City of Calabasas

Hilton Garden Inn Expansion Project

Draft

Initial Study - Mitigated Negative Declaration

October 2015

rincon

Environmental Scientists Planners Engineers

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Draft
Initial Study – Mitigated Negative Declaration

Prepared by:

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October 2015

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INITIAL STUDY

1. **Project Title:**
   Hilton Garden Inn Expansion Project

2. **Lead Agency Name and Address:**
   City of Calabasas
   100 Civic Center Way
   Calabasas, CA 91302

3. **Contact Person, Phone Number and Email Address:**
   Isidro Figueroa, Planner
   (818) 224-1708
   ifigueroa@cityofcalabasas.com

4. **Project Location:**
   The project site is located at 24150 Park Sorrento, east of the Parkway Calabasas and Park Sorrento intersection and south of the Ventura Freeway (101 Freeway) in Calabasas, Los Angeles County, California. Assessor Parcel Number (APN) 2069-030-011. Figure 1 shows the regional location and Figure 2 shows the project site location. Figure 3 shows photos of the project site and surrounding land uses. The project site is near the Ventura Freeway Scenic Corridor and the Calabasas Road/Parkway Calabasas intersection, which is one of the "Critical Intersections and Roadway Corridors", identified in the City of Calabasas 2030 General Plan.

5. **Project Sponsor's Name and Address**
   Mian Horizon Financial Corporation
   1055 Regal Row
   Dallas, TX, 75247

6. **General Plan Designation:**
   Mixed Use 0.95

7. **Zoning:**
   Commercial, Mixed Use (CMU)

8. **Description of Project:**

   The proposed project involves the expansion of the Hilton Garden Inn (HGI) within the hotel's 4.42-acre property. The HGI is located east of the Parkway Calabasas and Park Sorrento intersection and is part of the Calabasas Park Centre that includes Calabasas City Hall, Calabasas Library and additional commercial spaces. The project site is designated as a Mixed Use 0.95 land use in the City's General Plan and has a Commercial, Mixed Use Zoning designation. Access to the project would be provided via Park Sorrento that intersects with Parkway Calabasas, a 101 Highway exit.

The proposed project involves the addition of 51 guest rooms to the existing three-story, 142-room HGI, bringing the total number of rooms to 193. The extended hotel area would have a building footprint of approximately 8,114 square feet per floor and with three floors, totaling a gross floor area of 24,342 square feet. The existing building area of the HGI is 74, 132 square feet; therefore, the proposed addition would result in a HGI building area of 98,474 square feet. See Figure 4 for the proposed site plan. The floor-to-area ratio (FAR) proposed is 0.48, which is within the 0.95 FAR maximum set by the City of Calabasas. The maximum height of the proposed expansion would be 43' 11". See Figure 5 for hotel extension elevations. Construction is scheduled to last eight months. The project is designed to achieve a Calabasas-LEED silver rating in compliance with the City's Green Building Ordinance (Chapter 17.34). The project would include required infrastructure such as increased fire truck access, two handicap ramps, three new fire hydrants, and a swale to reduce water run-off.

Because the proposed project would occur within the existing HGI lot, the proposed project would eliminate some existing parking spaces on the site and additional parking spaces would be constructed on the south side of the hotel. The Calabasas Municipal Code (CMC) requires 1 parking space per guestroom and an additional space per every 10 rooms (CMC Section 17.28.050). HGI currently has 153 parking spaces, while only 142 are required. The addition of 51 guestrooms requires that the hotel have a total of 212 parking spaces (142 existing requirement + 51 spaces/rooms + 19 spaces/every 10 rooms). However, due to size limitations of the site 17 additional parking spaces are proposed, giving the hotel a total of 170 parking spaces. Therefore, the applicant is requesting a Conditional Use Permit (CUP) to allow a 20% off-street parking reduction pursuant to CMC Section 17.28.050. The mandate states that the City may grant up to a twenty-five percent reduction in number of off-street parking required by CMC Section 17.28.040 in compliance with Section 17.62.060. The applicant must provide evidence to demonstrate that the reduction is necessary for the efficient operation of the subject use and would not result in a parking deficiency. The review authority may also grant a reduction in off-street parking requirements in compliance with CMC Section 17.62.060 for development projects that are located in close proximity to a public transit stop. The proposed project is located within 0.2 miles of two public transit stops.

The Calabasas Municipal Code requires that Commercial zones have medium-to-large size trees in scale with the commercial areas and serve as sidewalk canopies, screening and parking area shade and relief (CMC Section 17.26.040). Shade trees would be planted along the southern edge of the project site where proposed parking stalls would be created. See Figure 6 for landscape plan. Mostly Eucalyptus trees are present on site. There are two existing oak trees located near the monument sign at the intersection of Park Sorrento and Parkway Calabasas. These trees appear to be non-native and planted as ornamental landscape with the original hotel development (early 2000's). The trees are medium to small size in stature. The trees would remain and no pruning is recommended as part of the project. The project will have no impact to the existing oak trees and an oak tree permit is not required. The parking lot improvements in the area would not impact the root system, branch structure, or long-term health of the oak trees. Additional landscaping for the project would include the replacement of shrubs groundcover to blend with existing landscape on Parkway Calabasas and Park Sorrento.

The project site is located near the Ventura Freeway Scenic Corridor and near the Calabasas Road/Parkway Calabasas intersection, which is one of the "Critical Intersections and Roadway Corridors, identified in the City of Calabasas 2030 General Plan.

9. Required Permits:

The following permits are required for the proposed development:

Conditional Use Permit Amendment: A request to amend Master C.U.P. 97-12.

Conditional Use Permit: A request for a 20% off-street parking reduction pursuant to Calabasas Municipal Code Section 17.28.050(A).

Site Plan Review: A request to construct an attached 24,342 square-foot, three-story, 51-wing addition to be built on the west end of an existing 74,132 square-foot, three-story, 141-room hotel (Calabasas Hilton Garden Inn).

10. Surrounding Land Uses and Setting:

The project site is located on the east side of Parkway Calabasas, south of Calabasas Road, approximately 1,000 feet south of the 101 Freeway. The project site is bordered by open space to the south and municipal buildings, specifically, Calabasas City Hall and Calabasas Library, to the east. Additional commercial development to the east and north includes restaurants, office buildings, retail shops, a movie theatre and a grocery store.

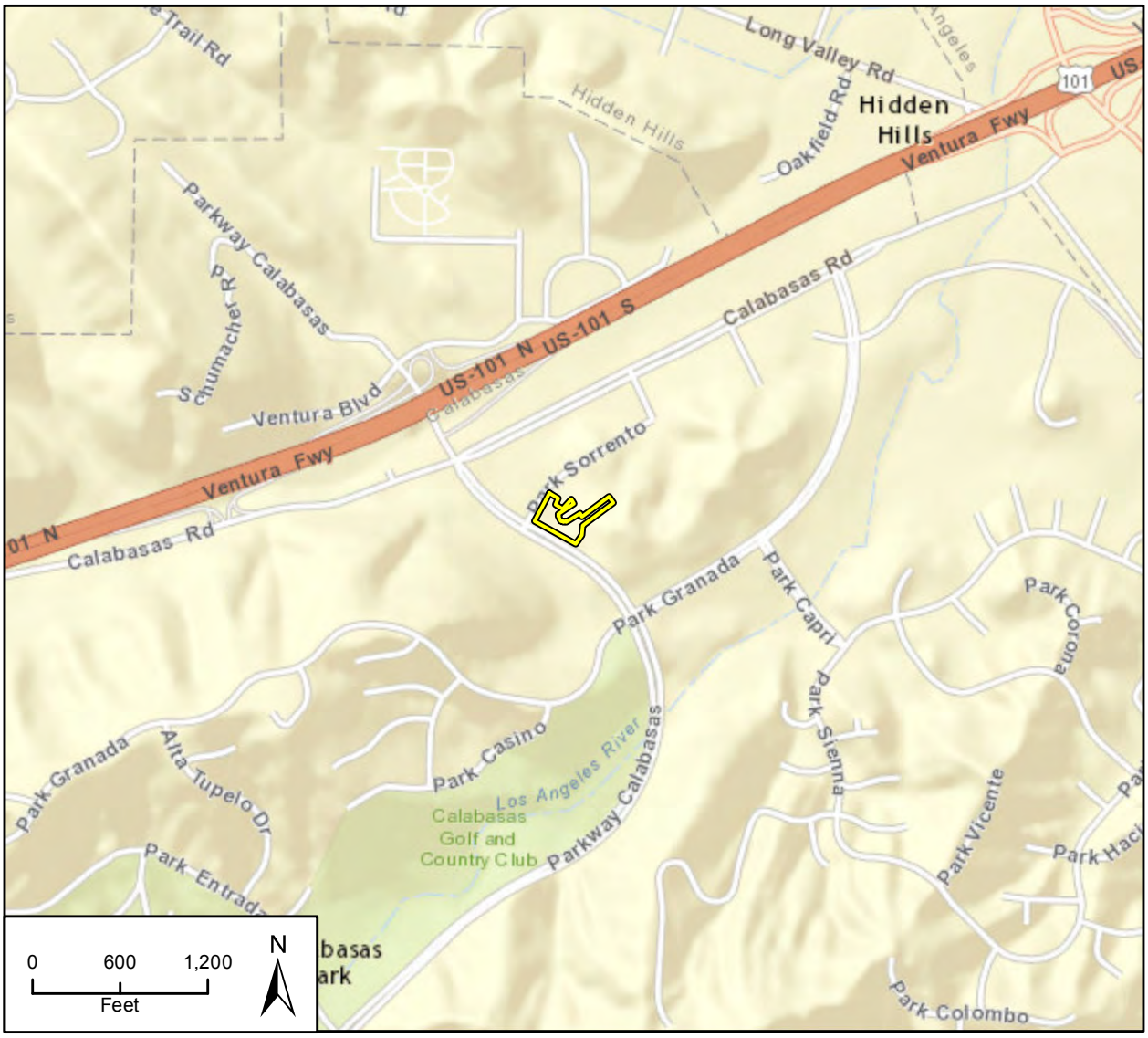
11. Other Public Agencies Whose Approval is Required:

The City of Calabasas is the lead agency with responsibility for approving the proposed project.

Table 1
Proposed Project Characteristics

Parcels	2069-030-011
Project Site Size	
Building Footprint	33,835 sf (0.77 acres)
Landscape Area	99,553 sf (2.29 acres)
Paved Area	68,635 sf (1.58 acres)
Net lot size	202,024 sf (4.42 acres)
Hotel Area	
Total Rooms	193 guestrooms
Total Building Area	98,474 sf
Floor Area Ratio (FAR)	0.48 (98,474 sf/202,024 sf)
Parking	
Existing	153 stalls
Proposed	17 stalls
Total Parking	170 stalls
Building Height	3 stories above grade 43' 11" feet above grade to top of Mansard Roof

Notes: sf = square feet



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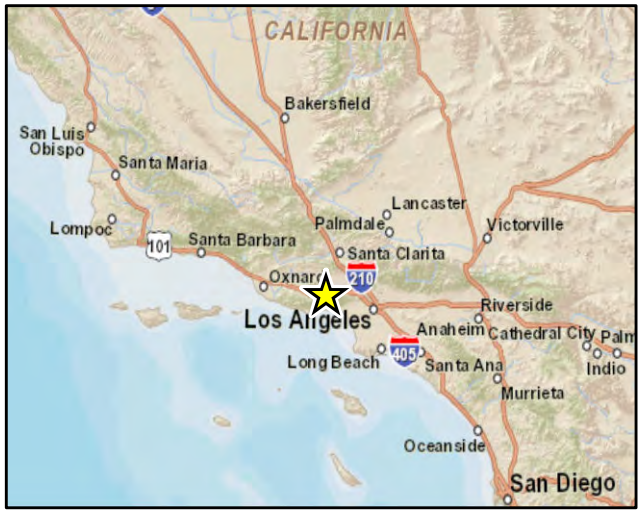

Project Location

Regional Location

Figure 1

City of Calabasas

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Project Location

Figure 2

City of Calabasas

Photo 1: Looking east at the project site from across Park Sorrento.

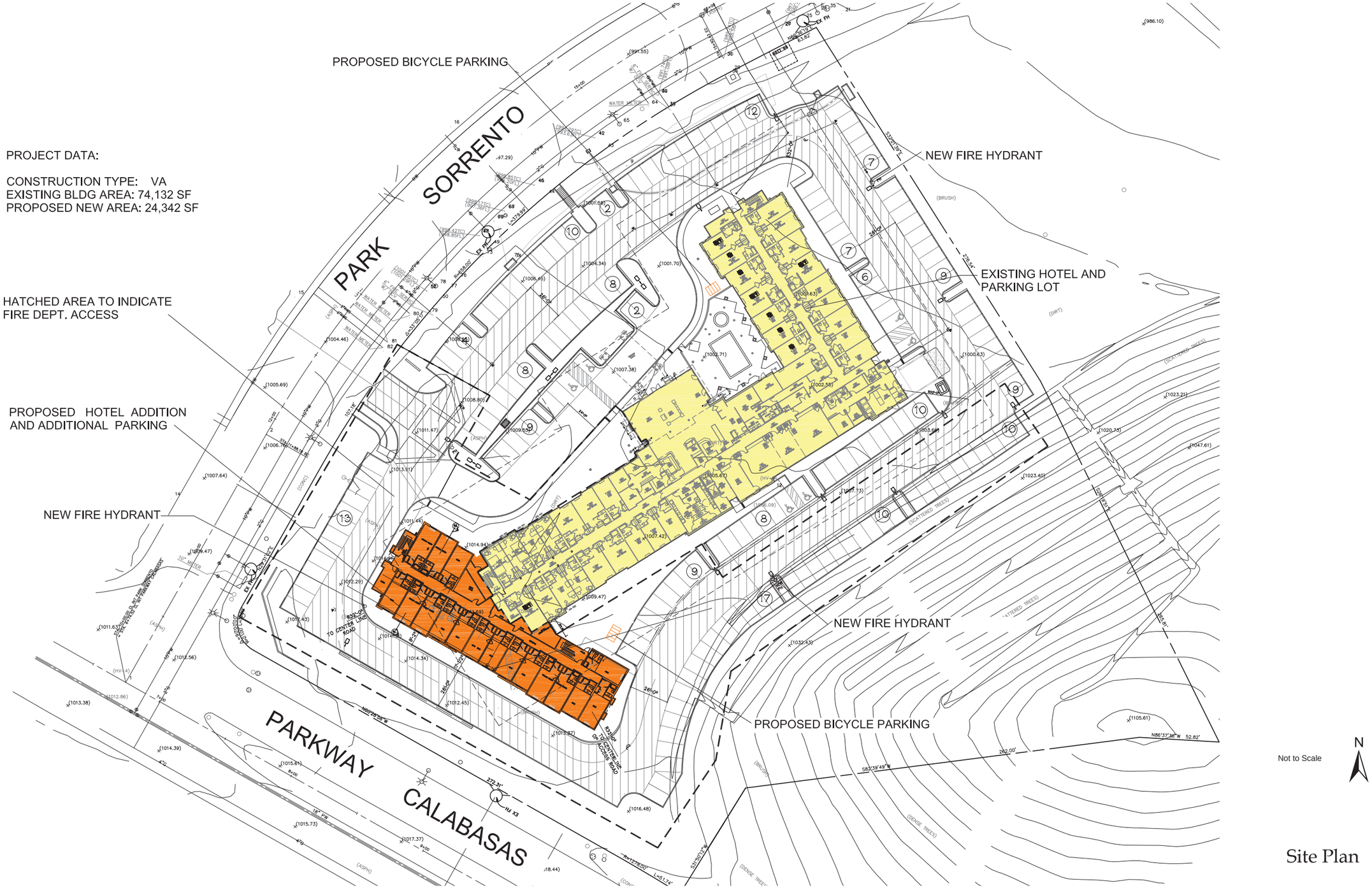
Photo 2: Looking northwest at the location of proposed hotel expansion from sourthern boundary of Hilton Garden Inn property.

Photo 3: From approximate location of proposed hotel expansion, looking northeast at area proposed for construction of additional parking stalls.

Photo 4: Looking southeast at area proposed for construction of additional parking stalls. Open space southeast of project site to remain.

Site Photos

Figure 3



Site Plan

Source: RYS Architects, Inc, March 2015

Figure 4

North Elevation

East Elevation

South Elevation

West Elevation

Project Elevations

Source: RYS Architects, Inc.

Figure 5a

Northeast Elevation with Hillside

Project Elevations

Source: RYS Architects, Inc.

Figure 5b

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigation Incorporated" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	■ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

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

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Isidro Figueroa	Planner
Printed Name	Title

ENVIRONMENTAL CHECKLIST

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I.	**AESTHETICS**				
	-- Would the Project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	■	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	■	☐
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	■	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	■	☐

a) Would the project 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 state scenic highway?

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

According to the Calabasas 2030 General Plan, the project site is located near the designated Ventura Freeway Scenic Corridor. The project site is located approximately 1,000 feet south of the 101 Freeway, which is a locally designated scenic highway in the City's 2030 General Plan. The 101 Freeway is not officially designated as a state scenic highway; however, it is identified as eligible for designation as a state scenic highway (Caltrans, 2014). No City-designated significant ridgelines are located on the project site. Figure III-4 of the City's 2030 General Plan shows the nearest significant ridgeline approximately 1,000 feet west of the project site.

The project site is located at a lower elevation than the areas south and west of the project site; therefore, the proposed project would not block any scenic views or views of the significant ridgeline from the areas south and west of the project area. Additionally, due to the large number of tall trees and dense foliage that occurs in the project area and surrounds the project site, the proposed project would not block the view of the ridgeline or any scenic vistas from the areas north and west areas surrounding the project site. The project would also minimize potential impacts to visual character and quality by replacing shrubs and groundcover around the perimeter of the hotel and parking areas along the project's Parkway Calabasas frontage. The proposed project would also involve the removal of several mature eucalyptus trees along the edge of the existing parking lot that could potentially be visible from public view locations;

however, due to the large density of trees surrounding the project site, the impact of the removals would be minimal. Therefore, the impact on scenic vistas, scenic resources, and visual character would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The proposed HGI expansion would increase the amount of light emitted by the hotel due additional interior and exterior illumination. New lighting would be typical of the light currently emitted from HGI. Project lighting would not have a significant impact on the night sky, as it would only incrementally add to the existing background light levels already present as a result of the surrounding residential and commercial development. New sources of glare would include headlights from cars entering and leaving the site at night, as well as windows on cars and buildings, which could reflect sunlight during certain times of the day.

The proposed hotel and parking areas would be located adjacent to Park Sorrento in an area already developed with existing commercial land uses; therefore, it would not substantially increase the levels of light and glare beyond those already experienced in the area. The nearest residences are located within the Westridge community, approximately 630 feet south of the project site and light spillover from the proposed project would not adversely affect these residences.

The City's Land Use and Development Code regulates lighting through Calabasas Municipal Code Chapter 17.27 (Dark Skies Ordinance). The City requires that "all exterior lights and illuminated signs be designed, located, installed and directed in such a manner as to prevent objectionable light at (and glare across) the property lines and glare at any location on or off the property" (CMC Section 17.27.020.f). This is generally accomplished through the use of shielding and directional lighting methods and through the use of low level pedestrian and perimeter landscape lighting. The City's condition of approval system requires the applicant for any project to submit evidence that the proposed work would comply with the code (CMC 17.27.040).

The review process would limit the light and glare effects on adjacent uses and would protect the character of the City of Calabasas from inappropriate levels of night lighting. Pursuant to this ordinance, architectural and lighting plans would be reviewed prior to the issuance of building permits to ensure that all proposed light fixtures would not substantially impact neighboring properties. Lighting impacts would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II.	**AGRICULTURE AND FOREST RESOURCES** -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:				
a)	Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	■
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	■

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

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

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

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

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?

Neither the project site nor surrounding areas contain any agricultural resources, farmland, forest land, or timberland. Consequently, the proposed project would have no effect on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Division of Land Resource Protection, 2014). Calabasas does not include land zoned for agricultural or forest land, nor are any lands within the City under a Williamson Act contract. The proposed project would have no impact upon agricultural or forest resources.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY				
-- Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	■	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	■	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	■	☐

The project site is within the South Coast Air Basin (the Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the Basin is classified as being in "attainment" or "nonattainment." The health effects associated with criteria pollutants upon which attainment of state and federal air quality standards is measured are described in Table 2.

Table 2
Health Effects Associated with Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: pulmonary function decrements and localized lung edema in humans and animals and risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Carbon monoxide (CO)	(1) Aggravation of angina pectoris and other aspects of coronary heart disease; (2) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (3) impairment of central nervous system functions; and (4) possible increased risk to fetuses.
Nitrogen dioxide (NO_2)	(1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (2) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (3) contribution to atmospheric discoloration.
Sulfur dioxide (SO_2)	(1) Bronchoconstriction accompanied by symptoms that may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).[a]
Suspended particulate matter ($PM_{2.5}$)	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.[a]

Source: U.S. Environmental Protection Agency, What are the Six Common Air Pollutants? website http://www.epa.gov/oaqps001/urbanair/, accessed March 10, 2015.

[a]*More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: Office of Environmental Health Hazard Assessment, Particulate Matter Health Effects and Standard Recommendations, www.oehha.ca.gov/air/toxic_contaminants/PM10notice.html#may, May 9, 2002; and EPA, Air Quality Criteria for Particulate Matter, October 2004.*

The South Coast Air Basin (Basin), in which the project site is located, is a non-attainment area for the federal standards for ozone, $PM_{2.5}$, and lead, and the state standards for ozone, PM_{10}, $PM_{2.5}$, NO_2 and lead. This non-attainment status is a result of several factors, the primary ones being the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate air pollutants, and the number, type, and density of emission sources within the Basin.

Because the Basin currently exceeds several state and federal ambient air quality standards, the SCAQMD is required to implement strategies to reduce pollutant levels to recognized acceptable standards. To accomplish this requirement, the SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides a strategy for the attainment of state and federal air quality standards.

The SCAQMD recommends the use of quantitative thresholds to determine the significance of temporary construction-related pollutant emissions and project operations. These thresholds are shown in Table 3.

Table 3
SCAQMD Air Quality Significance Thresholds

Pollutant	Mass Daily Thresholds	
	Operation Thresholds	Construction Thresholds
NO_X	55 lbs/day	100 lbs/day
ROG[1]	55 lbs/day	75 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day

Source: SCAQMD, http://www.aqmd.gov/ceqa/handbook/signthres.pdf, March 2011.

[1] Reactive Organic Gases (ROG) are formed during combustion and evaporation of organic solvents. ROG are also referred to as Volatile Organic Compounds (VOC).

The SCAQMD has also developed Localized Significance Thresholds (LSTs). LSTs were devised in response to concerns regarding the exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, and distance to the sensitive receptor. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed for NO_X, CO, PM_{10} and $PM_{2.5}$. LSTs are not applicable to mobile sources such as cars on a roadway (SCAQMD, revised July 2008). As such, LSTs for operational emissions do not apply to onsite development since the majority of emissions would be generated by cars on roadways.

LSTs have been developed for emissions within areas up to five acres in size, with air pollutant modeling recommended for activity within larger areas. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. The proposed project involves an approximately one-acre construction area. The project site is located in Source Receptor Area 6 (SRA-6, West San Fernando Valley). LSTs for construction on a 1-acre site in SRA-6 are shown in Table 4. LSTs are provided for the receptor at a distance of approximately 630 feet from the project site boundary. The nearest residences are at the Westridge residential area approximately 630 feet south of the project site. According to the SCAQMD, the use of LSTs is voluntary, to be implemented at the discretion of local agencies.

Table 4
LSTs for Construction

Pollutant	Allowable emissions from a 1-acre site in SRA-6 by receptor distances	
	328 feet	656 feet
Gradual conversion of NO_X to NO_2	121	157
CO	1,089	2,096
PM_{10}	27	59
$PM_{2.5}$	7	18

Source: SCAQMD, website http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2, October 2009.

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

Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. A project may be inconsistent with the AQMP if it would generate population, housing or employment growth exceeding the forecasts used in the development of the AQMP. The 2012 AQMP was developed using Southern California Association of Governments' (SCAG) population forecasts. SCAG produces projections of regional population, which form the basis for growth projection in SCAG's 2012 Regional Transportation Plan-Sustainable Communities Strategy (RTP-SCS). SCAG's growth forecast projects a population of 24,400 for Calabasas in 2035, an increase of 457 from the estimated 2013 population of 23,943 (California Department of Finance, 2014).

As discussed in Section XIII, *Population and Housing*, the proposed project would not directly increase the population because it does not include residential uses, but may indirectly increase the population by 21 residents, if all new employees relocated to the area. The City of Calabasas population is approximately 24,212, according to the most recent (2015) California Department of Finance estimate. Although most employees are expected to be drawn from the local workforce, the proposed project could result in a citywide population of approximately 24,233 persons, if all the employees moved into the City from elsewhere. The level of population growth associated with the proposed project falls within the population growth for Calabasas anticipated in SCAG's long-term population forecasts. Therefore, the project would not conflict with the population forecasts contained in the 2012 AQMP and the proposed project's impacts would be less than significant.

The South Coast Air Basin is a non-attainment area for the federal standards for ozone, $PM_{2.5}$ and lead and the state standards for ozone, PM_{10}, $PM_{2.5}$, NO_2 and lead. Any growth within the Los Angeles metropolitan area would contribute to existing exceedances of ambient air quality

standards when taken as a whole with existing development. SCAQMD's project-specific and cumulative significance thresholds are the same (SCAQMD, August 2003). Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable (SCAQMD, August 2003). Conversely, projects that do not exceed the project-specific thresholds are not considered to be cumulatively significant (SCAQMD, August 2003). As discussed under "Construction Emissions" and "Long-Term Emissions," the proposed project would result in an increase in temporary and long-term daily operation emissions; however, emissions would not exceed the SCAQMD thresholds. Since the proposed project would not generate emissions that exceed the SCAQMD's construction, LST, or operational thresholds and the project is consistent with the AQMP, its contribution to cumulative air quality impacts would not be cumulatively considerable.

LESS THAN SIGNIFICANT IMPACT

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

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

Emissions generated by the proposed project would include temporary construction emissions and long-term operational emissions. Emissions are quantified below and compared to SCAQMD significance thresholds, described in more detail above.

Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction vehicles, in addition to reactive organic gases (ROG) that would be released during the drying phase upon application of architectural coatings.

Emissions associated with the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2013.2.2.

Grading, excavation, hauling, and site preparation would involve the largest use of heavy equipment and generation of fugitive dust. For the purposes of modeling, it was assumed that construction of the proposed project would comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the Basin. Therefore, the following conditions would be required to reduce fugitive dust in compliance with SCAQMD Rule 403 and were included in CalEEMod for the site preparation and grading phases of construction.

1. ***Minimization of Disturbance.*** *Construction contractors shall minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive dust generation.*

2. ***Soil Treatment.*** *Construction contractors shall treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall occur as necessary, and at least twice daily, preferably in the late morning and after work is completed for the day.*

3. ***Soil Stabilization.*** *Construction contractors shall monitor all graded and/or excavated inactive areas of the construction site daily for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be periodically treated with environmentally safe dust suppressants to prevent excessive fugitive dust.*

4. ***No Grading During High Winds.*** *Construction contractors shall stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).*

5. ***Street Sweeping.*** *Construction contractors shall sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.*

It was also assumed that construction of the proposed project would comply with SCAQMD Rule 1113 regarding the use of low-volatile organic compound (VOC) architectural coatings and that construction equipment used would comply with U.S. Environmental Protection Agency (EPA) and California Air Resources Board (ARB) Tier 3 standards for off-road diesel engines. Construction was estimated to occur over approximately 8 months. Complete CalEEMod results and assumptions can be viewed in Appendix A. Table 5 summarizes the estimated maximum daily emissions of pollutants during construction assuming implementation of the above conditions in compliance with SCAQMD regulations. The SCAQMD or LST thresholds would not be exceeded. Therefore, temporary air quality impacts associated with project construction would be less than significant.

Table 5
Estimated Construction Maximum Daily Air Pollutant Emissions

	Maximum Daily Emissions (lbs/day)				
	ROG	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**
2016 Maximum Daily Emissions (On-site and Off-site)[a]	63.0	17.9	15.3	1.9	1.3
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**

Source: Calculations were made in CalEEMod.

[a] *See Table 2.1 "Overall Construction-Mitigated" of winter emissions CalEEMod worksheets in Appendix A.*

Long-Term Emissions

Long-term emissions associated with project operation, as shown in Table 6, would include emissions from vehicle trips (mobile sources), natural gas and electricity use (energy sources), and landscape maintenance equipment, consumer products and architectural coating associated with onsite development (area sources).

Emissions during operation of the proposed project would not exceed SCAQMD thresholds for any criteria pollutant. Therefore, air quality impacts associated with project operation would be less than significant.

Table 6
Estimated Project Operational Emissions

Sources	**Estimated Emissions (lbs/day)**					
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**SO_X**
Area	2.7	<0.01	<0.01	<0.01	<0.01	0
Energy	0.1	0.7	0.6	0.05	0.05	<0.01
Mobile	3.9	3.3	13.3	2.2	0.6	0.03
Total Emissions (lbs/day)	**6.7**	**4.0**	**13.9**	**2.21**	**0.66**	**0.03**
SCAQMD Thresholds	*55*	*55*	*550*	*150*	*55*	*150*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Calculations were made in CalEEMod. See Table 2.2 "Unmitigated Operational" in CalEEMod winter emissions worksheets in Appendix A.

Note: numbers may not add up due to rounding.

LESS THAN SIGNIFICANT IMPACT

e) Would the project create objectionable odors affecting a substantial number of people?

The proposed project would involve construction of a hotel expansion. This use is not included on Figure 5-5, *Land Uses Associated with Odor Complaints*, of the 1993 SCAQMD CEQA Air Quality Handbook. Diesel exhaust may be noticeable during some construction activities. However, the proposed project would not generate objectionable odors affecting a substantial number of people and construction would be temporary in nature; therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES				
-- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	■
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	■
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	■	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	■
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	■

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES				
-- Would the project:				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

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 regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No sensitive biological resources are noted to occur in the project area (City of Calabasas 2030 General Plan Conservation Element, 2008). The site is within a developed area and does not contain native biological habitat. Furthermore, the site on which the hotel expansion would be constructed is already developed and no sensitive or special status species have been observed at the site (Rincon Consultants, Inc., Site Visit, 2015). The site lacks native vegetation that might provide habitat for any sensitive or special status species identified in any regulations. Therefore, the project would have no impact**.**

NO IMPACT

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, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

As described above, the site of the proposed hotel expansion is a paved parking area surrounded by non-native vegetation. Therefore, the project would not result in the removal of any riparian habitat or other sensitive natural community. In addition, no federal-or-state-listed endangered, threatened, rare, or otherwise sensitive flora or fauna were observed at the project site (Rincon Consultants, Inc., Site Visit, 2015). No impact would occur.

NO IMPACT

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As discussed in Section X, *Hydrology and Water Quality*, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared for the proposed project. The SWPPP would specify Best Management Practices (BMPs) to be implemented by the contractor during construction to minimize stormwater runoff to the concrete channel and downstream impacts to water quality.

In addition, the proposed project would be required to comply with the water quality requirements of the current Los Angeles County Municipal Separate Storm Sewer System (MS4) permit, which requires that the amount of runoff from the site must be the same before and after construction of a project, and the Los Angeles County Low Impact Development (LID) Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52), which requires all infiltration water quality devices to be sized using the 0.75 inch storm or the 85th percentile storm, whichever is greater. Compliance with the MS4 permit and LID requirements would reduce on-site erosion from vegetated areas. Additionally, the project site is not located on or in the vicinity of a federally protected wetland (FWS wetlands Mapper, 2014). Therefore, the proposed project would have a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

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

The project site is not located in an area designated as a Significant Ecological Area, or Wildlife Linkage or Corridor (City of Calabasas 2030 General Plan Conservation Element, 2008). As described above, the project site is mostly paved and there is no native biological habitat on-site. Therefore the project would not interfere with the movement of any wildlife species. The modified project would have no impact to wildlife movement or native wildlife nursery sites**.**

NO IMPACT

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

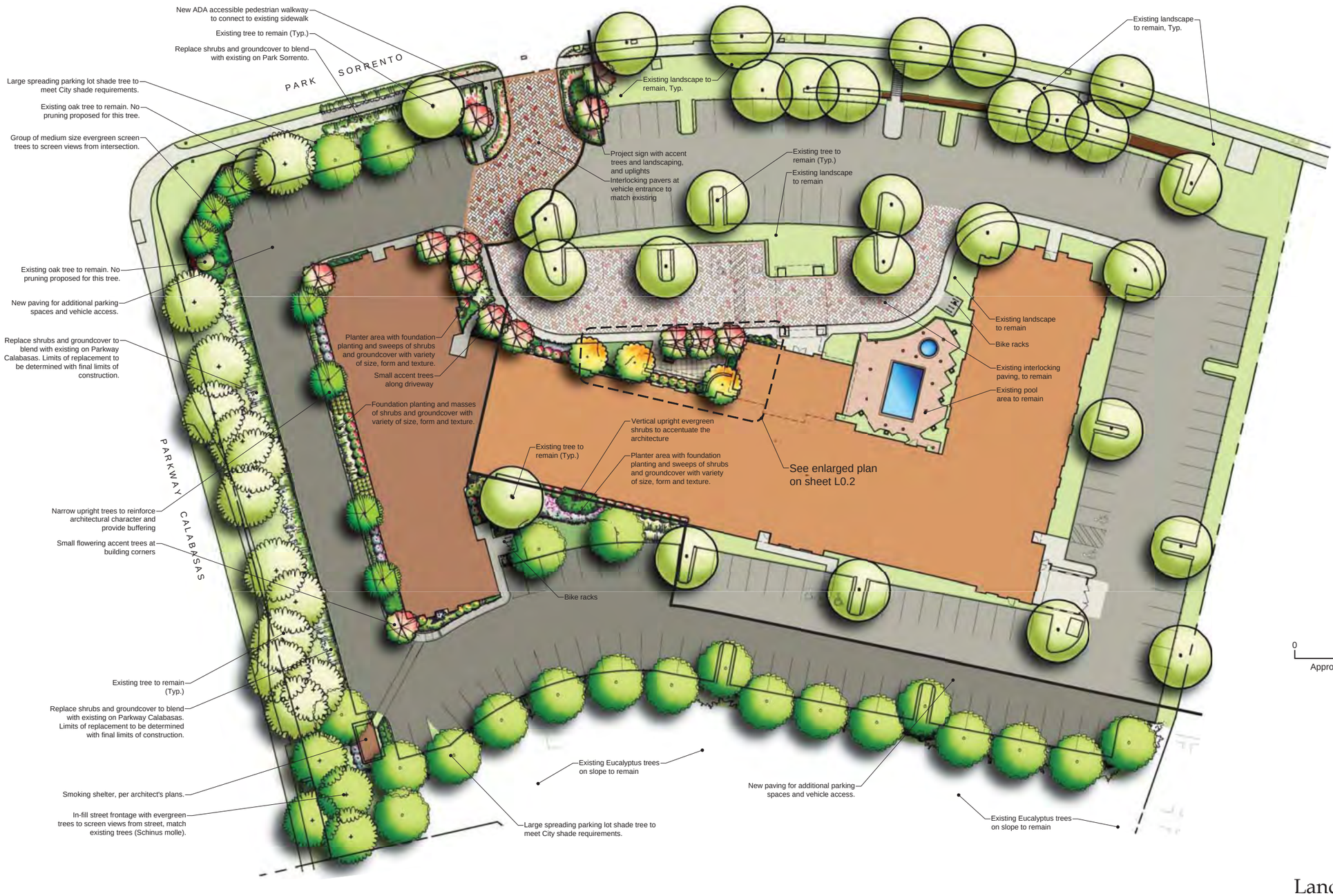
The City of Calabasas Oak Tree Ordinance sets forth the policy of the City to require the preservation of all healthy oak trees unless reasonable and conforming use of the property justifies the removal, cutting, pruning, and/or encroachment into the Protected Zone of an oak tree. The City's Oak Tree Protection and Preservation Policy and guidelines were established to recognize oak trees as significant and valuable aesthetic and ecological resources. The Oak Tree Ordinance requires completion of an Oak Tree Report by an International Society of Arboriculture (ISA) Certified arborist for projects involving impacts to oak trees. A landscape architecture firm, KLA, Inc., reported that there are two existing oak trees located near the sign wall at the intersection of Park Sorrento and Parkway Calabasas. These trees are non-native and planted as ornamental landscape with the original hotel development (early 2000s). The trees are medium to small size in stature. The trees would remain and no pruning is recommended as part of the project. The parking lot improvements in the area would not impact the root system, branch structure, or long-term health of the oak trees. See Figure 6 for landscaping plan. The removal of other trees on site, specifically eucalyptus trees, would occur along the perimeter of the site and the southeastern part of the site (where the proposed parking lot would be constructed). These trees would not be protected under any local policies or ordinances. The project is not proposing to remove or encroach within the protected zone of any oak tree. Furthermore, the absence of riparian habitat and other sensitive natural communities on the project site demonstrates that no impact would occur.

NO IMPACT

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 adopted habitat conservation plans or natural community conservation plans apply in Calabasas (2030 General Plan FEIR, 2008). No impact would occur.

NO IMPACT



Landscape Plan

Source: RYS Architects, Inc. & KLA, Inc.

Figure 6

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES				
-- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	■	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	■	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	■	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

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

b) Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?

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

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

The project site is already developed and is not identified as a cultural resource sensitivity area in the General Plan Cultural Resources Element (2008). There is no evidence that archaeological or paleontological resources or human remains are present onsite. In the unlikely event that such resources are unearthed during construction, applicable regulatory requirements pertaining to the handling and treatment of such resources would be followed. If archaeological or paleontological resources are identified, as defined by Section 2103.2 of the Public Resources Code, the site would be required to be treated in accordance with the provisions of Section 21083.2 of the Public Resources Code as appropriate. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. Due to the previous grading of the project site, existing standard monitoring during construction in conformance with current discipline standards, and the findings of recent cultural resource investigations on adjacent properties, impacts of the proposed project on archaeological and historical resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VI. GEOLOGY AND SOILS				
-- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	■	☐
ii) Strong seismic ground shaking?	☐	☐	■	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
iv) Landslides?	☐	☐	■	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	■	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■

a.i) 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?

a.ii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

a.iii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

a.iv) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

No faults traverse the project site and no active faults have been mapped within Calabasas; however, the City lies within a seismically active region that is prone to occasional earthquakes. According to the Southern California Earthquake Data Center Map (SCEDC), there are nine active faults and four potentially active faults within 25 miles of the City. Like much of California, the project site is subject to ground shaking from seismic activity emanating from a number of faults in the region. The California Building Code (CBC) and the City of Calabasas Development Code control building design and construction. Calabasas, along with all of Southern California and the Central Coast, is within Seismic Zone 4, the area of greatest risk and subject to the strictest building standards. New development would conform to the CBC (as amended at the time of permit approval) as required by law, and preparation of a final City-approved geotechnical study and remediation plan would be required prior to project approval. Compliance with applicable standards during construction of the proposed project would reduce the potential impact to less than significant and no mitigation would be required.

LESS THAN SIGNIFICANT IMPACT

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

Loose soils create conditions that can lead to erosion. The potential for erosion generally increases after soil has been disturbed by clearing and grading. As discussed in Section IV, *Air Quality*, dust control measures would be implemented during construction as required by the SCAQMD Rule 403 to minimize fugitive dust emissions. Measures to minimize fugitive dust emissions may include watering exposed surfaces and covering soil stockpiles. These measures are also effective for reducing soil erosion.

The California State Water Board adopted the most recent Construction General Permit (2009-0009-DWQ) on September 2, 2009. This permit became effective on July 1, 2010 and applies to construction sites greater than one acre in size. Even though the project would disturb less than one acre of area during construction, under the Development Program of the Los Angeles Municipal Stormwater Permit, development that occurs within Los Angeles County on areas less than one acre must also implement a SWPPP to prevent erosion and sedimentation problems during the construction phase of the development. As required by the Construction General Permit, a SWPPP would be prepared for the proposed project. The SWPPP would specify BMPs to be implemented by the contractor during construction to minimize soil erosion, stormwater runoff and downstream impacts to water quality.

As described in Section IV, *Hydrology/Water Quality*, the proposed project would be required to comply with the water quality requirements of the current MS4 permit, which requires that the amount of runoff from the site must be the same before and after construction of a project, and LID requirements, which require sizing of all infiltration water quality devices using the 0.75-inch storm or the 85th percentile storm, whichever is greater. Compliance with the MS4 permit and LID requirements would reduce on-site erosion from vegetated areas. As such, construction

and operational impacts associated with sedimentation and erosion would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is caused by a variety of activities, which include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydrocompaction. Ground subsidence and associated fissuring have occurred in different places in Los Angeles County, due to falling and rising groundwater tables. As discussed above, portions of the project site are also potentially susceptible to liquefaction and earthquake-induced landslides (2030 General Plan Seismic Hazard Zones Map, 2014). Because the proposed project would be required to adhere to applicable CBC standards ensuring building safety, no significant subsidence-related impacts would result from the construction or operation of the proposed on-site uses. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d) Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?

