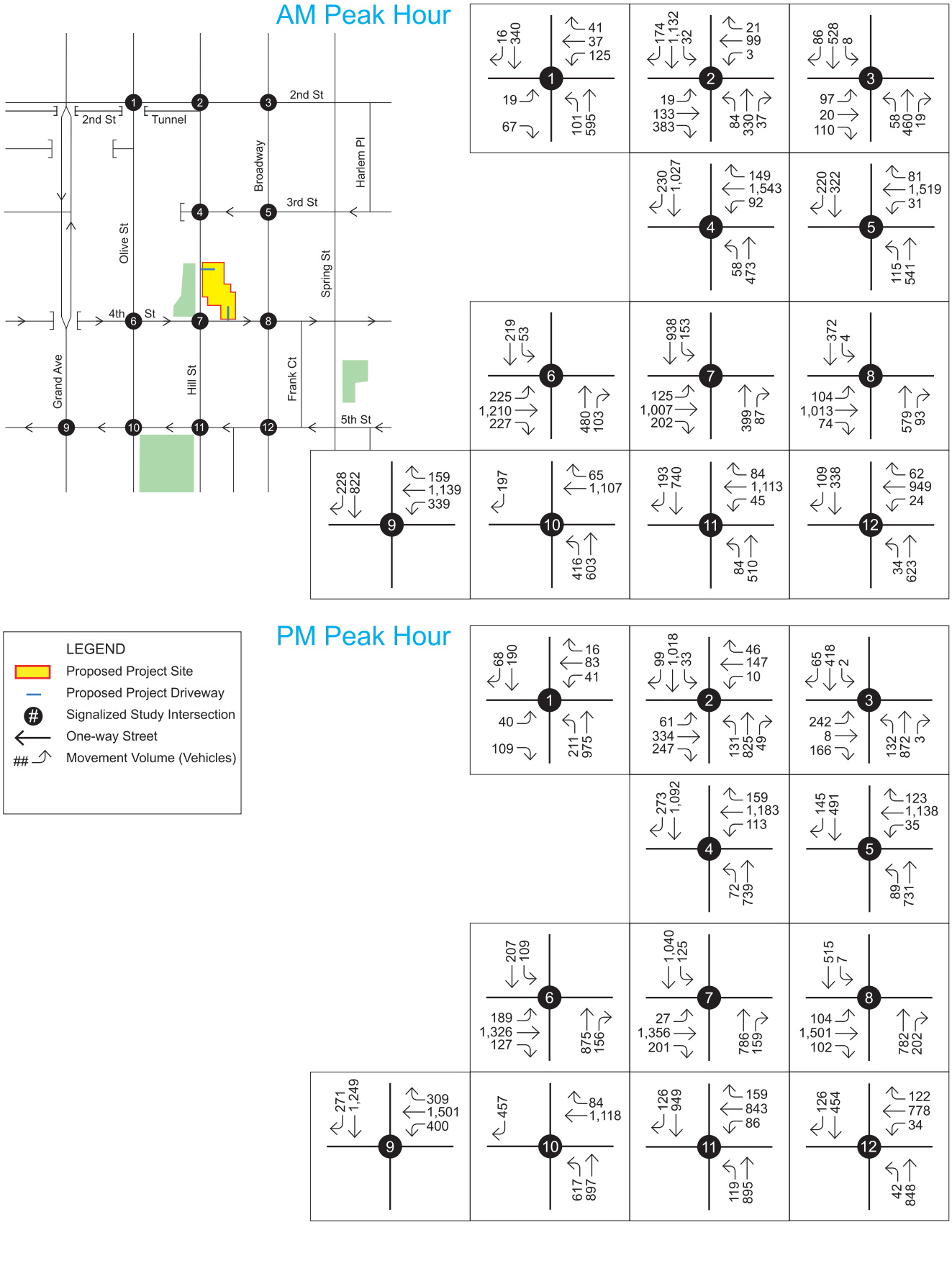


Figure V-20
Buildout (Year 2021) Volumes - Cumulative Base

Source: IBI Group, June 2019.

Future (2023) With Project Impacts

The results of the intersection LOS analysis during the AM and PM peak hours are summarized on Tables V-50 and V-51, respectively. The Project Buildout (Year 2023) AM and PM peak hour With Project volumes are shown on Figure V-21. As shown, the Project would not result in any significant impacts in the Future (2023) With Project conditions.

Construction Traffic

Project construction activities have the potential to cause: (1) temporary traffic impacts on drivers, (2) temporary loss of access for visitors entering and leaving, (3) temporary loss of bus stops or rerouting of bus lines, and (4) temporary loss of on-street parking. Traffic impacts from construction would be expected to occur as a result of the following conditions:

- Increases in truck traffic associated with export or import of fill materials and delivery of construction materials;
- Decreased capacity of access streets and haul routes due to slower movements and larger turning radii of trucks;
- Increases in automobile traffic associated with construction workers traveling to and from the Project Site;
- Reductions in existing street capacity or on-street parking from temporary lane closures necessary for the construction of roadway improvements, utility relocation or extension, and drainage facilities;
- Blockage of existing vehicle or pedestrian access to other parcels fronting streets; and
- Loss of bus stops or rerouting of bus lines.

Project construction is expected to take 29 months, during which construction activity would occur on weekdays and Saturday. It is estimated that approximately 48,000 cubic yards of material would be exported to a private landfill site, requiring approximately 3,200 to 4,800 haul trips over a 45-day period, with up to 75 trips per day, between the hours of 7:30 am and 4:00 pm, Monday through Saturday. In light of the increase in construction traffic related to the import and export of soil, the City implements a haul route monitoring program to ensure safety. As part of this program, the City quickly responds to any complaints made by the public regarding construction truck traffic to minimize related impacts. Haul routes are tracked via a Matrix and Map to identify the locations of construction sites for which a haul route was required (refer to http://navigatela.lacity.org/navigatela/).