The proposed project would occur on soil that is already paved and suitable for development. Foundation and structural design would be required to incorporate measures prescribed in the UBC to address these design considerations and minimize related project impacts. Structural design measures would address depth, thickness and reinforcement requirements for concrete footings and the ground floor building slab. With implementation of standard design measures required in the CBC to address expansive soils, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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?

The project would connect to the City's sewer system and would not require the use of septic tanks. Therefore, no impact would result and further analysis of this issue is not warranted.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS				
-- Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

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

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

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHGs). GHGs contribute to the "greenhouse effect," which is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) may be adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, and as a result may be contributing to an average increase in the Earth's temperature.

GHGs occur naturally and from human activities. Human activities that produce GHGs are the burning of fossil fuels (coal, oil and natural gas for heating and electricity, gasoline and diesel for transportation); methane from landfill wastes and raising livestock, deforestation activities; and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Since 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over by 36%, 148%, and 18% respectively, primarily due to human activity. Emissions of GHGs may affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way in which the Earth absorbs gases from the atmosphere. Potential impacts of global climate change in California may include loss of snow

pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CEC, March 2009).

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels; the same requirement as under S-3-05), and requires ARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires ARB to adopt regulations to require reporting and verification of statewide GHG emissions.

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

Senate Bill (SB) 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing ARB to develop regional GHG emission reduction targets to be achieved from vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, ARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035.

The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The 2008 SCAQMD threshold considers emissions of over 10,000 metric tons of carbon dioxide equivalent (CO_2E) per year from industrial development projects to be significant (SCAQMD, 2009). However, the SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency. In the latest guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD has considered a tiered approach to determine the significance of residential and commercial projects. The draft-tiered approach is outlined in the meeting minutes, dated September 29, 2010.

Tier 1 - If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.

Tier 2 - Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the proposed

project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.

Tier 3 - Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 3,000 tons of CO_2e per year for commercial projects.

The City of Calabasas has not adopted a Climate Action Plan. Because the City has not adopted any GHG emissions thresholds, the proposed project is evaluated based on the SCAQMD's recommended Tier 3 screen level threshold of 3,000 metric tons CO_2e per year (SCAQMD, "Proposed Tier 3 Quantitative Thresholds – Option 1", September 2010).

The GHG analysis has been conducted using the methodologies recommended by the California Air Pollution Control Officers Association [CAPCOA] (January 2008) *CEQA and Climate Change* white paper. The analysis focuses on CO_2, N_2O, and CH_4 as these are the GHG emissions that onsite development would generate in the largest quantities. Fluorinated gases, such as HFCs, PFCs, and SF_6, were also considered for the analysis. However, the quantity of fluorinated gases would not be significant since fluorinated gases are primarily associated with industrial processes. Calculations were based on the methodologies discussed in the CAPCOA white paper (January 2008) and included the use of the California Climate Action Registry General Reporting Protocol (January 2009).

Emissions associated with the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2013.2.2. Complete CalEEMod results and assumptions can be viewed in Appendix A.

Construction Emissions

Based on CalEEMod results, construction activity for the project would generate an estimated 152 metric tons of CO_2e (as shown in Table 7). Amortized over a 30-year period (the assumed life of the project), construction of the proposed project would generate about 5 metric tons of CO_2e per year.

Table 7
Estimated Construction
Emissions of Greenhouse Gases

	Emissions (metric tons CDE)
Total Emissions	152 metric tons
Amortized over 30 years	5 metric tons per year

See Appendix A for CalEEMod Results.

Operational Indirect and Stationary Direct Emissions

Operational emissions include area source, energy use, solid waste, water use, and transportation emissions. Table 8 combines the construction, operational and mobile GHG emissions associated with the proposed project. For the proposed project, the combined annual GHG emissions would total approximately 813 metric tons of CO_2e. The total amount of GHG emissions would be lower than the threshold of 3,000 metric tons of CO_2e per year.

Table 8
Combined Annual Emissions
of Greenhouse Gases

Emission Source	Annual Emissions CDE
Construction	5 metric tons
Operational *Area* *Energy* *Solid Waste* *Water*	 <1 metric tons 374 metric tons 13 metric tons 7 metric tons
Mobile *CO_2 and CH_4*	414 metric tons
Total Emissions from the Proposed Project	**813 metric tons**
SCAQMD Proposed Tier 3 Threshold	*3,000 metric tons*
Threshold exceeded?	**No**

Sources: See Appendix A for calculations and for GHG emission factor assumptions.

Senate Bill 375, signed in August 2008, requires the inclusion of sustainable communities' strategies in regional transportation plans for the purpose of reducing GHG emissions. In April 2012, SCAG adopted the 2012-2035 RTP/SCS. SCAG's RTP/SCS includes a commitment to reduce emissions from transportation sources by promoting compact and infill development and promoting alternative modes of transportation. A goal of the SCS is to "promote the development of better places to live and work through measures that encourage more compact development, varied housing options, bike and pedestrian improvements and efficient transportation infrastructure." The proposed hotel project would not conflict with any of these goals as it would allow for infill development of a commercially-designated site located along a major transportation corridor.

The proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs and would be consistent with the objectives of the RTP/SCS, AB 32, SB 97, and SB 375.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
-- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	☐	☐	■	☐
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	■	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
h) 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?	☐	☐	■	☐

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

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

The proposed hotel expansion would not involve the routine transport, use or disposal of hazardous substances, other than minor amounts used for maintenance and landscaping. Minor amounts of potentially hazardous materials such as fuels, lubricants, and solvents could be used during construction of the project. However, the transport, use, and storage of hazardous materials during construction would be conducted in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Adherence to these requirements would reduce impacts to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?

The nearest existing school is Bay Laurel Elementary School, located approximately 1.2 miles southwest of the project site. Calabasas High School and A.E. Wright Middle School, are located ~3 miles southeast of the project site. The proposed hotel would not generate hazardous emissions and the project site is not located within ¼ mile of an existing or proposed school. Therefore, the project would not emit hazardous emissions or handle hazardous materials within one quarter mile of a school.

NO IMPACT

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

The following databases compiled pursuant to Government Code Section 65962.5 were checked (August 13, 2015) for known hazardous materials contamination at the project site:

- *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database*
- *Geotracker search for leaking underground storage tanks (LUSTs)*
- *Cortese list of Hazardous Waste and Substances Sites*
- *Department of Toxic Substances Control's Site Mitigation and Brownfields Database*

The project site does not appear on any of the above lists. Two LUST sites are within 1,000 feet of the project site. Both LUST sites are closed and are no longer hazards. Therefore, impacts related to hazardous material sites would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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 for people residing or working in the project area?

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

There are no public or private airports on or adjacent to the project site. The nearest airport is Van Nuys Airport, located approximately 12 miles northeast of the project site. No impact related to airport hazards would occur.

NO IMPACT

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

The project would conform to the site planning and project design standards contained in Calabasas Municipal Code Section 17.20.080, which requires that discretionary projects provide points of ingress and egress that include emergency access for police and fire vehicles as required by the Los Angeles County Consolidated Fire Districts (LACFD) and the City of Calabasas, and would ensure that emergency response access is maintained.

NO IMPACT

h) Would the project 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?

The entire City of Calabasas, including the project site, is located within the Los Angeles County Consolidated Fire District's Very High Fire Hazard Severity Zone. This zone includes wildland fire hazard areas defined as watershed lands that contain native growth and vegetation (City Municipal Code, Section 17.20.130).

The proposed project would adhere to standard requirements set forth by the City Municipal Code and the California Building Code (CBC) with City of Calabasas amendments, including driveway width requirements, the creation and maintenance of wildfire buffers, and sprinkler and alarm requirements. Impacts related to wildland fire would be less than significant with mandatory compliance with applicable building standards and regulations.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	■	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	■
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	■	☐
d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	■	☐
e) 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?	☐	☐	■	☐
f) Otherwise substantially degrade water quality?	☐	☐	■	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	■	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	■	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the project:				
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	■	☐
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	■

a) Would the project violate any water quality standards or waste discharge requirements?

e) Would the project 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?

f) Would the project otherwise substantially degrade water quality?

The project site is within the region covered by the Los Angeles County Municipal Storm Water NPDES Permit No. CAS004001 issued by the Los Angeles Regional Water Quality Control Board (LARWQCB). This permit governs non-point source discharges associated with storm water runoff. Regulations under the federal Clean Water Act require compliance with the NPDES storm water permit for projects disturbing more than one acre during construction. Per State regulations, the applicant would be required to file a Notice of Intent with the LARWQCB and prepare a SWPPP. Even though the project would disturb less than one acre of area during construction, under the Development Program of the Los Angeles Municipal Stormwater Permit, development that occurs within Los Angeles County on areas less than one acre must also implement a SWPPP to prevent erosion and sedimentation problems during the construction phase of the development. The SWPPP would require the use of BMPs (such as gravel bags, silt fences, hay bales, check dams, hydro seed, mulch, and soil binders) during construction, which would prevent excessive storm water runoff pollution. The project would be required to comply with the Los Angeles County Areawide MS4 permit, which requires that the amount of runoff from the site must be the same before and after construction of a project. The MS4 permit also requires the integration of post-construction BMPs into the site's overall drainage system and would further reduce the potential for pollutants to enter the storm drain system. In order to comply with the MS4 permit, the proposed project would include a 36" wide grassy swale that would capture first flush stormwater from impervious surfaces and reduce the amount of runoff and pollution that reaches the storm drain system. In addition, the Los Angeles County Flood Control District (LACFCD) does not permit any increase in receiving water peak flows as a result of the project development. Because the project would be required to include site drainage systems according to standards and provisions set forth by the City of Calabasas and County of Los Angeles, impacts related to water quality would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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, in a manner which would result in substantial erosion or siltation on- or off-site?

d) Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The proposed project would not alter any watershed boundaries, impact a stream course or increase the quantity of water, erosion, or siltation in a stream or river. The project site drains through concrete drainages to storm drain inlets on Parkway Calabasas. The proposed project would include the construction of six additional gutters on the project site. A 36" wide swale would also be constructed to aid in stormwater capture and filtration. Thus, while the project would add impervious surface to the site, it would not substantially affect runoff volumes or patterns on the site. In addition, as discussed above, LACFCD does not permit any increase in receiving water peak flows as a result of project development, and the project would be required to comply with this restriction. As such, the proposed project would not alter drainage patterns in a manner that would cause flooding, erosion, or siltation. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The Las Virgenes Municipal Water District would provide water to the project site and relies on imported water for its supplies. Therefore, the proposed project would not affect groundwater supplies or recharge. No impact would occur with respect to groundwater.

NO IMPACT

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

i) Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

The project site is located in Flood Zone D, an area in which flood hazards are undetermined, but possible (FEMA Map No. 06037C1269F). The project site is not located within a known 100-year flood hazard zone (City of Calabasas 2030 General Plan, 2008). In addition, according to the 2030 General Plan FEIR (2008), the City of Calabasas is not in the dam inundation area for any major stream or river in the region. Because the project would not be located within a 100-year flood hazard area or in a dam inundation area, development of the proposed project would

not expose people or structures to significant flood hazards and would not impede or redirect flood flows. Therefore, impacts with respect to flooding would be less than significant.

LESS THAN SIGNIFICANT IMPACT

j) Would the project result in inundation by seiche, tsunami, or mudflow?

The project site is not subject to risks related to seiche, tsunami or mudflows (2030 General Plan FEIR, 2008).

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. LAND USE AND PLANNING				
-- Would the project:				
a) Physically divide an established community?	☐	☐	☐	■
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	■
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■

a) Would the project physically divide an established community?

Development of the proposed project would not involve a road or other facility that would physically divide an established community. The project involves expansion of an existing hotel that is consistent with the 2030 General Plan land use designation for the site.

NO IMPACT

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project is within the Calabasas Park Centre and is therefore subject to the Calabasas Park Centre Project Development and Design Guidelines. The Calabasas Park Centre

Development and Design Guidelines were a result of a cooperative planning and community participation process that was undertaken to create a new comprehensive master plan to guide the future planning and build out of the 67-acre Calabasas Park Centre Property. The master planning process was jointly initiated by the Calabasas City Council and the project developer, Kilroy Calabasas Associates in December of 1994. The Development and Design Guidelines give project specific site and architectural design guidelines. The proposed project is consistent with the all the project specific Development and Design Guidelines.

The project site is designated Mixed Use 0.95 in the 2030 General Plan and zoned Commercial, Mixed Use (CMU). The Mixed Use designation accommodates properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site. The maximum floor to area ratio for Mixed Use is 0.95 with a basic land intensity or floor area ratio (FAR) of less than or equal to 0.2.

Hotels are considered a commercial use and are permitted in the CMU zone with a CUP (City of Calabasas Municipal Code Section 17.11.010.f). In addition, the CMU zone has a maximum allowable FAR of 0.95 and a minimum of 0.6 for all buildings, and a 62%maximum for site area coverage. Since the proposed project is in Zone 4 of the Calabasas Park Centre, the building is authorized to consist of three stories with a 45-foot height limit (City of Calabasas, 1997).The proposed project would include increase the building area of the already existing hotel. With the expansion, the hotel would cover 16.7% of the net area of the project site with a FAR of 0.48, while 49.3% of the net area of the project site would be landscaped and the remaining 33.8% would be paved to provide parking. The project's proposed FAR is lower than the minimum required by the Calabasas Municipal Code. However, the existing hotel has a legal nonconforming floor area ratio and while the proposed project would not bring the total FAR in compliance with the required range of 0.60 to 0.95, the project would increase the FAR and bring it closer to the required range compared to the existing conditions; therefore, a variance is not required.
Assuming approval of a Site Plan Review and a Conditional Use Permit, no impact related to inconsistency with City plans and policies would occur.

NO IMPACT

c) Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?

The proposed project would not conflict with any habitat conservation plan or natural community conservation plan as the project site is not subject to such plans.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

a) 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?

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?

The proposed project would not entail construction of structures or facilities for the purposes of extraction or exploration of mineral resources and the project would not result in the loss of availability of a mineral resource of local, regional, or statewide importance (2030 General Plan FEIR, 2008). No impact would occur with respect to mineral resources.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	■	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c) A substantial permanent increase in ambient noise levels above levels existing without the project?	☐	■	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. NOISE				
-- Would the project result in:				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	■	☐	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?	☐	☐	☐	■

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If a sound's physical intensity is doubled, the sound level increases by 3 dBA, regardless of the initial sound level. For example, 60 dBA plus 60 dBA equals 63 dBA. Where ambient noise levels are high in comparison to a new noise source, the change in noise level would be less than 3 dBA. For example, 70 dBA ambient noise levels are combined with a 60 dBA noise source the resulting noise level equals 70.4 dBA. Based on the logarithmic scale, a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise that is experienced at any receptor can be attenuated by distance or the presence of noise barriers or intervening terrain. Sound from a single source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. For acoustically

absorptive, or soft, sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), ground attenuation of about 1.5 dBA per doubling of distance normally occurs. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction.

On July 23, 2015, Rincon Consultants, Inc. performed three 15-minute weekday noise measurements at the project site using an ANSI Type II integrating sound level meter. The noise monitoring results are summarized in Table 9.

Table 9
Measured Noise Levels

#	Measurement Location	Approximate Distance from Centerline of Parkway Calabasas	Leq[15] (dBA)[1]
1	On Parkway Calabasas (near southernmost rooms)	50 feet	70.0
2	On project site, midway between the project's northernmost and southernmost rooms	115 feet	70.0
3	On project site, near project's northernmost rooms	200 feet	67.6

Source: Rincon Consultants, Inc. Recorded during field visit using ANSI Type II Integrating sound level meter. See Appendix B for noise measurement results.

[1] The equivalent noise level (Leq) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). For this measurement the Leq was over a 15-minute period (Leq[15]).

The equivalent noise level (Leq) measured at the project site over 15-minute periods (Leq[15]) ranged from about 68 dBA near the approximate location of the project's northernmost rooms to 70 on Parkway Calabasas (near southernmost rooms) and on the project site (midway between the project's northernmost and southernmost rooms). The primary sources of roadway noise near the project site are automobiles traveling on Parkway Calabasas immediately west and the 101 Freeway north of the project site.

The City mapped CNEL noise exposure contours using the Federal Highway Traffic Noise Prediction Model for existing major noise sources, including freeways and primary arterial highways. Contour designations were formulated for conditions at the time the Noise Element was drafted. According to the contour map, the project site is located in the 65 dBA contour of the 101 Freeway (City of Calabasas General Plan, 2008).

The City identifies the State Office of Noise Control land use compatibility guidelines as the standards for development within the City (2030 General Plan, 2008). Figure 12 from the General Plan shows the ranges of noise exposure, for various land uses that are considered acceptable, conditionally acceptable, or unacceptable under the State Office of Noise Control guidelines and as adopted by the City of Calabasas General Plan Noise Element. An acceptable noise environment is one in which development may be permitted without requiring specific noise studies or specific noise-reducing features. A conditionally acceptable noise environment is one is which development should be permitted only after noise mitigation has been designed as part of the project, to reduce noise exposure to acceptable levels. In unacceptable noise environments, development generally should not be undertaken. For hotels, the normally acceptable range is up to 65 dBA, the conditionally acceptable range is from 60 to 70 dBA, and the normally unacceptable range is from 70 to 80 dBA. Noise levels measured on the project site range are conditionally acceptable (see Table 9 above).

The City of Calabasas has adopted a noise ordinance (Ordinance No. 2010-265) that establishes ambient noise standards for all properties within various noise zones, using the hourly equivalent sound level, or Leq. This ordinance sets an exterior noise standard of 60-65 dBA between 7:00 A.M. and 10:00 P.M., depending on the residential zone, and 50 dBA between 10:00 P.M. and 7:00 A.M. for all residential zones (City of Calabasas Municipal Code, Section 17.20.160 D). Interior noise levels for all residential uses are 45 dBA between 7:00 A.M. and 10:00 P.M. and 40 dBA from 10:00 P.M. to 7:00 A.M. (City of Calabasas Municipal Code, Section 17.20.160 E). Commercial and special purpose zones have an exterior noise level standard of 65 dBA from 7:00 A.M. to 10:00 P.M. and 60 dBA from 10:00 P.M. to 7:00 A.M., with the exception that active recreational areas have a noise level standard of 70 dBA from 7:00 A.M. to 10:00 P.M (City of Calabasas Municipal Code, Section 17.20.160 D).

The City's noise ordinance exempts noise associated with construction activities between the hours of 7:00 A.M. and 6:00 P.M. during weekdays and 8:00 A.M. and 5:00 P.M. on Saturdays (City of Calabasas Municipal Code, Section 17.20.160 C).

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S. The City has not adopted any thresholds or regulations addressing vibration. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (Federal Transit Administration, May 2006). The vibration thresholds established by the Federal Transit Administration (FTA) are 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB for residences and buildings where people normally sleep, including hotels, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools). The threshold for the proposed project is 72 VdB for residences and hotels during hours when people normally sleep, as these are the only sensitive receptors in the vicinity of the project site. In terms of ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB would damage fragile buildings and levels in excess of 95 VdB would damage extremely fragile historic buildings.

a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

c) Would the project result in a substantial permanent increase in ambient noise levels above levels existing without the project?

d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The entire project site is exposed to noise from the 101 Freeway and traffic along Parkway Calabasas. According to the Noise Element of the City of Calabasas' General Plan (2008), the project site is located in the 65 dBA noise contour of the 101 Freeway and Parkway Calabasas. Noise measurements taken onsite indicate that noise along the Parkway Calabasas is approximately 70 dBA and the noise on the proposed project site is approximately 68 dBA (see Table 9).

The proposed project's hotel use is within the 65 dBA noise contour for the 101 Freeway. A noise level exposure of 65 dBA would fall within the "normally acceptable" and a noise level exposure of 70 dBA would fall into the "conditionally acceptable" ranges for hotel land uses. Moreover, as indicated in Table 9, one noise measurement taken at the location of the proposed hotel (location 3) was approximately 67.6 dBA, which is within the "conditionally acceptable" range for hotels. Implementation of the Mitigation Measure NOISE-1 would ensure that potential noise impacts generated along the 101 Freeway and Parkway Calabasas would be less than significant.

NOISE-1 Project design shall include noise insulation sufficient to achieve an interior noise level of 45 dBA CNEL or less in all hotel rooms. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Construction Noise

Noise levels from construction of the proposed project would result from construction of the structure and traffic noise from construction vehicles. Nearby noise-sensitive land uses, such as residences 630 feet south of the project site, would be exposed to temporary construction noise during development of the proposed project. Noise impacts are a function of the type of activity being undertaken and the distance to the receptor location. Construction activity is expected to occur over a period of approximately 8 months. Table 10 shows the typical noise levels at construction sites.

Table 10
Typical Noise Levels at Construction Sites

Equipment Onsite	Typical Level (dBA) 25 Feet from the Source	Typical Level (dBA) 100 Feet from the Source	Typical Level (dBA) 630 Feet from the Source
Air Compressor	87	75	65
Backhoe	86	74	64
Concrete Mixer	91	79	69
Crane, mobile	89	77	67
Dozer	91	79	69
Jack Hammer	94	82	72
Paver	95	83	73
Saw	82	70	60
Truck	94	82	64

Noise levels assume a noise attenuation rate of 6 dBA per doubling of distance.
Source: Federal Transit Administration (FTA), May 2006

Typical noise levels from individual pieces of construction equipment range from about 60 to 73 dBA at a distance of 630 feet. Such levels, which would occur intermittently during the 8-month construction period, would be similar to ambient sound levels in the area of the residences. However, as discussed above, pursuant to City of Calabasas Municipal Code Section 17.20.160 C, noise associated with construction activities is only allowed between the hours of 7:00 AM and 6:00 PM during weekdays and 8:00 AM and 5:00 PM on Saturdays. Therefore, construction would not occur during recognized sleep hours for residences.

Operational Noise

Operation of the proposed hotel would generate noise typically associated with commercial uses, such as rooftop ventilation and heating systems, delivery trucks, trash hauling, parking lot noise, and on-site circulation of motor vehicles. Noise levels generated by commercial development would not disturb the residents located approximately 630 feet south of the project site. The distance from the proposed hotel to off-site sensitive receptors and the presence of intervening structures and roadways would attenuate operational noise associated with commercial uses. Typical noise sources associated with parking lots include tire squeal, doors slamming, car alarms, horns, and engine start-ups. Noise from typical parking lot activities such as car alarms can reach up to 66 dBA at 50 feet; door slams up to 72 dBA at 50 feet; vehicle tire squeals up to 72 dBA at 50 feet; and vehicle start-ups up to 73 dBA at 50 feet. Noise levels within the parking area would fluctuate with the amount of automobile and human activity. More generally, noise levels would be highest during the day, when the largest number of employees and visitors would enter and exit the parking lot. The maximum source of noise from the parking area, vehicle start-ups, would be 73 dBA at 50 feet, attenuating to approximately 50 dBA at the nearest residences (approximately 630 feet away). Therefore, operational noise generated from commercial uses would not expose off-site sensitive receptors to noise levels above exterior noise level standards.

According to the project traffic analysis (Appendix C), the proposed project would generate 417 new average daily trips (ADT), 27 new AM peak hour, and 31 new PM peak hour trips along study area roadway segments. Project-generated traffic would incrementally increase noise levels along these roadway segments. The increase in noise along these roadway segments was calculated using the maximum of A.M. and P.M. peak hour trips from the traffic analysis and the U.S. Department of Housing and Urban Development's Day/Night Noise Level Calculator tables (see Appendix C). The project would generate an increase of 22 A.M. and 24 P.M. peak hour trips on Parkway Calabasas and 5 A.M. and 6 P.M. peak hour trips on Park Sorrento.

Table 11 compares pre- and post-project noise levels along project area roadway segments. As shown in Table 11, increases in project-generated traffic noise would be less than 0.1 dBA on Parkway Calabasas and Park Sorrento. As discussed above, a 3 dBA change in community noise levels is noticeable, while 1 to 2 dBA changes generally are not perceived. Therefore, an increase of less than 0.1 would not result in an audible change in ambient noise at sensitive receptor locations along area roadways. Furthermore, an increase of less than 0.1 would not exceed the 1 dBA threshold established by the FTA for roadways with an existing noise exposure of 65-70 dBA. As such, the proposed project would not result in a substantial permanent increase in ambient noise levels in the project site vicinity and impacts would be less than significant.

Table 11
Comparison of Pre-Project and Post-Project Traffic Noise
On Project Area Roadways

Roadway	Projected Noise Level[a] (dBA CNEL)			Change In Noise Level (dBA)		Significant?
	Existing (1)	Existing + Project (2)	Cumulative + Project (3)	Due to Project Traffic (2-1)	Due to Cumulative Traffic Growth (3-1)	
Parkway Calabasas	77.7	77.7	77.7	<0.1	<0.1	No
Park Sorrento	78.6	78.6	78.6	<0.1	<0.1	No

Notes: DNL Calculator, U.S. Department of Housing and Urban Development, accessed at: https://www.hudexchange.info/programs/environmental-review/dnl-calculator. See Appendix B.

[a] *Estimate of noise generated by traffic approximately 50 feet from the centerline of the roadway. Noise levels presented do not account for attenuation provided by existing topography, barriers or future barriers; therefore, actual noise levels at sensitive receptor locations influenced by study area roadways may in many cases be lower than presented herein.*

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Operation of the proposed hotel would not perceptibly increase groundborne vibration or groundborne noise on the project site above existing conditions. Construction of the proposed project could potentially increase groundborne vibration on the project site, but construction effects would be temporary. The nearest sensitive receptors are residences at the Westridge Calabasas approximately 630 feet south of the project site. Based on the information presented in Table 12, during construction, these residences would be exposed to maximum vibration levels of approximately 58 VdB because vibration, like noise, attenuates over distance.

Table 12
Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB					
	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet	630 Feet
Loaded Trucks	86	80	78	76	74	58
Jackhammer	79	73	71	69	67	51
Small Bulldozer	58	52	50	48	46	30

Source: Federal Railroad Administration, 1998

As discussed above, 100 VdB is the general threshold where minor damage can occur in fragile buildings. Because vibration levels would not reach 100 VdB, structural damage would not be expected to occur as a result of construction activities. The vibration levels at residences to the south would not exceed the groundborne velocity threshold level of 72 VdB established by the Federal Transit Administration for residences and buildings where people normally sleep. In addition, as discussed above, the City of Calabasas exempts noise associated with construction activities between the hours of 7:00 AM and 6:00 PM during weekdays and 8:00 AM and 5:00 PM on Saturdays from its Noise Ordinance restrictions (City of Calabasas Municipal Code, Section 17.20.160 C). Assuming that construction is limited to these hours, construction activity would not occur during recognized sleep hours for residences. As such, vibration effects from proposed project construction would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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 expose people residing or working in the project area to excessive noise levels?

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?

The airport nearest to the project site is Van Nuys Airport, located approximately 12 miles northeast of the site. The project would not be subject to excessive noise levels associated with airport operations.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. POPULATION AND HOUSING				
-- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	■	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

a) Would the project induce substantial 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)?

SCAG produces forecasts of regional population, which form the basis for growth projection in SCAG's 2012 RTP-SCS. SCAG's growth forecast projects a population of 24,400 for Calabasas in 2035, an increase of 457 from the estimated 2015 population of 24,212 (California Department of Finance, 2015). As discussed in Section 4.10 of the 2030 General Plan FEIR (2008), given that Calabasas is primarily built out and the General Plan includes numerous policies and objectives aimed at limiting further growth, no exceedance of SCAG population forecasts for the City is anticipated.

The proposed project would involve development of the project site in general accordance with the uses prescribed in the 2030 General Plan. The development of a three-story hotel expansion with 51 rooms and a gross floor area of approximately 24,342 square feet could cause an indirect increase in the City's population. SCAG's Employee Density Study (2001) states that, in Los Angeles County, hotels generate approximately one employee per 1,179 square feet. Based on this factor, the project would generate an estimated 21 employees. The City population is approximately 24,212, according to the most recent (2015) California Department of Finance estimate. Therefore, although most employees are expected to be drawn from the local workforce, the proposed project could result in a citywide population of approximately 24,233 persons if all the employees moved into the City from elsewhere. Therefore, development of the proposed project would not add population beyond that anticipated in the 2030 General Plan projection, which is consistent with SCAG's 2030 growth forecast (2030 General Plan FEIR, 2008). Impacts related to population growth would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The proposed project would not involve the demolition of any residential units. Thus, the project would not displace housing units or people, or necessitate the construction of replacement housing. No impact related to the displacement of people and housing would occur.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	■	☐
ii) Police protection?	☐	☐	■	☐
iii) Schools?	☐	☐	■	☐
iv) Parks?	☐	☐	■	☐
v) Other public facilities?	☐	☐	■	☐

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

The LACFD provides fire protection services to the project site. The nearest fire station is Station #68, located at 24130 Calabasas Road, in Calabasas. The project site is across the street from the fire station, 0.2 mile (driving distance) from the fire station, with access via Park Sorrento.

The proposed project would incrementally increase demand for fire protection service. However, because the project site is within the current service area for Station #68, it would not require the construction of new or expanded fire protection facilities. Impacts related to fire services would be less than significant. In addition, the proposed project would be required to pay standard development impact mitigation fees. In addition, the applicant would be required to comply with the Fire Code and LACFD standards, including specific construction specifications, access design, location of fire hydrants, and other design requirements.

LESS THAN SIGNIFICANT IMPACT

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

The Los Angeles County Sheriff's Department (LASD) provides police protection service in Calabasas and to the project site. The nearest LASD station is the Malibu/Lost Hills Sheriff's Station located at 27050 Agoura Road in the City of Agoura, approximately 4.3 miles west of the project site. The Station's service area is approximately 178 square miles, which includes the cities of Agoura Hills, Calabasas, Hidden Hills, Malibu, and Westlake Village, as well as the surrounding communities of Chatsworth Lake Manor, Malibu Lake, Topanga, and West Hills (P. Davoren, pers. comm., June 11, 2015). The estimated resident population of the service area is 90,000. The Station is staffed by 107 sworn deputies and 78 civilian employees and staffing is expected to remain unchanged for the foreseeable future (P. Davoren, pers. comm., June 11, 2015). There are currently 40 patrol vehicles, 6 motorcycles, and 60 other law enforcement vehicles assigned to the Station. The Station is also supported by other Department assets, including helicopters, fixed-wing aircraft, emergency operations equipment, search and rescue equipment, and mounted patrol.

The Station's current service ratio is one deputy per 833 residents (P. Davoren, pers. comm., June 11, 2015). On average, the Station's response times throughout its service area is zero to ten minutes for emergent calls for service, zero to 20 minutes for priority calls for service, and zero to 60 minutes for routine calls for service. The LASD has stated concerns about potential long-term needs for additional staff and assets to meet future demands for service, but states that due to the relative proximity of the project site to the Station, the Station's response times to calls for service from the proposed project would fall within the times ranges described above. The proposed project would incrementally increase demand for police protection service. However, the site is within the current LASD service area and the LASD indicates that the proposed project would not adversely affect the Station's resources or operations (P. Davoren, pers. comm., June 11, 2015). Because the project would not create the need for new or expanded facilities, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project would not directly cause an increase in school age population since it involves the construction of a hotel. Thus, the proposed project would not require new or expanded schools to maintain acceptable service ratios or other performance objectives. The project site is located within the Las Virgenes Unified School District (LVUSD) and within the service areas of Calabasas High School, A.C. Stelle Middle School, and Bay Laurel Elementary School.

As of January 1987, State law allows school districts to levy three different levels of development fees directly on new residential, commercial, and industrial development (Government Code Section 65995). Districts set their own fees within this limit based on a nexus study establishing their funding requirements. Since Proposition 1A was passed by the voters and Government Code Section 65995(h) was adopted by the State Legislature in 1996, school fees generated by new development are deemed legally-sufficient mitigation of any impacts based on generation of students on school facilities.

LESS THAN SIGNIFICANT IMPACT

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

The City of Calabasas maintains a parkland target ratio of 3 acres per 1,000 residents (City of Calabasas General Plan, 2008). As described in Section XIII, *Population and Housing*, the proposed project would not directly increase the population because it does not include residential uses, but may indirectly increase the population by 21 residents if all new employees relocated to the City. Employees may use existing park facilities; however increased demand would be nominal. The proposed project also includes on-site amenities such as a pool and exercise room. These amenities may supplement any potentially nominal increase in park demand. Therefore, impacts related to parks would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Library services are provided by the Calabasas Library located at 200 Civic Center Way in Calabasas. The Calabasas Library was built in 2008 and serves 41,780 registered users (Calabasas Library, 2013). As of 2013, the Library employed 23 full and part time staff members and had over 60,000 print materials available, as well as electronic books, downloadable audio books, magazines, and online databases (Calabasas Library, 2013).

As described in Section XIII, *Population and Housing*, the proposed project would not directly increase the population because it does not include residential uses, but may indirectly increase the population by 21 residents if all new employees relocated to the City. Employees may use existing library facilities; however, even with such an increase in residential population demand for library services would increase by less than 0.1% (the percentage increase of adding 21 new registered users to the 41,780 existing library users). Additional library facilities would not be needed.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. 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?	☐	☐	■	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	■	☐

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

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?

Please see the discussion above under Section XIV.a.iv, *Public Services*. Impacts related to recreation would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC				
-- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	■	☐
b) 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?	☐	☐	■	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	■	☐
e) Result in inadequate emergency access?	☐	☐	■	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	■	☐

a) Would the project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?

Associated Transportation Engineers prepared a traffic impact analysis for the proposed project (July 2015; see Appendix C). Trip generation estimates were developed utilizing trip generation rates and equations from *Trip Generation, 9th Edition* (Institute of Transportation Engineers,

2012). As shown in Table 13, the proposed project would generate approximately 417 daily vehicle trips, including 27 AM and 31 PM peak hour trips.

Table 13
Estimated Project Traffic Trip Generation

Land Use	Quantity	Weekday Peak Hour		Total Daily Trips
		AM	PM	
Hotel	51 rooms	27	31	417

Source: Associated Transportation Engineers., 2015; See Appendix C for full traffic analysis.

Level of Service (LOS) calculations were performed at the following intersections:

- *Parkway Calabasas and Ventura Boulevard*
- *Northbound 101 Freeway Ramps and Ventura Boulevard*
- *Southbound 101 Freeway Ramps and Calabasas Road*
- *Parkway Calabasas and Calabasas Road*
- *Civic Center Way and Calabasas Road*
- *Commons Way and Calabasas Road*
- *Parkway Calabasas and Park Sorrento*

The following City of Calabasas Traffic Impact Analysis scenarios were evaluated:

- *Existing (2015) traffic conditions*
- *Existing + project traffic conditions / Future (2017) traffic conditions (A+B)*
- *Future (2017) + project traffic conditions (A+B+C)*
- *Future (2017) + cumulative impacts*
- *Cumulative Impacts + project traffic conditions*

The significance of the potential impacts of project-generated traffic was identified using the traffic impact criteria set forth in the City of Calabasas' 2030 General Plan (December 2008) for City intersections. The minimum acceptable LOS at an intersection in the City is LOS C except at freeway interchanges and the two-lane segment of Calabasas Road that traverses Old Town Calabasas. The performance level for freeway interchange locations is LOS D and the Old Town Calabasas section of Calabasas Road is LOS F.

The City of Calabasas has developed policies to address potential traffic impacts created by new development. Policy VI-2 states a need to limit the intensity and traffic generation of new development in the City to that which would compromise attainment of the maintenance of roadway level of service standards indicated above. Police VI-3 states that where existing or projected traffic volumes at General Plan buildout prevent a project from complying with VI-2, the development should be limited in intensity during the peak hours to not exceed the criteria shown in Table 14. Exceeding these limits is defined as a significant traffic impact and mitigation would be required to reduce the level of impact below these thresholds.

Table 14
Criteria for Significant Traffic Impact

Existing or Future Intersection LOS	Final ICU Value	Project-related increase in ICU value
D	0.81 – 0.90	+0.020
E	0.91 – 1.00	+0.015
F	> 1.0	+0.010 or more

Source: City of Calabasas 2030 General Plan, 2008); See Appendix C for full traffic analysis.

The existing (2015) LOS conditions for the seven study area intersections are shown in Table 15.

Table 15
Level of Service for Existing (2014) Conditions

No.	Intersection	Peak Hour	Existing	
			ICU/Delay	LOS
1	Parkway Calabasas and Ventura Boulevard	AM	0.470	A
		PM	0.605	B
2	Northbound 101 Freeway Ramps and Ventura Boulevard	AM	5.5	A
		PM	8.0	A
3	Southbound 101 Freeway Ramps and Calabasas Road	AM	20.2	C
		PM	20.0	C
4	Parkway Calabasas and Calabasas Road	AM	0.491	A
		PM	0.623	B
5	Civic Center Way and Calabasas Road	AM	0.281	A
		PM	0.460	A
6	Commons Way and Calabasas Road	AM	0.267	A
		PM	0.550	A
7	Parkway Calabasas and Park Sorrento	AM	0.365	A
		PM	0.331	A

Source: Associated Transportation Engineers, 2015; See Appendix C for full traffic analysis.

The study area intersections are projected to operate within acceptable LOS during the peak hours for existing + project traffic conditions as shown on Table 16.

Table 16
Traffic Conditions for Existing + Project

No.	Intersection	Peak Hour	Existing		Existing + Project			Significant Impact?
			ICU/Delay	LOS	ICU/Delay	LOS	Change	
1	Parkway Calabasas and Ventura Boulevard	AM	0.470	A	0.472	A	+0.002	No
		PM	0.605	B	0.607	B	+0.002	No
2	Northbound 101 Freeway Ramps and Ventura Boulevard	AM	5.5	A	5.5	A	+0.002[a]	No
		PM	8.0	A	8.0	A	+0.002[a]	No
3	Southbound 101 Freeway Ramps and Calabasas Road	AM	20.2	C	20.3	C	+0.002[a]	No
		PM	20.0	C	20.1	C	+0.003[a]	No
4	Parkway Calabasas and Calabasas Road	AM	0.491	A	0.495	A	+0.004	No
		PM	0.623	B	0.626	B	+0.003	No
5	Civic Center Way and Calabasas Road	AM	0.281	A	0.283	A	+0.002	No
		PM	0.460	A	0.465	A	+0.005	No
6	Commons Way and Calabasas Road	AM	0.267	A	0.267	A	0.000	No
		PM	0.550	A	0.551	A	0.001	No
7	Parkway Calabasas and Park Sorrento	AM	0.365	A	0.372	A	0.007	No
		PM	0.331	A	0.339	A	0.008	No

Source: Associated Transportation Engineers, 2015; See Appendix C for full traffic analysis.

[a]*Project added V/C ratio increases based on ICU calculations*

An opening year analysis was completed for the project to analyze traffic conditions due to ambient growth. Ambient growth represents projects being developed outside of the analysis area or projects not currently identified which may add traffic to the area intersections. Information provided by the project applicant indicates that the Hilton Garden Expansion Project would be fully built and operational by 2017. The 2017 (Opening Year) traffic volumes were developed by applying 1% annual growth rate to the existing traffic volumes.

Table 17 compares existing traffic volumes to the 2017 (Opening Year) traffic volumes for the project site area. Levels of service calculated for the project site intersections assuming 2017 and 2017 + Project traffic volumes are presented on Tables 17 and 18. Table 18 compares the 2017 and 2017 + Project levels of service and identifies impacts based on City thresholds. Study area intersections are projected to operate within acceptable LOS during the peak hours for future (2017) + project traffic conditions.

Table 17
Future Traffic Conditions without Project

No.	Intersection	Peak Hour	Existing		Future (2017) without Project		
			ICU/Delay	LOS	ICU/Delay	LOS	Growth
1	Parkway Calabasas and Ventura Boulevard	AM	0.470	A	0.477	A	+0.007
		PM	0.605	B	0.616	B	+0.011
2	Northbound 101 Freeway Ramps and Ventura Boulevard	AM	5.5	A	5.6	A	+0.1
		PM	8.0	A	8.0	A	+0.0
3	Southbound 101 Freeway Ramps and Calabasas Road	AM	20.2	C	20.9	C	+0.7
		PM	20.0	C	21.1	C	+1.1
4	Parkway Calabasas and Calabasas Road	AM	0.491	A	0.499	A	+0.008
		PM	0.623	B	0.633	B	+0.01
5	Civic Center Way and Calabasas Road	AM	0.281	A	0.286	A	+0.005
		PM	0.460	A	0.467	A	+0.060
6	Commons Way and Calabasas Road	AM	0.267	A	0.270	A	+0.003
		PM	0.550	A	0.559	A	+0.009
7	Parkway Calabasas and Park Sorrento	AM	0.365	A	0.370	A	+0.005
		PM	0.331	A	0.336	A	+0.005

Source: Associated Transportation Engineers, 2015; See Appendix C for full traffic analysis.