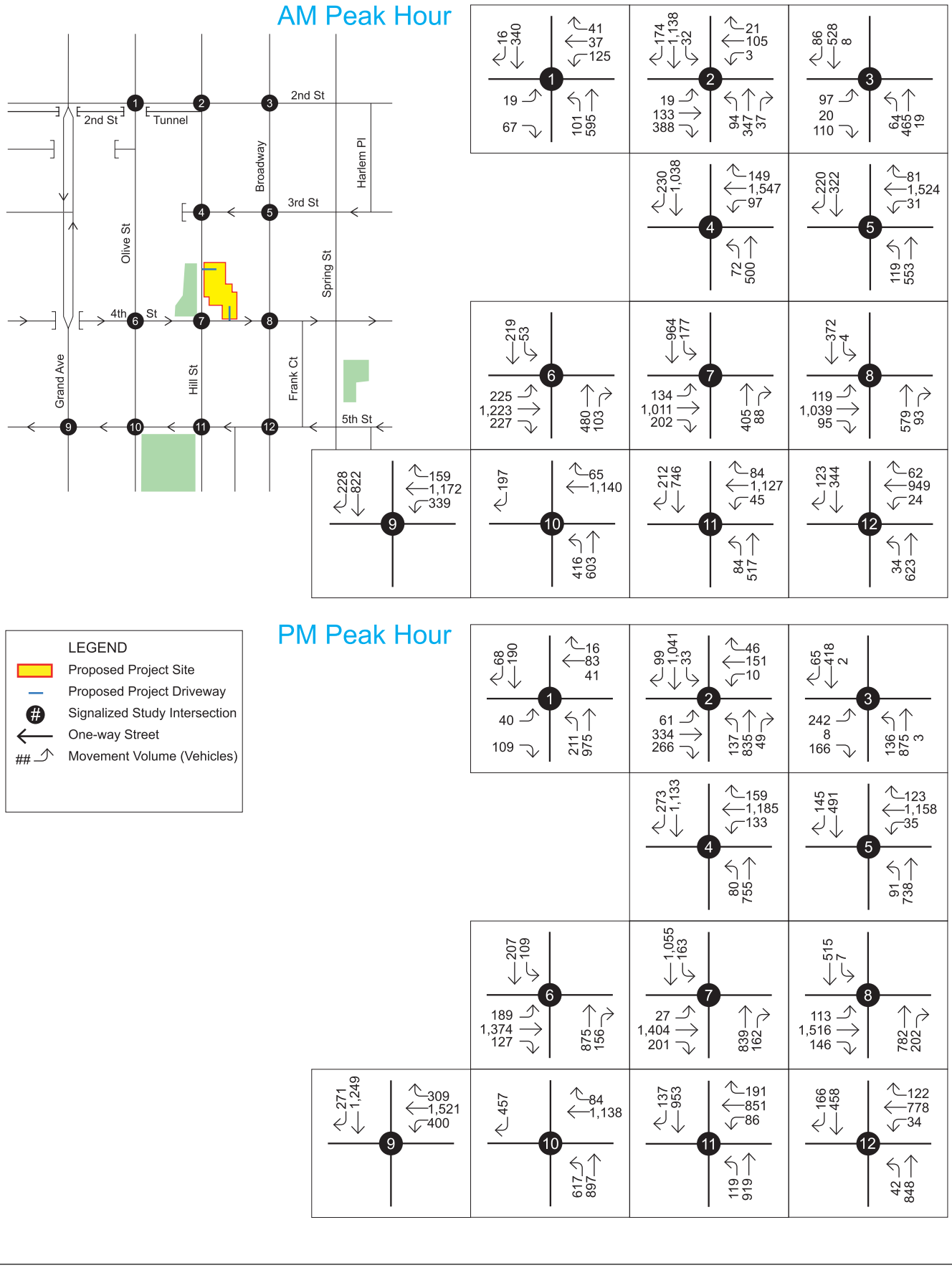


Figure V-21
Buildout (Year 2021) Volumes - With Project

Source: IBI Group, June 2019.

The Matrix is a summary list of these projects and their respective status. A review of this summary list for the Project area showed that no other development in the Project area has been issued a Haul Route approval.[141] Thus, no cumulative haul route impacts would occur.

Project construction would also generate construction-worker trips and would require delivery of construction materials. During the weekday, nearly all construction-related trips would occur outside of the peak hours. In general, the hours of construction typically require workers to be on-site before the weekday morning commuter peak period and allow them to leave before the afternoon commuter peak period. Saturday construction activity would occur outside of the typical weekend midday peak period. Thus, the large majority of construction worker trips would occur outside of the typical weekday commuter per periods and weekend midday peak period.

Prior to all construction activities, the City requires project developers to prepare a Construction Traffic Management Plan (CTMP) that is required to implemented during the construction phase and includes construction traffic conditions identified by LADOT (refer to LADOT's Traffic Assessment Letter, dated August 7, 2017 in Appendix M), such as street closure information, detour plans, haul routes, and staging plans and formalizes how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community (refer to Mitigation Measure TRAFFIC-1). The CTMP is required to be implemented during the construction phase. The CTMP is based on the nature and timing of the specific construction activities and other projects in the project vicinity and include the following elements, as appropriate:

- Providing for temporary traffic control during all construction activities adjacent to public right-of-way to improve traffic flow on public roadways (e.g., flag men):
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets;
- Rerouting construction trucks to reduce travel on congested streets to the extent feasible;
- Prohibiting construction-related vehicles from parking on surrounding public streets;
- Providing safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers and signage;
- Accommodating all equipment on-site;
- Scheduling of construction-related deliveries to reduce travel during commuter peak hours; and

[141] *Navigate LA, http://navigatela.lacity.org/navigatela/, accessed on July 24, 2017.*

- Obtaining the required permits for the truck haul routes from the City prior to issuance of any permit for the Project.

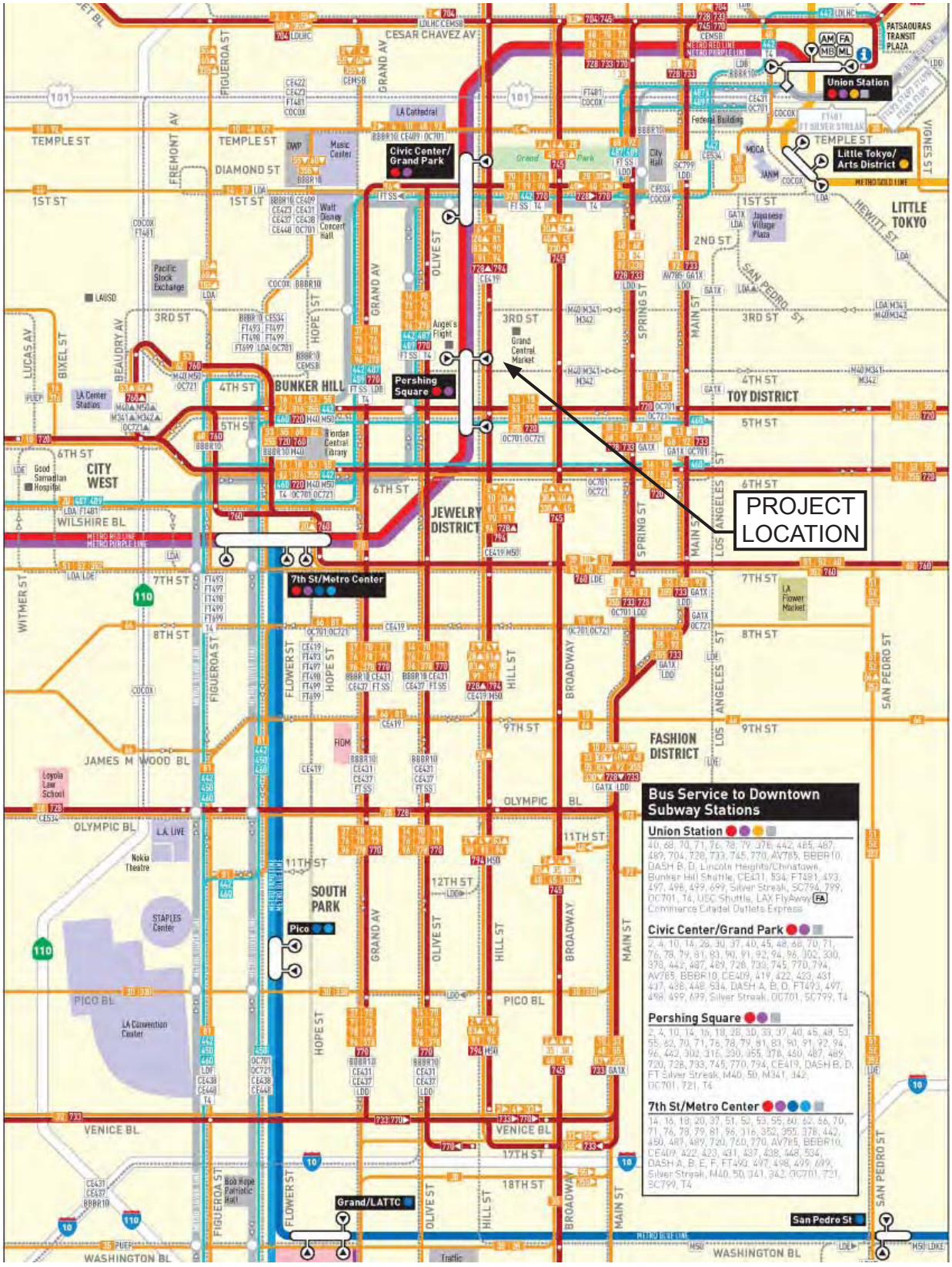
The CTMP for the Project would prohibit construction-related vehicles and construction workers from parking on surrounding public streets. Adequate parking for construction workers would be provided at a designated off-site location and shuttled to the Project Site until the proposed Project garage is sufficiently completed and usable for construction worker parking. Thus, construction workers and vehicles would not reduce the availability of spaces on streets surrounding the Project Site. Also, no bus stops would be relocated and no bus lines would be rerouted due to Project construction.

Construction of the Project would be largely contained within the Project Site and would not affect adjacent street access. In addition, any delays from additional construction traffic and/or construction activities at locations other than the streets adjacent to the Project Site would not be substantial. Certain construction activities such as roadway improvements, utility relocation or extension, and drainage facility reconstruction could require temporary lane closures, which would in turn temporarily reduce existing street capacity, but such impacts would be short-term in duration.

Additionally, the Project Applicant would be required to implement Mitigation Measure TRAFFIC-1 to minimize pedestrian safety impacts during the Project's construction phase. With the implementation of safety procedures and other controls set forth in the required CTMP, construction would not create hazards for roadway travelers or bus riders. The impacts of construction activity on the overall transportation system would be temporary in nature and would cause minimal interruption to the regular operation of the facilities surrounding the Project Site. Impacts on traffic associated with construction (e.g., an intermittent reduction in street and intersection operating capacity) are typically considered short-term impacts, but not significant. Therefore, Project construction-traffic impacts would be less than significant.

Public Transit

The Project Site is well served by public transit, including Metro Local Lines 2, 4, 10, 28, 30, 35, 40, 45, 81, 83, 90, 91, 94, 330, 728, 745, and 794; LADOT Community Express Line 419; and Metro Red and Purple lines. Ridership information for public transit near the Project Site is shown on Table III-2 in Section III (SCEA Criteria and Consistency). Transit stops and lines near the Project Site are shown on Figure V-22. As shown above on Table V-55, the Project would generate approximately 729 daily transit trips, including approximately 52 AM peak-hour trips and 68 PM peak-hour trips. As shown on Table III-2 in Section III (SCEA Criteria and Consistency), the total average ridership for transit serving the Project Site is 273,310 weekday trips, 181,404 Saturday trips, and 147,319 Sunday trips. Conservatively assuming that the Project's estimated 729 daily transit trips are new trips, the Project's transit trips would account for a potential 0.3 percent increase in weekday transit trips, a 0.4 percent increase in Saturday trips, and a 0.5 percent increase in Sunday trips.



Excerpt from the Los Angeles Metro Bus and Rail System Map

Figure V-22
Transit Stops and Lines Near the Project Site

Source: IBI Group, June 2017.

This increase in transit trips would be consistent with the regional policies, such as those included in the 2016-2040 RTP/SCS, to reduce reliance on vehicles, reduce VMT, and to increase transit ridership. For these reasons, Project impacts related to transit would be less than significant.