Table 18
Future Traffic Conditions with Project

No.	Intersection	Peak Hour	Future (2017) without Project		Future (2017) with Project			Significant Impact?
			ICU/Delay	LOS	ICU/Delay	LOS	Change	
1	Parkway Calabasas and Ventura Boulevard	AM	0.477	A	0.479	A	+0.002	No
		PM	0.616	B	0.619	B	+0.003	No
2	Northbound 101 Freeway Ramps and Ventura Boulevard	AM	5.6	A	5.6	A	+0.002[a]	No
		PM	8.0	A	8.0	A	+0.002[a]	No
3	Southbound 101 Freeway Ramps and Calabasas Road	AM	20.9	C	21.0	C	+0.001[a]	No
		PM	21.1	C	21.1	C	+0.002[a]	No
4	Parkway Calabasas and Calabasas Road	AM	0.499	A	0.503	A	+0.004	No
		PM	0.633	B	0.633	B	+0.0	No
5	Civic Center Way and Calabasas Road	AM	0.286	A	0.290	A	+0.004	No
		PM	0.467	A	0.471	A	+0.004	No
6	Commons Way and Calabasas Road	AM	0.270	A	0.271	A	+0.001	No
		PM	0.559	A	0.560	A	+0.001	No
7	Parkway Calabasas and Park Sorrento	AM	0.370	A	0.377	A	+0.007	No
		PM	0.336	A	0.344	A	+0.009	No

Source: Associated Transportation Engineers 2015; See Appendix C for full traffic analysis.

[a]Project added V/C ratio increases based on ICU calculations

Study area intersections would operate acceptably at LOS C or better with 2017 + Project traffic volumes. The project would not generate significant impacts to the intersections based on impact criteria set forth in the City of Calabasas' 2030 General Plan.

Cumulative traffic volumes were forecast for study area intersections assuming development of the approved and pending projects located within the project study area. The list of approved and pending projects used for the cumulative analysis was obtained from the City of Calabasas and is detailed in the traffic analysis in Appendix C. Trip generation estimates were developed for the cumulative projects using rates presented in the ITE Trip Generation report (cumulative trip generation calculation worksheets contained in Appendix C) (Institute of Transportation Engineers, 2012). The traffic generated by cumulative projects was added to the 2017 volumes based on distribution percentages presented in existing traffic studies and environmental documents completed for developments in the study area. Table 19 represents the Cumulative traffic volumes and the Cumulative + Project traffic volumes for the Project area intersections.

Table 19
Future Cumulative Traffic Conditions with and without Project

No.	Intersection	Peak Hour	Cumulative without Project		Cumulative with Project			Significant Impact?
			ICU/Delay	LOS	ICU/Delay	LOS	Change	
1	Parkway Calabasas and Ventura Boulevard	AM	0.485	A	0.487	A	+0.002	No
		PM	0.629	B	0.631	B	+0.002	No
2	Northbound 101 Freeway Ramps and Ventura Boulevard	AM	5.5	A	5.5	A	+0.002[a]	No
		PM	7.9	A	7.9	A	+0.002[a]	No
3	Southbound 101 Freeway Ramps and Calabasas Road	AM	21.7	C	21.8	C	+0.001[a]	No
		PM	22.0	C	22.1	C	+0.002[a]	No
4	Parkway Calabasas and Calabasas Road	AM	0.536	A	0.540	A	+0.004	No
		PM	0.676	B	0.676	B	+0.0	No
5	Civic Center Way and Calabasas Road	AM	0.297	A	0.301	A	+0.004	No
		PM	0.485	A	0.489	A	+0.004	No
6	Commons Way and Calabasas Road	AM	0.280	A	0.280	A	+0.0	No
		PM	0.576	A	0.577	A	+0.001	No
7	Parkway Calabasas and Park Sorrento	AM	0.371	A	0.378	A	+0.007	No
		PM	0.336	A	0.344	A	+0.008	No

Source: Associated Transportation Engineers 2015; See Appendix C for full traffic analysis.

[a]*Project added V/C ratio increases based on ICU calculations*

All study area intersections would operate at LOS C or better with Cumulative and Cumulative Project traffic volumes. The project would not generate significant impacts to the intersections based on impact criteria set forth in the City of Calabasas' 2030 General Plan.

As shown in Tables 18, 19 and 20, all seven study intersections currently operate at LOS C or better during the peak hours. The forecast change in operations during the AM and PM peak hours in comparing 1) the existing to existing plus project conditions 2) existing to future conditions without project 3) future conditions without project to future conditions with project,

and 4) cumulative conditions without the project to cumulative conditions with the project, are determined to be less than significant at all seven study intersections. Therefore, project-related and cumulative traffic impacts would be less than significant based on the City of Calabasas intersection impact threshold criteria.

LESS THAN SIGNIFICANT IMPACT

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?

The Congestion Management program (CMP) was adopted to monitor regional traffic growth and related transportation improvements. The CMP designated a transportation network including all state highways and some arterials within the County to be monitored by of local jurisdictions. If LOS standards deteriorate on the CMP network, then local jurisdictions must prepare a deficiency plan to be in conformance with the program. Local jurisdictions found to be in nonconformance with the CMP risk the loss of state gas tax funding.

For purposes of the CMP LOS analysis, an increase in the freeway volume by 150 vehicles per hour during the AM or PM peak hours in any direction requires further analysis. The proposed project is forecast to add 7 A.M. peak hour trips and 8 P.M. peak hour trips to northbound U.S. Highway 101 and 12 A.M. peak hour trips and 13 P.M. peak hour trips to southbound U.S. 101. Based on CMP impact threshold of 150 peak hour trips, the project would not generate a significant impact to the freeway segments located within the study area.

For purposes of CMP intersections, an increase of 50 vehicles or more during the AM or PM peak requires further analysis. There are no CMP monitored intersections within the project site area, thus no review of potential impacts to CMP intersections is required.

As the project would not generate a significant impact to the freeway segments in the area and there are no CMP monitored intersections in the area, project-related traffic impacts to the CMP would be less than significant.

LESS THAN SIGNIFICANT IMPACT

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?

The proposed project would be limited to site-specific improvements and would not damage the performance or safety of any public transit, bikeway or pedestrian facilities. Conversely, the proposed project would maintain the quality of the pedestrian environment with landscaping along Parkway Calabasas. Public transportation in the project area is provided by the City of Calabasas, Metro and the LADOT. Calabasas Public Transportation provides shuttle service via routes 1, 2, and 5, and trolley service. Line 1 operates throughout the City of Calabasas seven days a week. Metro provides transit service between Warner Center and the Thousand Oaks Transit Center via Route 161 with direct service to the site as it travels along Las Virgenes Road. LADOT provides the Commuter Express line 423 connecting Newbury Park, Thousand Oaks, Agoura Hills, Calabasas, Woodland Hills and Encino with downtown Los Angeles. The two

closest transit stops to the project site are located at the Parkway and Calabasas intersection and on Park Sorrento in front of the Calabasas Civic Center. Both transit stops are approximately 1,000 feet from the project site. Transit facilities include a bench, shade cover, transit signs, trash receptacle and a recycling receptacle.

The proposed project would generate approximately 417 weekday daily trips, including 27 A.M. peak hour trips and 31 P.M. peak hour trips. Per CMP (2004) guidelines, person trips can be estimated by multiplying the total trips generated by 1.4. The trips assigned to transit may be calculated by multiplying the person trips generated by 3.5%. The proposed project would generate approximately 20 daily, 1 AM peak hour, and 4 PM peak hour daily transit trips. The proposed project would incrementally increase ridership, but would not adversely affect the current transit services in the area.

Sidewalks are provided along all key roadways in the project site vicinity and pedestrian crosswalks with walk lights are provided at signalized intersections in the project area. The project would have no impact with respect to adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, and would not otherwise substantially reduce the performance or safety of such facilities.

LESS THAN SIGNIFICANT IMPACT

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Van Nuys Airport is the airport nearest to the project site, approximately 12 miles northeast. Implementation of the proposed project would have no effect on air traffic patterns, including either an increase in traffic levels or a change in location that results in safety risks. No impact would occur.

NO IMPACT

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

e) Would the project result in inadequate emergency access?

The project does not include any design features or incompatible uses that would increase traffic hazards. As a condition of project approval, the project would be required to provide adequate emergency access, based on Article III of the City Development Code, which includes specific site planning and project design standards intended to address such issues as traffic hazards and emergency access. In addition, the project would be subject to the LACFD and LASD review, prior to approval, to ensure that access needs are met. The project would not affect existing pedestrian facilities or conflict with adopted policies plans or programs regarding public transit. As such, impacts relating to traffic hazards and emergency access would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
-- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	■	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	■	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	■	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	■	☐
e) 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?	☐	☐	■	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	■	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	■	☐

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

e) 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?

Wastewater generated in Calabasas is treated at the Tapia Water Reclamation Facility (TWRF), operated by Las Virgenes Municipal Water District (LVMWD). The TWRF has a capacity of 16 million gallons per day (mgd) and currently treats an average of 9.5 mgd (LVMWD, 2011). Therefore, there is a surplus capacity of 6.5 mgd. Wastewater generation factors from the City of Los Angeles CEQA Thresholds Guide were used to estimate the proposed project's wastewater generation. As shown in Table 20, the proposed project would generate about 16,510 gallons of wastewater per day (0.017 mgd).

Table 20
Projected Wastewater Generation

Land Use	Units	Wastewater Generation Factor	Total Wastewater Flow (Gallons Per Day)
Hotel	51 rooms	130 gpd/room	6,630

gpd = gallons per day sf = square feet

Source: City of Los Angeles, CEQA Thresholds Guide Document, 2006.

Wastewater generated by the proposed project would constitute approximately 0.1% of the Tapia Water Reclamation Facility's available treatment capacity. Therefore, impacts related to wastewater treatment would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As discussed in Section IX, *Hydrology and Water Quality*, the project site consists of pervious surfaces. The area of impervious surface would increase with the proposed project. Stormwater drainage in the County is provided by a network of regional drainage channels and local drainage facilities. Surface water is deposited into regional channels, which are owned and maintained by the County. The proposed project would be required to comply with the Los Angeles County Areawide MS4 permit, which requires that the amount of runoff from the site must be the same before and after construction of a project. The on-site storm drain system would be designed, installed, and maintained per County of Los Angeles Department of Public Works standards. Because the project would be required to include site drainage systems meeting standards and provisions set forth by the City of Calabasas and the County of Los Angeles, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The Las Virgenes Municipal Water District (LVMWD) provides water service in Calabasas. The reliability of the LVMWD's water supply is dependent on the reliability of its imported water supplies, which are managed and delivered by the Metropolitan Water District of

Southern California (MWD). As shown in Table 21, the proposed project would generate demand for about 7,956 gallons of water per day or 9 acre-feet per year.

Table 21
Project Water Demand

Land Use	Units	Demand Factor	Demand (Gallons Per Day)	Demand (Acre-Feet Per Year)
Hotel	51 rooms	156 gpd/room	7,956	9

gpd = gallons per day

One acre-foot = 325,850 gallons

Source: City of Los Angeles, CEQA Thresholds Guide Document, 2006.

Water demand is assumed to be 120% of wastewater generation, as shown in Table 20, in order to account for landscape irrigation.

Table 22 compares LVMWD water supplies to forecast demand under normal year conditions and multiple dry years based on the LVMWD's 2010 Urban Water Management Plan. The LVMWD has sufficient water supplies to meet forecast demand for the normal year as well as dry years 1, 2, and 3 of a multiple dry year scenario.

Table 22
LVMWD Water Supply and Demand in Normal Year and Single and Multiple Dry Years (Acre Feet)

Normal Year	**2015**	**2020**	**2025**	**2030**	**2035**
Supply Totals	46,553	49,591	54,434	54,163	52,845
Demand Totals	28,829	28,219	30,280	32,304	33,252
Reserves (Supply – Demand)	17,724	21,372	24,154	21,859	19,953
Multiple Dry Year No. 1	**2015**	**2020**	**2025**	**2030**	**2035**
Supply Totals	34,132	35,979	38,479	39,498	39,384
Demand Totals	33,981	33,261	35,690	38,077	39,193
Reserves (Supply – Demand)	152	2,718	2,788	1,421	190
Multiple Dry Year No. 2	**2015**	**2020**	**2025**	**2030**	**2035**
Supply Totals	33,986	36,484	38,973	39,730	39,615
Demand Totals	33,837	33,747	36,168	38,300	39,423
Reserves (Supply – Demand)	149	2,737	2,806	1,430	191
Multiple Dry Year No. 3	**2015**	**2020**	**2025**	**2030**	**2035**
Supply Totals	33,839	36,988	39,468	39,961	39,846
Demand Totals	33,693	34,233	36,645	38,523	39,653
Reserves (Supply – Demand)	147	2,755	2,823	1,438	192

Source: Las Virgenes Municipal Water District, 2010 Urban Water Management Plan, June 2011.

The proposed project would generate demand for about 9 acre-feet of water per year. The proposed project is consistent with the level of development that was anticipated for the project site under the 2030 General Plan and the LVMWD 2010 UWMP water demand forecasts account for growth anticipated under the 2030 General Plan. Consequently, the increase in water demand associated with the proposed project can be accommodated with existing and planned supplies.

Due to the state-wide drought, the State Water Resources Control Board (SWRCB) adopted new water conservation regulations (Resolution 2014-0038) in July 2014, including select prohibitions for all water users and required actions for all water agencies. On April 1, 2015, Governor Brown issued Executive Order B-29-15, which ordered the SWRCB to impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016. Executive Order B-29-15 states that "these restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013" (State of California, Executive Order B-29-15, April 2015). The SWRCB adopted an emergency conservation regulation in accordance with the Governor's directive on May 5, 2015, the provisions of which went into effect on May 18, 2015 (SWRCB, June 2015). According to SWRCB data, the LVMWD must cut its water usage by 36% (State Water Resources Control Board, June 11, 2015).

In response to the drought, the LVMWD has adopted a number of water conservation measures. Measures include restricting outdoor irrigation to two days a week and prohibiting irrigation between 10 A.M. and 5 P.M and during or within 24 hours of rainfall. Irrigation runoff into streets, gutters, or other adjacent properties is also prohibited, as is the washing down of sidewalks and driveways. Additional measures include requiring a trigger nozzle for home car washing and requiring fountains and water features to use a recirculating system. Lastly, hotels and motels must give multi-night guests the option to reuse towels and linens during their stay to cut down on water used by washing machines. Violations of water conservation measures may be subject to a fine ranging from $100 for the second violation to $500 for the fourth violation by the LVMWD. For the fifth violation, LVMWD may terminate service to a property or install a flow restriction device.

In response to the need for greater water-use efficiency and to encourage water use reduction during droughts, LVMWD is also developing a "budget-based water rate" billing structure that provides each customer with a personalized water budget designed to meet their specific indoor and outdoor water needs. The new program will replace the District's existing "fixed tier" rate structure in 2016.

Despite the drought conditions, the increase in water demand associated with the proposed project can be accommodated with existing and planned supplies. The proposed project would be required to comply with any existing or future restrictions on water use that the LVMWD implements, which may include additional restrictions on landscape irrigation and promotion of non-potable water use, such as grey water, as described in SWRCB's Resolution 2014-0038. The proposed project would also be subject to the LVMWD's budget-based water rate billing structure, which is designed to encourage water use reductions. Impacts to water supply would, therefore, be less than significant.

LESS THAN SIGNIFICANT IMPACT

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

The Calabasas Sanitary Landfill, located adjacent to U.S. Highway 101 on Lost Hills Road, would receive solid waste generated by the proposed project. The total capacity of the Calabasas Landfill is 69.3 million cubic yards and its remaining capacity is approximately 18.1 million cubic yards (CalRecycle, SWIS, 2014). An average of 581 tons of waste is deposited in the landfill daily, with a permitted maximum daily capacity of 3,500 tons per day (CalRecycle, 2013 Landfill Summary Tonnage Report, 2014). Thus, the average daily surplus is 2,919 tons per day. As shown in Table 23, the proposed project would generate about 508 pounds, or 0.3 tons, of solid waste per day before mandated diversion.

Table 23
Project Solid Waste Generation

Land Use	Area	Generation Factor	Solid Waste Generated (lbs/day)	Solid Waste Generated (tons/day)
Hotel	51 rooms	4 lbs/room/day	204	0.102

** Note solid waste generated as shown herein does not include mandated diversion requirements.*

sf = square feet

Source: CalRecycle, 2013. http://www.calrecycle.ca.gov/wastechar/wastegenrates/Residential.htm, http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/Commercial.htm, http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/Service.htm.

The proposed project would be subject to federal, state, and local regulations related to solid waste, recycling, and water conservation, including the City's 75% waste diversion rate goal, which would reduce the total amount generated to about 51 pounds per day or 0.03 tons per day. The Calabasas Landfill has available capacity of 2,919 tons per day, which the proposed project would reduce by 0.001%. Therefore, the landfill has adequate capacity to serve the proposed project and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	■	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	■	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	■	☐

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

As discussed under Section IV, *Biological Resources*, and Section V, *Cultural Resources*, implementation of the proposed project would have no impact or a less than significant impact on cultural resources and biological resources.

LESS THAN SIGNIFICANT IMPACT

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)?

As described in the discussion of environmental checklist Sections I through XVII, the project would have no impact or a less than significant impact with respect to all environmental issues. Cumulative impacts of several resource areas have been addressed in the individual resource

sections above: Aesthetics, Air Quality, Biological Resources, Greenhouse Gases, Utilities and Service Systems (water supply and solid waste), and Transportation/Traffic (See CEQA Guidelines Section 15064(h)(3)). Some of the other resource areas (agricultural and mineral) were determined to have no impact in comparison to existing conditions and therefore would not contribute to cumulative impacts. As such, cumulative impacts would be less than significant (not cumulatively considerable).

LESS THAN SIGNIFICANT IMPACT

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in the preceding sections, the proposed project would not result, either directly or indirectly, in adverse hazards related to air quality, hazardous materials or noise. Compliance with applicable rules and regulations would reduce potential impacts on human beings to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

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Person Contacted

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Appendix A

Air Quality/Greenhouse Gas Emissions Modeling Results

Hilton Garden Inn

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	51.00	Room	0.77	98,474.00	0
Parking Lot	17.00	Space	0.15	6,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - Construction period= 8 months

Project Characteristics -

Land Use - Described in architecture plans

Area Mitigation -

Architectural Coating - Assumed compliance with Rule 113, use of low-VOC paint (150 g/L for nonflat coatings)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblConstructionPhase	NumDays	5.00	23.00
tblConstructionPhase	NumDays	100.00	131.00
tblConstructionPhase	NumDays	2.00	22.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	9/19/2016	8/17/2016
tblConstructionPhase	PhaseStartDate	8/18/2016	7/17/2016
tblLandUse	LandUseSquareFeet	74,052.00	98,474.00
tblLandUse	LotAcreage	1.70	0.77
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	62.9548	17.8949	15.3008	0.0250	0.8645	1.1656	1.8642	0.4434	1.0881	1.2754	0.0000	2,419.1494	2,419.1494	0.4237	0.0000	2,428.0479
Total	**62.9548**	**17.8949**	**15.3008**	**0.0250**	**0.8645**	**1.1656**	**1.8642**	**0.4434**	**1.0881**	**1.2754**	**0.0000**	**2,419.1494**	**2,419.1494**	**0.4237**	**0.0000**	**2,428.0479**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	62.9532	17.8801	15.2915	0.0250	0.8645	1.1645	1.8632	0.4434	1.0871	1.2745	0.0000	2,417.8099	2,417.8099	0.4234	0.0000	2,426.7009
Total	**62.9532**	**17.8801**	**15.2915**	**0.0250**	**0.8645**	**1.1645**	**1.8632**	**0.4434**	**1.0871**	**1.2745**	**0.0000**	**2,417.8099**	**2,417.8099**	**0.4234**	**0.0000**	**2,426.7009**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.5415e-003**	**0.0824**	**0.0605**	**0.0400**	**0.0000**	**0.0901**	**0.0558**	**0.0000**	**0.0901**	**0.0761**	**0.0000**	**0.0554**	**0.0554**	**0.0850**	**0.0000**	**0.0555**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7117	7.0000e-005	7.0700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0728	0.6618	0.5559	3.9700e-003		0.0503	0.0503		0.0503	0.0503		794.1400	794.1400	0.0152	0.0146	798.9731
Mobile	3.8837	3.3351	13.3738	0.0303	2.1135	0.0451	2.1587	0.5647	0.0415	0.6062		2,582.3121	2,582.3121	0.1049		2,584.5147
Total	**6.6682**	**3.9970**	**13.9368**	**0.0343**	**2.1135**	**0.0954**	**2.2090**	**0.5647**	**0.0918**	**0.6566**		**3,376.4670**	**3,376.4670**	**0.1202**	**0.0146**	**3,383.5035**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7117	7.0000e-005	7.0700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0728	0.6618	0.5559	3.9700e-003		0.0503	0.0503		0.0503	0.0503		794.1400	794.1400	0.0152	0.0146	798.9731
Mobile	3.8837	3.3351	13.3738	0.0303	2.1135	0.0451	2.1587	0.5647	0.0415	0.6062		2,582.3121	2,582.3121	0.1049		2,584.5147
Total	**6.6682**	**3.9970**	**13.9368**	**0.0343**	**2.1135**	**0.0954**	**2.2090**	**0.5647**	**0.0918**	**0.6566**		**3,376.4670**	**3,376.4670**	**0.1202**	**0.0146**	**3,383.5035**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/14/2016	5	10	
2	Site Preparation	Site Preparation	1/15/2016	1/15/2016	5	1	
3	Grading	Grading	1/16/2016	2/16/2016	5	22	
4	Building Construction	Building Construction	2/17/2016	8/17/2016	5	131	
5	Architectural Coating	Architectural Coating	7/17/2016	8/17/2016	5	23	
6	Paving	Paving	8/18/2016	8/31/2016	5	10	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	44.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

Acres of Grading: 0.5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3122	11.2385	8.7048	0.0120		0.8039	0.8039		0.7674	0.7674		1,193.6106	1,193.6106	0.2386		1,198.6217
Total	**1.3122**	**11.2385**	**8.7048**	**0.0120**		**0.8039**	**0.8039**		**0.7674**	**0.7674**		**1,193.6106**	**1,193.6106**	**0.2386**		**1,198.6217**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2393	0.0572	0.5980	1.3300e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		111.5695	111.5695	6.1000e-003		111.6976
Total	**0.2393**	**0.0572**	**0.5980**	**1.3300e-003**	**0.1118**	**9.3000e-004**	**0.1127**	**0.0296**	**8.6000e-004**	**0.0305**		**111.5695**	**111.5695**	**6.1000e-003**		**111.6976**

3.2 Demolition - 2016

Mitigated Construction On-Site

Acres of Grading: 0.5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3110	11.2281	8.6968	0.0120		0.8031	0.8031		0.7667	0.7667	0.0000	1,192.5155	1,192.5155	0.2384		1,197.5221
Total	**1.3110**	**11.2281**	**8.6968**	**0.0120**		**0.8031**	**0.8031**		**0.7667**	**0.7667**	**0.0000**	**1,192.5155**	**1,192.5155**	**0.2384**		**1,197.5221**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2393	0.0572	0.5980	1.3300e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		111.5695	111.5695	6.1000e-003		111.6976
Total	**0.2393**	**0.0572**	**0.5980**	**1.3300e-003**	**0.1118**	**9.3000e-004**	**0.1127**	**0.0296**	**8.6000e-004**	**0.0305**		**111.5695**	**111.5695**	**6.1000e-003**		**111.6976**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.3593	13.6350	7.3401	9.3500e-003		0.8338	0.8338		0.7671	0.7671		973.0842	973.0842	0.2935		979.2481
Total	**1.3593**	**13.6350**	**7.3401**	**9.3500e-003**	**0.5303**	**0.8338**	**1.3640**	**0.0573**	**0.7671**	**0.8243**		**973.0842**	**973.0842**	**0.2935**		**979.2481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1197	0.0286	0.2990	6.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.7848	55.7848	3.0500e-003		55.8488
Total	**0.1197**	**0.0286**	**0.2990**	**6.6000e-004**	**0.0559**	**4.7000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**55.7848**	**55.7848**	**3.0500e-003**		**55.8488**

3.3 Site Preparation - 2016

Mitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.3581	13.6225	7.3334	9.3400e-003		0.8330	0.8330		0.7663	0.7663	0.0000	972.1915	972.1915	0.2933		978.3496
Total	**1.3581**	**13.6225**	**7.3334**	**9.3400e-003**	**0.5303**	**0.8330**	**1.3632**	**0.0573**	**0.7663**	**0.8236**	**0.0000**	**972.1915**	**972.1915**	**0.2933**		**978.3496**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1197	0.0286	0.2990	6.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.7848	55.7848	3.0500e-003		55.8488
Total	**0.1197**	**0.0286**	**0.2990**	**6.6000e-004**	**0.0559**	**4.7000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**55.7848**	**55.7848**	**3.0500e-003**		**55.8488**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.3122	11.2385	8.7048	0.0120		0.8039	0.8039		0.7674	0.7674		1,193.6106	1,193.6106	0.2386		1,198.6217
Total	**1.3122**	**11.2385**	**8.7048**	**0.0120**	**0.7528**	**0.8039**	**1.5566**	**0.4138**	**0.7674**	**1.1811**		**1,193.6106**	**1,193.6106**	**0.2386**		**1,198.6217**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2393	0.0572	0.5980	1.3300e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		111.5695	111.5695	6.1000e-003		111.6976
Total	**0.2393**	**0.0572**	**0.5980**	**1.3300e-003**	**0.1118**	**9.3000e-004**	**0.1127**	**0.0296**	**8.6000e-004**	**0.0305**		**111.5695**	**111.5695**	**6.1000e-003**		**111.6976**

3.4 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.3110	11.2281	8.6968	0.0120		0.8031	0.8031		0.7667	0.7667	0.0000	1,192.5155	1,192.5155	0.2384		1,197.5221
Total	**1.3110**	**11.2281**	**8.6968**	**0.0120**	**0.7528**	**0.8031**	**1.5559**	**0.4138**	**0.7667**	**1.1804**	**0.0000**	**1,192.5155**	**1,192.5155**	**0.2384**		**1,197.5221**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2393	0.0572	0.5980	1.3300e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		111.5695	111.5695	6.1000e-003		111.6976
Total	**0.2393**	**0.0572**	**0.5980**	**1.3300e-003**	**0.1118**	**9.3000e-004**	**0.1127**	**0.0296**	**8.6000e-004**	**0.0305**		**111.5695**	**111.5695**	**6.1000e-003**		**111.6976**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3816	13.7058	8.2122	0.0113		0.9398	0.9398		0.8646	0.8646		1,178.5549	1,178.5549	0.3555		1,186.0202
Total	**1.3816**	**13.7058**	**8.2122**	**0.0113**		**0.9398**	**0.9398**		**0.8646**	**0.8646**		**1,178.5549**	**1,178.5549**	**0.3555**		**1,186.0202**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2791	1.5137	2.0353	3.6700e-003	0.1062	0.0242	0.1305	0.0303	0.0223	0.0525		367.8281	367.8281	2.7400e-003		367.8856
Worker	1.0530	0.2516	2.6312	5.8400e-003	0.4918	4.1100e-003	0.4959	0.1304	3.7800e-003	0.1342		490.9059	490.9059	0.0268		491.4694
Total	**1.3321**	**1.7653**	**4.6665**	**9.5100e-003**	**0.5981**	**0.0283**	**0.6264**	**0.1607**	**0.0261**	**0.1867**		**858.7339**	**858.7339**	**0.0296**		**859.3550**

3.5 Building Construction - 2016

Mitigated Construction On-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3803	13.6933	8.2046	0.0113		0.9389	0.9389		0.8638	0.8638	0.0000	1,177.4736	1,177.4736	0.3552		1,184.9321
Total	**1.3803**	**13.6933**	**8.2046**	**0.0113**		**0.9389**	**0.9389**		**0.8638**	**0.8638**	**0.0000**	**1,177.4736**	**1,177.4736**	**0.3552**		**1,184.9321**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2791	1.5137	2.0353	3.6700e-003	0.1062	0.0242	0.1305	0.0303	0.0223	0.0525		367.8281	367.8281	2.7400e-003		367.8856
Worker	1.0530	0.2516	2.6312	5.8400e-003	0.4918	4.1100e-003	0.4959	0.1304	3.7800e-003	0.1342		490.9059	490.9059	0.0268		491.4694
Total	**1.3321**	**1.7653**	**4.6665**	**9.5100e-003**	**0.5981**	**0.0283**	**0.6264**	**0.1607**	**0.0261**	**0.1867**		**858.7339**	**858.7339**	**0.0296**		**859.3550**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.6573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**60.0258**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2154	0.0515	0.5382	1.1900e-003	0.1006	8.4000e-004	0.1014	0.0267	7.7000e-004	0.0275		100.4126	100.4126	5.4900e-003		100.5278
Total	**0.2154**	**0.0515**	**0.5382**	**1.1900e-003**	**0.1006**	**8.4000e-004**	**0.1014**	**0.0267**	**7.7000e-004**	**0.0275**		**100.4126**	**100.4126**	**5.4900e-003**		**100.5278**

3.6 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.6573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3681	2.3701	1.8822	2.9700e-003		0.1964	0.1964		0.1964	0.1964	0.0000	281.1898	281.1898	0.0332		281.8860
Total	**60.0254**	**2.3701**	**1.8822**	**2.9700e-003**		**0.1964**	**0.1964**		**0.1964**	**0.1964**	**0.0000**	**281.1898**	**281.1898**	**0.0332**		**281.8860**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2154	0.0515	0.5382	1.1900e-003	0.1006	8.4000e-004	0.1014	0.0267	7.7000e-004	0.0275		100.4126	100.4126	5.4900e-003		100.5278
Total	**0.2154**	**0.0515**	**0.5382**	**1.1900e-003**	**0.1006**	**8.4000e-004**	**0.1014**	**0.0267**	**7.7000e-004**	**0.0275**		**100.4126**	**100.4126**	**5.4900e-003**		**100.5278**

3.7 Paving - 2016

Unmitigated Construction On-Site

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 148,017; Non-Residential Outdoor: 49,339

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1203	10.6282	7.2935	0.0111		0.6606	0.6606		0.6113	0.6113		1,083.5832	1,083.5832	0.2969		1,089.8175
Paving	0.0393					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1596**	**10.6282**	**7.2935**	**0.0111**		**0.6606**	**0.6606**		**0.6113**	**0.6113**		**1,083.5832**	**1,083.5832**	**0.2969**		**1,089.8175**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4308	0.1029	1.0764	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8251	200.8251	0.0110		201.0556
Total	**0.4308**	**0.1029**	**1.0764**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8251**	**200.8251**	**0.0110**		**201.0556**

3.7 Paving - 2016

Mitigated Construction On-Site

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 148,017; Non-Residential Outdoor: 49,339

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1192	10.6185	7.2868	0.0111		0.6600	0.6600		0.6108	0.6108	0.0000	1,082.5891	1,082.5891	0.2966		1,088.8176
Paving	0.0393					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1585**	**10.6185**	**7.2868**	**0.0111**		**0.6600**	**0.6600**		**0.6108**	**0.6108**	**0.0000**	**1,082.5891**	**1,082.5891**	**0.2966**		**1,088.8176**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4308	0.1029	1.0764	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8251	200.8251	0.0110		201.0556
Total	**0.4308**	**0.1029**	**1.0764**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8251**	**200.8251**	**0.0110**		**201.0556**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.8837	3.3351	13.3738	0.0303	2.1135	0.0451	2.1587	0.5647	0.0415	0.6062		2,582.3121	2,582.3121	0.1049		2,584.5147
Unmitigated	3.8837	3.3351	13.3738	0.0303	2.1135	0.0451	2.1587	0.5647	0.0415	0.6062		2,582.3121	2,582.3121	0.1049		2,584.5147

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	416.67	417.69	303.45	955,999	955,999
Parking Lot	0.00	0.00	0.00		
Total	416.67	417.69	303.45	955,999	955,999

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0728	0.6618	0.5559	3.9700e-003		0.0503	0.0503		0.0503	0.0503		794.1400	794.1400	0.0152	0.0146	798.9731
NaturalGas Unmitigated	0.0728	0.6618	0.5559	3.9700e-003		0.0503	0.0503		0.0503	0.0503		794.1400	794.1400	0.0152	0.0146	798.9731

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	6750.19	0.0728	0.6618	0.5559	3.9700e-003		0.0503	0.0503		0.0503	0.0503		794.1400	794.1400	0.0152	0.0146	798.9731
Total		**0.0728**	**0.6618**	**0.5559**	**3.9700e-003**		**0.0503**	**0.0503**		**0.0503**	**0.0503**		**794.1400**	**794.1400**	**0.0152**	**0.0146**	**798.9731**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	6.75019	0.0728	0.6618	0.5559	3.9700e-003		0.0503	0.0503		0.0503	0.0503		794.1400	794.1400	0.0152	0.0146	798.9731
Total		**0.0728**	**0.6618**	**0.5559**	**3.9700e-003**		**0.0503**	**0.0503**		**0.0503**	**0.0503**		**794.1400**	**794.1400**	**0.0152**	**0.0146**	**798.9731**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7117	7.0000e-005	7.0700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Unmitigated	2.7117	7.0000e-005	7.0700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8000e-004	7.0000e-005	7.0700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**2.7117**	**7.0000e-005**	**7.0700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8000e-004	7.0000e-005	7.0700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**2.7117**	**7.0000e-005**	**7.0700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Hilton Garden Inn

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	51.00	Room	0.77	98,474.00	0
Parking Lot	17.00	Space	0.15	6,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - Construction period= 8 months

Project Characteristics -

Land Use - Described in architecture plans

Area Mitigation -

Architectural Coating - Assumed compliance with Rule 113, use of low-VOC paint (150 g/L for nonflat coatings)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblConstructionPhase	NumDays	5.00	23.00
tblConstructionPhase	NumDays	100.00	131.00
tblConstructionPhase	NumDays	2.00	22.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	9/19/2016	8/17/2016
tblConstructionPhase	PhaseStartDate	8/18/2016	7/17/2016
tblLandUse	LandUseSquareFeet	74,052.00	98,474.00
tblLandUse	LotAcreage	1.70	0.77
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.8934	1.2849	1.0671	1.7100e-003	0.0509	0.0823	0.1332	0.0160	0.0763	0.0923	0.0000	150.8954	150.8954	0.0284	0.0000	151.4910
Total	**0.8934**	**1.2849**	**1.0671**	**1.7100e-003**	**0.0509**	**0.0823**	**0.1332**	**0.0160**	**0.0763**	**0.0923**	**0.0000**	**150.8954**	**150.8954**	**0.0284**	**0.0000**	**151.4910**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.8933	1.2836	1.0662	1.7100e-003	0.0509	0.0822	0.1331	0.0160	0.0763	0.0922	0.0000	150.7816	150.7816	0.0283	0.0000	151.3766
Total	**0.8933**	**1.2836**	**1.0662**	**1.7100e-003**	**0.0509**	**0.0822**	**0.1331**	**0.0160**	**0.0763**	**0.0922**	**0.0000**	**150.7816**	**150.7816**	**0.0283**	**0.0000**	**151.3766**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0168**	**0.1074**	**0.0825**	**0.0000**	**0.0000**	**0.1215**	**0.0676**	**0.0000**	**0.1179**	**0.0975**	**0.0000**	**0.0754**	**0.0754**	**0.1058**	**0.0000**	**0.0755**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4948	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.7900e-003
Energy	0.0133	0.1208	0.1015	7.2000e-004		9.1800e-003	9.1800e-003		9.1800e-003	9.1800e-003	0.0000	372.7212	372.7212	0.0136	4.7000e-003	374.4655
Mobile	0.6095	0.5935	2.3490	5.3500e-003	0.3623	7.8400e-003	0.3701	0.0969	7.2200e-003	0.1042	0.0000	413.5157	413.5157	0.0166	0.0000	413.8639
Waste						0.0000	0.0000		0.0000	0.0000	5.6675	0.0000	5.6675	0.3349	0.0000	12.7013
Water						0.0000	0.0000		0.0000	0.0000	0.4104	5.2776	5.6880	0.0424	1.0500e-003	6.9025
Total	**1.1176**	**0.7143**	**2.4514**	**6.0700e-003**	**0.3623**	**0.0170**	**0.3793**	**0.0969**	**0.0164**	**0.1133**	**6.0779**	**791.5162**	**797.5941**	**0.4075**	**5.7500e-003**	**807.9349**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4948	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.7900e-003
Energy	0.0133	0.1208	0.1015	7.2000e-004		9.1800e-003	9.1800e-003		9.1800e-003	9.1800e-003	0.0000	372.7212	372.7212	0.0136	4.7000e-003	374.4655
Mobile	0.6095	0.5935	2.3490	5.3500e-003	0.3623	7.8400e-003	0.3701	0.0969	7.2200e-003	0.1042	0.0000	413.5157	413.5157	0.0166	0.0000	413.8639
Waste						0.0000	0.0000		0.0000	0.0000	5.6675	0.0000	5.6675	0.3349	0.0000	12.7013
Water						0.0000	0.0000		0.0000	0.0000	0.4104	5.2776	5.6880	0.0424	1.0400e-003	6.9019
Total	**1.1176**	**0.7143**	**2.4514**	**6.0700e-003**	**0.3623**	**0.0170**	**0.3793**	**0.0969**	**0.0164**	**0.1133**	**6.0779**	**791.5162**	**797.5941**	**0.4075**	**5.7400e-003**	**807.9342**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.4538e-003**	**0.1739**	**8.1690e-005**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/14/2016	5	10	
2	Site Preparation	Site Preparation	1/15/2016	1/15/2016	5	1	
3	Grading	Grading	1/16/2016	2/16/2016	5	22	
4	Building Construction	Building Construction	2/17/2016	8/17/2016	5	131	
5	Architectural Coating	Architectural Coating	7/17/2016	8/17/2016	5	23	
6	Paving	Paving	8/18/2016	8/31/2016	5	10	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	44.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

Acres of Grading: 0.5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.5600e-003	0.0562	0.0435	6.0000e-005		4.0200e-003	4.0200e-003		3.8400e-003	3.8400e-003	0.0000	5.4141	5.4141	1.0800e-003	0.0000	5.4369
Total	**6.5600e-003**	**0.0562**	**0.0435**	**6.0000e-005**		**4.0200e-003**	**4.0200e-003**		**3.8400e-003**	**3.8400e-003**	**0.0000**	**5.4141**	**5.4141**	**1.0800e-003**	**0.0000**	**5.4369**

3.2 Demolition - 2016

Unmitigated Construction Off-Site

Acres of Grading: 0.5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	2.9000e-004	3.0600e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5140	0.5140	3.0000e-005	0.0000	0.5145
Total	**1.0500e-003**	**2.9000e-004**	**3.0600e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.5140**	**0.5140**	**3.0000e-005**	**0.0000**	**0.5145**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.5500e-003	0.0561	0.0435	6.0000e-005		4.0100e-003	4.0100e-003		3.8300e-003	3.8300e-003	0.0000	5.4077	5.4077	1.0800e-003	0.0000	5.4304
Total	**6.5500e-003**	**0.0561**	**0.0435**	**6.0000e-005**		**4.0100e-003**	**4.0100e-003**		**3.8300e-003**	**3.8300e-003**	**0.0000**	**5.4077**	**5.4077**	**1.0800e-003**	**0.0000**	**5.4304**

3.2 Demolition - 2016

Mitigated Construction Off-Site

Acres of Grading: 0.5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	2.9000e-004	3.0600e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5140	0.5140	3.0000e-005	0.0000	0.5145
Total	**1.0500e-003**	**2.9000e-004**	**3.0600e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.5140**	**0.5140**	**3.0000e-005**	**0.0000**	**0.5145**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	6.8200e-003	3.6700e-003	0.0000		4.2000e-004	4.2000e-004		3.8000e-004	3.8000e-004	0.0000	0.4414	0.4414	1.3000e-004	0.0000	0.4442
Total	**6.8000e-004**	**6.8200e-003**	**3.6700e-003**	**0.0000**	**2.7000e-004**	**4.2000e-004**	**6.9000e-004**	**3.0000e-005**	**3.8000e-004**	**4.1000e-004**	**0.0000**	**0.4414**	**0.4414**	**1.3000e-004**	**0.0000**	**0.4442**

3.3 Site Preparation - 2016

Unmitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	1.0000e-005	1.5000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0257	0.0257	0.0000	0.0000	0.0257
Total	**5.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0257**	**0.0257**	**0.0000**	**0.0000**	**0.0257**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	6.8100e-003	3.6700e-003	0.0000		4.2000e-004	4.2000e-004		3.8000e-004	3.8000e-004	0.0000	0.4409	0.4409	1.3000e-004	0.0000	0.4437
Total	**6.8000e-004**	**6.8100e-003**	**3.6700e-003**	**0.0000**	**2.7000e-004**	**4.2000e-004**	**6.9000e-004**	**3.0000e-005**	**3.8000e-004**	**4.1000e-004**	**0.0000**	**0.4409**	**0.4409**	**1.3000e-004**	**0.0000**	**0.4437**