Metro Adjacent Development

As discussed in Section II (Project Description), the Project Site includes the airspace starting at approximately 20 feet above the Metro subway portal located at the northeast corner of 4th Street and Hill Street, adjacent to the Project Site. The Project is designed to use the airspace and when constructed, the Project would provide a permanent overhang above the Metro subway portal. The Metro Board has authorized its staff to proceed and document the granting of previously agreed upon foundation easements and related access and maintenance easements, as discussed in Section II (Project Description). The Project Applicant has also proposed to provide certain enhanced paving, landscaping, and furniture on the Metro Transit Plaza in connection with the Project. The Project Applicant would be required by the City and Metro to coordinate with Metro during the Project's construction phase to ensure continued access to the Metro subway portal and other nearby transit lines. Additionally, Metro would require the Project Applicant to comply with the applicable guidelines outlined in Metro's *Metro Adjacent Development Handbook* to mimize impacts to Metro operations. Through continued coordination and compliance with existing guidelines, Project impacts related to Metro would be less than significant.

b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?[142]

Less Than Significant Impact. The Traffic Impact Analysis (TIA) guidelines of the 2010 Congestion Management Program (CMP) for Los Angeles County require analysis of all CMP arterial monitoring locations where a project could add a total of 50 or more trips during either peak hour. Additionally, all freeway monitoring locations where a project could add 150 or more trips in either direction during the peak hours are to be analyzed.

Under SB 375, when going forward with an SCEA (such as this document), project-specific and cumulative impacts associated with cars and light trucks on the regional transportation network are not required to be assessed, pursuant to PRC 21155.2(b) and 21159.28(a). To the extent that these impacts are included herein is done so for informational purposes only.

[142] *While this Appendix G Checklist Question has been modified by the Natural Resources Agency to address consistency with CEQA Guidelines section 15064.3, subdivision (b), which relates to use of the vehicle miles traveled (VMT) as the methodology for evaluating traffic impact, the City has not yet adopted a VMT methodology to address this updated Appendix G Checklist Question. Thus, the analysis is based on LADOT's adopted methodology under its Transportation Impact Study Guidelines, which requires use of LOS to evaluate traffic impacts of a project.*

Arterial Monitoring Locations

The following CMP arterial monitoring locations are the closest to the Project Site:

- No. 43: Alameda Street/Washington Boulevard
- No. 85: Wilshire Boulevard/Alvarado Boulevard

The Project would not add 50 or more trips during either the AM or PM weekday peak hours (i.e., of adjacent street traffic) at the CMP arterial monitoring locations listed above. Thus, no further review of potential impacts to intersection monitoring locations that are part of the CMP highway system is required. Therefore, Project impacts related to CMP arterial monitoring locations would be less than significant.

Freeway Monitoring Locations

The following CMP freeway monitoring locations are closest to the Project Site:

- No. 1013: Interstate 10, Budlong Avenue
- No. 1014: Interstate 10, East Los Angeles City Limit
- No. 1036: US Route 101, north of Vignes Street
- No. 1048: Interstate 110, south of US Route 101

The Project would not add 150 or more trips (in either direction) during either the AM or PM weekday peak hours to CMP freeway monitoring locations listed above Thus, no further review of potential impacts to freeway monitoring locations that are part of the CMP highway system is required. Therefore, Project impacts related to CMP freeway monitoring locations would be less than significant.

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

Less Than Significant Impact. The Project does not include development of any new roadways or intersections. Vehicular access to the Project Site would be provided via two driveways and an existing alley. Both driveways are proposed in locations where driveways currently serve the existing surface parking lot. The first driveway is located on Hill Street, approximately 160 feet north of 4th Street. Vehicles entering the site while travelling southbound on Hill Street would be able to turn left into Driveway 1 via an existing two-way left turn lane. Vehicles exiting Driveway 1 would be able to turn left or right onto Hill Street. The second driveway, Driveway 2, would be located on 4th Street, approximately 135 feet east of Hill Street and 175 feet west of Broadway. Fourth Street is a one-way street carrying eastbound traffic only. Driveway 2 would be accessed via left turns in and left turns out only. All ingress/egress points associated with the Project would be designed and constructed in accordance with the requirements of the City's Department of Building and Safety, the City's Department of Public Works, and LADOT. Therefore, Project impacts related to roadway hazards would be less than significant.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact. Prior to issuance of a building permit, the Project Applicant would be required to submit parking and driveway plans to the Bureau of Engineering, LAFD, and LADOT for approval to ensure that the Project complies with code-required emergency access. Through compliance with existing City regulations, the Project would not result in any significant impacts related to emergency access.

Cumulative Impacts

Cumulative traffic impacts were addressed previously under "Future (2023) With Project Impacts." As shown on Tables V-50 and V-51, no significant cumulative impacts would occur.

Mitigation Measures (Transportation/Traffic)

To ensure that Project impacts related to construction traffic and pedestrian safety would be less than significant, the following mitigation measure is required:

MM-TRAFFIC-1: Prior to issuance of a demolition permit, in coordination with LADOT and the Department of Building and Safety, the Project Applicant shall prepare a detailed Construction Traffic Management Plan, including street closure information, detour plans, haul routes, and staging plans The Construction Traffic Management Plan shall outline how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Traffic Management Plan shall be based on the nature and timing of specific construction activities and other projects in the vicinity, and shall include the following elements as appropriate:

- Providing for temporary traffic control during all construction activities adjacent to public right-of-way to improve traffic flow on public roadways (e.g., flag men):
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets;
- Rerouting construction trucks to reduce travel on congested streets to the extent feasible;
- Prohibiting construction-related vehicles from parking on surrounding public streets;
- Providing safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers and signage;

- Accommodating all equipment on-site;
- Scheduling of construction-related deliveries to reduce travel during commuter peak hours; and
- Obtaining the required permits for the truck haul routes from the City prior to issuance of any permit for the Project.

18. TRIBAL CULTURAL RESOURCES

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 size and scope of the landscape, sacred place, or object with cultural value to a California Native tribe, and that is:

i) 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

Less Than Significant Impact. The Project Site is currently developed with a restaurant building and surface parking. As discussed in response to Checklist Question 5(a), the Project Site does not contain any resources that are listed or eligible for listing in the California Register, National Register, or any other local register or historical resources. Additionally, no significant Tribal Cultural resources are known to exist at the Project Site. As discussed in response to Checklist Question 5(b), based on a records search conducted by the South Central Coast Information Center, 11 archaeological sites have been recorded within a 0.5-mile radius of the Project Site, and no sites have been recorded at the Project Site; no resources have been identified at the Project Site (refer to Appendix F). During the Project's construction phase, excavation of the Project Site to approximately 40 feet below ground surface would occur to develop the proposed subterranean parking levels. It is possible that unknown Tribal Cultural resources could exist at the Project Site that could be encountered within the underlying alluvium, given the relative sensitivity of the Project Site region. Nonetheless, the Project Applicant would be required to implement the City's Condition of Approval related to the inadvertent discovery of Tribal Cultural resources. In the event that objects or artifacts that could be Tribal Cultural resources are encountered during the course of any ground disturbance activities, all such activities shall temporarily cease on the Project Site until the potential Tribal Cultural resources are properly assessed and addressed pursuant to the process set forth below.[143]

[143] *Ground disturbance activities shall include the following: excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing peat, clearing, pounding posts, augering, backfilling, blasting, stripping topsoil or a similar activity*

- Upon a discovery of a potential Tribal Cultural resource, the Project Permittee shall immediately stop all ground disturbance activities and contact the following: (1) all California Native American tribes that have informed the City they are traditionally and culturally affiliated with the geographic area of the proposed project; (2) and the Department of City Planning at (213) 473-9723.

- If the City determines, pursuant to PRC Section 21074 (a)(2), that the object or artifact appears to be tribal cultural resource, the City shall provide any effected tribe a reasonable period of time, not less than 14 days, to conduct a site visit and make recommendations to the Project Permittee and the City regarding the monitoring of future ground disturbance activities, as well as the treatment and disposition of any discovered Tribal Cultural resources.

- The Project Permittee shall implement the tribe's recommendations if a qualified archaeologist, retained by the City and paid for by the project Permittee, reasonably concludes that the tribe's recommendations are reasonable and feasible.

- The Project Permittee shall submit a tribal cultural resource monitoring plan to the City that includes all recommendations from the City and any effected tribes that have been reviewed and determined by the qualified archaeologist to be reasonable and feasible. The Project Permittee shall not be allowed to recommence ground disturbance activities until this plan is approved by the City.

- If the Project Permittee does not accept a particular recommendation determined to be reasonable and feasible by the qualified archaeologist, the project Permittee may request mediation by a mediator agreed to by the Permittee and the City who has the requisite professional qualifications and experience to mediate such a dispute. The Project Permittee shall pay any costs associated with the mediation.

- The Project Permittee may recommence ground disturbance activities outside of a specified radius of the discovery site, so long as this radius has been reviewed by the qualified archaeologist and determined to be reasonable and appropriate.

- Copies of any subsequent prehistoric archaeological study, tribal cultural resources study or report, detailing the nature of any significant Tribal Cultural resources, remedial actions taken, and disposition of any significant Tribal Cultural resources shall be submitted to the SCCIC at California State University, Fullerton.

- Notwithstanding the above, any information determined to be confidential in nature, by the City Attorney's office, shall be excluded from submission to the SCCIC or the general public under the applicable provisions of the California Public Records Act, PRC, and shall comply with the City's AB 52 Confidentiality Protocols.

Compliance with this Condition of Approval would ensure that Project impacts related to unknown Tribal Cultural resources would be less than significant.

ii) 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, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact. Approved by Governor Brown on September 25, 2014, Assembly Bill 52 (AB 52) establishes a formal consultation process for California Native American Tribes to identify potential significant impacts to Tribal Cultural Resources, as defined in Public Resources Code Section 21074, as part of CEQA. Effective July 1, 2015, AB 52 applies to projects that file a Notice of Preparation or Notice of Negative Declaration/Mitigated Negative Declaration (or other similar CEQA document) on or after July 1, 2015. As specified in AB 52, lead agencies must provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if the tribe has submitted a written request to be notified. The tribe must respond to the lead agency within 30 days of receipt of the notification if it wishes to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the request for consultation.

Pursuant to AB 52, the Department of City Planning notified Native American tribes as to the Project with a 30-day consultation period on February 24, 2017. None of the tribes responded to the request for consultation. As discussed in response to Checklist Question 5(b), based on a records search conducted by the South Central Coast Information Center, 11 archaeological sites have been recorded within a 0.5-mile radius of the Project site, and no sites have been recorded at the Project site; no resources have been identified at the Project site (refer to Appendix F). During the Project's construction phase, excavation of the Project site to approximately 40 feet below ground surface would occur to develop the proposed subterranean parking levels. It is possible that unknown Tribal Cultural Resources could exist at the Project site that could be encountered within the underlying alluvium, given the relative sensitivity of the Project region. Nonetheless, the Project Applicant would be required to implement the City's Condition of Approval related to the inadvertent discovery of Tribal Cultural resources outlined above, which would ensure that Project impacts related to unknown Tribal Cultural resources would be less than significant.

Cumulative Impacts

Impacts related to Tribal Cultural resources tend to be site-specific and are assessed on a site-by-site basis. The City would require the applicants of each of the related projects to assess, determine, and mitigate any potential impacts related to cultural resources that could occur as a result of development, as necessary. As discussed previously, through compliance with existing laws and the City's Conditions of Approval, Project impacts associated with Tribal Cultural resources would be less than significant. However, the occurrence of these impacts would be limited to the Project site and would not contribute to any potentially significant Tribal Cultural

resources impacts that could occur at the sites of the related projects. As such, the proposed Project would not contribute to any potential cumulative impacts related to Tribal Cultural resources. Therefore, cumulative impacts related to Tribal Cultural resources would be less than significant.

19. UTILITIES AND SERVICE SYSTEMS

a) Would the project require or result in the relocation or construction of new or expanded water or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. LADWP owns and operates the Los Angeles Aqueduct Filtration Plant (LAAFP) located in the Sylmar community of the City. The LAAFP treats City water prior to distribution throughout LADWP's Central Water Service Area. The designated treatment capacity of the LAAFP is 600 mgd, with an average plant flow of 550 mgd during the summer months and 450 mgd during the remaining months of the year. Thus, the facility has between 50 to 150 mgd of remaining capacity, depending on the season. As shown on Table V-56, the Project would consume approximately 48,329 gallons of water per day (or 0.048 mgd). With the remaining capacity of approximately 50 to 150 mgd, the LAAFP would have adequate capacity to serve the Project. Thus, no new or expanded water treatment facilities would be required to handle the Project's additional water demands. Therefore, Project impacts related to water treatment would be less than significant.