3.3 Site Preparation - 2016

Mitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	1.0000e-005	1.5000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0257	0.0257	0.0000	0.0000	0.0257
Total	**5.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0257**	**0.0257**	**0.0000**	**0.0000**	**0.0257**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2800e-003	0.0000	8.2800e-003	4.5500e-003	0.0000	4.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1236	0.0958	1.3000e-004		8.8400e-003	8.8400e-003		8.4400e-003	8.4400e-003	0.0000	11.9111	11.9111	2.3800e-003	0.0000	11.9611
Total	**0.0144**	**0.1236**	**0.0958**	**1.3000e-004**	**8.2800e-003**	**8.8400e-003**	**0.0171**	**4.5500e-003**	**8.4400e-003**	**0.0130**	**0.0000**	**11.9111**	**11.9111**	**2.3800e-003**	**0.0000**	**11.9611**

3.4 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-003	6.5000e-004	6.7400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1307	1.1307	6.0000e-005	0.0000	1.1320
Total	**2.3000e-003**	**6.5000e-004**	**6.7400e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1307**	**1.1307**	**6.0000e-005**	**0.0000**	**1.1320**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2800e-003	0.0000	8.2800e-003	4.5500e-003	0.0000	4.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1235	0.0956	1.3000e-004		8.8300e-003	8.8300e-003		8.4300e-003	8.4300e-003	0.0000	11.8969	11.8969	2.3800e-003	0.0000	11.9469
Total	**0.0144**	**0.1235**	**0.0956**	**1.3000e-004**	**8.2800e-003**	**8.8300e-003**	**0.0171**	**4.5500e-003**	**8.4300e-003**	**0.0130**	**0.0000**	**11.8969**	**11.8969**	**2.3800e-003**	**0.0000**	**11.9469**

3.4 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-003	6.5000e-004	6.7400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1307	1.1307	6.0000e-005	0.0000	1.1320
Total	**2.3000e-003**	**6.5000e-004**	**6.7400e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1307**	**1.1307**	**6.0000e-005**	**0.0000**	**1.1320**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0905	0.8977	0.5379	7.4000e-004		0.0616	0.0616		0.0566	0.0566	0.0000	70.0304	70.0304	0.0211	0.0000	70.4740
Total	**0.0905**	**0.8977**	**0.5379**	**7.4000e-004**		**0.0616**	**0.0616**		**0.0566**	**0.0566**	**0.0000**	**70.0304**	**70.0304**	**0.0211**	**0.0000**	**70.4740**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0174	0.1011	0.1298	2.4000e-004	6.8500e-003	1.5800e-003	8.4300e-003	1.9600e-003	1.4500e-003	3.4100e-003	0.0000	21.9637	21.9637	1.6000e-004	0.0000	21.9671
Worker	0.0603	0.0170	0.1765	3.9000e-004	0.0316	2.7000e-004	0.0319	8.4000e-003	2.5000e-004	8.6400e-003	0.0000	29.6240	29.6240	1.5900e-003	0.0000	29.6575
Total	**0.0777**	**0.1181**	**0.3063**	**6.3000e-004**	**0.0385**	**1.8500e-003**	**0.0403**	**0.0104**	**1.7000e-003**	**0.0121**	**0.0000**	**51.5877**	**51.5877**	**1.7500e-003**	**0.0000**	**51.6246**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0904	0.8967	0.5373	7.4000e-004		0.0615	0.0615		0.0566	0.0566	0.0000	69.9471	69.9471	0.0211	0.0000	70.3902
Total	**0.0904**	**0.8967**	**0.5373**	**7.4000e-004**		**0.0615**	**0.0615**		**0.0566**	**0.0566**	**0.0000**	**69.9471**	**69.9471**	**0.0211**	**0.0000**	**70.3902**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0174	0.1011	0.1298	2.4000e-004	6.8500e-003	1.5800e-003	8.4300e-003	1.9600e-003	1.4500e-003	3.4100e-003	0.0000	21.9637	21.9637	1.6000e-004	0.0000	21.9671
Worker	0.0603	0.0170	0.1765	3.9000e-004	0.0316	2.7000e-004	0.0319	8.4000e-003	2.5000e-004	8.6400e-003	0.0000	29.6240	29.6240	1.5900e-003	0.0000	29.6575
Total	**0.0777**	**0.1181**	**0.3063**	**6.3000e-004**	**0.0385**	**1.8500e-003**	**0.0403**	**0.0104**	**1.7000e-003**	**0.0121**	**0.0000**	**51.5877**	**51.5877**	**1.7500e-003**	**0.0000**	**51.6246**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2400e-003	0.0273	0.0217	3.0000e-005		2.2600e-003	2.2600e-003		2.2600e-003	2.2600e-003	0.0000	2.9362	2.9362	3.5000e-004	0.0000	2.9435
Total	**0.6903**	**0.0273**	**0.0217**	**3.0000e-005**		**2.2600e-003**	**2.2600e-003**		**2.2600e-003**	**2.2600e-003**	**0.0000**	**2.9362**	**2.9362**	**3.5000e-004**	**0.0000**	**2.9435**

3.6 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1600e-003	6.1000e-004	6.3400e-003	1.0000e-005	1.1400e-003	1.0000e-005	1.1500e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.0639	1.0639	6.0000e-005	0.0000	1.0651
Total	**2.1600e-003**	**6.1000e-004**	**6.3400e-003**	**1.0000e-005**	**1.1400e-003**	**1.0000e-005**	**1.1500e-003**	**3.0000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**1.0639**	**1.0639**	**6.0000e-005**	**0.0000**	**1.0651**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2300e-003	0.0273	0.0216	3.0000e-005		2.2600e-003	2.2600e-003		2.2600e-003	2.2600e-003	0.0000	2.9328	2.9328	3.5000e-004	0.0000	2.9400
Total	**0.6903**	**0.0273**	**0.0216**	**3.0000e-005**		**2.2600e-003**	**2.2600e-003**		**2.2600e-003**	**2.2600e-003**	**0.0000**	**2.9328**	**2.9328**	**3.5000e-004**	**0.0000**	**2.9400**

3.6 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1600e-003	6.1000e-004	6.3400e-003	1.0000e-005	1.1400e-003	1.0000e-005	1.1500e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.0639	1.0639	6.0000e-005	0.0000	1.0651
Total	**2.1600e-003**	**6.1000e-004**	**6.3400e-003**	**1.0000e-005**	**1.1400e-003**	**1.0000e-005**	**1.1500e-003**	**3.0000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**1.0639**	**1.0639**	**6.0000e-005**	**0.0000**	**1.0651**

3.7 Paving - 2016

Unmitigated Construction On-Site

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 148,017; Non-Residential Outdoor: 49,339

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.6000e-003	0.0531	0.0365	6.0000e-005		3.3000e-003	3.3000e-003		3.0600e-003	3.0600e-003	0.0000	4.9151	4.9151	1.3500e-003	0.0000	4.9433
Paving	2.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.8000e-003**	**0.0531**	**0.0365**	**6.0000e-005**		**3.3000e-003**	**3.3000e-003**		**3.0600e-003**	**3.0600e-003**	**0.0000**	**4.9151**	**4.9151**	**1.3500e-003**	**0.0000**	**4.9433**

3.7 Paving - 2016

Unmitigated Construction Off-Site

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 148,017; Non-Residential Outdoor: 49,339

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	5.3000e-004	5.5100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9251	0.9251	5.0000e-005	0.0000	0.9262
Total	**1.8800e-003**	**5.3000e-004**	**5.5100e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9251**	**0.9251**	**5.0000e-005**	**0.0000**	**0.9262**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5900e-003	0.0531	0.0364	6.0000e-005		3.3000e-003	3.3000e-003		3.0500e-003	3.0500e-003	0.0000	4.9092	4.9092	1.3400e-003	0.0000	4.9375
Paving	2.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.7900e-003**	**0.0531**	**0.0364**	**6.0000e-005**		**3.3000e-003**	**3.3000e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**4.9092**	**4.9092**	**1.3400e-003**	**0.0000**	**4.9375**

3.7 Paving - 2016

Mitigated Construction Off-Site

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 148,017; Non-Residential Outdoor: 49,339

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	5.3000e-004	5.5100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9251	0.9251	5.0000e-005	0.0000	0.9262
Total	**1.8800e-003**	**5.3000e-004**	**5.5100e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9251**	**0.9251**	**5.0000e-005**	**0.0000**	**0.9262**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6095	0.5935	2.3490	5.3500e-003	0.3623	7.8400e-003	0.3701	0.0969	7.2200e-003	0.1042	0.0000	413.5157	413.5157	0.0166	0.0000	413.8639
Unmitigated	0.6095	0.5935	2.3490	5.3500e-003	0.3623	7.8400e-003	0.3701	0.0969	7.2200e-003	0.1042	0.0000	413.5157	413.5157	0.0166	0.0000	413.8639

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	416.67	417.69	303.45	955,999	955,999
Parking Lot	0.00	0.00	0.00		
Total	416.67	417.69	303.45	955,999	955,999

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	241.2424	241.2424	0.0111	2.2900e-003	242.1865
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	241.2424	241.2424	0.0111	2.2900e-003	242.1865
NaturalGas Mitigated	0.0133	0.1208	0.1015	7.2000e-004		9.1800e-003	9.1800e-003		9.1800e-003	9.1800e-003	0.0000	131.4788	131.4788	2.5200e-003	2.4100e-003	132.2790
NaturalGas Unmitigated	0.0133	0.1208	0.1015	7.2000e-004		9.1800e-003	9.1800e-003		9.1800e-003	9.1800e-003	0.0000	131.4788	131.4788	2.5200e-003	2.4100e-003	132.2790

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.46382e+006	0.0133	0.1208	0.1015	7.2000e-004		9.1800e-003	9.1800e-003		9.1800e-003	9.1800e-003	0.0000	131.4788	131.4788	2.5200e-003	2.4100e-003	132.2790
Total		**0.0133**	**0.1208**	**0.1015**	**7.2000e-004**		**9.1800e-003**	**9.1800e-003**		**9.1800e-003**	**9.1800e-003**	**0.0000**	**131.4788**	**131.4788**	**2.5200e-003**	**2.4100e-003**	**132.2790**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.46382e+006	0.0133	0.1208	0.1015	7.2000e-004		9.1800e-003	9.1800e-003		9.1800e-003	9.1800e-003	0.0000	131.4788	131.4788	2.5200e-003	2.4100e-003	132.2790
Total		**0.0133**	**0.1208**	**0.1015**	**7.2000e-004**		**9.1800e-003**	**9.1800e-003**		**9.1800e-003**	**9.1800e-003**	**0.0000**	**131.4788**	**131.4788**	**2.5200e-003**	**2.4100e-003**	**132.2790**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	837029	239.5300	0.0110	2.2800e-003	240.4674
Parking Lot	5984	1.7124	8.0000e-005	2.0000e-005	1.7191
Total		**241.2424**	**0.0111**	**2.3000e-003**	**242.1865**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	837029	239.5300	0.0110	2.2800e-003	240.4674
Parking Lot	5984	1.7124	8.0000e-005	2.0000e-005	1.7191
Total		**241.2424**	**0.0111**	**2.3000e-003**	**242.1865**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4948	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.7900e-003
Unmitigated	0.4948	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.7900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3804					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.7900e-003
Total	**0.4948**	**1.0000e-005**	**8.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6900e-003**	**1.6900e-003**	**0.0000**	**0.0000**	**1.7900e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3804					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.7900e-003
Total	**0.4948**	**1.0000e-005**	**8.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6900e-003**	**1.6900e-003**	**0.0000**	**0.0000**	**1.7900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.6880	0.0424	1.0400e-003	6.9019
Unmitigated	5.6880	0.0424	1.0500e-003	6.9025

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	1.29371 / 0.143745	5.6880	0.0424	1.0500e-003	6.9025
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.6880**	**0.0424**	**1.0500e-003**	**6.9025**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	1.29371 / 0.143745	5.6880	0.0424	1.0400e-003	6.9019
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.6880**	**0.0424**	**1.0400e-003**	**6.9019**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.6675	0.3349	0.0000	12.7013
Unmitigated	5.6675	0.3349	0.0000	12.7013

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	27.92	5.6675	0.3349	0.0000	12.7013
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**5.6675**	**0.3349**	**0.0000**	**12.7013**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	27.92	5.6675	0.3349	0.0000	12.7013
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**5.6675**	**0.3349**	**0.0000**	**12.7013**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Appendix B

Noise Measurement Results

Ambient Noise Survey Data Sheet

Project: Hilton Garden Inn Expansion
Date: July 27, 2015

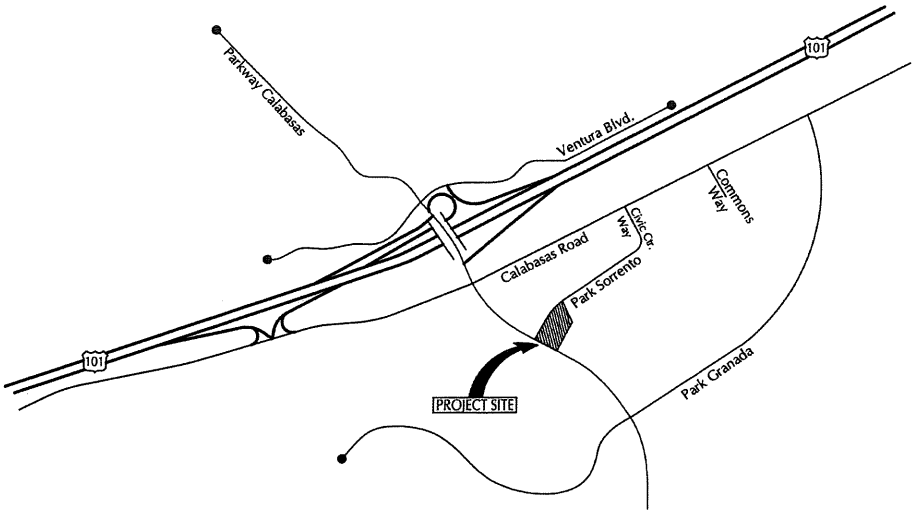
Measurement	Begin	Finish	Leq	Lmin	Lmax	L(10)	L(50)	L(90)
1	8:41:00 AM	8:56:00 AM	70	49.4	87.5	73.3	64.6	55.4
2	9:08:00 AM	9:23:00 AM	67.6	49.2	83.8	71.9	63.2	54.5
3	9:30:00 AM	9:45:00 AM	70	51.9	85.8	73.3	64.7	55

Appendix C

Traffic Analysis by Associated Transportation Engineers

HILTON GARDEN INN EXPANSION PROJECT
CITY OF CALABASAS, CALIFORNIA

UPDATED TRAFFIC, CIRCULATION, AND PARKING STUDY



October 9, 2015 **ATE Project #14044.01**

Prepared for:
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Richard L. Pool, P.E.
Scott A. Schell, AICP, PTP

October 9, 2015

14044.01R02

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Dallas, TX 75244

UPDATED TRAFFIC AND CIRCULATION STUDY FOR THE HILTON GARDEN INN EXPANSION PROJECT, CITY OF CALABASAS, CALIFORNIA

Associated Transportation Engineers (ATE) has prepared the following traffic and circulation study for the Hilton Garden Inn Expansion Project, proposed in the City of Calabasas. The study evaluates the potential traffic and circulation impacts associated with the project based on the City's traffic impact thresholds. ATE prepared a study for the project in July 2015. The following report has been updated to address comments contained in the Willdan peer review letter dated September 10, 2015.

We appreciate the opportunity to assist you with this project.

Associated Transportation Engineers

Scott A. Schell, AICP, PTP
Principal Transportation Planner

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FIGURES

INTRODUCTION

The following traffic and circulation study contains an analysis of the potential traffic impacts associated with the Hilton Garden Inn Expansion Project, located in the City of Calabasas. The study provides information regarding existing and future traffic conditions within the project study-area and recommends improvements where necessary. The study also provides an analysis of the project's consistency with the policies outlined in the Los Angeles County Congestion Management Program (CMP). The following report has been updated to address comments contained in the Willdan peer review letter dated September 10, 2015.

PROJECT DESCRIPTION

The project site is located at 24150 Park Sorrento in the City of Calabasas. Figure 1 shows the location of project site within the City. The project is proposing to expand the existing 142-room Hilton Garden Inn hotel, which contains 142-rooms and 1,500 square-feet of event space that can accommodate up to 100 guests, by 51 rooms (193 future rooms). Access to the project site would continue to be provided via the existing driveway connection to Park Sorrento. The project is proposing to expand the existing parking supply of 153 spaces by 17 spaces for a future total parking supply of 170 spaces. Figure 2 presents the project site plan.

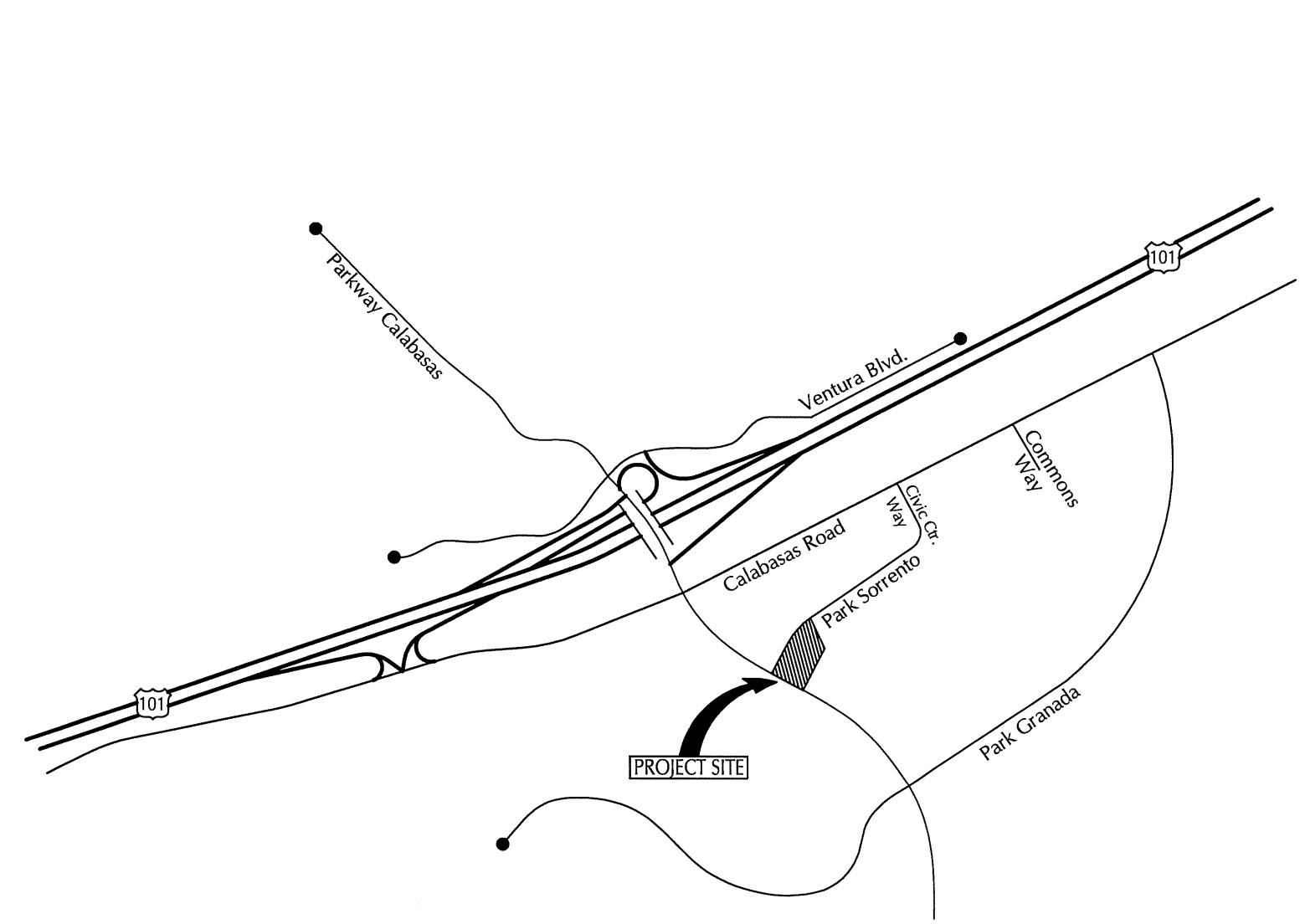
EXISTING CONDITIONS

Street Network

As shown on Figure 1, the study-area street network extends from the U.S. 101 Southbound ramps at Calabasas Road on the west to Park Granada on the east, and from Ventura Boulevard on the north to Calabasas Road on the south. Regional access to the site is provided by U.S. 101 via the interchanges at Calabasas Road and Parkway Calabasas. The primary arterials in the study-area include Calabasas Road and Parkway Calabasas which serve the predominately commercial areas in the vicinity of the project site.

Existing Traffic Volumes

Existing A.M. and P.M. peak hour traffic volumes for the study-area intersections were collected in March 2015 during periods when the local schools were in session with additional data collected in July 2015 (traffic count data is contained in the Technical Appendix for reference). The existing A.M. and P.M. peak hour traffic volumes for the study-area intersections are illustrated on Figure 3. Figure 4 illustrates the existing lane geometries and traffic controls for the study-area intersections.



ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING STREET NETWORK AND PROJECT SITE LOCATION

FIGURE 1

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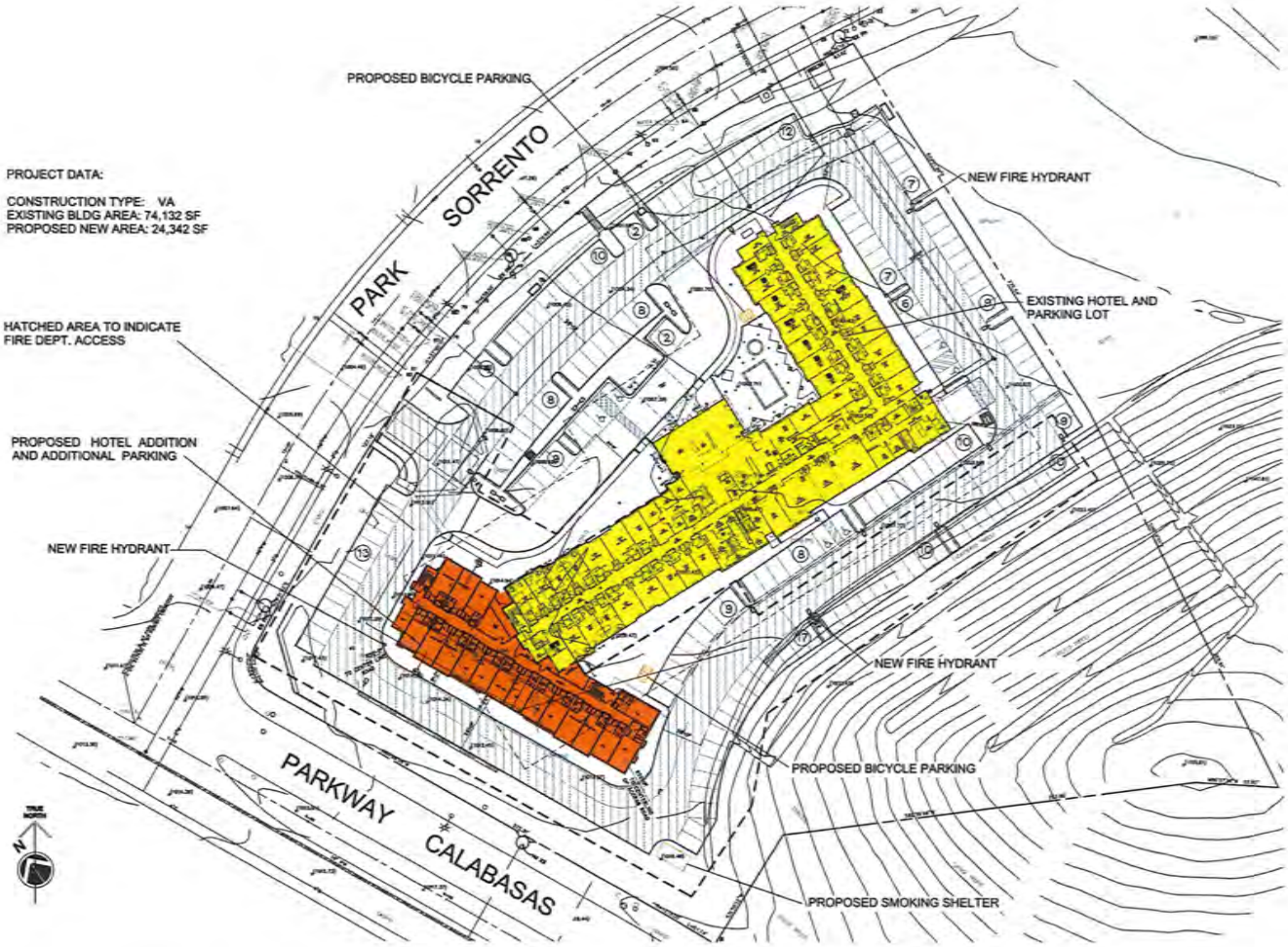

Associated Transportation Engineers

FIGURE 2

PROJECT SITE PLAN

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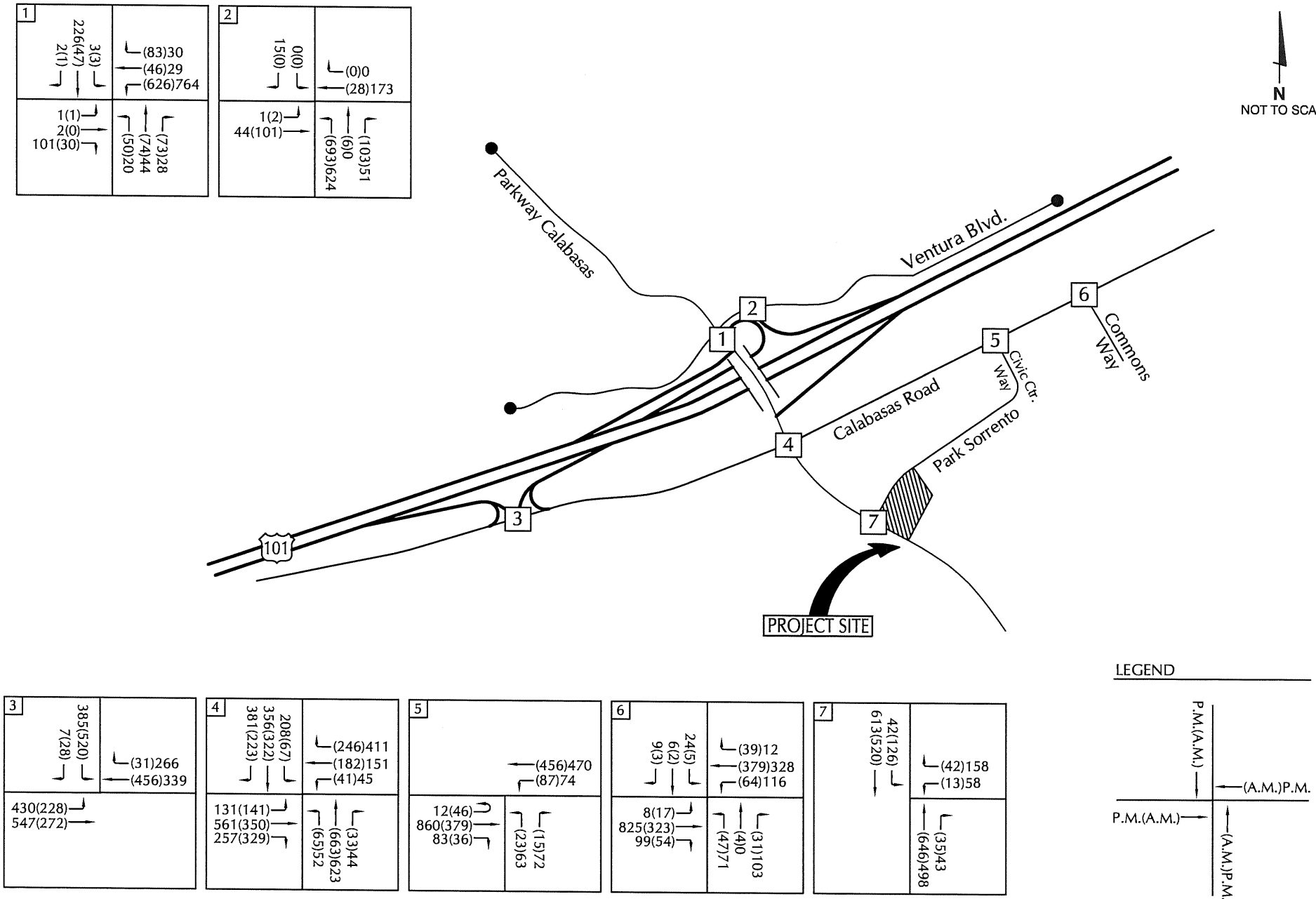

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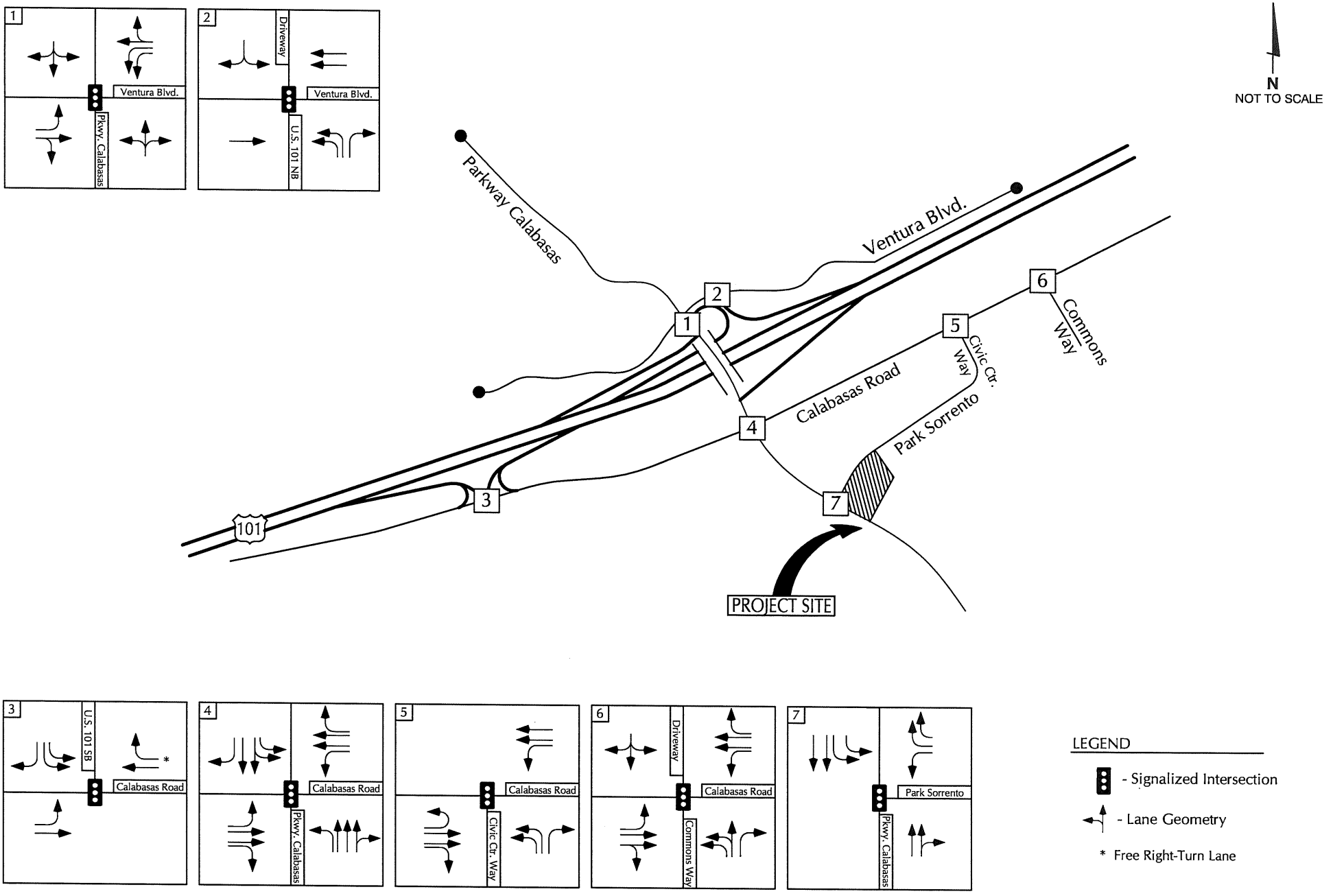
EXISTING TRAFFIC VOLUMES

FIGURE 3

MMF - #14044.01



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INTERSECTION LANE GEOMETRIES AND TRAFFIC CONTROLS

FIGURE 4

MMF - #14044.01

Existing Intersection Operations

Because traffic flow on city streets is most constrained at intersections, detailed traffic flow analyses focus on the operating conditions of critical intersections during peak travel periods. In rating an intersection's operating condition, "Levels of Service" (LOS) A through F are used, with LOS A indicating very good operations and LOS F indicating poor operations (more complete definitions are contained in the Technical Appendix for reference).

The City of Calabasas' General Plan has adopted a level of service standard of LOS C (V/C ratio 0.80) as the minimum acceptable operating standard for City intersections, and LOS D (V/C ratio 0.90) as the minimum acceptable operating standard for freeway interchanges within the City. Levels of service were calculated for the signalized intersections located in the City based on the "Intersection Capacity Utilization" (ICU) methodology. Levels of service for the freeway interchange intersections were calculated using the Highway Capacity Manual (HCM)[1] methodology pursuant to Caltrans' Guide for the Preparation of Traffic Impact Studies.[2] Table 1 lists the existing levels of service for the study-area intersections (calculation worksheets are contained in the Technical Appendix).

Table 1
Existing Intersection Levels of Service

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	ICU/Delay	LOS	ICU/Delay	LOS
1. Parkway Calabasas/Ventura Boulevard	0.470	LOS A	0.605	LOS B
2. U.S. 101 NB Ramps/Ventura Boulevard	5.5 sec.	LOS A	8.0 sec.	LOS A
3. U.S. 101 SB Ramps/Calabasas Road	20.2 sec.	LOS C	20.0 sec.	LOS C
4. Parkway Calabasas/Calabasas Road	0.491	LOS A	0.623	LOS B
5. Civic Center Way/Calabasas Road	0.281	LOS A	0.460	LOS A
6. Commons Way/Calabasas Road	0.267	LOS A	0.550	LOS A
7. Parkway Calabasas/Park Sorrento	0.365	LOS A	0.331	LOS A

The data presented in Table 1 show that the study-area intersections operate acceptably at LOS C or better with Existing traffic volumes.

[1] Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 2010.

[2] Guide for the Preparation of Traffic Impact Studies, State of California Department of Transportation, December 2002.

CEQA THRESHOLDS OF SIGNIFICANCE

The City of Calabasas considers LOS C (ICU 0.80) acceptable for intersections located within the City, and LOS D (V/C ratio 0.90) as the minimum acceptable operating standard for freeway interchanges which are under the jurisdiction of Caltrans. Projects that degrade intersection operations below the LOS C/D standard must provide measures to mitigate their impacts. According to the City of Calabasas 2030 General Plan Transportation Element, a significant impact would occur based on the criteria listed in Table 2.

Table 2
City of Calabasas Traffic Impact Thresholds

Project Related Traffic Increases that Constitute a Significant Impact Where Roadway Performance Standards Are or Will Be Exceeded (Urban Areas)		
Existing or Future Link/Intersection LOS	**Volume to Capacity (V/C) Ratio**	**Maximum Peak Hour V/C Increase**
LOS D	0.81 - 0.90	0.020
LOS E	0.91 - 1.00	0.015
LOS F	> 1.00	0.010

PROJECT-SPECIFIC ANALYSIS

Project Trip Generation

Trip generation estimates were developed for the project using the "Hotel" (Land Use Code #310) rates contained in the Institute of Transportation Engineers (ITE) Trip Generation report.[3] Table 3 summarizes the trip generation estimates developed for the project.

Table 3
Project Trip Generation

Land Use	Size	ADT		A.M. Peak Hour		P.M. Peak Hour	
		Rate	Trips	Rate	Trips (In/Out)	Rate	Trips (In/Out)
Hotel	51 Rooms	8.17	417	0.53	27 (16/11)	0.60	31 (16/14)

The data presented in Table 3 show that the Hilton Garden Inn Expansion Project is forecast to generate 417 average daily trips (ADT), 27 A.M. peak hour trips, and 31 P.M. peak hour trips.

[3] Trip Generation, Institute of Transportation Engineers, 9th Edition, 2012.

Project Trip Distribution

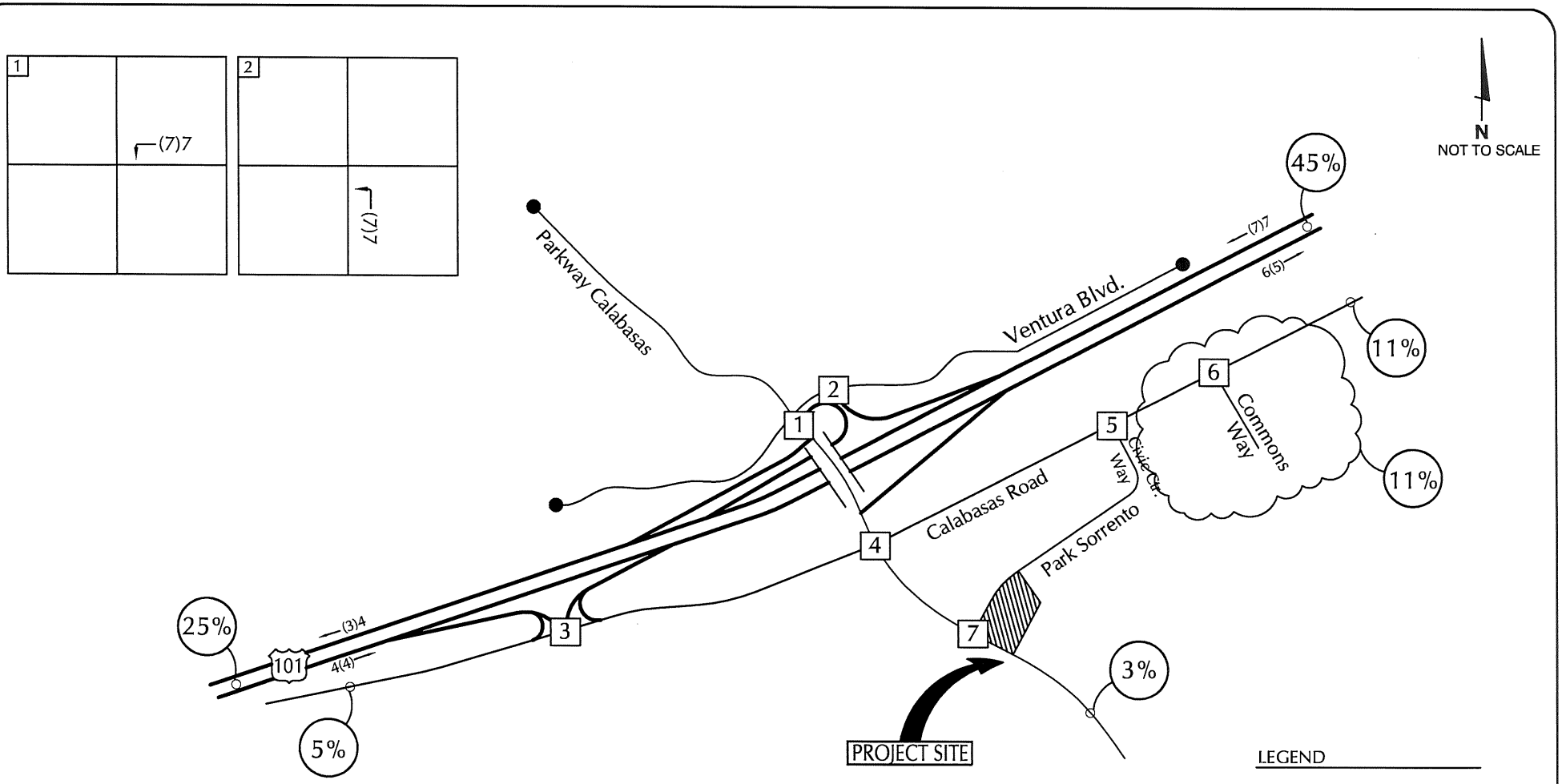
The traffic generated by the project was distributed and assigned to the adjacent street network based on the percentages shown in Table 4. The trip distribution percentages were developed based on traffic patterns observed at the existing site driveway (trip distribution pattern calculations are contained in the Technical Appendix). The distribution and assignment of project-added traffic is shown on Figure 5.