Table V-56
Estimated Project Wastewater Generation and Water Consumption

Land Use	Size	Wastewater Generation and Water Consumption Rate[1]	Total (gallons/day)
Residential - Studio	226 du	80 gpd/du	18,080
Residential - 1 bedroom	75 du	120 pgd/du	9,000
Residential - 2 bedroom	127 du	160 gpd/du	20,320
Commercial	5,610 sf	0.08 gpd/du	449
		Total	**47,849**

du = dwelling unit gpd = gallon per day sf = square feet

Note: Wastewater generation is assumed to equal water consumption. Also, numbers have been rounded up to the nearest whole number.
Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, March 20, 2002.

As discussed in response to Checklist Question 19(a), the Project site is located within the service area of the Hyperion Water Reclamation Plant (HWRP), which has been designed to treat approximately 450 million gallons per day of wastewater for full secondary treatment and currently

treats approximately 275 million gallons per day.[144] Full secondary treatment prevents virtually all particles suspended in the effluent from being discharged into the Pacific Ocean and is consistent with the LARWQCB) discharge polices for the Santa Monica Bay. The HWRP currently treats an average daily flow of approximately 240 mgd and thus, is operating below its design capacity.[145] As shown on Table V-56, the Project would generate approximately 47,849 gallons of wastewater per day (or 0.047 mgd). With a remaining daily capacity of 210 mgd, the HWRP would have adequate capacity to serve the Project. Additionally, detailed gauging and evaluation of the existing sewer system adjacent to the Project site would be required as part of the permitting process to identify a specific sewer connection point as is standard City practice. If necessary, the Project Applicant would be required to build improvements to convey wastewater to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit from the City would be made at that time. Thus, no new or expanded wastewater treatment facilities would be required to handle the Project's additional wastewater treatment demands. Therefore, Project impacts related to wastewater treatment would be less than significant.

Regarding stormwater drainage facilities, refer to response to Checklist Question 10(c)(iii). As discussed there, Project impacts related to stormwater drainage would be less than significant.

Regarding electric power and natural gas facilities, refer to response to Checklist Question 4(a). As discussed there, Project connections to existing local electrical and natural gas facilities would not result in significant impacts.

Regarding telecommunication facilities, the Project would require construction of new on-site telecommunications infrastructure to serve the new building. Construction impacts associated with the installation of telecommunications infrastructure would primarily involve trenching within the boundaries of the Project's construction zone in order to place the lines below surface. Installation of new telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the existing system. All on-site work would be within overall Project construction, which has been analyzed. No upgrades to off-site telecommunications systems would be required of the Project. Any work that may affect services to the existing telecommunications lines would be coordinated with service providers. Therefore, Project impacts related to telecommunications facilities would be less than significant.

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[144] *City of Los Angeleshttps://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=xv7pssoaw_4&_afrLoop=2072052347671516#!, April 2017.*

[145] *City of Los Angeles, Sewer System Management Plan, Hyperion Sanitary Sewer System, February 2017, Overview, https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdey/~edisp/cnt012544.pdf, accessed June 26, 2017.*

Cumulative Impacts

Implementation of the related projects listed on Table II-3 in Section II (Project Description) would increase the need for water and wastewater treatment. As shown on Table V-57, the Project in combination with the related projects would require wastewater and water treatment for approximately 7,862,685 gallons per day (or 7.8 mgd) The remaining treatment capacity of the LAAFP (50 to 150 mgd) would accommodate the wastewater treatment requirements of the related projects Further, the remaining treatment capacity of the HWRP (210 mgd) would accommodate the wastewater treatment requirements of the related projects No new or upgraded treatment facilities would be required. All of the related projects are located in urbanized areas of the City on sites that have already been developed. The sites of the related projects are already served by existing stormwater drainage, electric power, natural gas, and telecommunications facilities. The applicants of the related projects likely would be required to construct on-site connections to the existing utilities located near the sites. Similar to the Project, the related projects would not require the need for new or expanded utility facilities. Therefore, cumulative impacts related to utility infrastructure would be less than significant.

Table V-57
Estimated Cumulative Wastewater Generation and Water Consumption

Land Use	Size	Wastewater Generation and Water Consumption Rate[1]	Total (gallons/day)
Single-Family Residential	6 du	230 gpd/du	1,380
Multi-Family Residential	37,097 du	160 gpd/du	5,935,520
Retail	1,942,551 sf	0.08 gpd/sf	155,404
Restaurant	599,770 sf	0.3 gpd/sf	179,931
Commercial	907,015 sf	0.08 gpd/sf	72,561
Office	4,994,926 sf	0.15 gpd/sf	749,239
School	1,212 students	8 gpd/student	9,696
Hotel	5,294 rooms	130 gpd/room	688,220
Supermarket	73,020 sf	0.08 gpd/sf	5,842
Gym	25,383 sf	0.25 gpd/sf	6,346
Medical	16,500 sf	0.25 gpd/sf	4,125
Cinema	1,643 seats	4 gpd/seat	6,572
		Total Related Projects	*7,862,685*
		Total Project	***47,849***
		Total Cumulative	**7,862,685**

du = dwelling unit gpd = gallon per day sf = square feet

Note: Wastewater generation is assumed to equal water consumption. The wastewater generation and water consumption shown on this table does not reflect any reductions associated with water conservation measures or the removal of existing uses. Numbers have been rounded to the nearest whole number.

Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, March 20, 2002.

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

Less Than Significant Impact. To anticipate and plan for future water supply needs, LADWP develops and updates their Urban Water Management Plan (UWMP) every five years. The UWMP is the planning document for future water demands for the City and identifies short-term and long-term water resources management measures to meet growing water demand during normal, single-dry, and multiple-dry years over a 20-year horizon. The City's water demand in the 2015 UWMP is based on the growth forecasts contained in SCAG's 2012-2035 RTP/SCS. According to LADWP, Projects that conform to the demographic projection from SCAG's RTP/SCS and would be developed on sites that are currently within LADWP's service area, are considered to have been accounted for the UWMP and as such, LADWP can meet the water supply demands of those projects.

As shown on Table V-57, the Project would consume approximately 47,849 gallons of water per day. As discussed previously in response to Checklist Question 10(b), the Project's population growth is consistent with the demographic projection from SCAG's 2016-2040 RTP/SCS. Thus, the Project's water supply demand has been accounted for in LADWP's UWMP. As such, the Project would not require new or additional water supply or entitlements. Therefore, Project impacts related to water supply would be less than significant.

Cumulative Impacts

As discussed previously, the Project would result in an increase in water consumption of approximately 48,329 gallons of water per day. Implementation of the related projects listed on Table II-3 in Section II (Project Description) would result in a net increase in water consumption within LADWP's service area. Similar to the Project, the water supply needs of those related projects that are consistent with the City's General Plan have been accounted for in the most recently adopted UWMP. However, the applicants of all projects within LADWP's service area would be required to consult with LADWP to determine the specific water supply needs of the project, appropriate water conservation measures to minimize water usage, and LADWP's ability to serve the project. Through this process, cumulative impacts related to water supply would be less than significant.

c) Would the project 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?

Less Than Significant Impact. As discussed in response to Checklist Question 19(b), with a remaining daily capacity of 210 mgd, the HWRP would have adequate capacity to serve the Project. Therefore, Project impacts related to wastewater treatment would be less than significant.

d) Would the project generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. A significant impact could occur if the Project were to increase solid waste generation to a degree such that the existing and projected landfill capacity would be insufficient to accommodate the additional solid waste. Based on the Thresholds Guide, the determination of whether a project results in a significant impact on solid waste shall be made considering the following factors: (a) amount of projected waste generation, diversion, and disposal during demolition, construction, and operation of the Project, considering proposed design and operational features that could reduce typical waste generation rates; (b) need for additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated waste; and (c) whether the Project conflicts with solid waste policies and objectives in the Source Reduction and Recycling Element (SRRE) or its updates, the Solid Waste Management Policy Plan (CiSWMPP), Framework Element of the Curbside Recycling Program, including consideration of the land use-specific waste diversion goals contained in Volume 4 of the SRRE.

Solid waste generated within the City is disposed of at privately owned landfill facilities throughout Los Angeles County. While the Bureau of Sanitation provides waste collection services to single-family and some small multi-family developments, private haulers provide waste collection services for most multi-family residential and commercial developments within the City. Solid waste transported by both public and private haulers is recycled, reused, and transformed at a waste-to- energy facility or disposed of at a landfill. Under the City's RENEW LA Plan, adopted in February 2006, the City committed to reaching "Zero Waste." The goal of Zero Waste as defined by the RENEW LA Plan is to reduce, reuse, recycle, or convert the resources currently going to disposal so as to achieve an overall diversion rate of 90 percent or more by the year 2025 and becoming a Zero Waste city by 2030.[146] State law (i.e., AB 341) currently requires at least 50 percent solid waste diversion and establishes a state-wide goal of not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020. As of 2012, the City had achieved a landfill diversion rate of 76.4 percent, based on the calculation methodology adopted by the State.[147]

Moreover, state law requires mandatory commercial recycling in all businesses and multi-family complexes and imposes additional reporting requirements on local agencies, including the City. In order to meet these requirements and goals, the City has established an exclusive, competitive franchise system for the collection, transportation and processing of commercial and multi-family solid waste that will aid the City in meeting its diversion goals by, among other things: (i) requiring

[146] *City of Los Angeles, Solid Waste Integrated Resources Plan – A Zero Waste Master Plan, October 2013, Final Adoption, April 2015.*

[147] *City of Los Angeles, Bureau of Sanitation, Zero Waste Progress Report, March 2013.*

franchisees to meet diversion targets; (ii) increasing the capacity for partnership between the City and solid waste haulers; (iii) allowing the City to establish consistent methods for diversion of recyclables and organics; (iv) increasing the City's ability to track diversion, which will enable required reporting and monitoring of state mandated commercial and multi-family recycling; (v) increasing the City's ability to ensure diversion quality in the processing facilities handling its waste and recyclables; and (vi) increasing the City's capacity to enforce compliance with federal, state, county, and local standards.

Landfills that serve the Los Angeles area are shown on Table V-58. As shown, the landfills serving Los Angeles have a remaining daily intake capacity of 35,148 tons per day.

Table V-58
Landfill Capacity

Landfill Facility	Estimated Remaining Life (years)	Estimated Remaining Disposal Capacity (million tons)[2]	Permitted Intake (tons/day)	Daily Disposal (tons/day)	Available Daily Intake (tons/day)
Sunshine Canyon	22	72.61	12,100	7,701	4,399
Chiquita Canyon	1	0.75	6,000	3,446	3,588
Simi Valley	67	63.0	6,000	2,766	2,442
Azusa Land	30	57.56	6,500	846	5,654
El Sobrante	60	170	16,054	6,351	9,703
Lancaster	26	10.57	3,000	364	2,636
Calabasas	14	6.24	3,500	904	2,596
Puente Hills MRF [3]	--	--	4,400	--	4,400
				Total	**35,418**

Source: County of Los Angeles, Countywide Integrated Waste Management Plan, 2015 Annual Report, December 2016.

The Project would follow all applicable solid waste policies and objectives that are required by law, statute, or regulation. Under the requirements of the hauler's AB 939 Compliance Permit from the Bureau of Sanitation, all construction and demolition debris would be delivered to a Certified Construction and Demolition Waste Processing Facility. Debris from demolition of any asphalt surface parking located on the Project Site would be recycled/recovered and would not be deposited in area landfills. In order to meet the diversion goals of the California Integrated Waste Management Act and the City, the Project Applicant would be required to salvage and recycle construction and demolition materials to ensure that a minimum of 70 percent of construction-related solid waste that can be recycled is diverted from the waste stream to be landfilled. Solid waste diversion would be accomplished though the on-site separation of materials

and/or by contracting with a solid waste disposal facility that can guarantee a minimum diversion rate of 70 percent. Pursuant to Section 66.32 of the LAMC, the Project's solid waste contractor must obtain, in addition to all other required permits, an AB 939 Compliance Permit from the Bureau of Sanitation.

As shown on Table V-59, the Project would generate approximately 0.87 tons of solid waste per day. However, this estimate is conservative, as it does not factor in any recycling or waste diversion programs. With a remaining daily capacity of 35,418 tpd, the existing landfill capacity in the Los Angeles area would be adequate to accommodate the Project's solid waste generation. In compliance with AB 341, recycling bins shall be provided at appropriate locations to promote recycling of paper, metal, glass and other recyclable material. These bins shall be emptied and the contents recycled accordingly as a part of the Project's regular solid waste disposal program. The Project Applicant shall only contract for waste disposal services with a company that recycles solid waste in compliance with AB 341. Thus, the Project would not 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. Therefore, Project impacts related to solid waste would be less than significant.