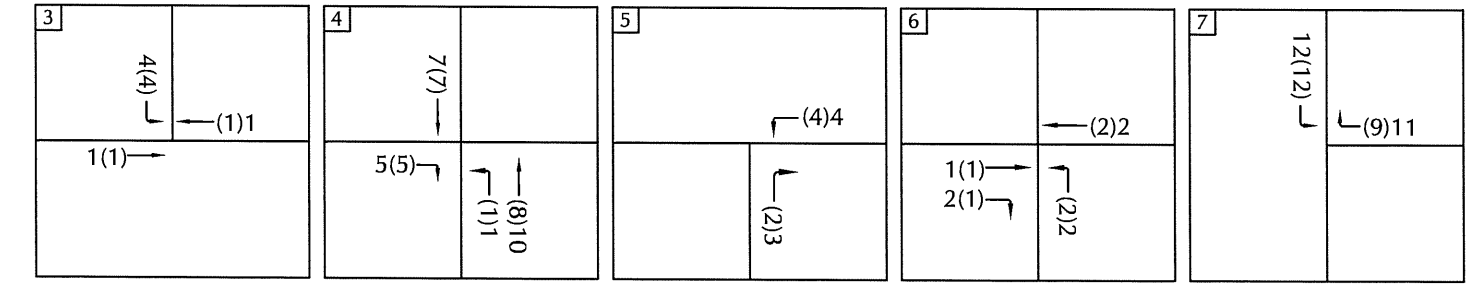
Table 4
Project Trip Distribution

Route	Origin/Destination	Distribution %
U.S. 101	East (Southbound) West (Northbound)	45% 25%
Calabasas Road	East West	11% 5%
Parkway Calabasas	South	3%
Local (The Commons)	-	11%
Total:		**100%**

Existing + Project Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Existing + Project traffic volumes presented on Figure 6. Tables 5 and 6 compare the Existing and Existing + Project levels of service and identify project-specific impacts based on City thresholds.





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PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 5

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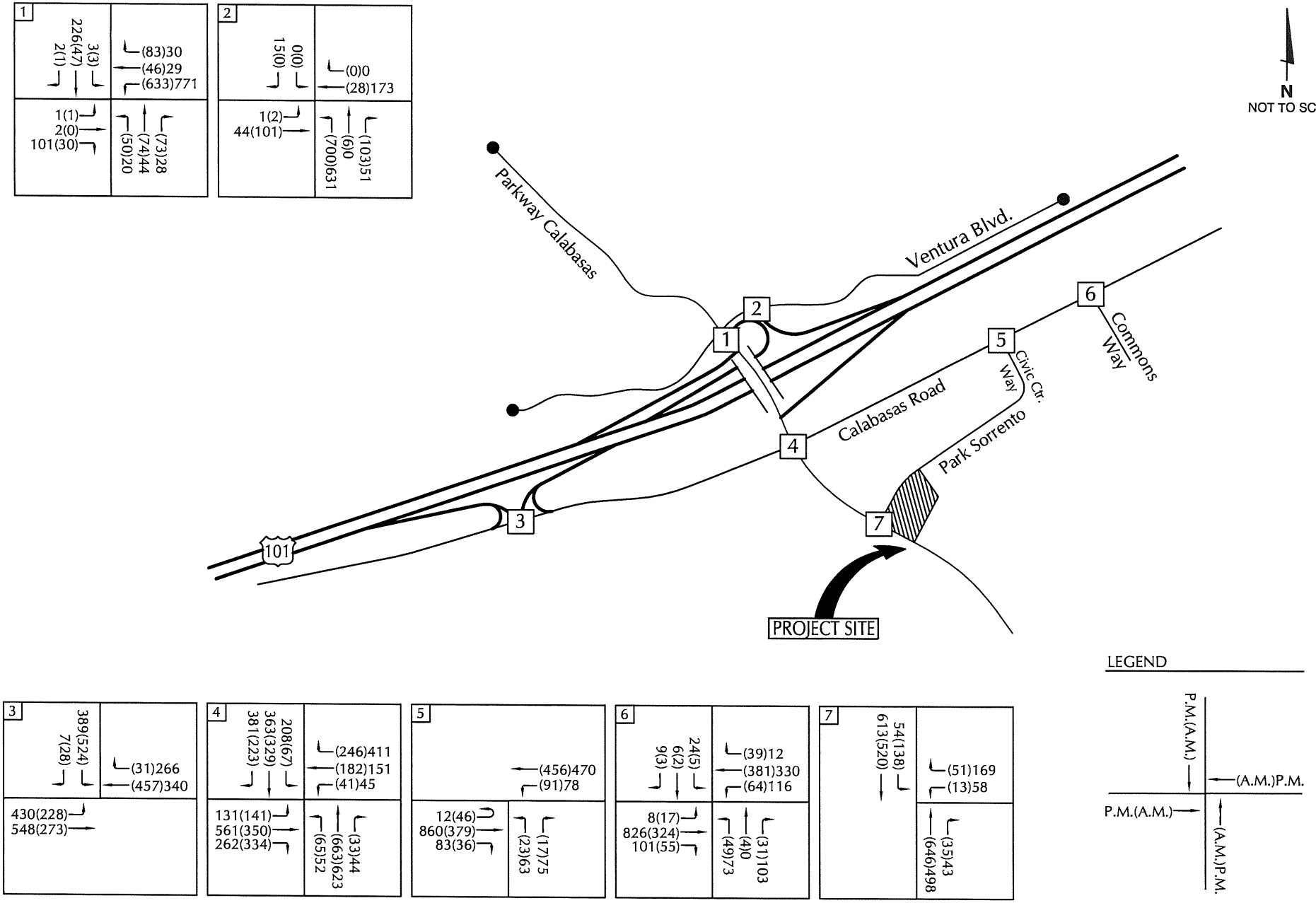

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EXISTING + PROJECT TRAFFIC VOLUMES

FIGURE 6

MMF - #14044.01

Table 5
Existing + Project A.M. Peak Hour Levels of Service

Intersection	Existing		Existing + Project		Project Added	
	ICU/Delay	LOS	ICU/Delay	LOS	Increase	Impact?
1. Parkway Calabasas/Ventura Boulevard	0.470	A	0.472	A	0.002	No
2. U.S. 101 NB Ramps/Ventura Boulevard	5.5 sec.	A	5.5 sec.	A	0.002 (a)	No
3. U.S. 101 SB Ramps/Calabasas Road	20.2 sec.	C	20.3 sec.	C	0.002 (a)	No
4. Parkway Calabasas/Calabasas Road	0.491	A	0.495	A	0.004	No
5. Civic Center Way/Calabasas Road	0.281	A	0.283	A	0.002	No
6. Commons Way/Calabasas Road	0.267	A	0.267	A	0.000	No
7. Parkway Calabasas/Park Sorrento	0.365	A	0.372	A	0.007	No

(a) Project-added V/C ratio increases based on ICU calculations.

Table 6
Existing + Project P.M. Peak Hour Levels of Service

Intersection	Existing		Existing + Project		Project Added	
	ICU/Delay	LOS	ICU/Delay	LOS	Increase	Impact?
1. Parkway Calabasas/Ventura Boulevard	0.605	B	0.607	B	0.002	No
2. U.S. 101 NB Ramps/Ventura Boulevard	8.0 sec.	A	8.0 sec.	A	0.002 (a)	No
3. U.S. 101 SB Ramps/Calabasas Road	20.0 sec.	C	20.1 sec.	C	0.003 (a)	No
4. Parkway Calabasas/Calabasas Road	0.623	B	0.626	B	0.003	No
5. Civic Center Way/Calabasas Road	0.460	A	0.465	A	0.005	No
6. Commons Way/Calabasas Road	0.550	A	0.551	A	0.001	No
7. Parkway Calabasas/Park Sorrento	0.331	A	0.339	A	0.008	No

(a) Project-added V/C ratio increases based on ICU calculations.

The data presented in Tables 5 and 6 show that the study-area intersections are forecast to operate acceptably at LOS C or better with Existing + Project traffic volumes. The project would not generate significant impacts to the intersections based on the City's impact thresholds.

2017 (OPENING YEAR) ANALYSIS

At the request of City staff, an opening year analysis was completed for the project. Information provided by the project applicant indicates that the Hilton Garden Expansion Project would be fully built and operational by 2017. The 2017 (Opening Year) traffic volumes were developed by applying a 1% annual growth rate to the existing traffic volumes. Figure 7 presents the 2017 (Opening Year) traffic volumes for the study-area intersections.

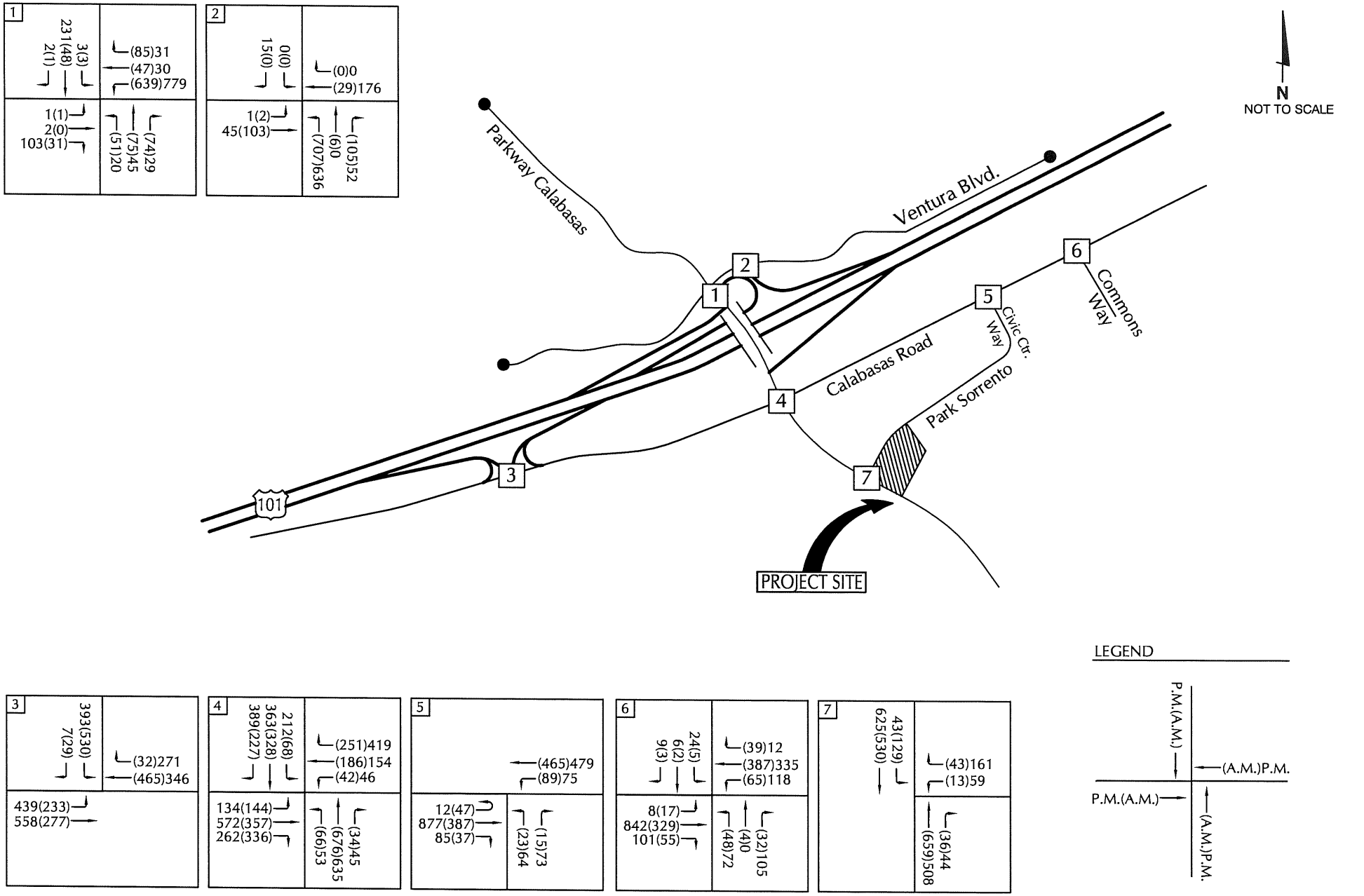
2017 + Project Intersection Operations

Levels of service were calculated for the study-area intersections assuming the 2017 and 2017 + Project traffic volumes presented on Figures 7 and 8. Tables 7 and 8 compare the 2017 and 2017 + Project levels of service and identify impacts based on City thresholds.

Table 7
2017 (Opening Year) + Project A.M. Peak Hour Levels of Service

Intersection	2017		2017 + Project		Project Added	
	ICU/Delay	LOS	ICU/Delay	LOS	Increase	Impact?
1. Parkway Calabasas/Ventura Boulevard	0.477	A	0.479	A	0.00	No
2. U.S. 101 NB Ramps/Ventura Boulevard	5.6 sec.	A	5.6 sec.	A	0.002 (a)	No
3. U.S. 101 SB Ramps/Calabasas Road	20.9 sec.	C	21.0 sec.	C	0.001 (a)	No
4. Parkway Calabasas/Calabasas Road	0.499	A	0.503	A	0.004	No
5. Civic Center Way/Calabasas Road	0.286	A	0.290	A	0.004	No
6. Commons Way/Calabasas Road	0.270	A	0.271	A	0.001	No
7. Parkway Calabasas/Park Sorrento	0.370	A	0.377	A	0.007	No

(a) Project-added V/C ratio increases based on ICU calculations.



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OPENING YEAR (2017) TRAFFIC VOLUMES

FIGURE 7

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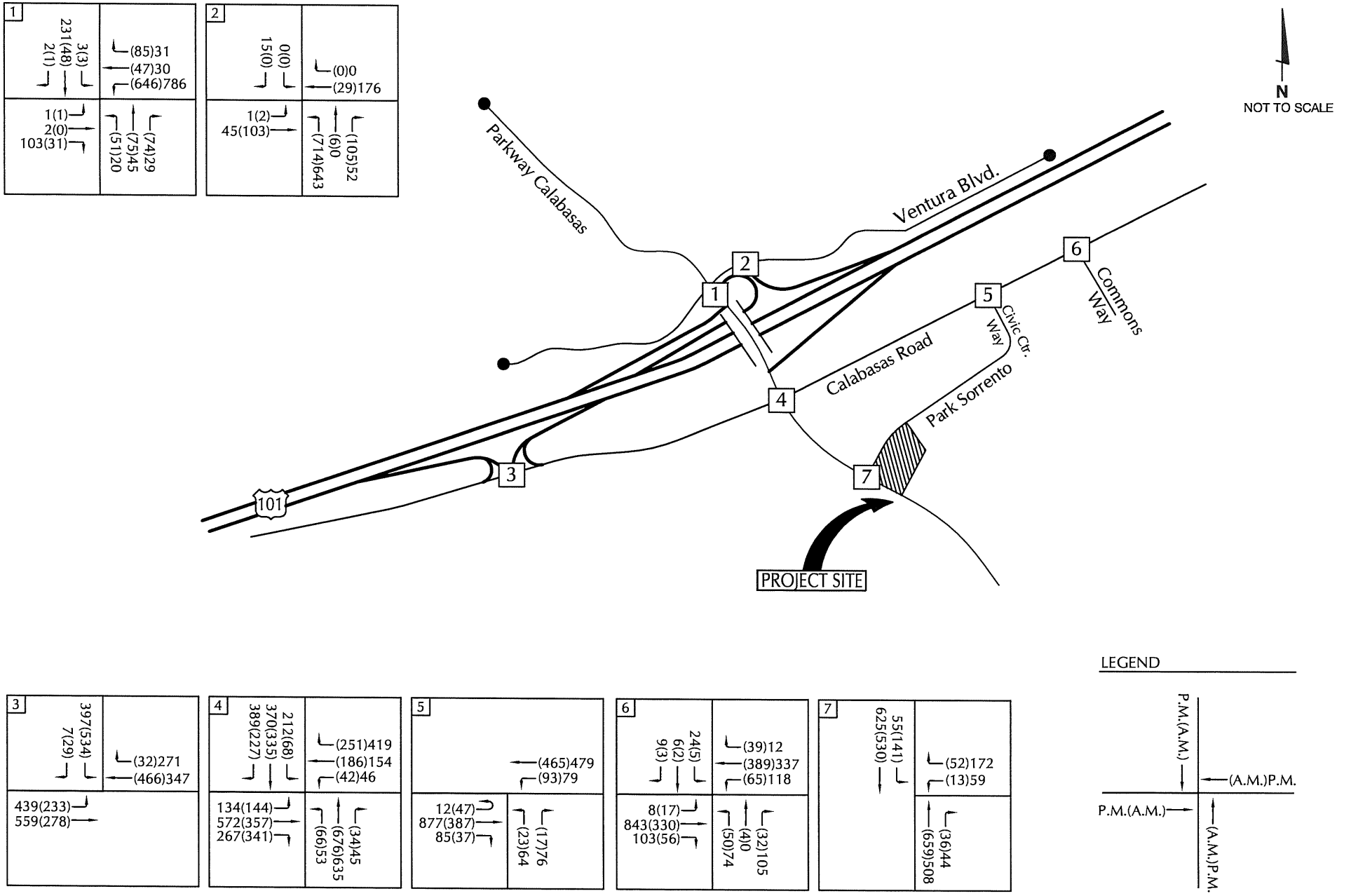

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OPENING YEAR (2017) + PROJECT TRAFFIC VOLUMES

FIGURE 8

MMF - #14044.01

Table 8
2017 (Opening Year) + Project P.M. Peak Hour Levels of Service

Intersection	2017		2017 + Project		Project Added	
	ICU/Delay	LOS	ICU/Delay	LOS	Increase	Impact?
1. Parkway Calabasas/Ventura Boulevard	0.616	B	0.619	B	0.003	No
2. U.S. 101 NB Ramps/Ventura Boulevard	8.0 sec.	A	8.0 sec.	A	0.002 (a)	No
3. U.S. 101 SB Ramps/Calabasas Road	21.1 sec.	C	21.1 sec.	C	0.002 (a)	No
4. Parkway Calabasas/Calabasas Road	0.633	B	0.633	B	0.000	No
5. Civic Center Way/Calabasas Road	0.467	A	0.471	A	0.004	No
6. Commons Way/Calabasas Road	0.559	A	0.560	A	0.001	No
7. Parkway Calabasas/Park Sorrento	0.336	A	0.344	A	0.008	No

(a) Project-added V/C ratio increases based on ICU calculations.

The data presented in Tables 7 and 8 indicate that the study-area intersections would operate acceptably at LOS C or better with 2017 + Project traffic volumes. The project would not generate significant impacts to the intersections based on the City's impact threshold.

CUMULATIVE ANALYSIS

Cumulative Traffic Forecasts

Cumulative traffic volumes were forecast for the study-area intersections assuming development of the approved and pending projects located within the project study area. The list of approved and pending projects used for the cumulative analysis was provided by City staff and is presented in the Technical Appendix. Trip generation estimates were developed for the cumulative projects using the rates presented in the ITE Trip Generation report. Table 9 summarizes the trip generation forecasts for the cumulative projects (detailed trip generation calculation worksheets contained in the Technical Appendix for reference).

Table 9
Cumulative Project Trip Generation Forecasts

Project Name	A.M. Peak Hour Trips	P.M. Peak Hour Trips
Westin Hotel	93	106
Hidden Terrace	50	68
Malamut Dealership	0	26
Village at Calabasas	107	111
Total:	**250**	**311**

The data presented in Table 9 show that the cumulative projects are forecast to generate 250 A.M. peak hour trips and 311 P.M. peak hour trips. The traffic generated by the cumulative projects was added to the 2017 volumes based on distribution percentages presented in existing traffic studies and environmental documents completed for developments in the study area (LOS comparison of common intersections is contained in the Technical Appendix). Figure 9 presents the Cumulative traffic volumes for the study-area intersections, and Figure 10 presents the Cumulative + Project traffic volumes.

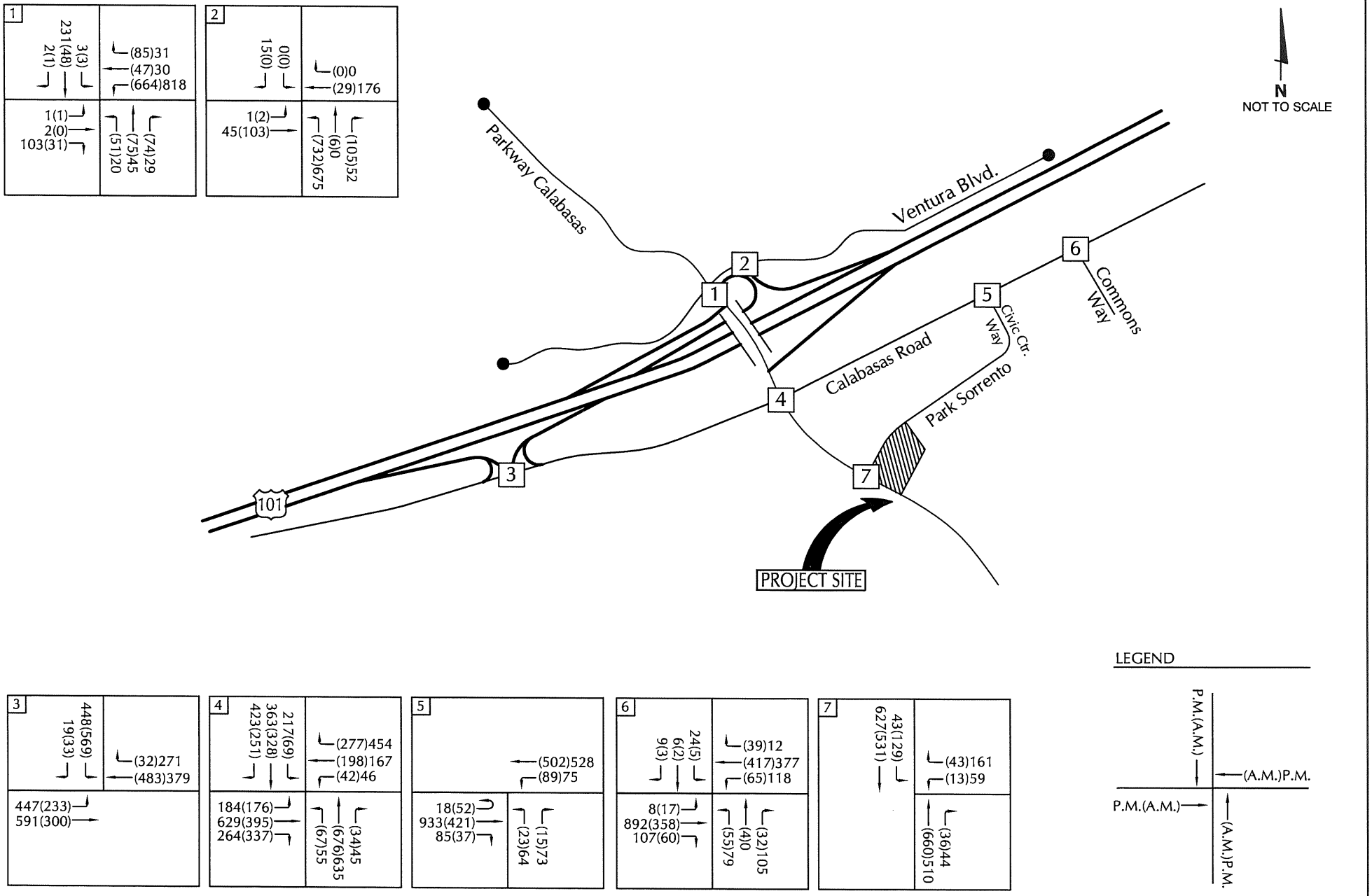
Cumulative + Project Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Cumulative and Cumulative + Project traffic volumes. Tables 10 and 11 compare the Cumulative and Cumulative + Project levels of service for the study-area intersections and identify cumulative impacts based on City thresholds.

Table 10
Cumulative + Project A.M. Peak Hour Levels of Service

Intersection	Cumulative		Cumulative + Project		Project Added	
	ICU/Delay	LOS	ICU/Delay	LOS	Increase	Impact?
1. Parkway Calabasas/Ventura Boulevard	0.485	A	0.487	A	0.002	No
2. U.S. 101 NB Ramps/Ventura Boulevard	5.5 sec.	A	5.5 sec.	A	0.002 (a)	No
3. U.S. 101 SB Ramps/Calabasas Road	21.7 sec.	C	21.8 sec.	C	0.002 (a)	No
4. Parkway Calabasas/Calabasas Road	0.536	A	0.540	A	0.004	No
5. Civic Center Way/Calabasas Road	0.297	A	0.301	A	0.004	No
6. Commons Way/Calabasas Road	0.280	A	0.280	A	0.000	No
7. Parkway Calabasas/Park Sorrento	0.371	A	0.378	A	0.007	No

(a) Project-added V/C ratio increases based on ICU calculations.



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CUMULATIVE TRAFFIC VOLUMES

FIGURE 9

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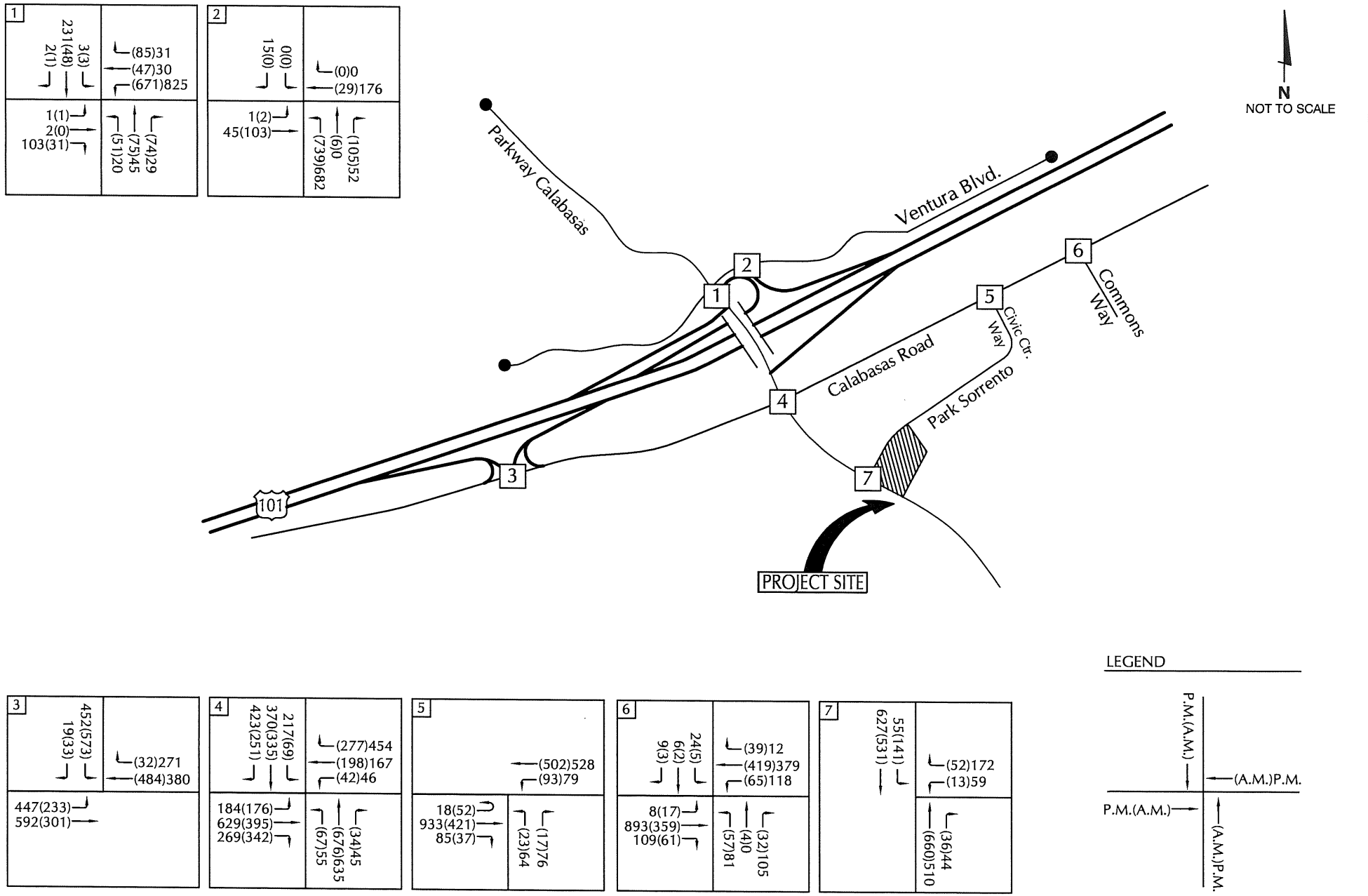

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CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 10

MMF - #14044.01

Table 11
Cumulative + Project P.M. Peak Hour Levels of Service

Intersection	Cumulative		Cumulative + Project		Project Added	
	ICU/Delay	LOS	ICU/Delay	LOS	Increase	Impact?
1. Parkway Calabasas/Ventura Boulevard	0.629	B	0.631	B	0.002	No
2. U.S. 101 NB Ramps/Ventura Boulevard	7.9 sec.	A	7.9 sec.	A	0.002 (a)	No
3. U.S. 101 SB Ramps/Calabasas Road	22.0 sec.	C	22.1 sec.	C	0.002 (a)	No
4. Parkway Calabasas/Calabasas Road	0.676	B	0.676	B	0.000	No
5. Civic Center Way/Calabasas Road	0.485	A	0.489	A	0.004	No
6. Commons Way/Calabasas Road	0.576	A	0.577	A	0.001	No
7. Parkway Calabasas/Park Sorrento	0.336	A	0.344	A	0.008	No

(a) Project-added V/C ratio increases based on ICU calculations.

The data presented in Tables 10 and 11 show that the study-area intersections would operate acceptably at LOS C or better with Cumulative and Cumulative + Project traffic volumes. The project would not generate significant cumulative impacts to the study-area intersections based on the City's impact thresholds.

SITE ACCESS AND CIRCULATION

Access to the project site would continue to be provided via the existing hotel driveway connection to Park Sorrento. The Project Site Plan (see Figure 2) shows that the existing on-site circulation system would be modified to extend around the new building area and that emergency fire access would continue to be provided around the hotel building. It is anticipated that the proposed site access and on-site circulation plans would accommodate traffic associated with the existing hotel operations and the additional traffic generated by the project.

Driveway operations were analyzed assuming the Cumulative + Project traffic volumes to determine if there are adequate gaps in the Park Sorrento traffic stream for project traffic to enter and exit the driveway. Levels of service were calculated for the unsignalized driveway intersection using the methodologies for two-way stop sign controlled intersections outlined in the Highway Capacity Manual (HCM)[4]. A figure presenting the Cumulative + Project driveway volumes and the driveway LOS calculation worksheets are contained in the Technical Appendix for reference. Table 12 presents the peak hour operations for the project driveway under Cumulative + Project conditions.

[4] Highway Capacity Manual, Transportation Research Board, 2010.

Table 12
Cumulative + Project Driveway Operations

Intersection	A.M. Delay/LOS	P.M. Delay/LOS
Park Sorrento/Project Driveway		
Inbound Left-Turn	7.6 sec./LOS A	7.4 sec./LOS A
Outbound Left/Right-Turn	9.8 sec./LOS A	9.8 sec./LOS A

As shown in Table 12, the delays at the project driveway equate to LOS A operations, representing acceptable operations and delays. The existing hotel driveway configuration would therefore operate acceptably considering the future volumes forecast for the project site and the adjacent street.

CONGESTION MANAGEMENT PROGRAM ANALYSIS

Impact Criteria

The following section reviews the potential impacts of the project to the Los Angeles County Congestion Management Program (CMP) system. This analysis was completed using the procedures and impact criteria outlined in Appendix D of the Los Angeles County CMP.[5]

Potential Intersection Impacts

The CMP guidelines require that intersection monitoring locations included in the CMP be examined if the proposed project would add 50 peak hour trips (PHT) or more during the A.M. or P.M. peak hours. There are no CMP monitored intersections within the project study-area, thus no further review of potential impacts to CMP intersections is required.

Potential Freeway Impacts

The CMP guidelines require that freeway monitoring locations must be examined if the proposed project would add 150 PHT or more (in either direction) during the A.M. or P.M. peak hours. The proposed project is forecast to add 7 A.M. and 8 P.M. PHT to northbound U.S. Highway 101 and 12 A.M. PHT and 13 P.M. PHT to southbound U.S. 101. Based on CMP impact threshold of 150 PHT, the project would not generate a significant impact to the freeway segments located within the study-area.

■ ■ ■

[5] 2010 Draft Congestion Management Program for Los Angeles County, County of Los Angeles Metropolitan Transportation Authority.

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

Scott A. Schell, AICP, PTP, Principal Planner
Matthew Farrington, Transportation Planner I

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2010 Draft Congestion Management Program for Los Angeles County, County of Los Angeles Metropolitan Transportation Authority.

Persons Contacted

Marc Seferian P.E., T.E. - City of Calabasas
Ben Chan – City of Calabasas

TECHNICAL APPENDIX

CONTENTS:

LEVEL OF SERVICE DEFINITIONS

Signalized Intersection Level of Service Definitions

LOS	Delay (a)	V/C Ratio	Definition
A	< 10.0	< 0.60	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
B	10.1 - 20.0	0.61 - 0.70	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	0.71 - 0.80	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	0.81 - 0.90	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	0.91 - 1.00	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
F	> 80.0	> 1.00	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

(a) Average control delay per vehicle in seconds.

Unsignalized Intersection Level of Service Definitions

The HCM[1] uses *control delay* to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed.

LOS	Control Delay Seconds per Vehicle
A	< 10.0
B	10.1 - 15.0
C	15.1 - 25.0
D	25.1 - 35.0
E	35.1 - 50.0
F	> 50.0

[1] Highway Capacity Manual, National Research Board, 2010

TRAFFIC COUNT DATA

ITM Peak Hour Summary

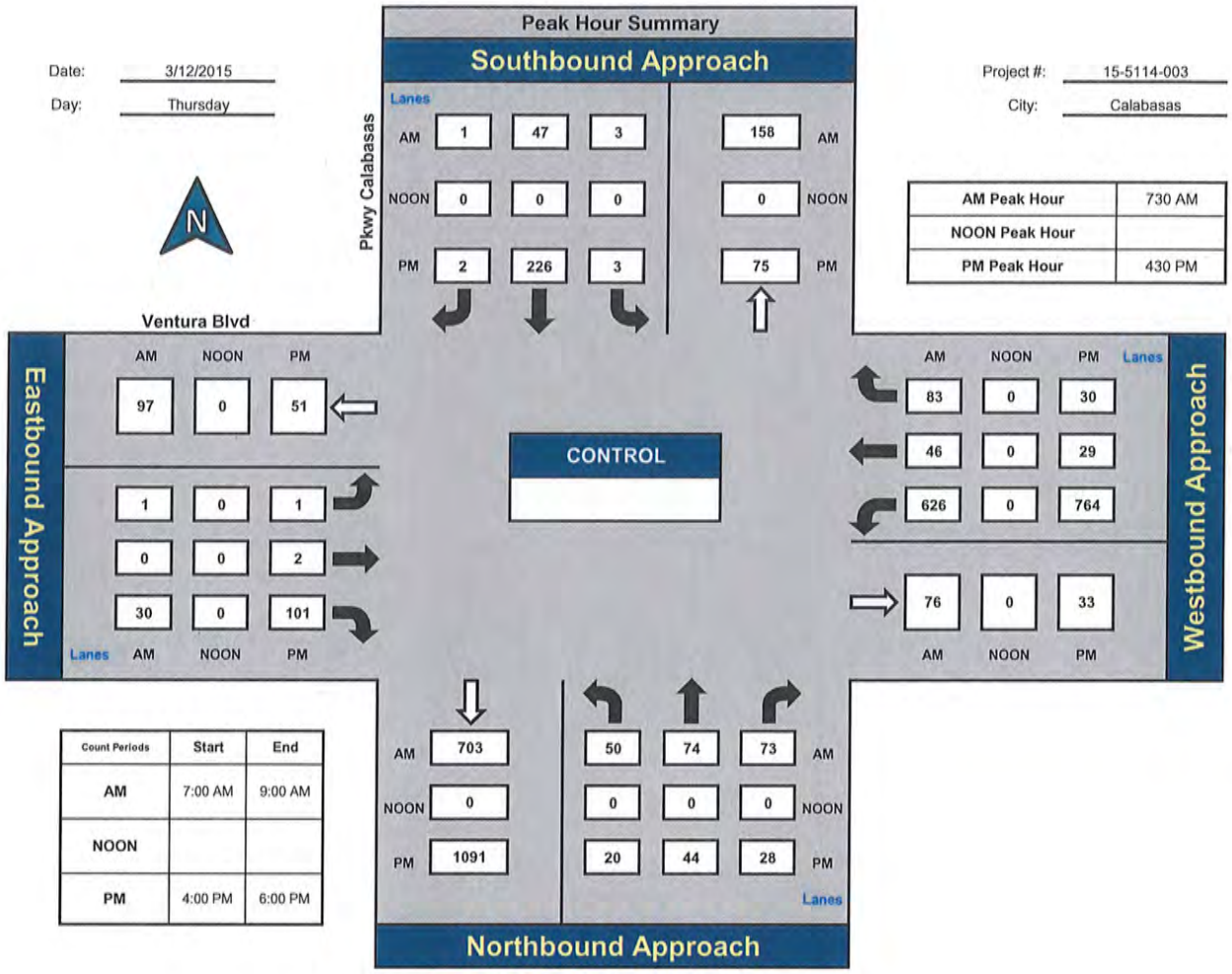
Prepared by:

National Data & Surveying Services

Pkwy Calabasas and Ventura Blvd , Calabasas

Date: 3/12/2015
Day: Thursday

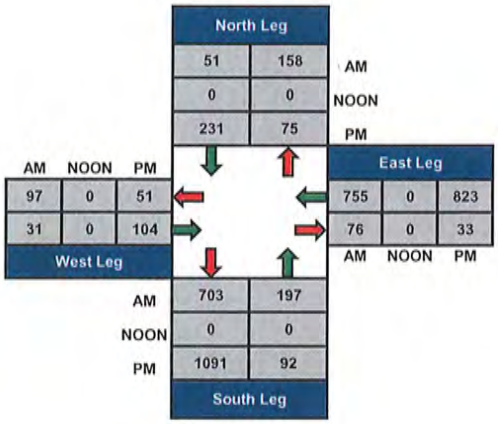
Project #: 15-5114-003
City: Calabasas



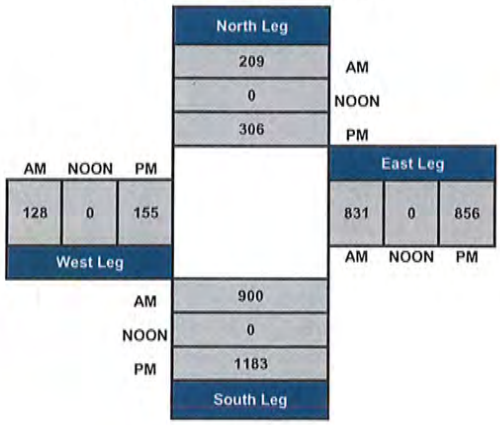
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

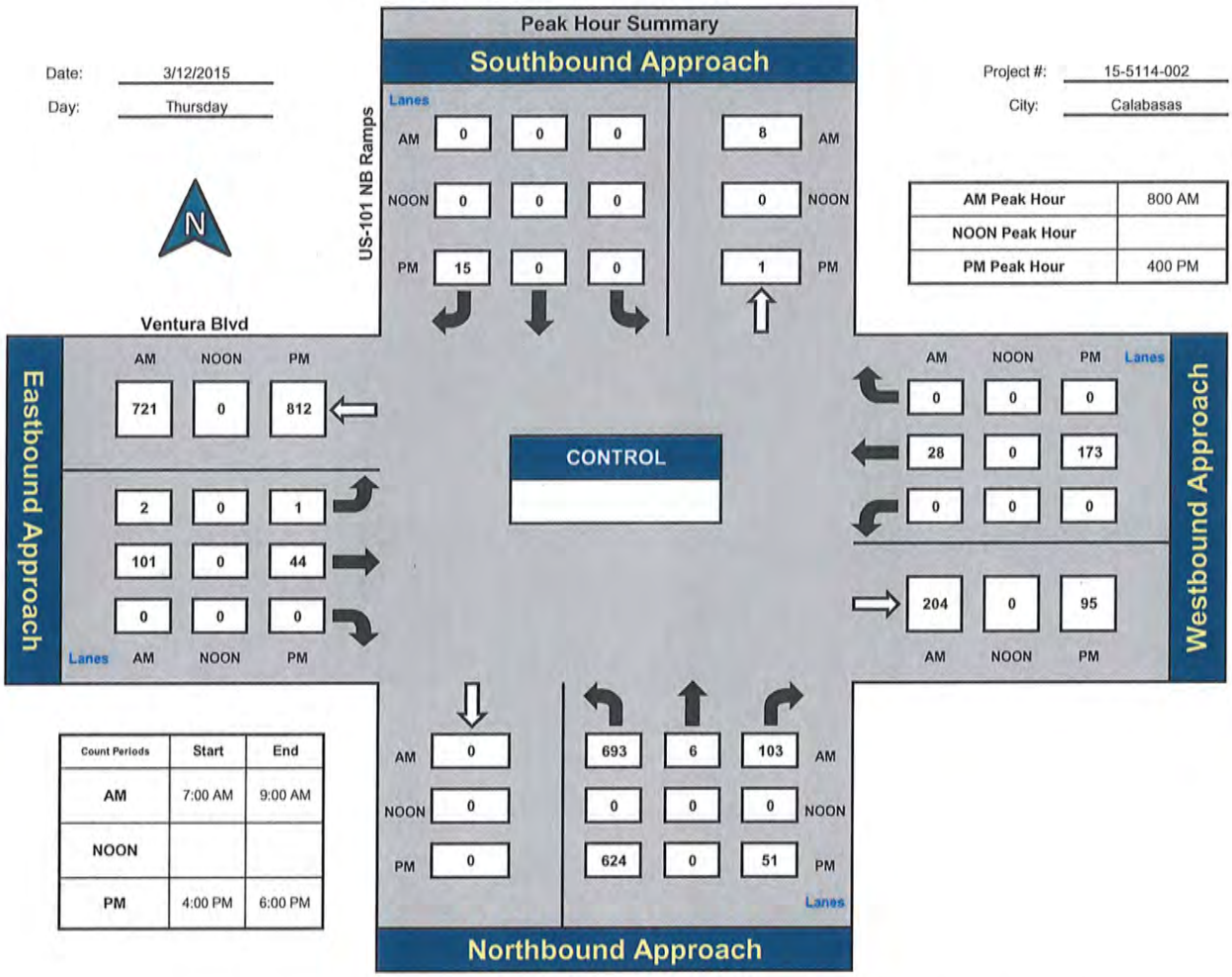
Prepared by:

National Data & Surveying Services

US-101 NB Ramps and Ventura Blvd , Calabasas

Date: 3/12/2015
Day: Thursday

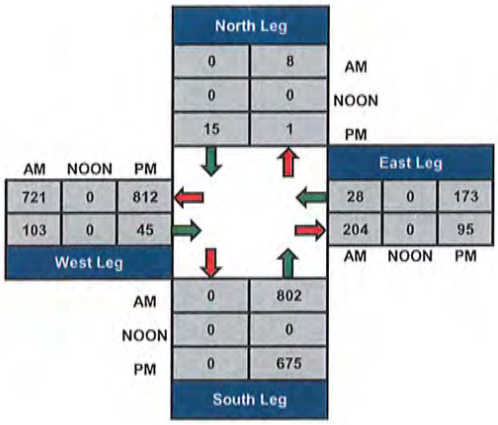
Project #: 15-5114-002
City: Calabasas



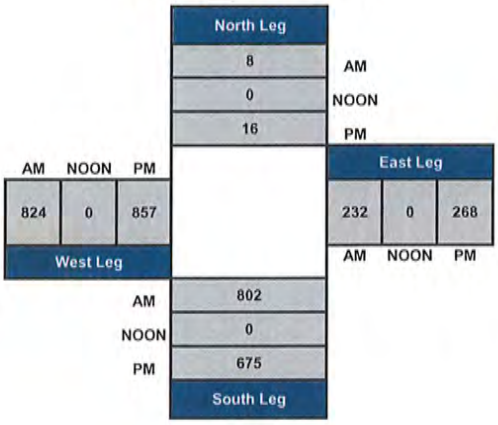
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

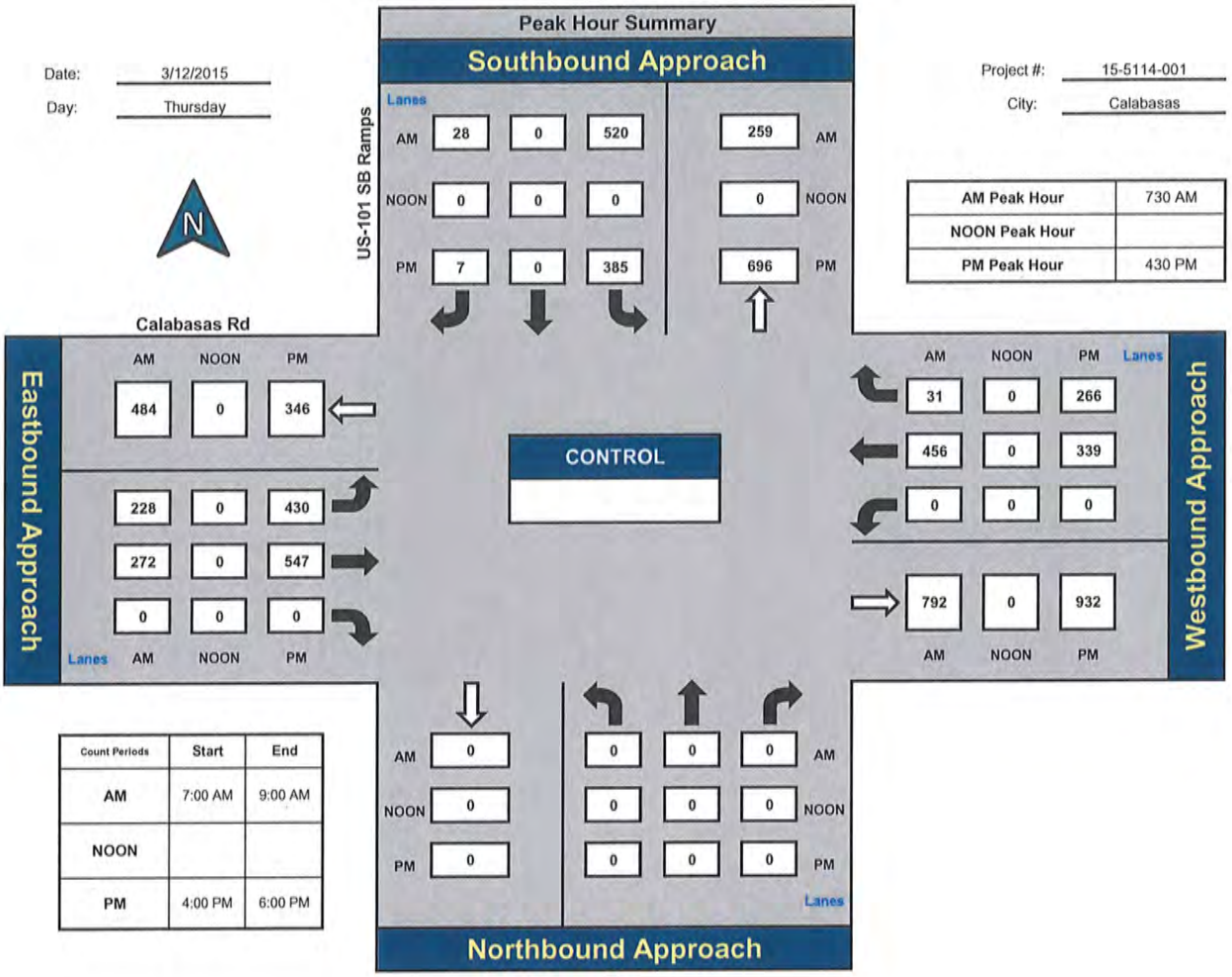
National Data & Surveying Services

US-101 SB Ramps and Calabasas Rd , Calabasas

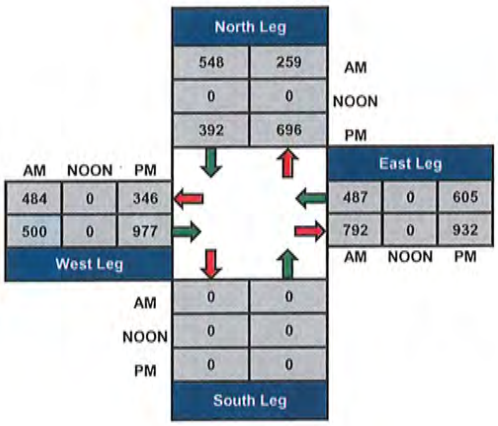
Date: 3/12/2015
Day: Thursday
Project #: 15-5114-001
City: Calabasas

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	430 PM

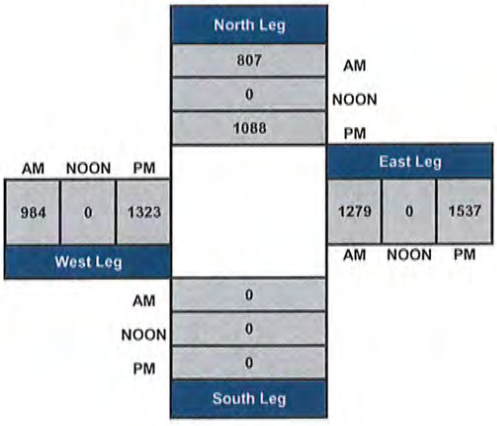
Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

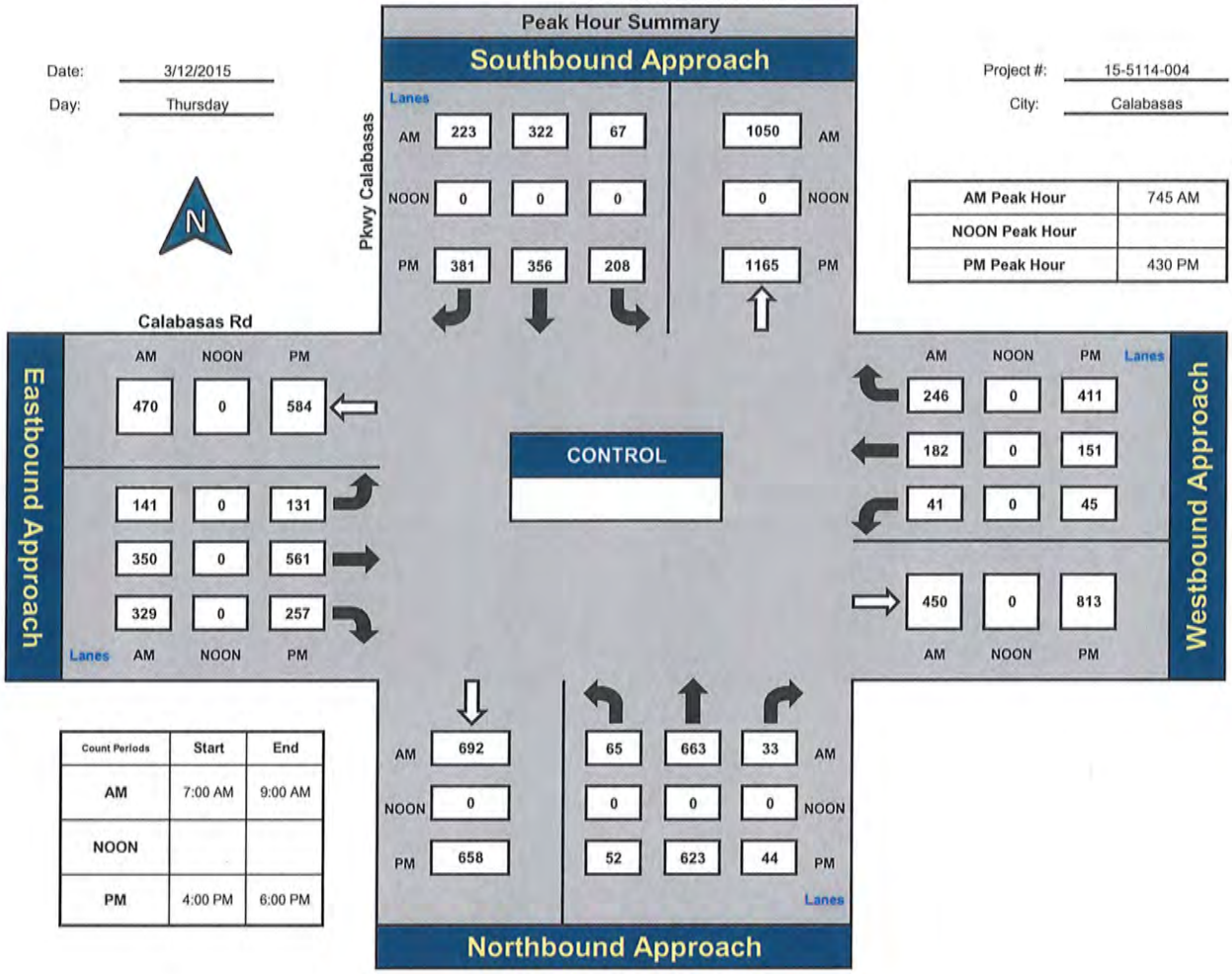
National Data & Surveying Services

Pkwy Calabasas and Calabasas Rd , Calabasas

Date: 3/12/2015
Day: Thursday

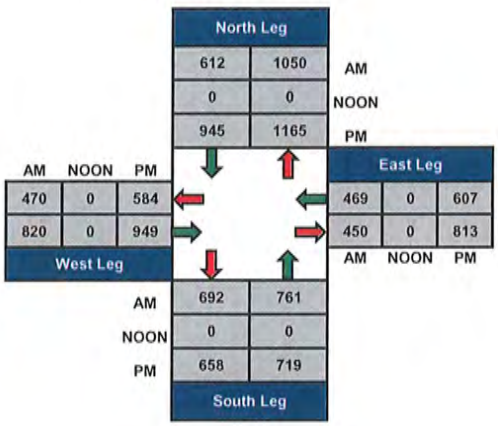
Project #: 15-5114-004
City: Calabasas

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

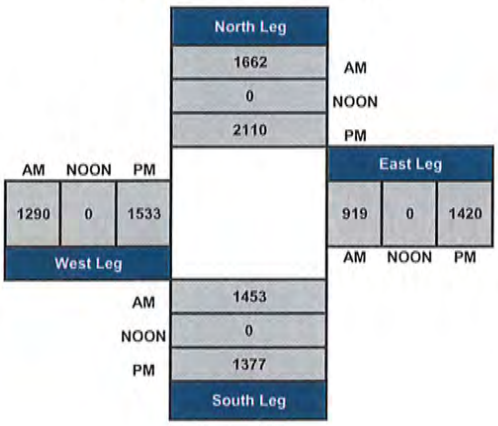


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg

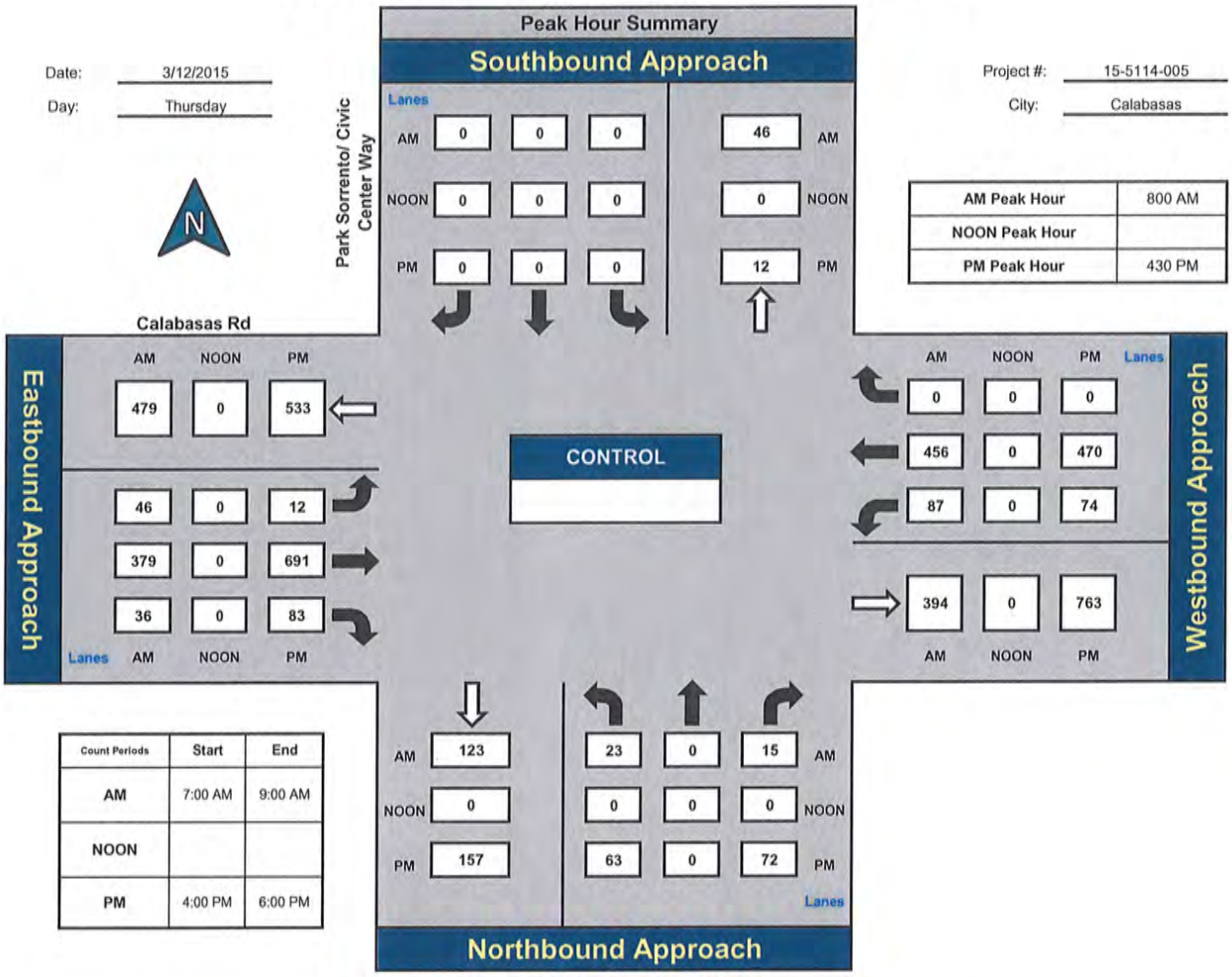


ITM Peak Hour Summary

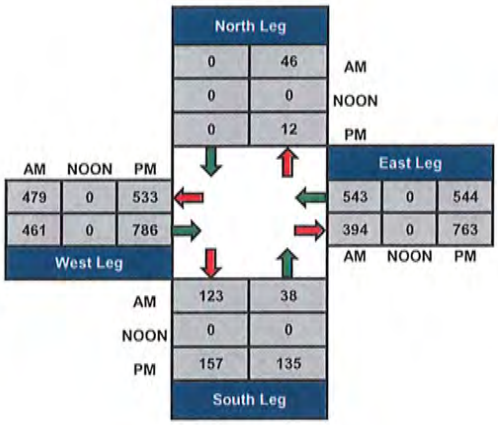
Prepared by:

National Data & Surveying Services

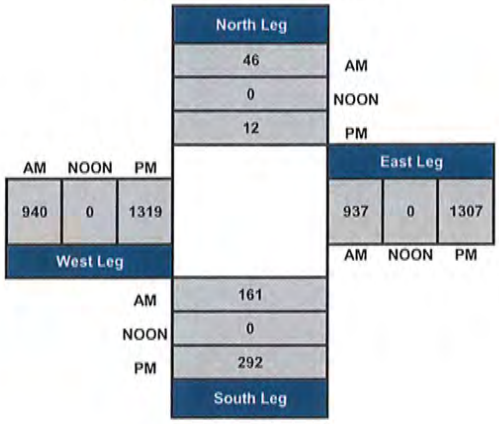
Park Sorrento/ Civic Center Way and Calabasas Rd , Calabasas



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Commons Wy and Calabasas Rd , Calabasas

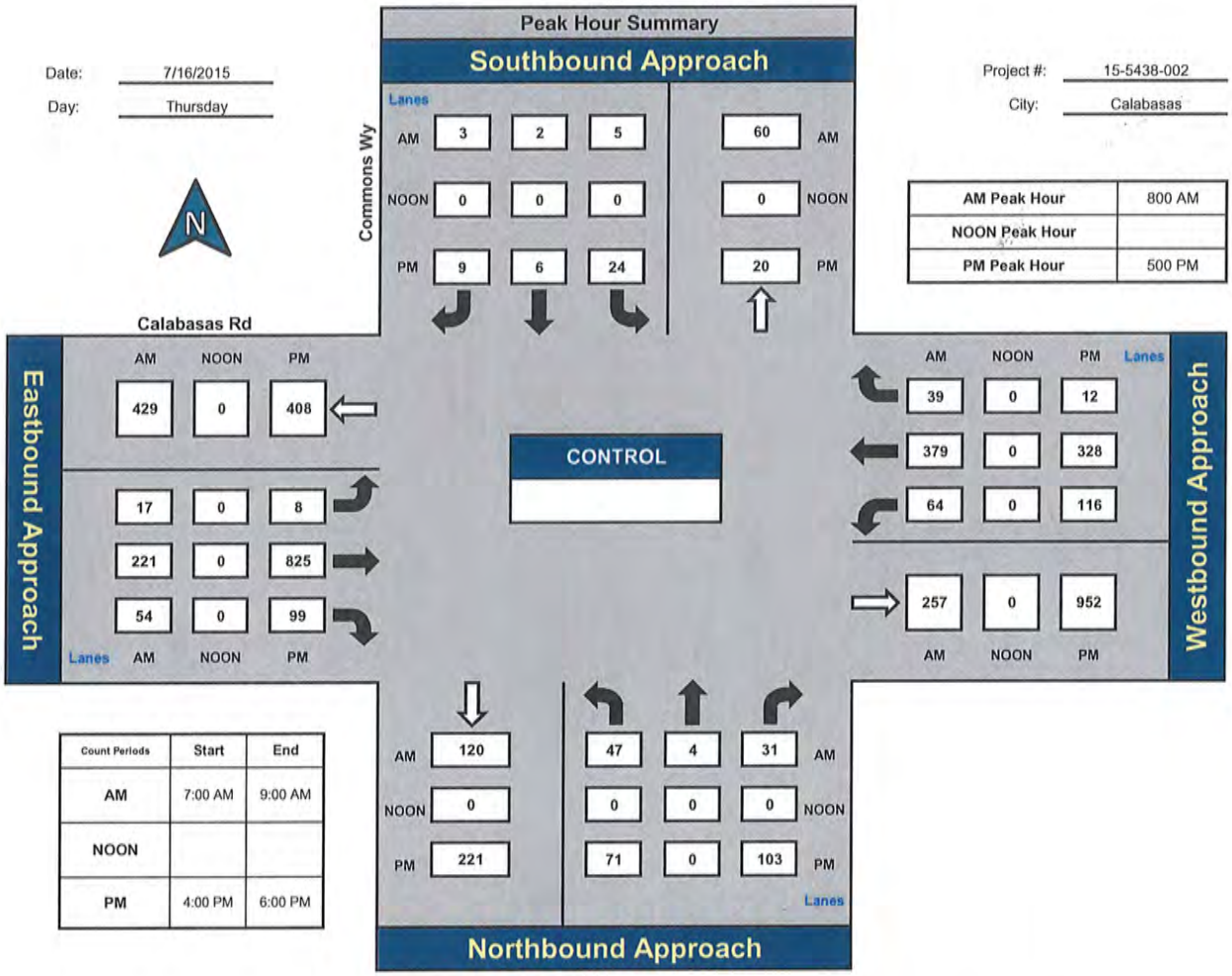
Date: 7/16/2015

Day: Thursday

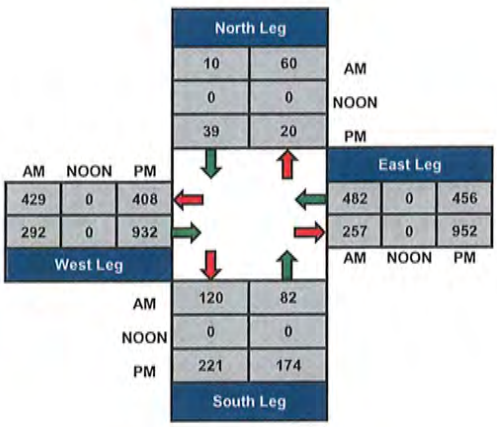
Project #: 15-5438-002

City: Calabasas

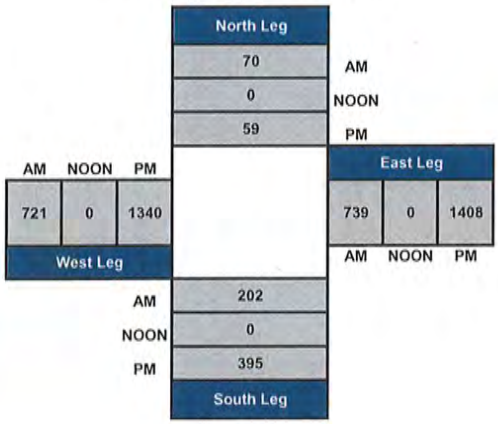
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM



Total Ins & Outs



Total Volume Per Leg



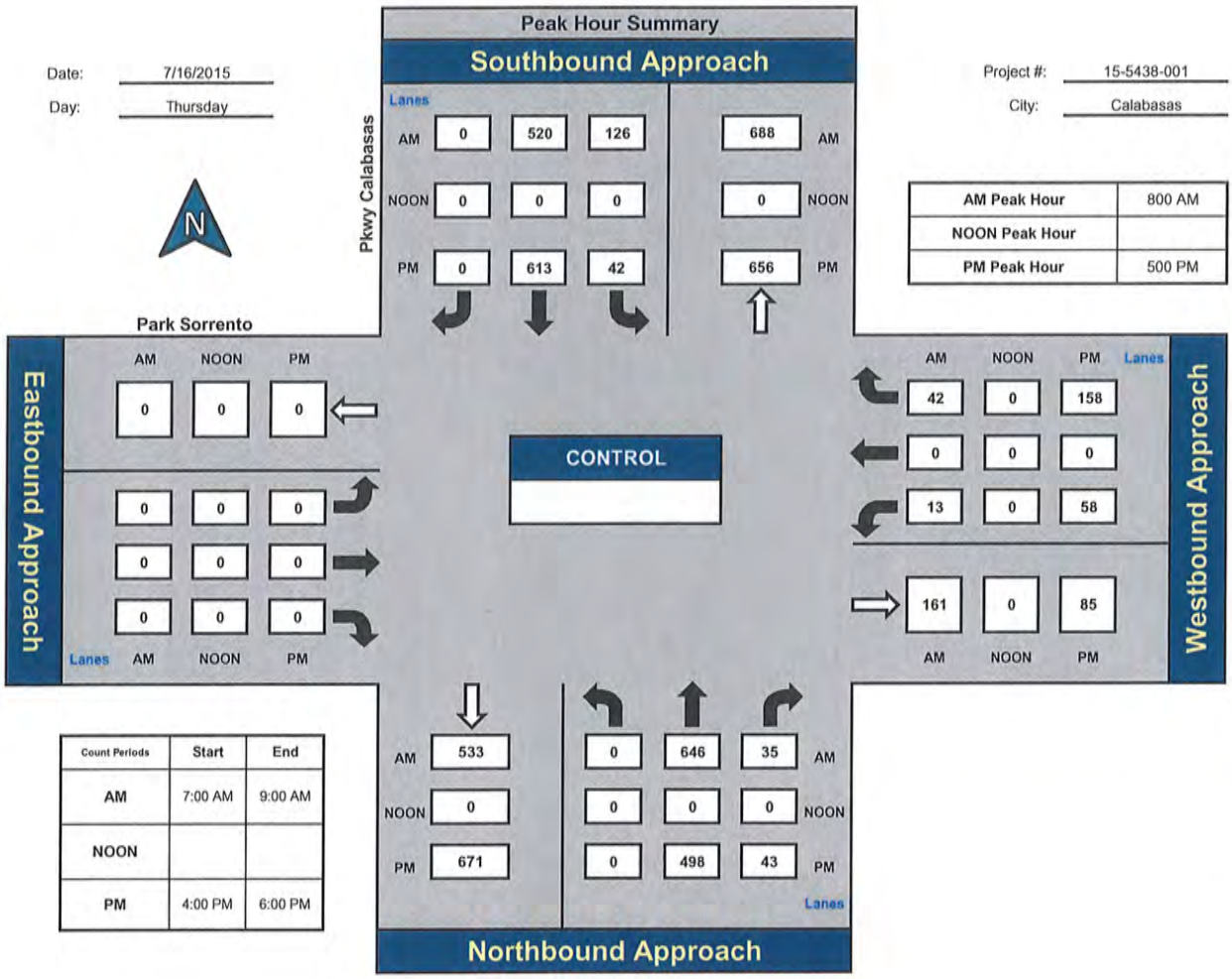
ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pkwy Calabasas and Park Sorrento , Calabasas

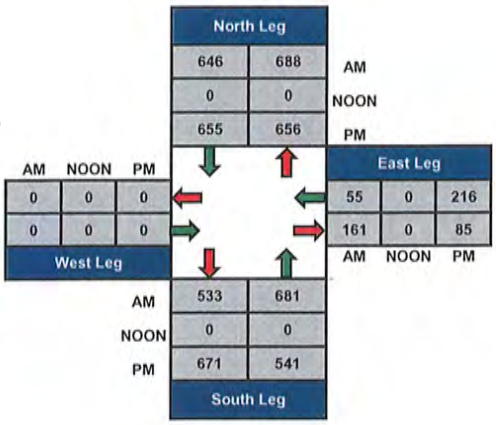
Date: 7/16/2015
Day: Thursday
Project #: 15-5438-001
City: Calabasas



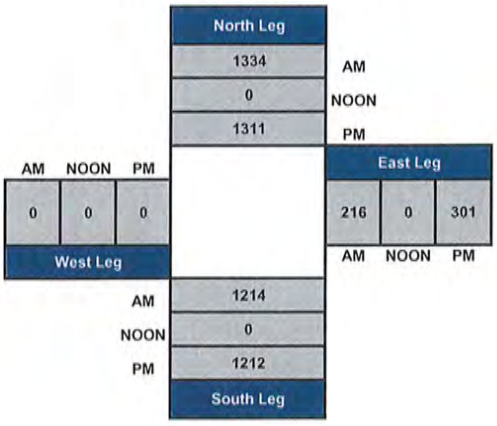
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 Parkway Calabasas/Ventura Boulevard
Reference 2 U.S. 101 Northbound Off-Ramp/Ventura Boulevard
Reference 3 U.S. 101 Southbound Ramps/Calabasas Road
Reference 4 Parkway Calabasas/Calabasas Road
Reference 5 Calabasas Road/Civic Center Way
Reference 6 Calabasas Road/Commons Way
Reference 7 Parkway Calabasas/Park Sorrento

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 1_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS (SPLIT PHASED)

E/W STREET: VENTURA BOULEVARD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**50**	**74**	**73**	**3**	**47**	**1**	**1**	**0**	**30**	**626**	**46**	**83**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	LTR	LTR	L TR	LL TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	SCENARIO VOLUMES 2	SCENARIO V/C RATIOS 1	SCENARIO V/C RATIOS 2
NBL	0	0	50	50	-	-
NBT	1	1600	74	74	0.123 *	0.123 *
NBR	0	0	73	73	-	-
SBL	0	0	3	3	-	-
SBT	1	1600	47	47	0.032 *	0.032 *
SBR	0	0	1	1	-	-
EBL	1	1600	1	1	0.001	0.001
EBT	1	1600	0	0	0.019 *	0.019 *
EBR	0	0	30	30	-	-
WBL	2	3200	626	633	0.196 *	0.198 *
WBT	1	1600	46	46	0.081	0.081
WBR	0	0	83	83	-	-
				LOST TIME:	0.100 *	0.100 *
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.470**	**0.472**
				SCENARIO LEVEL OF SERVICE:	A	A

NOTES:

Printed: 07/21/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 1_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***10-16-2012***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS (SPLIT PHASED)

E/W STREET: VENTURA BOULEVARD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	50	74	73	3	47	1	1	0	30	626	46	83
(B)	AMBIENT GROWTH:	1	1	1	0	1	0	0	0	1	13	1	2
(C)	PROJECT-ADDED:	0	0	0	0	0	0	0	0	0	7	0	0
(D)	CUMULATIVE-ADDED:	0	0	0	0	0	0	0	0	0	25	0	0

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LTR	LTR	L TR	LL TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	0	0	50	51	51	51	51	-	-	-	-	-
NBT	1	1600	74	75	75	75	75	0.123 *	0.125 *	0.125 *	0.125 *	0.125 *
NBR	0	0	73	74	74	74	74	-	-	-	-	-
SBL	0	0	3	3	3	3	3	-	-	-	-	-
SBT	1	1600	47	48	48	48	48	0.032 *	0.033 *	0.033 *	0.033 *	0.033 *
SBR	0	0	1	1	1	1	1	-	-	-	-	-
EBL	1	1600	1	1	1	1	1	0.001	0.001	0.001	0.001	0.001
EBT	1	1600	0	0	0	0	0	0.019 *	0.019 *	0.019 *	0.019 *	0.019 *
EBR	0	0	30	31	31	31	31	-	-	-	-	-
WBL	2	3200	626	639	646	664	671	0.196 *	0.200 *	0.202 *	0.208 *	0.210 *
WBT	1	1600	46	47	47	47	47	0.081	0.083	0.083	0.083	0.083
WBR	0	0	83	85	85	85	85	-	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.470**	**0.477**	**0.479**	**0.485**	**0.487**
						SCENARIO LEVEL OF SERVICE:		A	A	A	A	A

NOTES:

Printed: 07/21/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) REF: 1_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS (SPLIT PHASED)

E/W STREET: VENTURA BOULEVARD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**20**	**44**	**28**	**3**	**226**	**2**	**1**	**2**	**101**	**764**	**29**	**30**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	LTR	LTR	L TR	LL TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	SCENARIO VOLUMES 2	SCENARIO V/C RATIOS 1	SCENARIO V/C RATIOS 2
NBL	0	0	20	20	-	-
NBT	1	1600	44	44	0.058 *	0.058 *
NBR	0	0	28	28	-	-
SBL	0	0	3	3	-	-
SBT	1	1600	226	226	0.144 *	0.144 *
SBR	0	0	2	2	-	-
EBL	1	1600	1	1	0.001	0.001
EBT	1	1600	2	2	0.064 *	0.064 *
EBR	0	0	101	101	-	-
WBL	2	3200	764	771	0.239 *	0.241 *
WBT	1	1600	29	29	0.037	0.037
WBR	0	0	30	30	-	-
				LOST TIME:	0.100 *	0.100 *
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.605**	**0.607**
				SCENARIO LEVEL OF SERVICE:	**B**	**B**

NOTES:

Printed: 07/21/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) REF: 1_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS (SPLIT PHASED)

E/W STREET: VENTURA BOULEVARD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**20**	**44**	**28**	**3**	**226**	**2**	**1**	**2**	**101**	**764**	**29**	**30**
(B)	AMBIENT GROWTH:	**0**	**1**	**1**	**0**	**5**	**0**	**0**	**0**	**2**	**15**	**1**	**1**
(C)	PROJECT-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**
(D)	CUMULATIVE-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**	**0**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LTR	LTR	L TR	LL TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	0	0	20	20	20	20	20	-	-	-	-	-
NBT	1	1600	44	45	45	45	45	0.058 *	0.059 *	0.059 *	0.059 *	0.059 *
NBR	0	0	28	29	29	29	29	-	-	-	-	-
SBL	0	0	3	3	3	3	3	-	-	-	-	-
SBT	1	1600	226	231	231	231	231	0.144 *	0.148 *	0.148 *	0.148 *	0.148 *
SBR	0	0	2	2	2	2	2	-	-	-	-	-
EBL	1	1600	1	1	1	1	1	0.001	0.001	0.001	0.001	0.001
EBT	1	1600	2	2	2	2	2	0.064 *	0.066 *	0.066 *	0.066 *	0.066 *
EBR	0	0	101	103	103	103	103	-	-	-	-	-
WBL	2	3200	764	779	786	818	825	0.239 *	0.243 *	0.246 *	0.256 *	0.258 *
WBT	1	1600	29	30	30	30	30	0.037	0.038	0.038	0.038	0.038
WBR	0	0	30	31	31	31	31	-	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.605**	**0.616**	**0.619**	**0.629**	**0.631**
						SCENARIO LEVEL OF SERVICE:		**B**	**B**	**B**	**B**	**B**

NOTES:

Printed: 07/29/15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	101	0	0	28	0	693	6	103	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		1.00			0.95		0.97	1.00				
Frt		1.00			1.00		1.00	0.86				
Flt Protected		1.00			1.00		0.95	1.00				
Satd. Flow (prot)		1861			3539		3433	1598				
Flt Permitted		1.00			1.00		0.76	1.00				
Satd. Flow (perm)		1855			3539		2736	1598				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	2	122	0	0	34	0	835	7	124	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	33	0	0	0	0
Lane Group Flow (vph)	0	124	0	0	34	0	835	98	0	0	0	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.1			8.1		43.9	43.9				
Effective Green, g (s)		8.1			8.1		43.9	43.9				
Actuated g/C Ratio		0.13			0.13		0.73	0.73				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		250			478		2002	1169				
v/s Ratio Prot					0.01			0.06				
v/s Ratio Perm		c0.07					c0.31					
v/c Ratio		0.50			0.07		0.42	0.08				
Uniform Delay, d1		24.1			22.7		3.1	2.3				
Progression Factor		0.60			1.00		1.00	1.00				
Incremental Delay, d2		1.5			0.1		0.6	0.1				
Delay (s)		16.0			22.7		3.8	2.4				
Level of Service		B			C		A	A				
Approach Delay (s)		16.0			22.7			3.6			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	101	0	0	28	0	700	6	103	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		1.00			0.95		0.97	1.00				
Frt		1.00			1.00		1.00	0.86				
Flt Protected		1.00			1.00		0.95	1.00				
Satd. Flow (prot)		1861			3539		3433	1598				
Flt Permitted		1.00			1.00		0.76	1.00				
Satd. Flow (perm)		1855			3539		2736	1598				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	2	122	0	0	34	0	843	7	124	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	33	0	0	0	0
Lane Group Flow (vph)	0	124	0	0	34	0	843	98	0	0	0	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.1			8.1		43.9	43.9				
Effective Green, g (s)		8.1			8.1		43.9	43.9				
Actuated g/C Ratio		0.13			0.13		0.73	0.73				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		250			478		2002	1169				
v/s Ratio Prot					0.01			0.06				
v/s Ratio Perm		c0.07					c0.31					
v/c Ratio		0.50			0.07		0.42	0.08				
Uniform Delay, d1		24.1			22.7		3.1	2.3				
Progression Factor		0.60			1.00		1.00	1.00				
Incremental Delay, d2		1.5			0.1		0.7	0.1				
Delay (s)		16.0			22.7		3.8	2.4				
Level of Service		B			C		A	A				
Approach Delay (s)		16.0			22.7			3.6			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 2_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***10-16-2012***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: U.S. 101 NB OFF-RAMP

E/W STREET: VENTURA BOULEVARD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**693**	**6**	**103**	**0**	**0**	**0**	**2**	**101**	**0**	**0**	**28**	**0**
(B) PROJECT-ADDED:	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL R	LTR	T	TT

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING + PROJECT VOLUMES (A + B)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	SCENARIO VOLUMES 2	SCENARIO V/C RATIOS 1	SCENARIO V/C RATIOS 2
NBL	2	3200	693	700	0.217 *	0.219 *
NBT	0	0	6	6	-	-
NBR	1	1600	103	103	0.064	0.064
SBL	0	0	0	0	-	-
SBT	1	1600	0	0	0.000 *	0.000 *
SBR	0	0	0	0	-	-
EBL	0	0	2	2	-	-
EBT	1	1600	101	101	0.064 *	0.064 *
EBR	0	0	0	0	-	-
WBL	0	0	0	0	-	-
WBT	2	3200	28	28	0.009	0.009
WBR	0	0	0	0	-	-
			LOST TIME:		0.100 *	0.100 *
			TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.381**	**0.383**
			SCENARIO LEVEL OF SERVICE:		A	A

NOTES:

Printed: 07/21/15

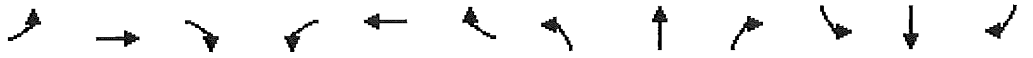
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	103	0	0	29	0	707	6	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		1.00			0.95		0.97	1.00				
Frt		1.00			1.00		1.00	0.86				
Flt Protected		1.00			1.00		0.95	1.00				
Satd. Flow (prot)		1861			3539		3433	1598				
Flt Permitted		1.00			1.00		0.76	1.00				
Satd. Flow (perm)		1855			3539		2736	1598				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	2	124	0	0	35	0	852	7	127	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	126	0	0	35	0	852	100	0	0	0	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.2			8.2		43.8	43.8				
Effective Green, g (s)		8.2			8.2		43.8	43.8				
Actuated g/C Ratio		0.14			0.14		0.73	0.73				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		254			484		1997	1167				
v/s Ratio Prot					0.01			0.06				
v/s Ratio Perm		c0.07					c0.31					
v/c Ratio		0.50			0.07		0.43	0.09				
Uniform Delay, d1		24.0			22.6		3.2	2.3				
Progression Factor		0.59			1.00		1.00	1.00				
Incremental Delay, d2		1.5			0.1		0.7	0.1				
Delay (s)		15.6			22.6		3.8	2.5				
Level of Service		B			C		A	A				
Approach Delay (s)		15.6			22.6			3.7			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	103	0	0	29	0	714	6	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		1.00			0.95		0.97	1.00				
Frt		1.00			1.00		1.00	0.86				
Flt Protected		1.00			1.00		0.95	1.00				
Satd. Flow (prot)		1861			3539		3433	1598				
Flt Permitted		1.00			1.00		0.76	1.00				
Satd. Flow (perm)		1855			3539		2736	1598				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	2	124	0	0	35	0	860	7	127	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	126	0	0	35	0	860	100	0	0	0	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.2			8.2		43.8	43.8				
Effective Green, g (s)		8.2			8.2		43.8	43.8				
Actuated g/C Ratio		0.14			0.14		0.73	0.73				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		254			484		1997	1167				
v/s Ratio Prot					0.01			0.06				
v/s Ratio Perm		c0.07					c0.31					
v/c Ratio		0.50			0.07		0.43	0.09				
Uniform Delay, d1		24.0			22.6		3.2	2.3				
Progression Factor		0.59			1.00		1.00	1.00				
Incremental Delay, d2		1.5			0.1		0.7	0.1				
Delay (s)		15.6			22.6		3.9	2.5				
Level of Service		B			C		A	A				
Approach Delay (s)		15.6			22.6			3.7			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	103	0	0	29	0	732	6	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		1.00			0.95		0.97	1.00				
Frt		1.00			1.00		1.00	0.86				
Flt Protected		1.00			1.00		0.95	1.00				
Satd. Flow (prot)		1861			3539		3433	1598				
Flt Permitted		1.00			1.00		0.76	1.00				
Satd. Flow (perm)		1855			3539		2736	1598				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	2	124	0	0	35	0	882	7	127	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	126	0	0	35	0	882	100	0	0	0	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.2			8.2		43.8	43.8				
Effective Green, g (s)		8.2			8.2		43.8	43.8				
Actuated g/C Ratio		0.14			0.14		0.73	0.73				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		254			484		1997	1167				
v/s Ratio Prot					0.01			0.06				
v/s Ratio Perm		c0.07					c0.32					
v/c Ratio		0.50			0.07		0.44	0.09				
Uniform Delay, d1		24.0			22.6		3.2	2.3				
Progression Factor		0.57			1.00		1.00	1.00				
Incremental Delay, d2		1.5			0.1		0.7	0.1				
Delay (s)		15.1			22.6		3.9	2.5				
Level of Service		B			C		A	A				
Approach Delay (s)		15.1			22.6			3.7			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	103	0	0	29	0	739	6	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		1.00			0.95		0.97	1.00				
Frt		1.00			1.00		1.00	0.86				
Flt Protected		1.00			1.00		0.95	1.00				
Satd. Flow (prot)		1861			3539		3433	1598				
Flt Permitted		1.00			1.00		0.76	1.00				
Satd. Flow (perm)		1855			3539		2736	1598				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	2	124	0	0	35	0	890	7	127	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	126	0	0	35	0	890	100	0	0	0	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.2			8.2		43.8	43.8				
Effective Green, g (s)		8.2			8.2		43.8	43.8				
Actuated g/C Ratio		0.14			0.14		0.73	0.73				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		254			484		1997	1167				
v/s Ratio Prot					0.01			0.06				
v/s Ratio Perm		c0.07					c0.33					
v/c Ratio		0.50			0.07		0.45	0.09				
Uniform Delay, d1		24.0			22.6		3.2	2.3				
Progression Factor		0.57			1.00		1.00	1.00				
Incremental Delay, d2		1.5			0.1		0.7	0.1				
Delay (s)		15.1			22.6		4.0	2.5				
Level of Service		B			C		A	A				
Approach Delay (s)		15.1			22.6			3.8			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 2_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***10-16-2012***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: U.S. 101 NB OFF-RAMP

E/W STREET: VENTURA BOULEVARD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**693**	**6**	**103**	**0**	**0**	**0**	**2**	**101**	**0**	**0**	**28**	**0**
(B)	AMBIENT GROWTH:	**14**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**
(C)	PROJECT-ADDED:	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(D)	CUMULATIVE-ADDED:	**25**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL R	LTR	T	TT

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	2	3200	693	707	714	732	739	0.217 *	0.221 *	0.223 *	0.229 *	0.231 *
NBT	0	0	6	6	6	6	6	-	-	-	-	-
NBR	1	1600	103	105	105	105	105	0.064	0.066	0.066	0.066	0.066
SBL	0	0	0	0	0	0	0	-	-	-	-	-
SBT	1	1600	0	0	0	0	0	0.000 *	0.000 *	0.000 *	0.000 *	0.000 *
SBR	0	0	0	0	0	0	0	-	-	-	-	-
EBL	0	0	2	2	2	2	2	-	-	-	-	-
EBT	1	1600	101	103	103	103	103	0.064 *	0.066 *	0.066 *	0.066 *	0.066 *
EBR	0	0	0	0	0	0	0	-	-	-	-	-
WBL	0	0	0	0	0	0	0	-	-	-	-	-
WBT	2	3200	28	29	29	29	29	0.009	0.009	0.009	0.009	0.009
WBR	0	0	0	0	0	0	0	-	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.381**	**0.387**	**0.389**	**0.395**	**0.397**
						SCENARIO LEVEL OF SERVICE:		A	A	A	A	A

NOTES:

Printed: 07/21/15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	44	0	0	173	0	624	0	51	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		1.00			0.95		0.97	1.00			1.00	
Frt		1.00			1.00		1.00	0.85			0.86	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1861			3539		3433	1583			1611	
Flt Permitted		0.99			1.00		0.75	1.00			1.00	
Satd. Flow (perm)		1849			3539		2697	1583			1611	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1	49	0	0	194	0	701	0	57	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	16	0	0	5	0
Lane Group Flow (vph)	0	50	0	0	194	0	701	41	0	0	12	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.6			8.6		43.4	43.4			43.4	
Effective Green, g (s)		8.6			8.6		43.4	43.4			43.4	
Actuated g/C Ratio		0.14			0.14		0.72	0.72			0.72	
Clearance Time (s)		4.0			4.0		4.0	4.0			4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		265			507		1951	1145			1165	
v/s Ratio Prot					c0.05			0.03			0.01	
v/s Ratio Perm		0.03					c0.26					
v/c Ratio		0.19			0.38		0.36	0.04			0.01	
Uniform Delay, d1		22.6			23.3		3.1	2.4			2.3	
Progression Factor		0.70			1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.3			0.5		0.5	0.1			0.0	
Delay (s)		16.1			23.8		3.6	2.4			2.3	
Level of Service		B			C		A	A			A	
Approach Delay (s)		16.1			23.8			3.5			2.3	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	44	0	0	173	0	631	0	51	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		1.00			0.95		0.97	1.00			1.00	
Frt		1.00			1.00		1.00	0.85			0.86	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1861			3539		3433	1583			1611	
Flt Permitted		0.99			1.00		0.75	1.00			1.00	
Satd. Flow (perm)		1849			3539		2697	1583			1611	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1	49	0	0	194	0	709	0	57	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	16	0	0	5	0
Lane Group Flow (vph)	0	50	0	0	194	0	709	41	0	0	12	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.6			8.6		43.4	43.4			43.4	
Effective Green, g (s)		8.6			8.6		43.4	43.4			43.4	
Actuated g/C Ratio		0.14			0.14		0.72	0.72			0.72	
Clearance Time (s)		4.0			4.0		4.0	4.0			4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		265			507		1951	1145			1165	
v/s Ratio Prot					c0.05			0.03			0.01	
v/s Ratio Perm		0.03					c0.26					
v/c Ratio		0.19			0.38		0.36	0.04			0.01	
Uniform Delay, d1		22.6			23.3		3.1	2.4			2.3	
Progression Factor		0.70			1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.3			0.5		0.5	0.1			0.0	
Delay (s)		16.1			23.8		3.6	2.4			2.3	
Level of Service		B			C		A	A			A	
Approach Delay (s)		16.1			23.8			3.5			2.3	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 2_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***10-16-2012***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: U.S. 101 NB OFF-RAMP

E/W STREET: VENTURA BOULEVARD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**624**	**0**	**51**	**0**	**0**	**15**	**1**	**44**	**0**	**0**	**173**	**0**
(B) PROJECT-ADDED:	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL R	LTR	T	TT

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	SCENARIO VOLUMES 2	SCENARIO V/C RATIOS 1	SCENARIO V/C RATIOS 2
NBL	2	3200	624	631	0.195 *	0.197 *
NBT	0	0	0	0	-	-
NBR	1	1600	51	51	0.032	0.032
SBL	0	0	0	0	-	-
SBT	1	1600	0	0	0.009 *	0.009 *
SBR	0	0	15	15	-	-
EBL	0	0	1	1	-	-
EBT	1	1600	44	44	0.028	0.028
EBR	0	0	0	0	-	-
WBL	0	0	0	0	-	-
WBT	2	3200	173	173	0.054 *	0.054 *
WBR	0	0	0	0	-	-
			LOST TIME:		0.100 *	0.100 *
			TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.358**	**0.360**
			SCENARIO LEVEL OF SERVICE:		A	A

NOTES:

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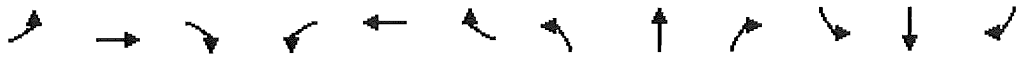
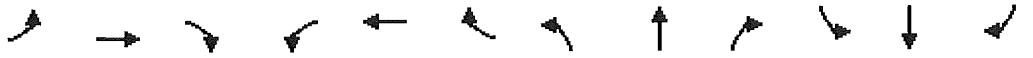


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	45	0	0	176	0	636	0	52	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		1.00			0.95		0.97	1.00			1.00	
Frt		1.00			1.00		1.00	0.85			0.86	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1861			3539		3433	1583			1611	
Flt Permitted		0.99			1.00		0.75	1.00			1.00	
Satd. Flow (perm)		1850			3539		2697	1583			1611	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1	51	0	0	198	0	715	0	58	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	16	0	0	5	0
Lane Group Flow (vph)	0	52	0	0	198	0	715	42	0	0	12	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.7			8.7		43.3	43.3			43.3	
Effective Green, g (s)		8.7			8.7		43.3	43.3			43.3	
Actuated g/C Ratio		0.14			0.14		0.72	0.72			0.72	
Clearance Time (s)		4.0			4.0		4.0	4.0			4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		268			513		1946	1142			1163	
v/s Ratio Prot					c0.06			0.03			0.01	
v/s Ratio Perm		0.03					c0.27					
v/c Ratio		0.19			0.39		0.37	0.04			0.01	
Uniform Delay, d1		22.6			23.2		3.2	2.4			2.3	
Progression Factor		0.69			1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.4			0.5		0.5	0.1			0.0	
Delay (s)		16.0			23.7		3.7	2.4			2.4	
Level of Service		B			C		A	A			A	
Approach Delay (s)		16.0			23.7			3.6			2.4	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



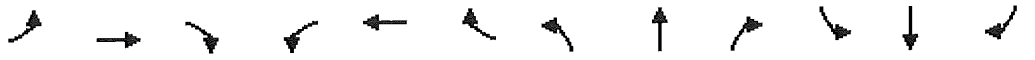
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	45	0	0	176	0	643	0	52	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		1.00			0.95		0.97	1.00			1.00	
Frt		1.00			1.00		1.00	0.85			0.86	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1861			3539		3433	1583			1611	
Flt Permitted		0.99			1.00		0.75	1.00			1.00	
Satd. Flow (perm)		1850			3539		2697	1583			1611	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1	51	0	0	198	0	722	0	58	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	16	0	0	5	0
Lane Group Flow (vph)	0	52	0	0	198	0	722	42	0	0	12	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.7			8.7		43.3	43.3			43.3	
Effective Green, g (s)		8.7			8.7		43.3	43.3			43.3	
Actuated g/C Ratio		0.14			0.14		0.72	0.72			0.72	
Clearance Time (s)		4.0			4.0		4.0	4.0			4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		268			513		1946	1142			1163	
v/s Ratio Prot					c0.06			0.03			0.01	
v/s Ratio Perm		0.03					c0.27					
v/c Ratio		0.19			0.39		0.37	0.04			0.01	
Uniform Delay, d1		22.6			23.2		3.2	2.4			2.3	
Progression Factor		0.69			1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.4			0.5		0.5	0.1			0.0	
Delay (s)		16.0			23.7		3.7	2.4			2.4	
Level of Service		B			C		A	A			A	
Approach Delay (s)		16.0			23.7			3.6			2.4	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	45	0	0	176	0	675	0	52	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		1.00			0.95		0.97	1.00			1.00	
Frt		1.00			1.00		1.00	0.85			0.86	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1861			3539		3433	1583			1611	
Flt Permitted		0.99			1.00		0.75	1.00			1.00	
Satd. Flow (perm)		1850			3539		2697	1583			1611	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1	51	0	0	198	0	758	0	58	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	16	0	0	5	0
Lane Group Flow (vph)	0	52	0	0	198	0	758	42	0	0	12	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.7			8.7		43.3	43.3			43.3	
Effective Green, g (s)		8.7			8.7		43.3	43.3			43.3	
Actuated g/C Ratio		0.14			0.14		0.72	0.72			0.72	
Clearance Time (s)		4.0			4.0		4.0	4.0			4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		268			513		1946	1142			1163	
v/s Ratio Prot					c0.06			0.03			0.01	
v/s Ratio Perm		0.03					c0.28					
v/c Ratio		0.19			0.39		0.39	0.04			0.01	
Uniform Delay, d1		22.6			23.2		3.2	2.4			2.3	
Progression Factor		0.69			1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.4			0.5		0.6	0.1			0.0	
Delay (s)		16.0			23.7		3.8	2.4			2.4	
Level of Service		B			C		A	A			A	
Approach Delay (s)		16.0			23.7			3.7			2.4	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	7.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	45	0	0	176	0	682	0	52	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		1.00			0.95		0.97	1.00			1.00	
Frt		1.00			1.00		1.00	0.85			0.86	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1861			3539		3433	1583			1611	
Flt Permitted		0.99			1.00		0.75	1.00			1.00	
Satd. Flow (perm)		1850			3539		2697	1583			1611	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1	51	0	0	198	0	766	0	58	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	16	0	0	5	0
Lane Group Flow (vph)	0	52	0	0	198	0	766	42	0	0	12	0
Turn Type	Perm						Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		8.7			8.7		43.3	43.3			43.3	
Effective Green, g (s)		8.7			8.7		43.3	43.3			43.3	
Actuated g/C Ratio		0.14			0.14		0.72	0.72			0.72	
Clearance Time (s)		4.0			4.0		4.0	4.0			4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		268			513		1946	1142			1163	
v/s Ratio Prot					c0.06			0.03			0.01	
v/s Ratio Perm		0.03					c0.28					
v/c Ratio		0.19			0.39		0.39	0.04			0.01	
Uniform Delay, d1		22.6			23.2		3.2	2.4			2.3	
Progression Factor		0.69			1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.4			0.5		0.6	0.1			0.0	
Delay (s)		16.0			23.7		3.8	2.4			2.4	
Level of Service		B			C		A	A			A	
Approach Delay (s)		16.0			23.7			3.7			2.4	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	7.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 2_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: U.S. 101 NB OFF-RAMP

E/W STREET: VENTURA BOULEVARD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**624**	**0**	**51**	**0**	**0**	**15**	**1**	**44**	**0**	**0**	**173**	**0**
(B)	AMBIENT GROWTH:	**12**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**0**
(C)	PROJECT-ADDED:	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(D)	CUMULATIVE-ADDED:	**39**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL R	LTR	T	TT

TRAFFIC SCENARIOS

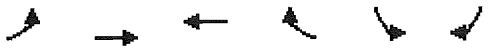
SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	2	3200	624	636	643	675	682	0.195 *	0.199 *	0.201 *	0.211 *	0.213 *
NBT	0	0	0	0	0	0	0	-	-	-	-	-
NBR	1	1600	51	52	52	52	52	0.032	0.033	0.033	0.033	0.033
SBL	0	0	0	0	0	0	0	-	-	-	-	-
SBT	1	1600	0	0	0	0	0	0.009 *	0.009 *	0.009 *	0.009 *	0.009 *
SBR	0	0	15	15	15	15	15	-	-	-	-	-
EBL	0	0	1	1	1	1	1	-	-	-	-	-
EBT	1	1600	44	45	45	45	45	0.028	0.029	0.029	0.029	0.029
EBR	0	0	0	0	0	0	0	-	-	-	-	-
WBL	0	0	0	0	0	0	0	-	-	-	-	-
WBT	2	3200	173	176	176	176	176	0.054 *	0.055 *	0.055 *	0.055 *	0.055 *
WBR	0	0	0	0	0	0	0	-	-	-	-	-
			LOST TIME:					0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
			TOTAL INTERSECTION CAPACITY UTILIZATION:					**0.358**	**0.363**	**0.365**	**0.375**	**0.377**
			SCENARIO LEVEL OF SERVICE:					A	A	A	A	A

NOTES:

Printed: 07/21/15



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	228	272	456	31	520	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1736	1827	1827	1553	3367	1553
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1736	1827	1827	1553	3367	1553
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	251	299	501	34	571	31
RTOR Reduction (vph)	0	0	0	23	0	0
Lane Group Flow (vph)	251	299	501	11	571	31
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	11.2	33.4	18.2	18.2	13.8	55.2
Effective Green, g (s)	11.2	33.4	18.2	18.2	13.8	55.2
Actuated g/C Ratio	0.20	0.61	0.33	0.33	0.25	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	352	1105	602	512	842	1553
v/s Ratio Prot	c0.14	0.16	c0.27		c0.17	
v/s Ratio Perm				0.01		0.02
v/c Ratio	0.71	0.27	0.83	0.02	0.68	0.02
Uniform Delay, d1	20.5	5.1	17.1	12.5	18.7	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	0.1	9.6	0.0	2.2	0.0
Delay (s)	27.2	5.3	26.7	12.5	20.9	0.0
Level of Service	C	A	C	B	C	A
Approach Delay (s)		15.3	25.8		19.8	
Approach LOS		B	C		B	

Intersection Summary			
HCM Average Control Delay	20.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	55.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	228	274	457	31	524	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1736	1827	1827	1553	3367	1553
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1736	1827	1827	1553	3367	1553
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	251	301	502	34	576	31
RTOR Reduction (vph)	0	0	0	23	0	0
Lane Group Flow (vph)	251	301	502	11	576	31
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	11.2	33.4	18.2	18.2	13.8	55.2
Effective Green, g (s)	11.2	33.4	18.2	18.2	13.8	55.2
Actuated g/C Ratio	0.20	0.61	0.33	0.33	0.25	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	352	1105	602	512	842	1553
v/s Ratio Prot	c0.14	0.16	c0.27		c0.17	
v/s Ratio Perm				0.01		0.02
v/c Ratio	0.71	0.27	0.83	0.02	0.68	0.02
Uniform Delay, d1	20.5	5.2	17.1	12.5	18.7	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	0.1	9.7	0.0	2.3	0.0
Delay (s)	27.2	5.3	26.8	12.5	21.0	0.0
Level of Service	C	A	C	B	C	A
Approach Delay (s)		15.2	25.9		20.0	
Approach LOS		B	C		B	

Intersection Summary			
HCM Average Control Delay	20.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	55.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 3_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: U.S. 101 SB RAMPS

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	0	0	0	520	0	28	228	272	0	0	456	31
(B) PROJECT-ADDED:	0	0	0	4	0	0	0	1	0	0	1	0

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS		LL R	L T	R T

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	SCENARIO V/C RATIOS 1	2
NBL	0	0	0	0	-	-
NBT	0	0	0	0	-	-
NBR	0	0	0	0	-	-
SBL	2	3200	520	524	0.163 *	0.164 *
SBT	0	0	0	0	-	-
SBR (a)	1	1600	28	28	0.018	0.018
EBL	1	1600	228	228	0.143 *	0.143 *
EBT	1	1600	272	273	0.170	0.171
EBR	0	0	0	0	-	-
WBL	0	0	0	0	-	-
WBT	1	1600	456	457	0.285 *	0.286 *
WBR (a)	1	1600	31	31	0.019	0.019
			LOST TIME:		0.100 *	0.100 *
			TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.691**	**0.693**
			SCENARIO LEVEL OF SERVICE:		**B**	**B**

NOTES:

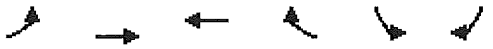
RTOR: *(a) YIELD*

Printed: 10/08/15

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	233	277	465	32	530	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1736	1827	1827	1553	3367	1553
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1736	1827	1827	1553	3367	1553
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	256	304	511	35	582	32
RTOR Reduction (vph)	0	0	0	23	0	0
Lane Group Flow (vph)	256	304	511	12	582	32
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	10.6	33.0	18.4	18.4	14.3	55.3
Effective Green, g (s)	10.6	33.0	18.4	18.4	14.3	55.3
Actuated g/C Ratio	0.19	0.60	0.33	0.33	0.26	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	333	1090	608	517	871	1553
v/s Ratio Prot	c0.15	0.17	c0.28		c0.17	
v/s Ratio Perm				0.01		0.02
v/c Ratio	0.77	0.28	0.84	0.02	0.67	0.02
Uniform Delay, d1	21.2	5.4	17.1	12.4	18.4	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.2	0.1	10.2	0.0	2.0	0.0
Delay (s)	31.4	5.5	27.3	12.4	20.3	0.0
Level of Service	C	A	C	B	C	A
Approach Delay (s)		17.4	26.3		19.3	
Approach LOS		B	C		B	

Intersection Summary			
HCM Average Control Delay	20.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	55.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	233	279	466	32	534	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1736	1827	1827	1553	3367	1553
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1736	1827	1827	1553	3367	1553
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	256	307	512	35	587	32
RTOR Reduction (vph)	0	0	0	23	0	0
Lane Group Flow (vph)	256	307	512	12	587	32
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	10.7	33.1	18.4	18.4	14.3	55.4
Effective Green, g (s)	10.7	33.1	18.4	18.4	14.3	55.4
Actuated g/C Ratio	0.19	0.60	0.33	0.33	0.26	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	335	1092	607	516	869	1553
v/s Ratio Prot	c0.15	0.17	c0.28		c0.17	
v/s Ratio Perm				0.01		0.02
v/c Ratio	0.76	0.28	0.84	0.02	0.68	0.02
Uniform Delay, d1	21.2	5.4	17.2	12.4	18.5	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.9	0.1	10.4	0.0	2.1	0.0
Delay (s)	31.1	5.5	27.5	12.5	20.6	0.0
Level of Service	C	A	C	B	C	A
Approach Delay (s)		17.2	26.6		19.5	
Approach LOS		B	C		B	

Intersection Summary			
HCM Average Control Delay	21.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	55.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	233	300	483	32	569	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1736	1827	1827	1553	3367	1553
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1736	1827	1827	1553	3367	1553
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	256	330	531	35	625	36
RTOR Reduction (vph)	0	0	0	23	0	0
Lane Group Flow (vph)	256	330	531	12	625	36
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	10.7	33.9	19.2	19.2	14.4	56.3
Effective Green, g (s)	10.7	33.9	19.2	19.2	14.4	56.3
Actuated g/C Ratio	0.19	0.60	0.34	0.34	0.26	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	330	1100	623	530	861	1553
v/s Ratio Prot	c0.15	0.18	c0.29		c0.19	
v/s Ratio Perm				0.01		0.02
v/c Ratio	0.78	0.30	0.85	0.02	0.73	0.02
Uniform Delay, d1	21.7	5.4	17.2	12.3	19.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.9	0.2	10.9	0.0	3.1	0.0
Delay (s)	32.5	5.6	28.1	12.3	22.2	0.0
Level of Service	C	A	C	B	C	A
Approach Delay (s)		17.4	27.1		21.0	
Approach LOS		B	C		C	

Intersection Summary			
HCM Average Control Delay	21.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	56.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	233	302	484	32	573	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1736	1827	1827	1553	3367	1553
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1736	1827	1827	1553	3367	1553
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	256	332	532	35	630	36
RTOR Reduction (vph)	0	0	0	23	0	0
Lane Group Flow (vph)	256	332	532	12	630	36
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	10.7	33.9	19.2	19.2	14.4	56.3
Effective Green, g (s)	10.7	33.9	19.2	19.2	14.4	56.3
Actuated g/C Ratio	0.19	0.60	0.34	0.34	0.26	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	330	1100	623	530	861	1553
v/s Ratio Prot	c0.15	0.18	c0.29		c0.19	
v/s Ratio Perm				0.01		0.02
v/c Ratio	0.78	0.30	0.85	0.02	0.73	0.02
Uniform Delay, d1	21.7	5.4	17.2	12.3	19.2	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.9	0.2	11.0	0.0	3.2	0.0
Delay (s)	32.5	5.6	28.2	12.3	22.4	0.0
Level of Service	C	A	C	B	C	A
Approach Delay (s)		17.3	27.3		21.2	
Approach LOS		B	C		C	

Intersection Summary			
HCM Average Control Delay	21.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	56.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 3_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: U.S. 101 SB RAMPS

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**0**	**0**	**0**	**520**	**0**	**28**	**228**	**272**	**0**	**0**	**456**	**31**
(B)	AMBIENT GROWTH:	**0**	**0**	**0**	**10**	**0**	**1**	**5**	**5**	**0**	**0**	**9**	**1**
(C)	PROJECT-ADDED:	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**
(D)	CUMULATIVE-ADDED:	**0**	**0**	**0**	**39**	**0**	**4**	**0**	**23**	**0**	**0**	**18**	**0**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS		LL R	L T	R T

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	0	0	0	0	0	0	0	-	-	-	-	-
NBT	0	0	0	0	0	0	0	-	-	-	-	-
NBR	0	0	0	0	0	0	0	-	-	-	-	-
SBL	2	3200	520	530	534	569	573	0.163 *	0.166 *	0.167 *	0.178 *	0.179 *
SBT	0	0	0	0	0	0	0	-	-	-	-	-
SBR (a)	1	1600	28	29	29	33	33	0.018	0.018	0.018	0.021	0.021
EBL	1	1600	228	233	233	233	233	0.143 *	0.146 *	0.146 *	0.146 *	0.146 *
EBT	1	1600	272	277	278	300	301	0.170	0.173	0.174	0.188	0.188
EBR	0	0	0	0	0	0	0	-	-	-	-	-
WBL	0	0	0	0	0	0	0	-	-	-	-	-
WBT	1	1600	456	465	466	483	484	0.285 *	0.291 *	0.291 *	0.302 *	0.303 *
WBR (a)	1	1600	31	32	32	32	32	0.019	0.020	0.020	0.020	0.020
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.691**	**0.703**	**0.704**	**0.726**	**0.728**
						SCENARIO LEVEL OF SERVICE:		**B**	**B**	**B**	**C**	**C**

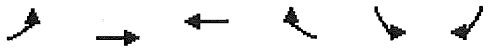
NOTES:

RTOR: *(a) YIELD*

Printed: 10/08/15

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	430	547	339	266	385	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	3433	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	473	601	373	292	423	8
RTOR Reduction (vph)	0	0	0	214	0	0
Lane Group Flow (vph)	473	601	373	78	423	8
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	16.1	34.7	14.6	14.6	11.9	54.6
Effective Green, g (s)	16.1	34.7	14.6	14.6	11.9	54.6
Actuated g/C Ratio	0.29	0.64	0.27	0.27	0.22	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	522	1184	498	423	748	1583
v/s Ratio Prot	c0.27	0.32	c0.20		c0.12	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.91	0.51	0.75	0.18	0.57	0.01
Uniform Delay, d1	18.5	5.4	18.3	15.4	19.0	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	19.2	0.3	6.1	0.2	1.0	0.0
Delay (s)	37.7	5.7	24.4	15.6	20.0	0.0
Level of Service	D	A	C	B	C	A
Approach Delay (s)		19.8	20.6		19.7	
Approach LOS		B	C		B	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	54.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	430	549	340	266	389	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	3433	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	473	603	374	292	427	8
RTOR Reduction (vph)	0	0	0	214	0	0
Lane Group Flow (vph)	473	603	374	78	427	8
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	16.1	34.7	14.6	14.6	12.0	54.7
Effective Green, g (s)	16.1	34.7	14.6	14.6	12.0	54.7
Actuated g/C Ratio	0.29	0.63	0.27	0.27	0.22	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	521	1182	497	423	753	1583
v/s Ratio Prot	c0.27	0.32	c0.20		c0.12	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.91	0.51	0.75	0.18	0.57	0.01
Uniform Delay, d1	18.6	5.4	18.4	15.5	19.0	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	19.5	0.4	6.4	0.2	1.0	0.0
Delay (s)	38.0	5.8	24.7	15.7	20.0	0.0
Level of Service	D	A	C	B	C	A
Approach Delay (s)		20.0	20.8		19.7	
Approach LOS		B	C		B	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	54.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 3_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: U.S. 101 SB RAMPS

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	**0**	**0**	**0**	**385**	**0**	**7**	**430**	**547**	**0**	**0**	**339**	**266**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS		LL R	L T	R T

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING + PROJECT VOLUMES (A + B)

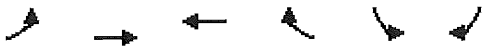
LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	SCENARIO V/C RATIOS 1	2
NBL	0	0	0	0	-	-
NBT	0	0	0	0	-	-
NBR	0	0	0	0	-	-
SBL	2	3200	385	389	0.120 *	0.122 *
SBT	0	0	0	0	-	-
SBR (a)	1	1600	7	7	0.004	0.004
EBL	1	1600	430	430	0.269 *	0.269 *
EBT	1	1600	547	548	0.342	0.343
EBR	0	0	0	0	-	-
WBL	0	0	0	0	-	-
WBT	1	1600	339	340	0.212 *	0.213 *
WBR (a)	1	1600	266	266	0.166	0.166
			LOST TIME:		0.100 *	0.100 *
			TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.701**	**0.704**
			SCENARIO LEVEL OF SERVICE:		**B**	**B**

NOTES:

RTOR: *(a) YIELD*

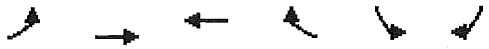
Printed: 10/08/15



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	439	558	346	271	393	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	3433	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	482	613	380	298	432	8
RTOR Reduction (vph)	0	0	0	218	0	0
Lane Group Flow (vph)	482	613	380	80	432	8
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	16.1	34.8	14.7	14.7	12.1	54.9
Effective Green, g (s)	16.1	34.8	14.7	14.7	12.1	54.9
Actuated g/C Ratio	0.29	0.63	0.27	0.27	0.22	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	519	1181	499	424	757	1583
v/s Ratio Prot	c0.27	0.33	c0.20		c0.13	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.93	0.52	0.76	0.19	0.57	0.01
Uniform Delay, d1	18.8	5.5	18.5	15.5	19.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	23.0	0.4	6.8	0.2	1.0	0.0
Delay (s)	41.8	5.9	25.2	15.7	20.1	0.0
Level of Service	D	A	C	B	C	A
Approach Delay (s)		21.7	21.1		19.8	
Approach LOS		C	C		B	

Intersection Summary			
HCM Average Control Delay	21.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	54.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



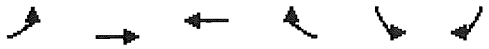
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	439	560	347	271	397	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	3433	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	482	615	381	298	436	8
RTOR Reduction (vph)	0	0	0	218	0	0
Lane Group Flow (vph)	482	615	381	80	436	8
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	16.1	34.8	14.7	14.7	12.1	54.9
Effective Green, g (s)	16.1	34.8	14.7	14.7	12.1	54.9
Actuated g/C Ratio	0.29	0.63	0.27	0.27	0.22	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	519	1181	499	424	757	1583
v/s Ratio Prot	c0.27	0.33	c0.20		c0.13	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.93	0.52	0.76	0.19	0.58	0.01
Uniform Delay, d1	18.8	5.5	18.5	15.5	19.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	23.0	0.4	6.8	0.2	1.1	0.0
Delay (s)	41.8	5.9	25.3	15.7	20.2	0.0
Level of Service	D	A	C	B	C	A
Approach Delay (s)		21.7	21.1		19.8	
Approach LOS		C	C		B	

Intersection Summary			
HCM Average Control Delay	21.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	54.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	447	591	379	271	448	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	3433	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	491	649	416	298	492	21
RTOR Reduction (vph)	0	0	0	221	0	0
Lane Group Flow (vph)	491	649	416	77	492	21
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	19.2	38.8	15.6	15.6	13.6	60.4
Effective Green, g (s)	19.2	38.8	15.6	15.6	13.6	60.4
Actuated g/C Ratio	0.32	0.64	0.26	0.26	0.23	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	563	1197	481	409	773	1583
v/s Ratio Prot	c0.28	0.35	c0.22		c0.14	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.87	0.54	0.86	0.19	0.64	0.01
Uniform Delay, d1	19.4	5.9	21.4	17.5	21.2	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.9	0.5	14.9	0.2	1.7	0.0
Delay (s)	33.3	6.4	36.3	17.7	22.9	0.0
Level of Service	C	A	D	B	C	A
Approach Delay (s)		18.0	28.5		22.0	
Approach LOS		B	C		C	

Intersection Summary			
HCM Average Control Delay	22.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	60.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	447	593	380	271	452	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	3433	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	491	652	418	298	497	21
RTOR Reduction (vph)	0	0	0	221	0	0
Lane Group Flow (vph)	491	652	418	77	497	21
Turn Type	Prot			Perm		Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Actuated Green, G (s)	19.2	38.9	15.7	15.7	13.6	60.5
Effective Green, g (s)	19.2	38.9	15.7	15.7	13.6	60.5
Actuated g/C Ratio	0.32	0.64	0.26	0.26	0.22	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	562	1198	483	411	772	1583
v/s Ratio Prot	c0.28	0.35	c0.22		c0.14	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.87	0.54	0.87	0.19	0.64	0.01
Uniform Delay, d1	19.5	5.9	21.4	17.4	21.3	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.1	0.5	14.9	0.2	1.8	0.0
Delay (s)	33.6	6.4	36.3	17.7	23.1	0.0
Level of Service	C	A	D	B	C	A
Approach Delay (s)		18.1	28.5		22.2	
Approach LOS		B	C		C	

Intersection Summary			
HCM Average Control Delay	22.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	60.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 3_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: U.S. 101 SB RAMPS

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	0	0	0	385	0	7	430	547	0	0	339	266
(B) AMBIENT GROWTH:	0	0	0	8	0	0	9	11	0	0	7	5
(C) PROJECT-ADDED:	0	0	0	4	0	0	0	1	0	0	1	0
(D) CUMULATIVE-ADDED:	0	0	0	55	0	12	8	33	0	0	33	0

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
		LL R	L T	R T

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	0	0	0	0	0	0	0	-	-	-	-	-
NBT	0	0	0	0	0	0	0	-	-	-	-	-
NBR	0	0	0	0	0	0	0	-	-	-	-	-
SBL	2	3200	385	393	397	448	452	0.120 *	0.123 *	0.124 *	0.140 *	0.141 *
SBT	0	0	0	0	0	0	0	-	-	-	-	-
SBR (a)	1	1600	7	7	7	19	19	0.004	0.004	0.004	0.012	0.012
EBL	1	1600	430	439	439	447	447	0.269 *	0.274 *	0.274 *	0.279 *	0.279 *
EBT	1	1600	547	558	559	591	592	0.342	0.349	0.349	0.369	0.370
EBR	0	0	0	0	0	0	0	-	-	-	-	-
WBL	0	0	0	0	0	0	0	-	-	-	-	-
WBT	1	1600	339	346	347	379	380	0.212 *	0.216 *	0.217 *	0.237 *	0.238 *
WBR (a)	1	1600	266	271	271	271	271	0.166	0.169	0.169	0.169	0.169
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.701**	**0.713**	**0.715**	**0.756**	**0.758**
						SCENARIO LEVEL OF SERVICE:		**B**	**C**	**C**	**C**	**C**

NOTES:

RTOR: *(a) YIELD*

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) REF: 4_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***10-16-2012***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS (SPLIT PHASED)

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**65**	**663**	**33**	**67**	**322**	**223**	**141**	**350**	**329**	**41**	**182**	**246**
(B) PROJECT-ADDED:	**1**	**8**	**0**	**0**	**7**	**0**	**0**	**0**	**5**	**0**	**0**	**0**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TT TR	L LT T R	L TT R	L TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING + PROJECT VOLUMES (A + B)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	SCENARIO VOLUMES 2	SCENARIO V/C RATIOS 1	SCENARIO V/C RATIOS 2
NBL	1	1600	65	66	0.041	0.041
NBT	3	4800	663	671	0.145 *	0.147 *
NBR	0	0	33	33	-	-
SBL (a)	1	1600	67	67	0.042	0.042
SBT	2	3200	322	329	0.101 *	0.103 *
SBR (b)	1	1600	82	82	0.051	0.051
EBL	1	1600	141	141	0.088 *	0.088 *
EBT	2	3200	350	350	0.109	0.109
EBR (c)	1	1600	108	111	0.068	0.069
WBL	1	1600	41	41	0.026	0.026
WBT	2	3200	182	182	0.057 *	0.057 *
WBR (d)	1	1600	85	81	0.053	0.051
				LOST TIME:	0.100 *	0.100 *
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.491**	**0.495**
				SCENARIO LEVEL OF SERVICE:	A	A

NOTES:

(a) Assumes single left-turn lane based on left-turn check calculations.

(b) Assumes right-turn green arrow overlap with EB left-turn phase.

(c) Assumes right-turn green arrow overlap with NB phase.

(d) Assumes right-turn green arrow overlap with SB phase.

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 4_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS (SPLIT PHASED)

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**65**	**663**	**33**	**67**	**322**	**223**	**141**	**350**	**329**	**41**	**182**	**246**
(B)	AMBIENT GROWTH:	**1**	**13**	**1**	**1**	**6**	**4**	**3**	**7**	**7**	**1**	**4**	**5**
(C)	PROJECT-ADDED:	**1**	**8**	**0**	**0**	**7**	**0**	**0**	**0**	**5**	**0**	**0**	**0**
(D)	CUMULATIVE-ADDED:	**1**	**0**	**0**	**1**	**0**	**24**	**32**	**38**	**1**	**0**	**12**	**26**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND L TT TR	SOUTH BOUND L LT T R	EAST BOUND L TT R	WEST BOUND L TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	1	1600	65	66	67	67	68	0.041	0.041	0.042	0.042	0.043
NBT	3	4800	663	676	684	676	684	0.145 *	0.148 *	0.150 *	0.148 *	0.150 *
NBR	0	0	33	34	34	34	34	-	-	-	-	-
SBL (a)	1	1600	67	68	68	69	69	0.042	0.043	0.043	0.043	0.043
SBT	2	3200	322	328	335	328	335	0.101 *	0.103 *	0.105 *	0.103 *	0.105 *
SBR (b)	1	1600	82	83	83	75	75	0.051	0.052	0.052	0.047	0.047
EBL	1	1600	141	144	144	176	176	0.088 *	0.090 *	0.090 *	0.110	0.110
EBT	2	3200	350	357	357	395	395	0.109	0.112	0.112	0.123 *	0.123 *
EBR (c)	1	1600	108	111	114	112	115	0.068	0.069	0.071	0.070	0.072
WBL	1	1600	41	42	42	42	42	0.026	0.026	0.026	0.026	0.026
WBT	2	3200	182	186	186	198	198	0.057 *	0.058 *	0.058 *	0.062 *	0.062 *
WBR (d)	1	1600	85	87	83	113	109	0.053	0.054	0.052	0.071	0.068
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.491**	**0.499**	**0.503**	**0.536**	**0.540**
						SCENARIO LEVEL OF SERVICE:		A	A	A	A	A

NOTES:

(a) Assumes single left-turn lane based on left-turn check calculations.
(b) Assumes right-turn green arrow overlap with EB left-turn phase.
(c) Assumes right-turn green arrow overlap with NB phase.
(d) Assumes right-turn green arrow overlap with SB phase.

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) REF: 4_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS (SPLIT PHASED)

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	**52**	**623**	**44**	**208**	**356**	**381**	**131**	**561**	**257**	**45**	**151**	**411**
(B) PROJECT-ADDED:	**1**	**10**	**0**	**0**	**7**	**0**	**0**	**0**	**5**	**0**	**0**	**0**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND L TT TR	SOUTH BOUND L LT T R	EAST BOUND L TT R	WEST BOUND L TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	SCENARIO V/C RATIOS 1	2
NBL	1	1600	52	53	0.033	0.033
NBT	3	4800	623	633	0.139 *	0.141 *
NBR	0	0	44	44	-	-
SBL	0	0	208	208	-	-
SBT	3	4800	356	363	0.118	0.119
SBR (a)	1	1600	250	256	0.156 *	0.160 *
EBL	1	1600	131	131	0.082 *	0.082 *
EBT	2	3200	561	561	0.175	0.175
EBR (b)	1	1600	49	52	0.031	0.033
WBL	1	1600	45	45	0.028	0.028
WBT	2	3200	151	151	0.047	0.047
WBR (c)	1	1600	233	229	0.146 *	0.143 *
				LOST TIME:	0.100 *	0.100 *
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.623**	**0.626**
				SCENARIO LEVEL OF SERVICE:	**B**	**B**

NOTES:

(a) Assumes right-turn green arrow overlap with EB left-turn phase.

(b) Assumes right-turn green arrow overlap with NB phase.

(c) Assumes right-turn green arrow overlap with SB phase.

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 4_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS (SPLIT PHASED)

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**52**	**623**	**44**	**208**	**356**	**381**	**131**	**561**	**257**	**45**	**151**	**411**
(B) AMBIENT GROWTH:	**1**	**13**	**1**	**4**	**7**	**8**	**3**	**11**	**5**	**1**	**3**	**8**
(C) PROJECT-ADDED:	**1**	**10**	**0**	**0**	**7**	**0**	**0**	**0**	**5**	**0**	**0**	**0**
(D) CUMULATIVE-ADDED:	**2**	**0**	**0**	**5**	**0**	**34**	**50**	**57**	**2**	**0**	**13**	**35**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TT TR	L LT T R	L TT R	L TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	1	1600	52	53	54	55	56	0.033	0.033	0.034	0.034	0.035
NBT	3	4800	623	636	646	636	646	0.139 *	0.142 *	0.144 *	0.142 *	0.144 *
NBR	0	0	44	45	45	45	45	-	-	-	-	-
SBL	0	0	208	212	212	217	217	-	-	-	-	-
SBT	3	4800	356	363	370	363	370	0.118	0.120	0.121	0.121	0.122
SBR (a)	1	1600	250	255	255	239	239	0.156 *	0.159 *	0.159 *	0.149 *	0.149 *
EBL	1	1600	131	134	134	184	184	0.082 *	0.084 *	0.084 *	0.115 *	0.115 *
EBT	2	3200	561	572	572	629	629	0.175	0.179	0.179	0.197	0.197
EBR (b)	1	1600	49	50	53	52	55	0.031	0.031	0.033	0.033	0.034
WBL	1	1600	45	46	46	46	46	0.028	0.029	0.029	0.029	0.029
WBT	2	3200	151	154	154	167	167	0.047	0.048	0.048	0.052	0.052
WBR (c)	1	1600	233	237	234	272	269	0.146 *	0.148 *	0.146 *	0.170 *	0.168 *
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.623**	**0.633**	**0.633**	**0.676**	**0.676**
						SCENARIO LEVEL OF SERVICE:		**B**	**B**	**B**	**B**	**B**

NOTES:

(a) Assumes right-turn green arrow overlap with EB left-turn phase.

(b) Assumes right-turn green arrow overlap with NB phase.

(c) Assumes right-turn green arrow overlap with SB phase.

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 5_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: CIVIC CENTER WAY

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**23**	**0**	**15**	**0**	**0**	**0**	**46**	**379**	**36**	**87**	**456**	**0**
(B) PROJECT-ADDED:	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	LL R		U TT R	L TT

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	SCENARIO VOLUMES 2	SCENARIO V/C RATIOS 1	SCENARIO V/C RATIOS 2
NBL	2	3200	23	23	0.007	0.007
NBT	0	0	0	0	-	-
NBR	1	1600	15	17	0.009 *	0.011 *
SBL	0	0	0	0	-	-
SBT	0	0	0	0	-	-
SBR	0	0	0	0	-	-
EBL	1	1600	46	46	0.029	0.029 *
EBT	2	3200	379	379	0.118 *	0.118
EBR	1	1600	36	36	0.023	0.023
WBL	1	1600	87	91	0.054 *	0.057
WBT	2	3200	456	456	0.143	0.143 *
WBR	0	0	0	0	-	-
				LOST TIME:	0.100 *	0.100 *
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.281**	**0.283**
				SCENARIO LEVEL OF SERVICE:	A	A

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 5_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: CIVIC CENTER WAY

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**23**	**0**	**15**	**0**	**0**	**0**	**46**	**379**	**36**	**87**	**456**	**0**
(B) AMBIENT GROWTH:	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**1**	**2**	**9**	**0**
(C) PROJECT-ADDED:	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**
(D) CUMULATIVE-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**34**	**0**	**0**	**37**	**0**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	LL R		U TT R	L TT

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	2	3200	23	23	23	23	23	0.007	0.007	0.007	0.007	0.007
NBT	0	0	0	0	0	0	0	-	-	-	-	-
NBR	1	1600	15	15	17	15	17	0.009 *	0.009 *	0.011 *	0.009 *	0.011 *
SBL	0	0	0	0	0	0	0	-	-	-	-	-
SBT	0	0	0	0	0	0	0	-	-	-	-	-
SBR	0	0	0	0	0	0	0	-	-	-	-	-
EBL	1	1600	46	47	47	52	52	0.029	0.029	0.029	0.033	0.033
EBT	2	3200	379	387	387	421	421	0.118 *	0.121 *	0.121 *	0.132 *	0.132 *
EBR	1	1600	36	37	37	37	37	0.023	0.023	0.023	0.023	0.023
WBL	1	1600	87	89	93	89	93	0.054 *	0.056 *	0.058 *	0.056 *	0.058 *
WBT	2	3200	456	465	465	502	502	0.143	0.145	0.145	0.157	0.157
WBR	0	0	0	0	0	0	0	-	-	-	-	-
			LOST TIME:					0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
			TOTAL INTERSECTION CAPACITY UTILIZATION:					**0.281**	**0.286**	**0.290**	**0.297**	**0.301**
			SCENARIO LEVEL OF SERVICE:					A	A	A	A	A

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 5_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: CIVIC CENTER WAY

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	**63**	**0**	**72**	**0**	**0**	**0**	**12**	**860**	**83**	**74**	**470**	**0**
(B) PROJECT-ADDED:	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	LL R		U TT R	L TT

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	SCENARIO V/C RATIOS 1	2
NBL	2	3200	63	63	0.020	0.020
NBT	0	0	0	0	-	-
NBR	1	1600	72	75	0.045 *	0.047 *
SBL	0	0	0	0	-	-
SBT	0	0	0	0	-	-
SBR	0	0	0	0	-	-
EBL	1	1600	12	12	0.008	0.008
EBT	2	3200	860	860	0.269 *	0.269 *
EBR	1	1600	83	83	0.052	0.052
WBL	1	1600	74	78	0.046 *	0.049 *
WBT	2	3200	470	470	0.147	0.147
WBR	0	0	0	0	-	-
				LOST TIME:	0.100 *	0.100 *
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.460**	**0.465**
				SCENARIO LEVEL OF SERVICE:	**A**	**A**

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 5_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***03/12/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: CIVIC CENTER WAY

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**63**	**0**	**72**	**0**	**0**	**0**	**12**	**860**	**83**	**74**	**470**	**0**
(B) AMBIENT GROWTH:	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**17**	**2**	**1**	**9**	**0**
(C) PROJECT-ADDED:	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**
(D) CUMULATIVE-ADDED:	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**56**	**0**	**0**	**49**	**0**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	LL R		U TT R	L TT

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	2	3200	63	64	64	64	64	0.020	0.020	0.020	0.020	0.020
NBT	0	0	0	0	0	0	0	-	-	-	-	-
NBR	1	1600	72	73	76	73	76	0.045 *	0.046 *	0.048 *	0.046 *	0.048 *
SBL	0	0	0	0	0	0	0	-	-	-	-	-
SBT	0	0	0	0	0	0	0	-	-	-	-	-
SBR	0	0	0	0	0	0	0	-	-	-	-	-
EBL	1	1600	12	12	12	18	18	0.008	0.008	0.008	0.011	0.011
EBT	2	3200	860	877	877	933	933	0.269 *	0.274 *	0.274 *	0.292 *	0.292 *
EBR	1	1600	83	85	85	85	85	0.052	0.053	0.053	0.053	0.053
WBL	1	1600	74	75	79	75	79	0.046 *	0.047 *	0.049 *	0.047 *	0.049 *
WBT	2	3200	470	479	479	528	528	0.147	0.150	0.150	0.165	0.165
WBR	0	0	0	0	0	0	0	-	-	-	-	-
			LOST TIME:					0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
			TOTAL INTERSECTION CAPACITY UTILIZATION:					**0.460**	**0.467**	**0.471**	**0.485**	**0.489**
			SCENARIO LEVEL OF SERVICE:					A	A	A	A	A

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) REF: 6_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***07/16/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: COMMONS WAY

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	47	4	31	5	2	3	17	323	54	64	379	39
(B) PROJECT-ADDED:	2	0	0	0	0	0	0	1	1	0	2	0

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND T TL R	SOUTH BOUND LTR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	SCENARIO V/C RATIOS 1	2
NBL	0	0	47	49	-	-
NBT	2	3200	4	4	0.016	0.017
NBR	1	1600	31	31	0.019 *	0.019 *
SBL	0	0	5	5	-	-
SBT	1	1600	2	2	0.006 *	0.006 *
SBR	0	0	3	3	-	-
EBL	1	1600	17	17	0.011 *	0.011 *
EBT	2	3200	323	324	0.118	0.118
EBR	0	0	54	55	-	-
WBL	1	1600	64	64	0.040	0.040
WBT	2	3200	379	381	0.131 *	0.131 *
WBR	0	0	39	39	-	-
				LOST TIME:	0.100 *	0.100 *
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.267**	**0.267**
				SCENARIO LEVEL OF SERVICE:	A	A

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 6_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***07/16/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: COMMONS WAY

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	47	4	31	5	2	3	17	323	54	64	379	39
(B)	AMBIENT GROWTH:	1	0	1	0	0	0	0	6	1	1	8	1
(C)	PROJECT-ADDED:	2	0	0	0	0	0	0	1	1	0	2	0
(D)	CUMULATIVE-ADDED:	7	0	0	0	0	0	0	29	5	0	30	0

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L LT R	LTR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	0	0	47	48	50	55	57	-	-	-	-	-
NBT	2	3200	4	4	4	4	4	0.016	0.016	0.017	0.018	0.019
NBR	1	1600	31	32	32	32	32	0.019 *	0.020 *	0.020 *	0.020 *	0.020 *
SBL	0	0	5	5	5	5	5	-	-	-	-	-
SBT	1	1600	2	2	2	2	2	0.006 *	0.006 *	0.006 *	0.006 *	0.006 *
SBR	0	0	3	3	3	3	3	-	-	-	-	-
EBL	1	1600	17	17	17	17	17	0.011 *	0.011 *	0.011 *	0.011 *	0.011 *
EBT	2	3200	323	329	330	358	359	0.118	0.120	0.121	0.131	0.131
EBR	0	0	54	55	56	60	61	-	-	-	-	-
WBL	1	1600	64	65	65	65	65	0.040	0.041	0.041	0.041	0.041
WBT	2	3200	379	387	389	417	419	0.131 *	0.133 *	0.134 *	0.143 *	0.143 *
WBR	0	0	39	40	40	40	40	-	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.267**	**0.270**	**0.271**	**0.280**	**0.280**
						SCENARIO LEVEL OF SERVICE:		A	A	A	A	A

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 6_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***07/16/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: COMMONS WAY

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	71	0	103	24	6	9	8	825	99	116	328	12
(B) PROJECT-ADDED:	2	0	0	0	0	0	0	1	2	0	2	0

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND T TL R	SOUTH BOUND LTR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING + PROJECT VOLUMES (A + B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	SCENARIO V/C RATIOS 1	2
NBL	0	0	71	73	-	-
NBT	2	3200	0	0	0.022	0.023
NBR	1	1600	103	103	0.064 *	0.064 *
SBL	0	0	24	24	-	-
SBT	1	1600	6	6	0.024 *	0.024 *
SBR	0	0	9	9	-	-
EBL	1	1600	8	8	0.005	0.005
EBT	2	3200	825	826	0.289 *	0.290 *
EBR	0	0	99	101	-	-
WBL	1	1600	116	116	0.073 *	0.073 *
WBT	2	3200	328	330	0.106	0.107
WBR	0	0	12	12	-	-
				LOST TIME:	0.100 *	0.100 *
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.550**	**0.551**
				SCENARIO LEVEL OF SERVICE:	A	A

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 6_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***07/16/2015***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: COMMONS WAY

E/W STREET: CALABASAS ROAD

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	**71**	**0**	**103**	**24**	**6**	**9**	**8**	**825**	**99**	**116**	**328**	**12**
(B)	AMBIENT GROWTH:	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**17**	**2**	**2**	**7**	**0**
(C)	PROJECT-ADDED:	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**2**	**0**
(D)	CUMULATIVE-ADDED:	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**50**	**6**	**0**	**42**	**0**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L LT R	LTR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	0	0	71	72	74	79	81	-	-	-	-	-
NBT	2	3200	0	0	0	0	0	0.022	0.023	0.023	0.025	0.025
NBR	1	1600	103	105	105	105	105	0.064 *	0.066 *	0.066 *	0.066 *	0.066 *
SBL	0	0	24	24	24	24	24	-	-	-	-	-
SBT	1	1600	6	6	6	6	6	0.024 *	0.024 *	0.024 *	0.024 *	0.024 *
SBR	0	0	9	9	9	9	9	-	-	-	-	-
EBL	1	1600	8	8	8	8	8	0.005	0.005	0.005	0.005	0.005
EBT	2	3200	825	842	843	892	893	0.289 *	0.295 *	0.296 *	0.312 *	0.313 *
EBR	0	0	99	101	103	107	109	-	-	-	-	-
WBL	1	1600	116	118	118	118	118	0.073 *	0.074 *	0.074 *	0.074 *	0.074 *
WBT	2	3200	328	335	337	377	379	0.106	0.108	0.109	0.122	0.122
WBR	0	0	12	12	12	12	12	-	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.550**	**0.559**	**0.560**	**0.576**	**0.577**
						SCENARIO LEVEL OF SERVICE:		A	A	A	A	A

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) REF: 7_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***07/16/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS

E/W STREET: PARK SORRENTO

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	**0**	**646**	**35**	**126**	**520**	**0**	**0**	**0**	**0**	**13**	**0**	**42**
(B) PROJECT-ADDED:	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	T TR	LL TT		L RR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	SCENARIO V/C RATIOS 1	2
NBL	0	0	0	0	-	-
NBT	2	3200	646	646	0.213 *	0.213 *
NBR	0	0	35	35	-	-
SBL	2	3200	126	138	0.039 *	0.043 *
SBT	2	3200	520	520	0.163	0.163
SBR	0	0	0	0	-	-
EBL	0	0	0	0	- *	- *
EBT	0	0	0	0	-	-
EBR	0	0	0	0	-	-
WBL	1	1600	13	13	0.008	0.008
WBT	0	0	0	0	-	-
WBR	2	3200	42	51	0.013 *	0.016 *
				LOST TIME:	0.100 *	0.100 *
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.365**	**0.372**
				SCENARIO LEVEL OF SERVICE:	A	A

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) REF: 7_AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***07/16/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS

E/W STREET: PARK SORRENTO

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

		NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
VOLUMES		L	T	R	L	T	R	L	T	R	L	T	R
(A)	EXISTING:	0	646	35	126	520	0	0	0	0	13	0	42
(B)	AMBIENT GROWTH:	0	13	1	3	10	0	0	0	0	0	0	1
(C)	PROJECT-ADDED:	0	0	0	12	0	0	0	0	0	0	0	9
(D)	CUMULATIVE-ADDED:	0	1	0	0	1	0	0	0	0	0	0	0

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	T TR	LL TT		L RR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	0	0	0	0	0	0	0	-	-	-	-	-
NBT	2	3200	646	659	659	660	660	0.213 *	0.217 *	0.217 *	0.218 *	0.218 *
NBR	0	0	35	36	36	36	36	-	-	-	-	-
SBL	2	3200	126	129	141	129	141	0.039 *	0.040 *	0.044 *	0.040 *	0.044 *
SBT	2	3200	520	530	530	531	531	0.163	0.166	0.166	0.166	0.166
SBR	0	0	0	0	0	0	0	-	-	-	-	-
EBL	0	0	0	0	0	0	0	-	-	-	-	-
EBT	0	0	0	0	0	0	0	-	-	-	-	-
EBR	0	0	0	0	0	0	0	-	-	-	-	-
WBL	1	1600	13	13	13	13	13	0.008	0.008	0.008	0.008	0.008
WBT	0	0	0	0	0	0	0	-	-	-	-	-
WBR	2	3200	42	43	52	43	52	0.013 *	0.013 *	0.016 *	0.013 *	0.016 *
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.365**	**0.370**	**0.377**	**0.371**	**0.378**
						SCENARIO LEVEL OF SERVICE:		A	A	A	A	A

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 7_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***07/16/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS

E/W STREET: PARK SORRENTO

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	0	498	43	42	613	0	0	0	0	58	0	158
(B) PROJECT-ADDED:	0	0	0	12	0	0	0	0	0	0	0	11

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	T TR	LL TT		L RR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

SCENARIO 2 = EXISTING+PROJECT VOLUMES (A+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	SCENARIO V/C RATIOS 1	2				
NBL	0	0	0	0	-	-				
NBT	2	3200	498	498	0.169 *	0.169 *				
NBR	0	0	43	43	-	-				
SBL	2	3200	42	54	0.013 *	0.017 *				
SBT	2	3200	613	613	0.192	0.192				
SBR	0	0	0	0	-	-				
EBL	0	0	0	0	-	-				
EBT	0	0	0	0	-	-				
EBR	0	0	0	0	-	-				
WBL	1	1600	58	58	0.036	0.036				
WBT	0	0	0	0	-	-				
WBR	2	3200	158	169	0.049 *	0.053 *				
				LOST TIME:	0.100 *	0.100 *				
				TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.331**	**0.339**				
				SCENARIO LEVEL OF SERVICE:	A	A				

NOTES:

Printed: 10/08/15

HILTON GARDEN INN EXPANSION PROJECT (14044.01) **REF:** 7_PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***07/16/2015***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: PARKWAY CALABASAS

E/W STREET: PARK SORRENTO

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	0	498	43	42	613	0	0	0	0	58	0	158
(B)	AMBIENT GROWTH:	0	10	1	1	12	0	0	0	0	1	0	3
(C)	PROJECT-ADDED:	0	0	0	12	0	0	0	0	0	0	0	11
(D)	CUMULATIVE-ADDED:	0	2	0	0	2	0	0	0	0	0	0	0

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	T TR	LL TT		L RR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = YEAR 2017 VOLUMES (A+B)
SCENARIO 3 = YEAR 2017 + PROJECT VOLUMES (A+B+C)
SCENARIO 4 = CUMULATIVE VOLUMES (A+B+D)
SCENARIO 5 = CUMULATIVE + PROJECT VOLUMES (A+B+C+D)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	5	SCENARIO V/C RATIOS 1	2	3	4	5
NBL	0	0	0	0	0	0	0	-	-	-	-	-
NBT	2	3200	498	508	508	510	510	0.169 *	0.173 *	0.173 *	0.173 *	0.173 *
NBR	0	0	43	44	44	44	44	-	-	-	-	-
SBL	2	3200	42	43	55	43	55	0.013 *	0.013 *	0.017 *	0.013 *	0.017 *
SBT	2	3200	613	625	625	627	627	0.192	0.195	0.195	0.196	0.196
SBR	0	0	0	0	0	0	0	-	-	-	-	-
EBL	0	0	0	0	0	0	0	-	-	-	-	-
EBT	0	0	0	0	0	0	0	-	-	-	-	-
EBR	0	0	0	0	0	0	0	-	-	-	-	-
WBL	1	1600	58	59	59	59	59	0.036	0.037	0.037	0.037	0.037
WBT	0	0	0	0	0	0	0	-	-	-	-	-
WBR	2	3200	158	161	172	161	172	0.049 *	0.050 *	0.054 *	0.050 *	0.054 *
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.331**	**0.336**	**0.344**	**0.336**	**0.344**
						SCENARIO LEVEL OF SERVICE:		A	A	A	A	A

NOTES:

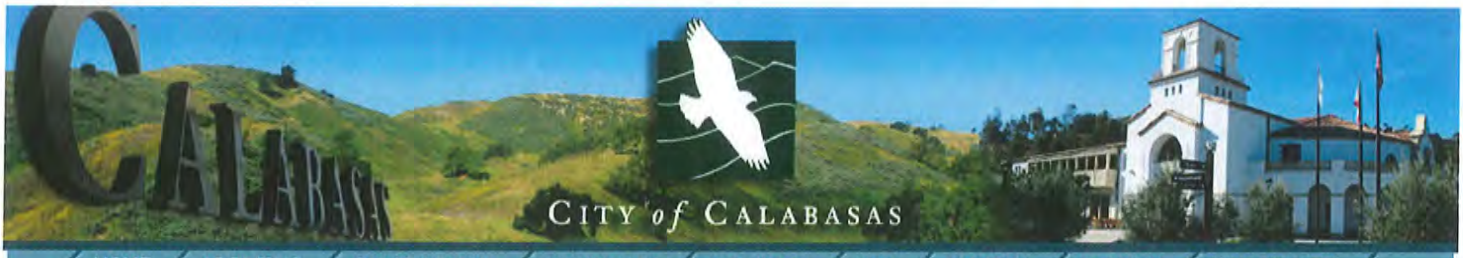
Printed: 10/08/15

TRIP DISTRIBUTION PATTERN CALCULATIONS

HILTON GARDEN INN EXPANSION PROJECT (#14044.01)
TRIP DISTRIBUTION PATTERN CALCULATIONS
10/8/2015

ORIGIN/DESTINATION	OUTBOUND TRIPS	INBOUND TRIPS	TOTAL TRIPS	DISTRIBUTION %
TO/FROM EAST (VIA PARK SORRENTO)	6	2	8	22%
TO/FROM WEST (VIA CALABASAS ROAD)	1	-	2	5%
TO/FROM NORTH (VIA PARKWAY CALABASAS)	13	13	26	70%
TO/FROM SOUTH (VIA PARKWAY CALABASAS)	0	2	1	3%
TOTAL:			**37**	**100%**

CUMULATIVE PROJECT LIST/TRIP GENERATION FORECASTS



CITY of CALABASAS

PROJECTS, PLANS & REPORTS IN THE CITY OF CALABASAS

Community Development Department
Public Works Department
Code Enforcement

CLICK HERE FOR EMAIL NOTIFICATIONS FROM THE CITY OF CALABASAS

MAJOR DEVELOPMENT PROJECTS IN CALABASAS

- BSVERCOM Project
- Calabasas Hilton Garden Inn Expansion
- Calabasas Park Gateway Monument
- Canyon Oaks Project
- Cheesecake Factory
- City of Calabasas Senior Center
- Craftsman's Corner Territory Annexation
- Las Virgenes Road/Thousand Oaks Blvd. Commercial Center
- Las Virgenes - Triunfo Joint Powers Authority Solar Generation Project Recycled Water Pump Station
- Malamut Vintage Auto Dealership
- Old Town Calabasas Park and Ride Parking Lot
- Paxton Calabasas Project
- Rondell Oasis Hotel
- Viewpoint Phase III
- Village at Calabasas
- Westin Hotel
- Wireless Telecommunications Facility Information

ROAD WORK/STREET CLOSURES/RESURFACING

- Las Virgenes Road Scenic Corridor Widening Project
- Las Virgenes Rd./Thousand Oaks Blvd. Intersection Improvements
- Lost Hills Interchange Improvement Project
- Mulholland Highway Scenic Corridor Phase III Project
- Parkway Calabasas/US101 S/B Off-Ramp Intersection Modifications
- West Calabasas Road Improvement Project

NOTABLE PROJECTS NEAR CALABASAS

- Santa Monica CA Incline Replacement project - April 2015 - Summer 2016
- Malibu Canyon to be Closed 9pm-5am for 7 Months beginning January 15, 2015
- Important Public Hearing Notice - Local Costal Program - July 10, 2014

LCP Amendment No. LCP-4LAC-14-0109-4
Los Angeles County- Santa Monica Mountains LCP

- Calabasas Peak Motorway Residences
- Hidden Terraces Specific Plan
- Los Angeles County General Plan and Antelope Valley Area Plan Updates
- Los Angeles County Regional Planning Commission (RPC) case and hearing information
- The Malibu Institute
  - Notice of Preparation - LA County Dept. of Regional Planning

TRAILS

- Las Virgenes Creek Trail

MAJOR ORDINANCES

INITIATIVES

- 2010 Calabasas Building Standards Code
- Mont Calabasas Annexation

MONTHLY REPORTS

- Development Notices and Monthly Projects Report

GENERAL PLAN AND MASTER PLANS

- Calabasas General Plan
- Development Code Update
- Bicycle Master Plan
- Parks Master Plan
- Pedestrian Master Plan
- Trails Master Plan
- Las Virgenes, McCoy and Dry Canyon Creeks Master Plan

ARCHIVED PROJECTS

2014

- The Horizons - Senior Condominiums
- 2014 Annual Street Resurfacing Project
- Mureau Road Pipeline Project

2013

- Mountain View Estates Annexation
- PARK CAPRI/PARK GRANADA TRAFFIC SIGNAL PROJECT
- Parkway Calabasas Drop-off and Median Improvements/Park Sorrento Median Circles Landscape Improvements
- Calabasas Road Water Line Replacement

2012

- Mulholland Hwy 2012 Overlay Project
- Edison to Complete Infrastructure Upgrade Project
- 2012 Annual Citywide Resurfacing Project
- Calabasas Sewer Upgrade Project (a Los Angeles County project)
- Safe Routes to School

2011

- Thomas Safran Associates Senior Affordable Housing Development
- 2011 Annual Citywide Resurfacing Project
- A.E. Wright Middle School Pedestrian and Bicycle Footbridge and Trail
- City-Wide Signal Interconnect Project
- Clover Trail Water Main Extension

2010

- 2010 Annual Citywide Resurfacing Project
- ADA Citywide Sidewalk Ramp Improvement Project
- Calabasas Road/US 101 Southbound On-Ramp Intersection Improvement
- Mulholland Hwy Sewer Upgrade Road Delays
- Swim Center West
- Time Warner Cable Installation
- Time Warner Cable Optic Line Installation

2008

- Summit at Calabasas

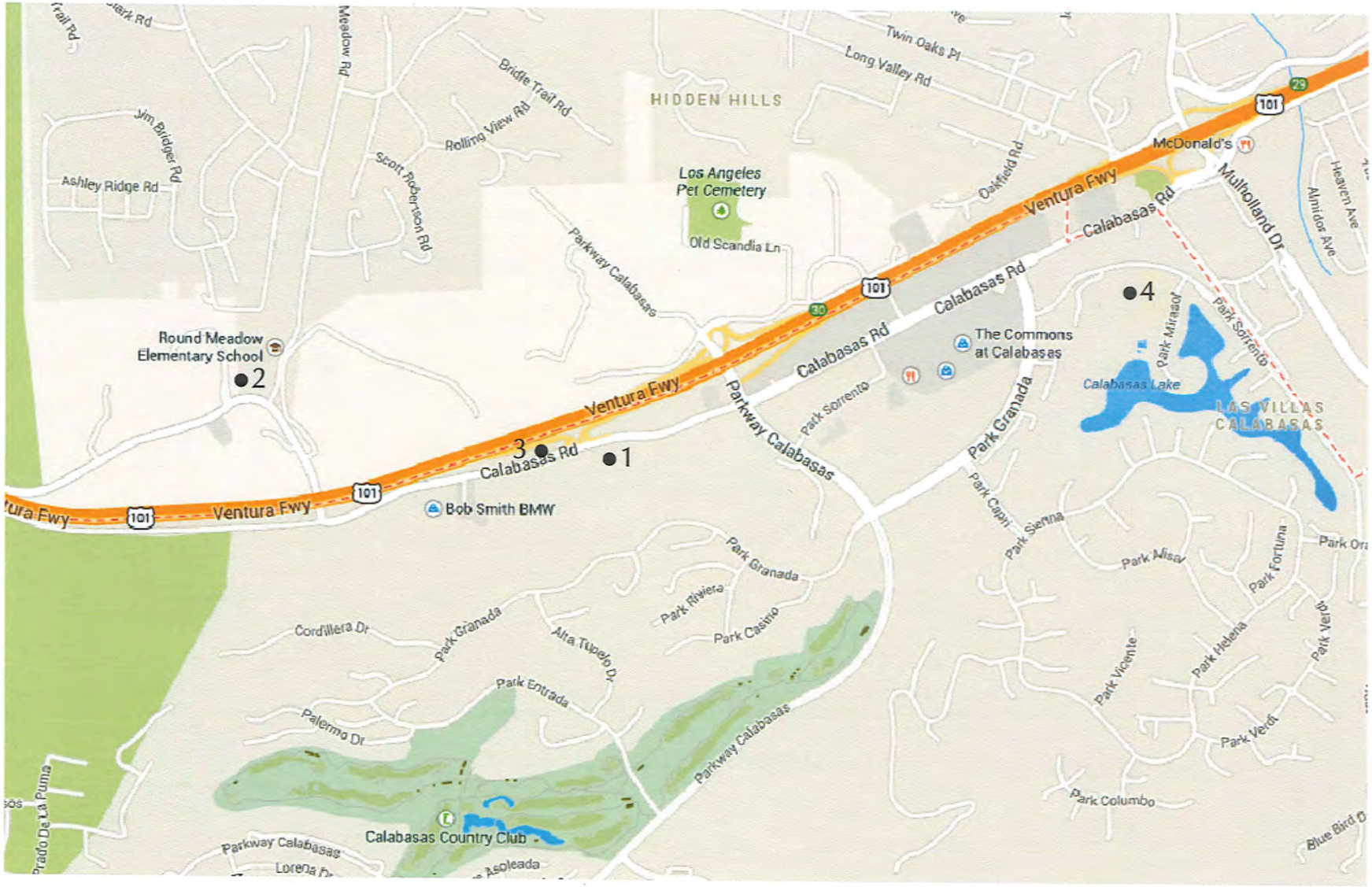
To receive updates via email on projects in the City of Calabasas, please click here to sign up on the Connect with Calabasas page.

Associated Transportation Engineers
Trip Generation Worksheet - With In/Out Splits

CUMULATIVE PROJECT TRIP GENERATION															
Land Use	Size	ADT		A.M.						P.M.					
		Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
1. Westin Hotel (a)	176	8.17	1,438	0.530	93	59%	55	41%	38	0.60	106	51%	54	49%	52
2. Hidden Terrace (Senior Apts.) (b)	180	3.44	619	0.200	36	34%	12	66%	24	0.25	45	54%	24	46%	21
2. Hidden Terrace (Assited Living) (c)	78	2.74	214	0.180	14	68%	10	32%	4	0.29	23	50%	12	50%	11
3. Malamut Dealership (d)	20983		198		0		0		0		26	40%	10	60%	16
4. Village @ Calabasas (e)			1,399		107		48		59		111		65		46

(a) ITE average rates for Hotel.
(b) ITE average rates for Senior Housing - Attached
(c) ITE average rates for Assited Living - Beds
(d) Malamut Vintage Automobile Dealership - Traffic Impact Analysis. Kimley-Horn and Associates, June 2010.
(e) The Village at Calabasas Mixed-Use Project - Updated Traffic, Circulation, and Parking Study. Associated Transportation Engineers, June 2013.

* Cumulative-added traffic forecasts assume through traffic from projects located in the Lost Hills/Las Virgenes area of the City.

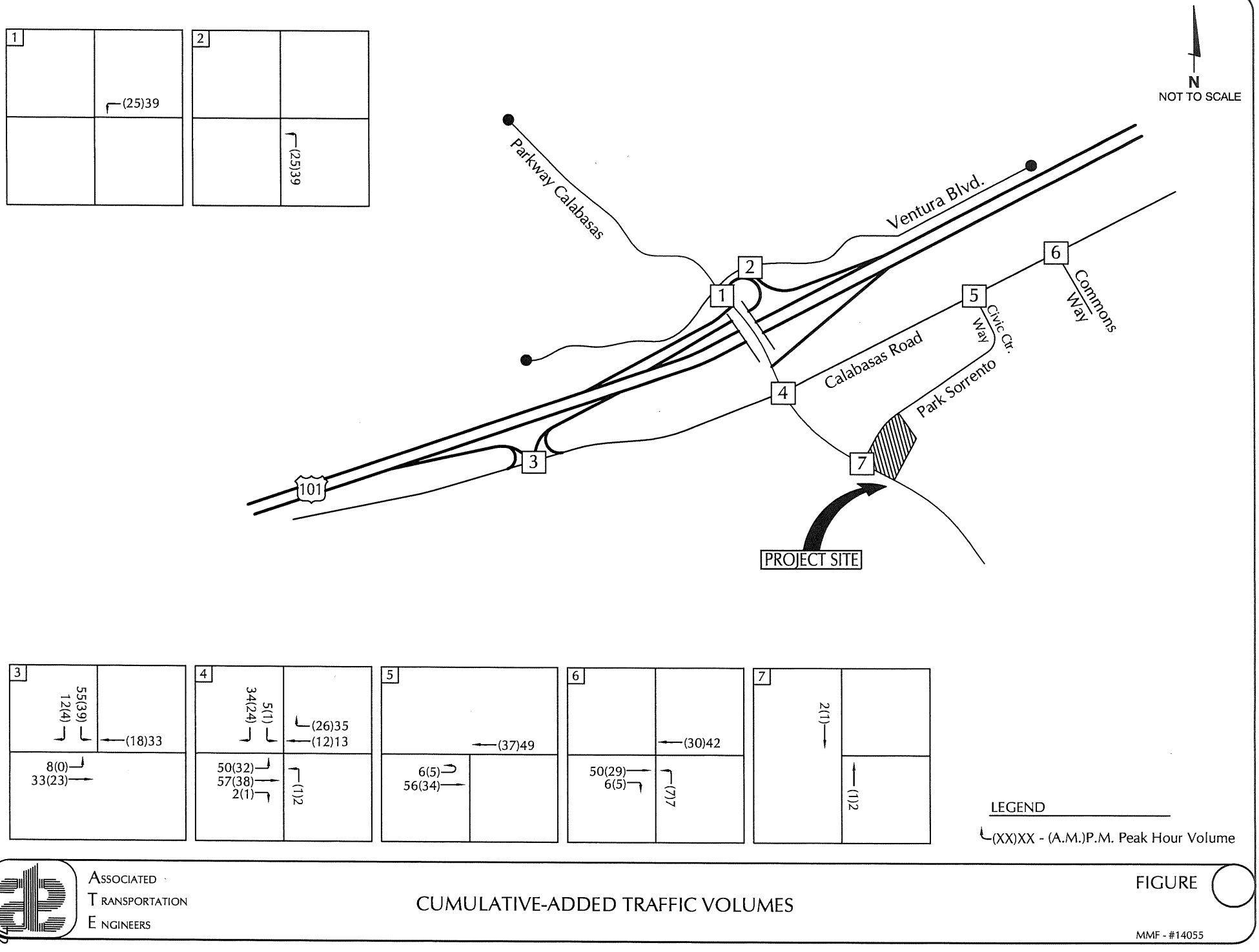


ASSOCIATED TRANSPORTATION ENGINEERS

CUMULATIVE PROJECT LOCATIONS

FIGURE

MMF - #14055



ASSOCIATED TRANSPORTATION ENGINEERS

CUMULATIVE-ADDED TRAFFIC VOLUMES

FIGURE

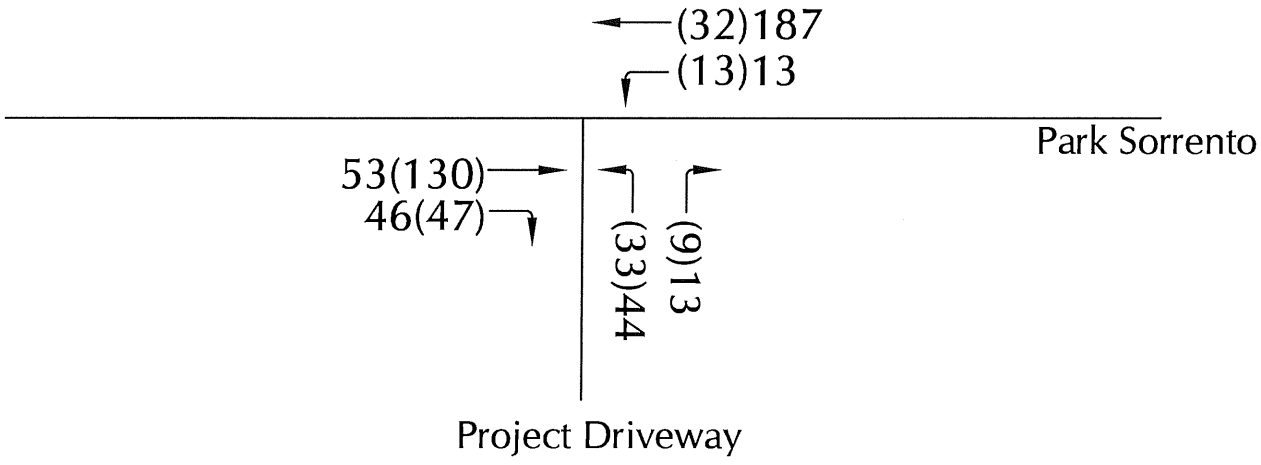
MMF - #14055

CUMULATIVE + PROJECT LOS COMPARISON TABLE

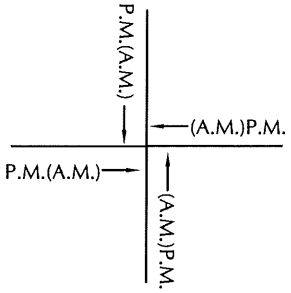
Cumulative + Project LOS Comparison

Study-Area Intersection	Hilton Garden Inn Expansion (ATE, October 2015)		Westin Hotel Project (ATE, April 2015)		Village at Calabasas Project (ATE, June 2013)	
	A.M. LOS	P.M. LOS	A.M. LOS	P.M. LOS	A.M. LOS	P.M. LOS
Parkway Calabasas/Ventura Blvd.	0.487/LOS A	0.631/LOS B	0.487/LOS A	0.631/LOS B	0.53/LOS A	0.70/LOS B
U.S. 101 NB Ramps/Ventura Blvd.	5.5 sec./LOS A	7.9 sec./LOS A	5.6 sec./LOS A	7.9 sec./LOS A	0.48/LOS A	0.46/LOS A
U.S. 101 SB Ramps/Calabasas Road	21.8 sec./LOS C	22.1 sec./LOS C	21.9 sec./LOS A	21.4 sec./LOS C	0.71/LOS C	0.69/LOS B
Parkway Calabasas/Calabasas Road	0.540/LOS A	0.676/LOS B	0.542/LOS A	0.678/LOS B	0.44/LOS A	0.67/LOS B
Civic Center Way/Calabasas Road	0.301/LOS A	0.489/LOS A	0.299/LOS A	0.433/LOS A	0.28/LOS A	0.45/LOS A
Commons Way/Calabasas Road	0.280/LOS A	0.577/LOS A	N/A	N/A	0.30/LOS A	0.54/LOS A
Parkway Calabasas/Park Sorrento	0.378/LOS A	0.344/LOS A	N/A	N/A	N/A	N/A

CUMULATIVE + PROJECT DRIVEWAY VOLUMES/LOS CALCULATIONS



LEGEND



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NOT TO SCALE

ASSOCIATED TRANSPORTATION ENGINEERS

CUMULATIVE + PROJECT PEAK HOUR DRIVEWAY VOLUMES

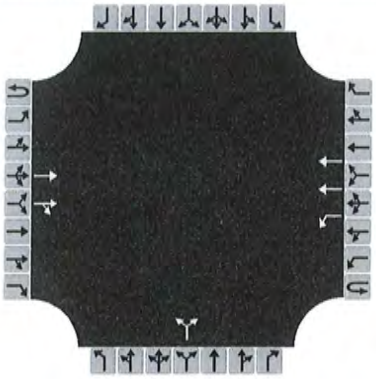
FIGURE A

MMF - #14044.01

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	MMF	Intersection	DRIVEWAY_AM_CU+PR
Agency/Co.	ATE	Jurisdiction	CITY OF CALABASAS
Date Performed	10/9/2015	East/West Street	PARK SORRENTO
Analysis Year	2015	North/South Street	PROJECT DRIVEWAY
Time Analyzed	A.M. PEAK HOUR	Peak Hour Factor	1.00
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	HILTON GARDEN INN EXPANSION PROJECT		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	0		0	0	0
Configuration			T	TR		L	T				LR					
Volume (veh/h)			0130	47		13	32			33		9				
Percent Heavy Vehicles						3				3		3				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

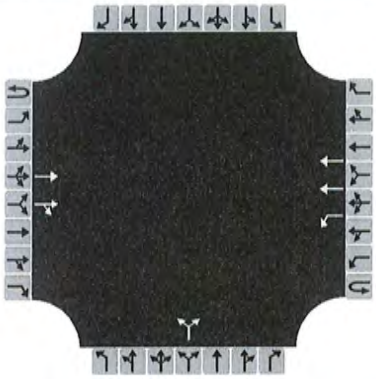
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						13					42					
Capacity						1389					798					
v/c Ratio						0.01					0.05					
95% Queue Length						0.0					0.2					
Control Delay (s/veh)						7.6					9.8					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					2.2				9.8							
Approach LOS					A				A							

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	MMF	Intersection	DRIVEWAY_PM_CU+PR
Agency/Co.	ATE	Jurisdiction	CITY OF CALABASAS
Date Performed	10/9/2015	East/West Street	PARK SORRENTO
Analysis Year	2015	North/South Street	PROJECT DRIVEWAY
Time Analyzed	P.M. PEAK HOUR	Peak Hour Factor	1.00
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	HILTON GARDEN INN EXPANSION PROJECT		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	0		0	0	0
Configuration			T	TR		L	T				LR					
Volume (veh/h)			53	46		13	187			44		13				
Percent Heavy Vehicles						3				3		3				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						13					57					
Capacity						1485					809					
v/c Ratio						0.01					0.07					
95% Queue Length						0.0					0.2					
Control Delay (s/veh)						7.4					9.8					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.5				9.8							
Approach LOS					A				A							