Table V-59
Estimated Solid Waste Generation

Land Use	Size	Generation Rate[a]	Total (tpd)
Multi-Family Residential	428 du	4 lbs/day	0.856
Commercial	5,610 sf	0.005 lbs/day	0.014
		Total	**0.87**

du=dwelling unit sf =square feet lbs=pounds tpd= tons per day
[a] *Source: CalRecyclewebsite: http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/default.htm, 2014*
Note: Waste generation includes all materials discarded, whether or not they are later recycled or disposed of in a landfill.

Cumulative Impacts

Implementation of the related projects listed on Table II-3 in Section II (Project Description) would increase the need for landfill capacity. However, all development in the City is required to comply with the City's Curbside Recycling Program and the Construction and Demolition Waste Recycling Ordinance to minimize the amount of solid waste generated by the development and the need for landfill capacity. As discussed previously, the landfills serving the Project area have available capacity. The Project would create a demand for less than a fraction of one percent of the remaining landfill capacity serving the Project area and would not result in any significant impacts. Therefore, cumulative impacts related to landfill capacity would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. Solid waste management in the State is primarily guided by the California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. AB 939 establishes an integrated waste management hierarchy consisting of (in order of priority): (1) source reduction; (2) recycling and composting; and (3) environmentally safe transformation and land disposal. In addition, AB 1327 provides for the development of the California Solid Waste Reuse and Recycling Access Act of 1991, which requires the adoption of an ordinance by any local agency governing the provision of adequate areas for the collection and loading of recyclable materials in development projects. Furthermore, AB 341, which became effective on July 1, 2012, requires businesses and public entities that generate four cubic yards or more of waste per week and multi-family dwellings with five or more units, to recycle. The purpose of AB 341 is to reduce GHG emissions by diverting commercial solid waste from landfills and expand opportunities for recycling in California. In addition, in March 2006, the Los Angeles City Council adopted RENEW LA, a 20-year plan with the primary goal of shifting from waste disposal to resource recovery within the City, resulting in "zero waste" by 2030. The "blueprint" of the plan builds on the key elements of existing reduction and recycling programs and infrastructure, and combines them with new systems and conversion technologies to achieve resource recovery (without combustion) in the form of traditional recyclables, soil amendments, renewable fuels, chemicals, and energy. The plan also calls for reductions in the quantity and environmental impacts of residue material disposed in landfills. More recently, in October 2014, Governor Jerry Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste generated per week. Specifically, beginning April 1, 2016, businesses that generate eight cubic yards of organic waste per week shall arrange for organic waste recycling services. In addition, beginning January 1, 2017, businesses that generate four cubic yards of organic waste per week shall arrange for organic waste recycling services. Mandatory recycling of organic waste is the next step toward achieving California's recycling and greenhouse gas emission goals. Organic waste such as green materials and food materials are recyclable through composting and mulching, and through anaerobic digestion, which can produce renewable energy and fuel. Reducing the amount of organic materials sent to landfills and increasing the production of compost and mulch are part of the AB 32 (California Global Warming Solutions Act of 2006) Scoping Plan. The Project would be consistent with the applicable regulations associated with solid waste.

Specifically, the Project would provide adequate storage areas in accordance with the City's Space Allocation Ordinance (Ordinance No. 171,687), which requires that development projects include an on-site recycling area or room of specified size. The Project would also comply with AB 939, AB 341, AB 1826 and City waste diversion goals, as applicable, by providing clearly marked, source-sorted receptacles to facilitate recycling. Since the Project would comply with federal, state, and local statutes and regulations related to solid waste, no impacts related to this issue would occur.

Cumulative Impacts

All development in the City, including the proposed Project and the related projects listed on Table II-3 in Section II (Project Description) is required to comply with the City's recycling programs. No cumulative impacts related to this issue would occur.

21. WILDFIRE

If located on or near state responsibility areas or lands classified as very high fire hazard severity zones:

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project Site is located in a highly urbanized area of the City and is not located near lands that are classified as very high fire hazard severity zones. Therefore, no impact related to this issue would occur.

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

No Impact. The Project Site is located in a highly urbanized area of the City and is not located near lands that are classified as very high fire hazard severity zones. Therefore, no impact related to this issue would occur.

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

No Impact. The Project Site is located in a highly urbanized area of the City and is not located near lands that are classified as very high fire hazard severity zones. Therefore, no impact related to this issue would occur.

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

No Impact. The Project Site is located in a highly urbanized area of the City and is not located near lands that are classified as very high fire hazard severity zones. Therefore, no impact related to this issue would occur.

Cumulative Impacts

None of the related projects is located near lands that are classified as very high fire hazard severity zones. Therefore, no cumulative impact related to this issue would occur.

21. MANDATORY FINDINGS OF SIGNIFICANCE

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

Less Than Significant With Mitigation Incorporated. As discussed under Checklist Topic 4 (Biological Resources), the Project would not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal. As discussed under Checklist Topic 5 (Cultural Resources), the Project would not eliminate important examples of the major periods of California history or prehistory. Therefore, with implementation of the mitigation measures outlined in Section V of the SCEA, Project impacts related to these issues would be less than significant.

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

Less Than Significant Impact. Cumulative impacts for each checklist topic listed in Section V of the SCEA have been addressed. As discussed in this section, the Project would not contribute a cumulatively considerable impact to any cumulative impacts outlined in this section.

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

Less Than Significant With Mitigation Incorporated. As discussed in response to Checklist Topic 3 (Air Quality), with implementation of mitigation, the Project's construction-related air quality impacts would be less than significant. The Project's operational air quality impacts would be less than significant. As discussed in response to Checklist Topic 8 (Greenhouse Gas Emissions), the Project would not result in any significant impacts related to GHG emissions. As discussed in response to Checklist Topic 9 (Hazards and Hazardous Materials) with implementation of mitigation, Project impacts related to hazards and hazardous materials would be less than significant. As discussed in response to Checklist Topic 13 (Noise), with implementation of mitigation, the Project's construction-related noise and vibration impacts would be less than significant. The Project's operational noise and vibration impacts would be less than significant. Therefore, with implementation of the mitigation measures outlined in Section V of the SCEA, the Project would not have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly.