Appendix A

Commitment Letter and LEED Measures

Crossroads Hollywood

Application for CEQA Streamlining
Appendix A, Commitment Letter and LEED Measures

- Commitment Letter
- LEED Measures

Crossroads Hollywood

Application for CEQA Streamlining

- Commitment Letter

CRE-HAR Crossroads

October 27, 2016

Ms. Terry Roberts, Manager
Sustainable Communities Policy and Planning Section
California Air Resources Board
9500 Telstar Avenue
El Monte, CA 91731

Re: Greenhouse Gas Emissions Offset Approach for the Crossroads Hollywood Project

Dear Ms. Roberts:

This letter is provided as a supplement to the application filed on August 26, 2016, by CRE-HAR Crossroads SPV, LLC (the "Project Applicant"), who proposes to develop the Crossroads Hollywood Project (the "Project") in the Hollywood Community Plan and the Hollywood Redevelopment Plan Project area of the City of Los Angeles.

As you know, the Project Applicant has applied for certification by the Governor as a leadership project under the Jobs and Economic Improvement Through Environmental Leadership Act of 2011, as amended (collectively, "AB 900" or the "Act"). The application includes projected emissions for the Project that show certain projected net additional emissions of greenhouse gases (GHG) as a result of the construction of the Project and as a consequence of Project operations. The Project Applicant proposes to meet the requirement set forth in California Public Resources Code Section 21183 (c), which requires that the Project demonstrate that it will not result in net additional emissions of GHG, through the acquisition of voluntary carbon credits sufficient to offset all projected additional emissions, in the following manner:

1. No later than six (6) months after the issuance of a Temporary Certificate of Occupancy for the Project, the Project Sponsor shall provide to the lead agency, the City of Los Angeles, a calculation of the net additional emissions resulting from the construction of the Project (the "Construction Emissions"), to be calculated in accordance with the methodology agreed upon by the Air Resources Board (ARB) in connection with the AB 900 certification of the Project (the "Agreed Methodology"). Project Sponsor shall provide courtesy copies of the calculations to the ARB and the Governor's Office promptly following transmittal of the calculations to the City of Los Angeles. Project Sponsor shall enter into one or more contracts to purchase voluntary carbon credits from a qualified GHG emissions broker in an amount sufficient to offset the Construction Emissions. The Project Sponsor shall provide

courtesy copies of any such contracts to the ARB and the Governor's Office promptly following the execution of such contracts.

2. Prior to issuance of any Certificate of Occupancy for any building in the Project, the Applicant or its successor shall enter into one or more contracts to purchase carbon credits from a qualified GHG emissions broker (to be selected from an accredited registry), which contract, together with any previous contracts for the purchase of carbon credits, shall evidence the purchase of carbon credits in an amount sufficient to offset the Operational Emissions attributable to such building in the Project, as well as all previously constructed buildings in the Project and shall be calculated on a net present value basis for a 30-year useful life.

   Prior to execution of the contract(s), the Applicant and its consultant shall calculate the Operational Emissions, in accordance with the methodology described in the Applicant's "Application for Environmental Leadership Development Project", specifically the "Greenhouse Gas Emissions Methodology and Documentation" prepared by Eyestone Environmental.

   Once the City has had an opportunity to review and approve the methodology and associated calculations, the Applicant shall provide copies of the calculation methodology to the California Air Resources Board (CARB) and Governor's Office of Planning and Research (OPR), which is then subject to a determination signed by the Executive Officer of CARB pursuant to the procedures set forth in Section 6 of OPR's Guidelines. The City will issue a Certificate of Occupancy upon receipt of the following: (1) a fully executed copy of the carbon offset purchase agreement(s); (2) a final CARB Determination that the Project will not result in any net additional GHG emissions; and (3) a copy of OPR's Certification Letter for the Project.

3. The following project design features were accounted for in the AB 900 application for purposes of reducing GHG emissions and are, therefore, included as commitments in this letter.

   A. The design of the new buildings shall incorporate features to be capable of achieving at least Silver certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED)-CS® or LEED-NC® Rating System as of January 1, 2011. Specific sustainability features that are integrated into the Project design to enable the Project to achieve LEED® Silver certification would include the following:

      a. Exceeding Title 24, Part 6, California Energy Code baseline standard requirements by 15 percent for energy efficiency, based on the 2016 Building Energy Efficiency Standards requirements.

      b. Use of Energy Star–labeled products and appliances, including dishwashers in the residential units, where appropriate.

c. Use of light emitting diode (LED) lighting or other energy-efficient lighting technologies, such as occupancy sensors or daylight harvesting and dimming controls, where appropriate, to reduce electricity use.

d. The Project would reduce indoor water use by a minimum of 35 percent by installing water fixtures that exceed applicable standards.

e. The Project would reduce outdoor water us by a minimum of 50 percent from the calculated baseline at peak watering month by installing efficient irrigation.

B. The Project shall limit the use of natural gas-fueled fireplaces to 20 percent of the proposed residential units.

C. The Project shall provide the equivalent of 135 kilowatts of photovoltaic panels on the Project site.

The commitments outlined herein will be incorporated into the Project's Final Environmental Impact Report (FEIR) as a proposed improvement measure. The Project Sponsor will agree to comply with all improvement measures and mitigation measures contained in the FEIR through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement with the Project's lead agency, the City of Los Angeles.

Should you have any questions, please do not hesitate to call Marc Annotti at (323) 658-1511.

Sincerely,

CRE-HAR Crossroads SPV, LLC,
a Delaware limited liability company

By: CRE-HAR Crossroads JV, LLC,
a Delaware limited liability company,
its sole member

By: Crossroads Associates, LLC,
a Delaware limited liability company,
its managing member

By: _____
Name: David Schwartzman
Its: Authorized Signatory

Crossroads Hollywood

Application for CEQA Streamlining

- LEED Measures

Crossroads Hollywood

LEED Measures

The following list highlights the main sustainability strategies to be implemented into the Crossroads Hollywood Project in order to achieve the Gold Rating under LEED 2009 (v3) or the Silver Rating under LEED v4 rating system. This is in addition to the strategies needed to reduce the greenhouse gas (GHG) emissions, as required by the California Air Resources Board (ARB).

Design

- Conduct a preliminary LEED meeting with a minimum of four key Project team members and the owner or owner's representative. As part of the meeting, create a LEED action plan that, at a minimum (1) determines the LEED certification level to pursue (Certified, Silver, Gold, or Platinum); (2) selects the LEED credits to meet the targeted certification level; and (3) identifies the responsible parties to ensure the LEED requirements for each prerequisite and selected credit are met.

Site

- Implementation of an erosion and sedimentation plan for all construction activities.
- Provision of heat island mitigation strategies for 50 percent of hardscapes or provide 100 percent underground parking.
- Provision of heat island mitigation strategies for 75 percent of roof areas.
- Development of tenant design and construction guidelines, which applies to LEED Core & Shell certification only.

Transportation

- Installation of bike share facilities at the Project Site should a bike share program become available in Los Angeles.
- Allocation of preferred parking for alternative-fuel vehicles, low-emitting, and fuel-efficient and ride-sharing vehicles.

- Provision of electric vehicle charging stations in accordance with City requirements.

- Provide bicycle racks/storage for 5 percent of building users and shower/changing facilities for 0.5 percent of full-time equivalent (FTE) occupants.

- Provide additional bicycle storage and demarcated bike lanes/trails.

Water Quality

- Use of on-site storm water treatment.

- Installation of catch basin inserts and screens to provide runoff contaminant removal.

- Preparation and implementation of a Stormwater Pollution and Prevention Plan (SWPPP) and Standard Urban Stormwater Mitigation Plan (SUSMP), both of which would include Best Management Practices (BMPs) to control stormwater runoff, minimize pollutant loading and erosion effects during and after construction.

Energy Conservation and Efficiency

- Use of full-cutoff or fully shielded on-street lighting oriented to pedestrian areas/sidewalks so as to minimize overlighting, light trespass, and glare.

- Inclusion of outdoor air flow measuring devices, additional outdoor air ventilation, and use of low emitting materials to promote indoor environmental quality.

- Use of refrigerants that reduce ozone depletion.

- Provision of conduit that is appropriate for future photovoltaic and solar thermal collectors.

- Post-construction commissioning of building energy systems performed on an ongoing basis to ensure all systems are running at optimal efficiency.

- Purchase of renewable source power (“green power”) to minimize carbon emissions.

- Review of commissioning activities by an independent Commissioning Agency and development and implementation of commissioning plan.

- Implementation of building level energy meter to provide monthly tracking of energy consumption.

- Provision of metering for tenant space.

Solid Waste

- Provision of on-site recycling containers to promote the recycling of paper, metal, glass, and other recyclable materials and adequate storage areas for such containers during construction and after the building is occupied.

- Use of building materials with a minimum of 10 percent recycled-content for the construction of the Project.

- Implementation of a construction waste management plan to recycle and/or salvage a minimum of 75 percent of nonhazardous construction debris or minimize the generation of construction waste to 2.5 pounds per square foot of building floor area.

- Utilize building materials extracted, harvested or recovered and manufactured within 500 miles of the Project Site for a minimum of 10 percent based on cost.

- Provide additional dedicated storage for (select two) batteries, mercury lamps, and/or electronic waste.

- Conduct Life Cycle Assessment (LCA), which must be performed using one of the existing LCA tools and dataset; depending on the tools selected for the project, a LCA specialist consultation may be required.

- Selection of materials based on Environmental Product Declaration availability; this strategy requires significant market response.

- Selection of materials based on their reported environmental impact.

- Selection of materials based on their reported ingredients.

- Diversion of construction materials from landfill. Diversion must include at least three material streams (e.g., recovery, reuse, and recycling).

Air Quality

- Employment of practices that prohibit the use of chlorofluorocarbons (CFCs) in heating, ventilation, and air conditioning (HVAC) systems.
- Installation of MERV 13 filtration at outside air intakes to improve indoor air quality.
- Meeting applicable California and/or Los Angeles air emissions requirements for all heating or cogeneration equipment utilized at the Project Site.
- Installation of landscaping throughout the Project Site, including roof decks, pool decks, and terraces, to provide shading and capture carbon dioxide (CO_2) emissions.
- Use of adhesives, sealants, paints, finishes, carpet, and other materials that emit low quantities of volatile organic compounds (VOCs) and/or other air quality pollutants.
- Development of an Indoor Air Quality Management Plan for construction and pre-occupancy phases.
- Installation of CO_2 sensors to monitor indoor air quality.
- Provision of individual control on thermostats to 50 percent of building occupants. For residential buildings, the credit can be achieved by providing access to operable windows. For commercial spaces, control must be provided to 50 percent of occupants in order to meet the intent of the credit.
- HVAC system design compliance to ASHRAE 55. The Core & Shell base building mechanical systems must allow for the tenant build-out to meet the requirement of this credit.

Appendix B

Greenhouse Gas Worksheets (Construction)

Crossroads Hollywood

Application for CEQA Streamlining
Appendix B, Greenhouse Gas Worksheets (Construction)

- Construction Equipment and Haul Plan
- CalEEMod Output (Project Construction)

Crossroads Hollywood
Application for CEQA Streamlining

- Construction Equipment and Haul Plan

Crossroads Hollywood

Construction Equipment and Haul Plan

1. Introduction

This Construction Equipment and Haul Plan for the Crossroads Hollywood Project includes an overview of the construction equipment anticipated to be used for the Project, as well as the anticipated haul route activities. Information is provided by general development phase. Note that the information provided accounts for overlap of construction activities.

2. Project Construction

a. Demolition (Anticipated 1/1/18–1/31/18)

Project construction would commence with demolition of the existing buildings (excluding Crossroads of the World) and surface parking lots throughout Development Parcels A-D. The existing uses on the Project Site consists of a total of approximately 181,656 gross square feet of built area, including the Crossroads of the World. The Project would retain, preserve, and rehabilitate Crossroads of the World and remove all other existing uses on the Project Site. As such, the Project would remove a total of approximately 131,656 gross square feet of existing uses, consisting of 84 residential units (80 multi-family dwelling units and two duplexes), as well as commercial/retail, restaurant and office uses, and 344 parking spaces. As shown in Table 1 on page 2, based on construction and debris rates established by the United States Environmental Protection Agency (USEPA), it is anticipated that construction of the Project would generate a total of approximately 18,912 tons of demolition debris. It should be noted that soil export is not typically included in the calculation of construction waste to be landfilled since soil is not disposed of as waste but, rather, is typically used as a cover material. Thus, soil export is not included in the 18,912 ton total.

Removal of demolition debris would require a total of 660 total hauls with a round trip distance of 32 miles to Scholl Canyon Landfill. Haul trucks would travel on approved truck routes designated within the City. Given the Project Site's proximity to US 101, haul truck traffic would take the most direct route to the appropriate freeway ramp. As shown in Figure 1 on page 3, it is anticipated that outbound traffic would travel on Highland Avenue to access US-101 northbound or on Sunset Boulevard to access US-101 southbound.

Table 1
Project Demolition Waste Generation

Land Use	Size/Units[a]	Generation Rate[b] (lbs/sf)	Total (tons)
Existing Uses			
Multi-Family Residential (84 Units)	69,791 gsf	115	4,013
Commercial/Retail	28,095 gsf	155	2,177
Restaurant	500 gsf	155	39
Office	83,271 gsf	155	6,453
Total Existing	*181,656 gsf*		***12,683***
Crossroads of the World Rehabilitation[d]	(50,000 gsf)	155	(3,875)
Total Demo	131,656 gsf		**8,808**
Surface Parking	130,375 sf	155	**10,104**
Total Demolition			**18,912**

gsf = gross square feet

[a] *Sizes of land uses identified in this table differ from those presented in Section II.c., Project Description, of the Greenhouse Gas Emissions Methodology and Documentation. The sizes in the Project Description represent the existing floor area, which is defined by LAMC Section 12.03 as "the area in square feet confined within the exterior walls of a building, but not including the area of the following: exterior walls, stairways, shafts, rooms housing building-operating equipment or machinery, parking areas with associated driveways and ramps, space dedicated to bicycle parking, space for the landing and storage of helicopters, and Basement storage areas." The existing floor areas presented in the Project Description are estimated assuming 95 percent of gross building areas, which are included in this table.*

[b] *U.S. Environmental Protection Agency, Report No. EPA530-98-010, Characterization of Building-Related Construction and Demolition Debris in the United States, June 1998, pages 2-3, 2-4, and 2-8 and Appendix A, Table A-6.*

[c] *Existing uses, particularly the commercial/retail and office components, include Crossroads of the World buildings that are not proposed for demolition. Consequently, the quantity of demolition debris estimated for the square footage of the existing buildings to remain has been credited back. The quantity of construction debris associated with building rehabilitation has been accounted for under "Total Proposed Uses," which include the reuse of the Crossroads of the World buildings.*

Source: Eyestone Environmental, 2016.

Inbound traffic would take the reverse route from US 101. Demolition activities would require a maximum of 30 workers per day (2.5 trips per worker per day). The equipment mix on a worst-case day during the demolition phase is provided in Table 2 on page 4.

b. Grading/Excavation (Anticipated 2/1/18–6/30/18)

Once demolition is complete, grading and excavation would commence throughout Development Parcels A–D. It is estimated that approximately 643,753 cubic yards (cy) of

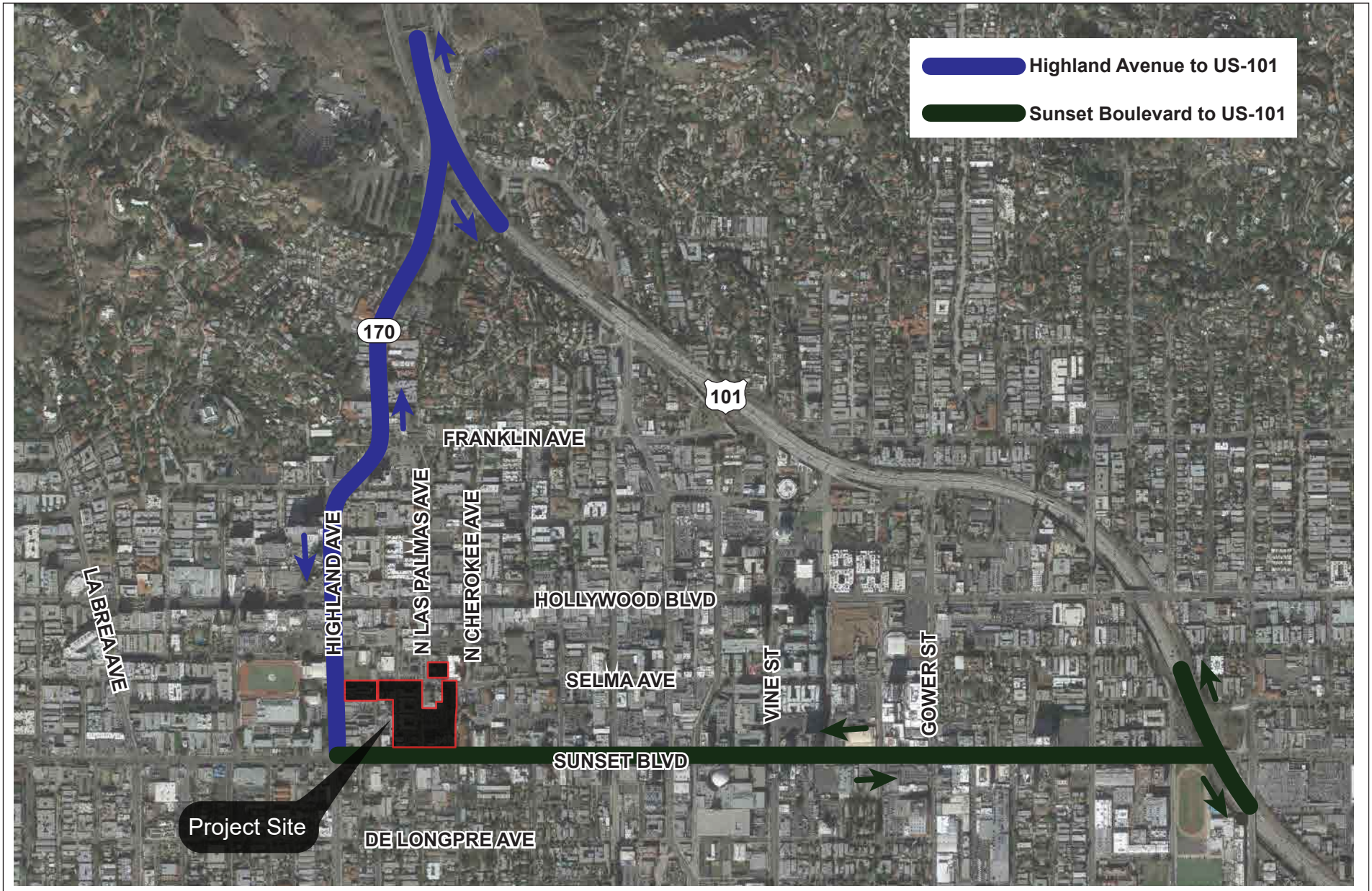

Figure 1
Crossroads Construction Haul Route Map

Source: Google Earth, 2016; Eyestone Environmental, 2016; Gibson Transportation Consulting, Inc., 2016.

Table 2
Construction Equipment Mix and Usage—Demolition

Equipment	Usage	Horsepower
2 Excavators	8 hours per day	162
2 Loaders	8 hours per day	199
3 Air Compressors	8 hours per day	78
3 Concrete Saws	8 hours per day	81
1 Crane	8 hours per day	226
1 Welder	8 hours per day	46

Source: Eyestone Environmental, 2016.

soil would be hauled from the Project Site during the grading and excavation phase, as well as an additional 1,490 cy associated with off-site improvements to the existing sanitary sewer system related to the realignment of Las Palmas Avenue. Export of material would require approximately 46,100 haul truck trips using 14-cubic-yard trucks. It is anticipated that the export of material would be hauled to Scholl Canyon Landfill, which would require a 32-mile round trip, as described above. In addition, grading/excavation activities would require approximately 20 deliveries per day (e.g., shoring materials). Thus, up to 840 daily truck trips (420 inbound, 420 outbound) are forecast to occur during the excavation and grading period, with approximately 106 trips per hour (53 inbound, 53 outbound) uniformly over a typical 8-hour workday.

Transportation Research Circular No. 212 defines passenger car equivalency (PCE) for a vehicle as the number of through moving passenger cars to which it is equivalent based on the vehicle's headway and delay-creating effects. Table 8 of *Transportation Research Circular No. 212* and Exhibit 16.7 of the HCM suggest a PCE of 2.0 for trucks. Assuming a PCE factor of 2.0, the 840 truck trips would be equivalent to 1,680 daily PCE trips. The 106 hourly truck trips would be equivalent to 212 PCE trips (106 inbound, 106 outbound) per hour. In addition, grading/excavation activities would require a maximum of 30 workers per day (2.5 trips per worker per day). With the implementation of a Construction Management Plan, it is anticipated that almost all haul truck activity to and from the Project Site would occur outside of the A.M. and P.M. peak hours. Similarly, worker trips to and from the Project Site would also occur outside of the peak hours.

The equipment required for grading/excavation activities is listed in Table 3 on page 5.

Table 3
Construction Equipment Mix and Usage—Grading and Excavation

Equipment	Usage	Horsepower
4 Excavators	8 hours per day	162
2 Cranes	8 hours per day	226
2 Bore/Drill Rigs	8 hours per day	205
4 Pumps	8 hours per day	84

Source: Eyestone Environmental, 2016.

c. Foundations (Anticipated 7/1/18–12/31/18)

Once grading/excavation is complete, building foundations would be constructed. Construction of building foundations would require a maximum of approximately 50 deliveries (e.g., concrete and rebar) per day and 35 workers per day (2.5 trips per worker per day). The equipment mix on a worst-case day is listed in Table 4 below.

Table 4
Construction Equipment Mix and Usage—Foundations

Equipment	Usage	Horsepower
2 Cement and Mortar Mixers	8 hours per day	9
2 Concrete Saws	8 hours per day	81
2 Cranes	8 hours per day	226
2 Plate Compactors	8 hours per day	8
2 Concrete Pumps	8 hours per day	84
2 Welders	8 hours per day	46

Source: Eyestone Environmental, 2016.

d. Building Construction (Anticipated 1/1/19–9/30/21)

Once the building foundations are complete, building construction would occur throughout Development Parcels A–D. Building construction would require a maximum of approximately 75 deliveries per day and 360 workers per day (2.5 trips per worker per day). The equipment mix on a worst-case day during the building construction phase is listed in Table 5, on page 6.

Table 5
Construction Equipment Mix and Usage—Building Construction

Equipment	Usage	Horsepower
3 Cement and Mortar Mixers	8 hours per day	9
2 Concrete Saw	8 hours per day	81
3 Cranes	8 hours per day	226
3 Plate Compactors	8 hours per day	8
3 Concrete Pumps	8 hours per day	84
3 Welders	8 hours per day	46
4 Air Compressors	8 hours per day	78
4 Aerial Lifts	8 hours per day	62
4 Forklifts	8 hours per day	89

Source: Eyestone Environmental, 2016.

e. Paving/Concrete/Landscape Installation (Anticipated 10/1/21–12/31/21)

Once building construction is complete, paving/concrete/landscape installation would occur throughout Development Parcels A–D. This phase would require a maximum of approximately 20 deliveries per day and 30 workers per day (2.5 trips per worker per day). The equipment mix on a worst-case day during this construction phase is listed in Table 6, below.

Table 6
Construction Equipment Mix and Usage—Paving/Concrete/Landscape Installation

Equipment	Usage	Horsepower
2 Cement and Mortar Mixers	6 hours per day	9
1 Concrete Pump	8 hours per day	84
1 Paving Equipment	8 hours per day	130
1 Roller	8 hours per day	80
2 Tractor/Loader/Backhoe	8 hours per day	97
2 Skid Steer Loaders	8 hours per day	64

Source: Eyestone Environmental, 2016.

Crossroads Hollywood

Application for CEQA Streamlining

- CalEEMod Output (Project Construction)

Crossroads Project Construction

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	95.00	1000sqft	2.18	95,000.00	0
Enclosed Parking with Elevator	2,494.00	Space	22.45	1,223,700.00	0
High Turnover (Sit Down Restaurant)	41.60	1000sqft	0.96	41,600.00	0
Hotel	308.00	Room	10.27	348,500.00	0
Quality Restaurant	41.60	1000sqft	0.96	41,600.00	0
Apartments High Rise	760.00	Dwelling Unit	12.26	643,200.00	2174
Condo/Townhouse High Rise	190.00	Dwelling Unit	2.97	160,800.00	543
Strip Mall	61.80	1000sqft	1.42	61,800.00	0
Supermarket	40.00	1000sqft	0.92	40,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site Specific

Construction Phase - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - site specific

Demolition -

Grading -

Architectural Coating - Low VOC Consistent with SCAQMD Rule 1301.

Vehicle Trips - Project Specific Traffic Study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves -

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	75.00	349.00
tblConstructionPhase	NumDays	1,110.00	718.00
tblConstructionPhase	NumDays	70.00	23.00
tblConstructionPhase	NumDays	110.00	107.00
tblConstructionPhase	NumDays	75.00	66.00
tblConstructionPhase	NumDays	40.00	131.00
tblConstructionPhase	PhaseEndDate	2/1/2023	9/30/2021
tblConstructionPhase	PhaseEndDate	6/29/2018	6/30/2018
tblConstructionPhase	PhaseStartDate	10/1/2021	6/1/2020
tblGrading	MaterialExported	0.00	645,243.00
tblLandUse	LandUseSquareFeet	997,600.00	1,223,700.00
tblLandUse	LandUseSquareFeet	447,216.00	348,500.00
tblLandUse	LandUseSquareFeet	760,000.00	643,200.00
tblLandUse	LandUseSquareFeet	190,000.00	160,800.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblTripsAndVMT	HaulingTripLength	20.00	32.00
tblTripsAndVMT	HaulingTripLength	20.00	32.00
tblTripsAndVMT	HaulingTripNumber	1,870.00	660.00
tblTripsAndVMT	HaulingTripNumber	80,655.00	46,100.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	394.00	75.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00

tblTripsAndVMT	WorkerTripNumber	30.00	76.00
tblTripsAndVMT	WorkerTripNumber	30.00	76.00
tblTripsAndVMT	WorkerTripNumber	30.00	88.00
tblTripsAndVMT	WorkerTripNumber	1,414.00	900.00
tblTripsAndVMT	WorkerTripNumber	283.00	0.00
tblTripsAndVMT	WorkerTripNumber	23.00	76.00

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					
2018																3,314.5534
2019																2,228.7534
2020																2,180.2700
2021																1,715.7702
Total																**9,439.3470**

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	1/1/2018	1/31/2018	5	23	
2	Grading	Grading	2/1/2018	6/30/2018	5	107	
3	Foundation	Site Preparation	7/1/2018	12/31/2018	5	131	
4	Building Construction	Building Construction	1/1/2019	9/30/2021	5	718	
5	Architectural Coating	Architectural Coating	6/1/2020	9/30/2021	5	349	
6	Paving	Paving	10/1/2021	12/31/2021	5	66	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,923,750; Residential Outdoor: 641,250; Non-Residential Indoor: 2,678,424; Non-Residential Outdoor: 892,808

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	3	8.00	78	0.48
Demolition	Concrete/Industrial Saws	3	8.00	81	0.73
Demolition	Cranes	1	8.00	226	0.29
Demolition	Excavators	2	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Rubber Tired Loaders	2	8.00	199	0.36
Demolition	Welders	1	8.00	46	0.45

Grading	Bore/Drill Rigs	2	8.00	205	0.50
Grading	Cranes	2	8.00	226	0.29
Grading	Excavators	4	8.00	162	0.38
Grading	Graders	0	8.00	174	0.41
Grading	Pumps	4	8.00	84	0.74
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Foundation	Cement and Mortar Mixers	2	8.00	9	0.56
Foundation	Concrete/Industrial Saws	2	8.00	81	0.73
Foundation	Cranes	2	8.00	226	0.29
Foundation	Plate Compactors	2	8.00	8	0.43
Foundation	Pumps	2	8.00	84	0.74
Foundation	Rubber Tired Dozers	0	8.00	255	0.40
Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Foundation	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	4	8.00	62	0.31
Building Construction	Air Compressors	4	8.00	78	0.48
Building Construction	Cement and Mortar Mixers	3	8.00	9	0.56
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	3	8.00	226	0.29
Building Construction	Forklifts	4	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Plate Compactors	3	8.00	8	0.43
Building Construction	Pumps	3	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Pumps	1	8.00	84	0.74
Paving	Rollers	1	8.00	80	0.38
Paving	Skid Steer Loaders	2	8.00	64	0.37
Paving	Tractors/Loaders/Backhoes	2	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	12	76.00	0.00	660.00	14.70	6.90	32.00	LD_Mix	HDT_Mix	HHDT
Grading	12	76.00	20.00	46,100.00	14.70	6.90	32.00	LD_Mix	HDT_Mix	HHDT
Foundation	12	88.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	28	900.00	75.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	76.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

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																0.0000
Off-Road																62.6211
Total																**62.6211**

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																34.5539
Vendor																0.0000
Worker																8.6752
Total																**43.2291**

3.3 Grading - 2018

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																0.0000
Off-Road																366.3325
Total																**366.3325**

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																2,413.5398
Vendor																20.6185
Worker																40.3584
Total																**2,474.5168**

3.4 Foundation - 2018

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																0.0000
Off-Road																247.5334
Total																**247.5334**

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
Vendor																63.1081
Worker																57.2125
Total																**120.3206**

3.5 Building Construction - 2019

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					
Off-Road																923.9988
Total																**923.9988**

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
Vendor																184.7301
Worker																1,120.0246
Total																**1,304.7547**

3.5 Building Construction - 2020

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					
Off-Road																919.8523
Total																**919.8523**

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
Vendor																181.3065
Worker																1,079.1111
Total																**1,260.4176**

3.5 Building Construction - 2021

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					
Off-Road																684.5409
Total																**684.5409**

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
Vendor																134.8384

Worker																790.5338
Total																**925.3722**

3.6 Architectural Coating - 2020

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																0.0000
Off-Road																0.0000
Total																**0.0000**

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
Vendor																0.0000
Worker																0.0000
Total																**0.0000**

3.6 Architectural Coating - 2021

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																0.0000
Off-Road																0.0000
Total																**0.0000**

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

Vendor																0.0000
Worker																0.0000
Total																**0.0000**

3.7 Paving - 2021

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					
Off-Road																71.0927
Paving																0.0000
Total																**71.0927**

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
Vendor																12.1700
Worker																22.5944
Total																**34.7644**

Appendix C

Greenhouse Gas Worksheets (Operation)

Crossroads Hollywood

Application for CEQA Streamlining
Appendix C, Greenhouse Gas Worksheets (Operation)

- Summary of GHG Emissions
- Trip Generation
    - Calculation Worksheets and CAPCOA Reduction Measures
    - Tables 8a and 8b of the Traffic Study for Crossroads Hollywood, June 2016
- Energy Calculation Worksheets
- CalEEMod Output Files
    - Baseline-2015
    - Project-2022
    - Project-2030

Crossroads Hollywood
Application for CEQA Streamlining

- Summary of GHG Emissions

Summary of GHG Emissions

	Baseline (2015)	Project	Project Post 2030
Area	28	62	62
Energy	1,160	5,496	4,184
Mobile	2,295	Mobile See Below for Calc	
Waste	33	345	345
Water	241	449	330
Emergency Generators	-	22	22
Total	**3,757**	**6,374**	**4,944**

Summary of Yearly Projections

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-2051	Total Offsets Required
Baseline (2015)	Construction	Construction	Construction	Construction	3757	3757	3757	3757	3757	3757	3757	3757	3757	
Project	3,314	2,229	2,180	1,716	18,051	17,788	17,583	17,321	17,321	17,321	17,321	17,321	15,890	
Shortfall	(3,313.98)	(2,228.75)	(2,180.27)	(1,715.77)	(14,294)	(14,031)	(13,826)	(13,564)	(13,564)	(13,564)	(13,564)	(13,564)	(12,133)	(374,209)
				Annual VMT	29191797	29191797	29191797	29191797	29191797	29191797	29191797	29191797	29191797	
				CARB EF (g/mile)	400	391	384	375	375	375	375	375	375	
				Annual VMT Emissions MTCO2e	11677	11414	11210	10947	10947	10947	10947	10947	10947	

Crossroads Hollywood

Application for CEQA Streamlining

- Trip Generation
  - Calculation Worksheets and CAPCOA Reduction Measures
  - Tables 8a and 8b of the Traffic Study for Crossroads Hollywood, June 2016

PROJECT (Daily Trip Generation)

	size	daily	trip rate	Transit/Walk	Internal	Pass-by	CalEEMod Default Daily Rates weekday	sat	sun	Scalar	Adjusted Daily Rates weekday	sat	sun
Apartments (du)	760	5054	6.65	CalEEMod was used to calculate these reductions			6.59	7.16	6.07	1.01	6.65	7.23	6.13
High-Rise Condominiums (du)	190	1104	5.81	CalEEMod was used to calculate these reductions			6.59	7.16	6.07	0.88	5.81	6.31	5.35
Hotel (rooms)	308	2516	8.17	CalEEMod was used to calculate these reductions			8.17	8.19	5.95	1.00	8.17	8.19	5.95
Office (ksf)	95	1048	11.03	CalEEMod was used to calculate these reductions			11.01	2.37	0.98	1.00	11.03	2.37	0.98
Retail (ksf)	61.8	2639	42.70	CalEEMod was used to calculate these reductions			44.32	42.04	20.43	0.96	42.70	40.50	19.68
Supermarket (ksf)	40	4090	102.24	CalEEMod was used to calculate these reductions			102.24	177.59	166.44	1.00	102.24	177.59	166.44
Rest High Quality (ksf)	41.6	3742	89.95	CalEEMod was used to calculate these reductions			89.95	94.36	72.16	1.00	89.95	94.36	72.16
Rest High Turnover(ksf)	41.6	5289	127.15	CalEEMod was used to calculate these reductions			127.15	158.37	131.84	1.00	127.15	158.37	131.84
Parking Structure (ksf)	1,223.70	0	0.00	CalEEMod was used to calculate these reductions			0	0	0	0.00	0.00	0.00	0.00
Total:		25482											

Existing/Baseline (2015) (Daily Trip Generation)

	size	daily	trip rate	Transit/Walk	Internal	Pass-by	CalEEMod Default Daily Rates weekday	sat	sun	Scalar	Adjusted Daily Rates weekday	sat	sun
Apartments (du)	84	559	6.65	CalEEMod was used to calculate these reductions			6.59	7.16	6.07	1.01	6.65	7.23	6.13
Office (ksf)	79.107	873	11.03	CalEEMod was used to calculate these reductions			11.01	2.37	0.98	1.00	11.03	2.37	0.98
Rest (ksf)	0.475	60	127.15	CalEEMod was used to calculate these reductions			127.15	158.37	131.84	1.00	127.15	158.37	131.84
Retail (ksf)	26.69	1140	42.70	CalEEMod was used to calculate these reductions			44.32	42.04	20.43	0.96	42.70	40.50	19.68
Parking Lot (ksf)	137.6	0	0.00	CalEEMod was used to calculate these reductions			0	0	0	0.00	0.00	0.00	0.00
Total:		2631											

***Note: Trip generation rates were derived from Tables 8a and 8b of the Traffic Study for the Crossroads Hollywood Mixed-Use Development, prepared by Gibson Transportation Consulting, Inc., June 2016. Included as Attachment B

Applicable VMT Reduction Measures selected in CalEEMod based on CAPCOA's Quantifying Greenhouse Gas Mitigation Measures, August, 2010.

LUT-1	Increase Density LUT-1 CAPCOA measures dwellings per acre and jobs per acre .	**Project**	**Baseline**		
	Data Needed: number of housing units per acre or jobs per acre (8 acres)	**DU/Acre**	**Jobs/Acre**		
	Employees: 82 employees for Baseline and 1,660 employees for Project.	207.5	10.25		
	Residential Units: 84 units for Baseline and 950 for Project.	118.75	10.5		
LUT-3	Increase Diversity of Urban and Suburban Developments (Mixed Use) (Internally calculated in CalEEMod based on mix of land uses)				
LUT-4	Increase Destination Accessibility	**Project**	**Existing**		
	Distance to downtown/job center (Los Angeles)	5.5	5.5	miles	
LUT-5	Increase Transit Accessibility (0.5-24.6% reduction)	**Project**	**Existing**		
	Distance to Metro Red Line Station at Hollywood Boulevard and Highland Avenue	0.13	0.13	miles	
LUT-6	Integrate Below Market Rate Housing	**Project**	**Existing**		
	Number of dwelling units below market rate	80	Not Applicable	dwelling units	
LUT-8	Provide pedestrian Network Improvements	**Project**	**Existing**		
		Applicable	Not Applicable		
LUT-9	Improve Walkability Design	**Project**	**Existing**		
	Intersections within one square mile of the Project site	113	113	intersections	
SDT-2	Provide Traffic Calming Measures	**Project**	**Existing**		
	Percent of Streets with sidewalks within one square mile of the Project site	100	Not Applicable	Percent	
	Percent of intersections with crosswalks within one square mile of the Project site	25	Not Applicable	Percent	

DRAFT

TRAFFIC STUDY FOR THE CROSSROADS HOLLYWOOD MIXED-USE DEVELOPMENT

HOLLYWOOD, CALIFORNIA

JUNE 2016

PREPARED FOR

CRE-HAR CROSSROADS SPV, LLC

PREPARED BY

Gibson
transportation consulting, inc.

TABLE 8A
TRIP GENERATION - EXISTING USES

Land Use	ITE Land Use	Size	Weekday						
			Daily	A.M. Peak Hour			P.M. Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation Rates [a]									
Apartments	220	per du	6.65	20%	80%	0.51	65%	35%	0.62
Office	710	per ksf	11.03	88%	12%	1.56	17%	83%	1.49
Shopping Center	820	per ksf	42.70	62%	38%	0.96	48%	52%	3.71
High-Turnover Restaurant	932	per ksf	127.15	55%	45%	10.81	60%	40%	9.85
Apartments	220	84 du	559	9	34	43	34	18	52
Transit/Walk Adjustment - 15% [b]			*(84)*	*(1)*	*(5)*	*(6)*	*(5)*	*(3)*	*(8)*
Subtotal - Residential			***475***	***8***	***29***	***37***	***29***	***15***	***44***
Office	710	79.1 ksf	873	108	15	123	20	98	118
Transit/Walk Adjustment - 15% [b]			*(131)*	*(16)*	*(2)*	*(18)*	*(3)*	*(15)*	*(18)*
Subtotal - Office			***742***	***92***	***13***	***105***	***17***	***83***	***100***
Shopping Center [d]	820	26.7 ksf	1,140	16	10	26	48	51	99
Transit/Walk Adjustment - 15% [b]			*(171)*	*(2)*	*(2)*	*(4)*	*(7)*	*(8)*	*(15)*
Pass-by Adjustment - 40% [c]			*(388)*	*(6)*	*(3)*	*(9)*	*(16)*	*(18)*	*(34)*
Subtotal - Shopping Center			***581***	***8***	***5***	***13***	***25***	***25***	***50***
High-Turnover Restaurant	932	0.5 ksf	60	3	2	5	3	2	5
Transit/Walk Adjustment - 15% [b]			*(9)*	*0*	*(1)*	*(1)*	*0*	*(1)*	*(1)*
Pass-by Adjustment - 20% [c]			*(10)*	*(1)*	*0*	*(1)*	*(1)*	*0*	*(1)*
Subtotal - High-Turnover Restaurant			***41***	***2***	***1***	***3***	***2***	***1***	***3***
Total - Existing Uses			**1,839**	**110**	**48**	**158**	**73**	**124**	**197**

ksf: 1,000 square feet
du: dwelling units
[a] Source: *Trip Generation, 9th Edition*, Institute of Transportation Engineers, 2012.
[b] The Project site is located within a 1/4 mile of the Metro Red Line Hollywood Highland station and a RapidBus stop, therefore a 15% transit adjustment was applied, per *Traffic Study Polices and Procedures* (LADOT, August 2014).
[c] Pass-by adjustments account for Project trips made as an intermediate stop on the way from an origin to a primary trip destination without route diversion.

TABLE 8B
TRIP GENERATION - PROJECT

Land Use	ITE Land Use	Size	Weekday						
			Daily	A.M. Peak Hour			P.M. Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation Rates [a]									
Apartments	220	per du	6.65	20%	80%	0.51	65%	35%	0.62
Condominiums	230	per du	5.81	17%	83%	0.44	67%	33%	0.52
Hotel	310	per room	8.17	59%	41%	0.53	51%	49%	0.60
Office	710	per ksf	11.03	88%	12%	1.56	17%	83%	1.49
Shopping Center	820	per ksf	42.70	62%	38%	0.96	48%	52%	3.71
Supermarket	850	per ksf	102.24	62%	38%	3.40	51%	49%	9.48
Quality Restaurant	931	per ksf	89.95	55%	45%	0.81	67%	33%	7.49
High-Turnover Restaurant	932	per ksf	127.15	55%	45%	10.81	60%	40%	9.85
Proposed Project									
Apartments	220	760 du	5,054	78	310	388	306	165	471
Transit/Walk Adjustment - 15% [b]			*(758)*	*(12)*	*(46)*	*(58)*	*(46)*	*(25)*	*(71)*
Subtotal - Apartments			***4,296***	***66***	***264***	***330***	***260***	***140***	***400***
Condominiums	230	190 du	1,104	14	70	84	66	33	99
Transit/Walk Adjustment - 15% [b]			*(166)*	*(2)*	*(11)*	*(13)*	*(10)*	*(5)*	*(15)*
Subtotal - Condominiums			***938***	***12***	***59***	***71***	***56***	***28***	***84***
Hotel [c]	310	308 rooms	2,516	96	67	163	94	91	185
Transit/Walk Adjustment - 15% [b]			*(377)*	*(14)*	*(10)*	*(24)*	*(14)*	*(14)*	*(28)*
Subtotal - Hotel			***2,139***	***82***	***57***	***139***	***80***	***77***	***157***
Office	710	95.0 ksf	1,048	130	18	148	24	118	142
Transit/Walk Adjustment - 15% [b]			*(157)*	*(20)*	*(2)*	*(22)*	*(4)*	*(17)*	*(21)*
Subtotal - Office			***891***	***110***	***16***	***126***	***20***	***101***	***121***
Shopping Center [d]	820	61.8 ksf	2,637	37	22	59	110	119	229
Transit/Walk Adjustment - 15% [b]			*(396)*	*(6)*	*(3)*	*(9)*	*(17)*	*(17)*	*(34)*
Internal Capture Adjustment - 10% [e]			*(224)*	*(3)*	*(2)*	*(5)*	*(9)*	*(11)*	*(20)*
Pass-by Adjustment - 40% [f]			*(807)*	*(11)*	*(7)*	*(18)*	*(34)*	*(36)*	*(70)*
Subtotal - Shopping Center			***1,210***	***17***	***10***	***27***	***50***	***55***	***105***
Supermarket	850	40.0 ksf	4,090	84	52	136	193	186	379
Transit/Walk Adjustment - 15% [b]			*(614)*	*(13)*	*(7)*	*(20)*	*(29)*	*(28)*	*(57)*
Internal Capture Adjustment - 10% [e]			*(348)*	*(7)*	*(5)*	*(12)*	*(16)*	*(16)*	*(32)*
Pass-by Adjustment - 40% [f]			*(1,251)*	*(26)*	*(16)*	*(42)*	*(59)*	*(57)*	*(116)*
Subtotal - Supermarket			***1,877***	***38***	***24***	***62***	***89***	***85***	***174***
Quality Restaurant	931	41.6 ksf	3,744	19	15	34	187	125	312
Transit/Walk Adjustment - 15% [b]			*(562)*	*(3)*	*(2)*	*(5)*	*(28)*	*(19)*	*(47)*
Internal Capture Adjustment - 15% [e]			*(477)*	*(2)*	*(2)*	*(4)*	*(24)*	*(16)*	*(40)*
Pass-by Adjustment - 10% [f]			*(271)*	*(1)*	*(2)*	*(3)*	*(14)*	*(9)*	*(23)*
Subtotal - Quality Restaurant			***2,434***	***13***	***9***	***22***	***121***	***81***	***202***
High-Turnover Restaurant	932	41.6 ksf	5,293	248	202	450	246	164	410
Transit/Walk Adjustment - 15% [b]			*(794)*	*(37)*	*(31)*	*(68)*	*(37)*	*(25)*	*(62)*
Internal Capture Adjustment - 15% [e]			*(675)*	*(32)*	*(25)*	*(57)*	*(31)*	*(21)*	*(52)*
Pass-by Adjustment - 20% [f]			*(765)*	*(36)*	*(29)*	*(65)*	*(36)*	*(23)*	*(59)*
Subtotal - High-Turnover Restaurant			***3,059***	***143***	***117***	***260***	***142***	***95***	***237***
Total - Proposed Project			**16,844**	**481**	**556**	**1,037**	**818**	**662**	**1,480**
Total - Existing Uses [g]			**(1,839)**	**(110)**	**(48)**	**(158)**	**(73)**	**(124)**	**(197)**
Total - Net New Project Trips			**15,005**	**371**	**508**	**879**	**745**	**538**	**1,283**

ksf: 1,000 square feet
du: dwelling units
[a] Source: *Trip Generation, 9th Edition*, Institute of Transportation Engineers, 2012.
[b] The Project site is located within a 1/4 mile of the Metro Red Line Hollywood Highland station and a RapidBus stop, therefore a 15% transit adjustment was applied, per *Traffic Study Polices and Procedures* (LADOT, August 2014).
[c] Hotel trip rates includes ancillary conference/meeting rooms, a lobby lounge and bar, rooftop bar and lounge, guest amenities, as well as retail and restaurant space. However, the retail and restaurant uses within the hotel were considered separately and included in the total retail and restaurant square footage to provide a conservative analysis.
[d] Shopping center includes retail, restaurant, and recreational uses.
[e] Internal capture adjustments account for person trips made between distinct land uses within a mixed-use development without using an off-site road system (e.g., hotel guests visiting retail/restaurant uses).
[f] Pass-by adjustments account for Project trips made as an intermediate stop on the way from an origin to a primary trip destination without route diversion.
[g] See Table 3-A for calcuation of the Existing Use trip generation.

Crossroads Hollywood

Application for CEQA Streamlining

- Energy Calculation Worksheets

ENERGY

Baseline

	CalEEMod Default					CalEEMod Adjustment to Reflect 2005 Title 24 Standards					Total Electricity	Total Natural Gas	Total Electricity	Total Natural Gas
EnergyUseLandUseSubType	**T24E**	**NT24E**	**Lighting**	**T24NG**	**NT24NG**	**T24E**	**NT24E**	**Lighting**	**T24NG**	**NT24NG**	**KWhr/size/yr**	**KBTU/size/yr**	**MWhr/yr**	**MMBTU/yr**
Apartment Low Rise	137.3059	2630.88	810.36	10855.89	2578.64	170.99	2630.88	810.36	11673.00	2578.64	3,612.2	14,251.6	303	1,197
General Office Building	5.62	4.62	4.29	10.54	0.39	5.99	4.62	4.63	12.05	0.39	15.2	12.4	1,206	984
High Turnover (Sit Down Restaurant)	9.91	28.16	8.84	45.23	187.78	10.52	28.16	9.64	46.57	187.78	48.3	234.4	23	111
Parking Lot	0	0	0.876	0	0	0.00	0.00	0.88	0.00	0.00	0.9	-	121	-
Strip Mall	4.9	3.23	7.04	1.21	0.49	5.17	3.23	7.56	1.33	0.49	16.0	1.8	426	49
												Total:	**2,079**	**2,341**

Baseline Note: CalEEMod provides for the use of historical data (Consistent with 2005 Title 24 Standards). The Baseline condition conservatively assumed consistency with 2005 Title 24 Standards.

Project

	CalEEMod Default					CalEEMod Adjustment to Reflect 2016 Title 24 Standards					Total Electricity	Total Natural Gas	Total Electricity	Total Natural Gas
EnergyUseLandUseSubType	**T24E**	**NT24E**	**Lighting**	**T24NG**	**NT24NG**	**T24E**	**NT24E**	**Lighting**	**T24NG**	**NT24NG**	**KWhr/size/yr**	**KBTU/size/yr**	**MWhr/yr**	**MMBTU/yr**
Apartments High Rise	185.97	2553.86	741.44	5157.8	1662	87.41	2553.86	741.44	3868.35	1662.00	3,382.7	5,530.4	2,571	4,203
Condo/Townhouse High Rise	230.21	3125.85	1001.1	14173.61	3046.55	108.20	3125.85	1001.10	10630.21	3046.55	4,235.2	13,676.8	805	2,599
Enclosed Parking with Elevator	3.92	0.19	2.63	0	0	0.40	0.19	2.33	0	0	2.9	-	3,573	-
General Office Building	5.62	4.62	4.29	10.54	0.39	3.65	4.62	4.29	7.38	0.39	12.6	7.8	1,193	738
High Turnover (Sit Down Restaurant)	9.91	28.16	8.84	45.23	187.78	6.44	28.16	8.84	31.66	187.78	43.4	219.4	1,807	9,129
Hotel	3.12	2.89	2.49	20.96	4.06	2.03	2.89	2.49	14.67	4.06	7.4	18.7	2,582	6,527
Quality Restaurant	9.91	28.16	8.84	45.23	187.78	6.44	28.16	8.84	31.66	187.78	43.4	219.4	1,807	9,129
Strip Mall	4.9	3.23	7.04	1.21	0.49	3.19	3.23	7.04	0.85	0.49	13.5	1.3	832	83
Supermarket	5.4	25.88	7.89	10.35	12.24	3.51	25.88	7.89	7.25	12.24	37.3	19.5	1,491	780
												Total:	**16,662**	**33,187**
Reduction in energy usage from additional Project Features associated with LEED Silver (i.e., Exceed 2016 Title 24 requirements by 15%, Energy Star-labeled products and appliancies, and use of energy efficent lighting (25%)													(2,343)	(2,062)
Reduction in energy usage from photovaletic solar panesl (187,690 kWh/year at Statewide average of 595 lbs of CO2eq per kW generated)													(188)	
												Total:	14,131	31,125

Project Note: CalEEMod default energy factors reflect 2008 Title 24 Standards. Therefore, adjustments were made to account for improvements in 20013 and 2016 standards.
- -2013 Standards reduce Title 24 energy requirements by 25% for residential and 30% for non residential (Website www.energy.ca.gov/releases/2012_releases/2012-05-31_energy_commission_approves_more_efficient_buildings_nr.html.
- -2016 Standards reduce Title 24 electricity requirements by 28% for residential and 5% for non residential (Website www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf, accessed April 7, 2016.
- -Project Title 24 electricity usage rates are futher reduced by 15% for LEED Silver, Installation of High Efficiency Lighting (25%), and use of Energy Star Appliances (calculated within CalEEMod
- -The reduction in GHG emissions from Project Features are calculated internally within CalEEMod and reflect The difference between the unmitigated versus the mitigated scenario

Emergency Generators (2-1,500 kW, 1-1,250 kW, 1-505 kW, and 4-400 kW):
- -Total Electricty Generated = 6,355 kW or 8,519 Hp
- -Load Factor of 0.73; Tested for 30 minutes once per month
- -Emission Factor = 1.16 lb/hp-hr (US EPA AP-42, Table 3.4-1 (Gaseous Emission Factors for Large Stationary Diesel Engines))
- -Annual Emissions = **21.6** tons per year

Calculation of Carbon Intensity Factor for RPS of 50 Percent (Consistent with SB 350)
- -ARB provided factor for 2020 representing a 33% RPS = 595 lb/MWh
- -Adjsutment for 2030 RPS 50% = (50%-33%)/50%=-34%
- -Post 2030 factor = 1-34%) x 595 = 393 lb/MWh

Consistent with Section 120.6(c), Mandatory Requirements for Enclosed Parking Garages, the ventilation rate shall be at least 0.15 cfm/sq f when the garage is scheduled to be occupied.

Parking Garage Ventilation

Square Footage =	1223700	ft2
Minimum Ventilation =	0.15	cfm/ft2
Flowrate =	183555	cfm
Number of Fans (21,000 cfm)	8.7	fans
Number of Fans	9	fans
Horsepower per Fan	15	hp
Horsepower to kW Conv.	0.746	kW per hp
Total kW =	100.71	
Annual kW =	441,110	conservatively assumes operational 50 percent of the time even though it would only be operational when CO sensors read CO concentrations in excess of 25 ppm (2013 Building Energy Efficiency Stanards
Usage Rate:	**0.36**	kWh/sq ft annual
Adjustment:	0.40	(CalEEMod applies mititgation to all land uses. So, this adjustement accounts for the 10% reduction in Title 24 standards associated with LEED Silver)

Parking Garage Lighting

Square Footage =	1223700	ft2
Allowed Lighting Power =	0.2	watts per ft2 (Table 140.6 (Complete Building Method Lighting Power Density Value) of the 2013 Building Energy Efficiency Standards)
Annual kW =	2,138,563	conservatively assumes maximum lighting power 24 hours per day)
Annual kW/sq ft =	**1.75**	kWh/sq ft annual
Adjustment:	2.33	(CalEEMod applies mititgation to all land uses. So, this adjustement accounts for the 25% reduction in lighting associated with LEED Silver)

Elevator (no change CalEEMod Default) **0.19** kWh/sq ft annual

Crossroads Hollywood

Application for CEQA Streamlining

- CalEEMod Output Files
  - Baseline-2015
  - Project-2022
  - Project-2030

Crossroads Existing Conditions

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	79.11	1000sqft	1.00	79,107.00	0
Parking Lot	344.00	Space	2.00	137,600.00	0
High Turnover (Sit Down Restaurant)	0.48	1000sqft	0.01	475.00	0
Apartments Low Rise	84.00	Dwelling Unit	4.00	66,301.00	240
Strip Mall	26.69	1000sqft	1.00	26,690.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2015
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1094	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2013

Land Use - Site Specific

Vehicle Trips - Project Specific Traffic Study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves -

Energy Use - Existing Uses

Water And Wastewater -

Solid Waste -

Mobile Land Use Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	79,110.00	79,107.00
tblLandUse	LandUseSquareFeet	480.00	475.00
tblLandUse	LandUseSquareFeet	84,000.00	66,301.00
tblLandUse	LotAcreage	1.82	1.00
tblLandUse	LotAcreage	3.10	2.00
tblLandUse	LotAcreage	5.25	4.00
tblLandUse	LotAcreage	0.61	1.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	1094
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	7.16	7.23
tblVehicleTrips	ST_TR	42.04	40.50
tblVehicleTrips	SU_TR	6.07	6.13
tblVehicleTrips	SU_TR	20.43	19.68

tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	44.32	42.70

2.0 Emissions Summary

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																28.2725
Energy																1,159.6972
Mobile																2,865.9802
Waste																66.3904
Water																240.5294
Total																**4,360.8697**

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																28.2725
Energy																1,159.6972
Mobile																2,295.3725
Waste																33.1952
Water																240.5185
Total																**3,757.0558**

	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	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**13.85**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

	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																2,295.3725
Unmitigated																2,865.9802

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	558.60	607.32	514.92	1,911,281	1,518,587
General Office Building	872.58	187.49	77.53	2,129,816	1,692,221
High Turnover (Sit Down Restaurant)	61.03	76.02	63.28	86,532	68,753
Parking Lot	0.00	0.00	0.00		
Strip Mall	1,139.66	1,080.95	525.26	1,985,363	1,577,448
Total	2,631.88	1,951.77	1,180.99	6,112,993	4,857,008

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.534619	0.058604	0.178185	0.126004	0.038986	0.006286	0.016079	0.029769	0.002429	0.003158	0.003693	0.000543	0.001646

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

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																1,034.0057
Electricity Unmitigated																1,034.0057
NaturalGas Mitigated																125.6914
NaturalGas Unmitigated																125.6914

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					
Apartments Low Rise	1.19714e+006																64.2726
General Office Building	984091																52.8344
High Turnover (Sit Down Restaurant)	111316																5.9764
Parking Lot	0																0.0000
Strip Mall	48575.8																2.6080
Total																	**125.6914**

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					
General Office Building	984091																52.8344
High Turnover (Sit Down Restaurant)	111316																5.9764
Parking Lot	0																0.0000
Strip Mall	48575.8																2.6080
Apartments Low Rise	1.19714e+006																64.2726
Total																	**125.6914**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	303427				150.9096
General Office Building	1.20559e+006				599.6005
High Turnover (Sit Down Restaurant)	22952				11.4152
Parking Lot	121088				60.2231
Strip Mall	425972				211.8574
Total					**1,034.0057**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	303427				150.9096
General Office Building	1.20559e+006				599.6005
High Turnover (Sit Down Restaurant)	22952				11.4152
Parking Lot	121088				60.2231
Strip Mall	425972				211.8574
Total					**1,034.0057**

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																28.2725
Unmitigated																28.2725

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																0.0000
Consumer Products																0.0000
Hearth																26.8147
Landscaping																1.4578
Total																**28.2725**

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																0.0000
Consumer Products																0.0000

Hearth																26.8147
Landscaping																1.4578
Total																**28.2725**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				240.5185
Unmitigated				240.5294

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	5.47294 / 3.45033				61.2945
General Office Building	14.0605 / 8.61774				156.1094
High Turnover (Sit Down Restaurant)	0.145696 / 0.0092997				1.1756
Parking Lot	0 / 0				0.0000
Strip Mall	1.977 / 1.21171				21.9500
Total					**240.5294**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	5.47294 / 3.45033				61.2917
General Office Building	14.0605 / 8.61774				156.1023
High Turnover (Sit Down Restaurant)	0.145696 / 0.0092997				1.1755
Parking Lot	0 / 0				0.0000
Strip Mall	1.977 / 1.21171				21.9490
Total					**240.5185**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				33.1952
Unmitigated				66.3904

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	38.64				17.5780
General Office Building	73.57				33.4682
High Turnover (Sit Down Restaurant)	5.71				2.5976
Parking Lot	0				0.0000
Strip Mall	28.02				12.7467
Total					**66.3904**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	19.32				8.7890
General Office Building	36.785				16.7341
High Turnover (Sit Down Restaurant)	2.855				1.2988
Parking Lot	0				0.0000
Strip Mall	14.01				6.3734
Total					**33.1952**

9.0 Operational Offroad

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

Crossroads Project Conditions

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	95.00	1000sqft	8.00	95,000.00	0
Enclosed Parking with Elevator	2,494.00	Space	0.00	1,223,700.00	0
High Turnover (Sit Down Restaurant)	41.60	1000sqft	0.00	41,600.00	0
Hotel	308.00	Room	0.00	348,500.00	0
Quality Restaurant	41.60	1000sqft	0.00	41,600.00	0
Apartments High Rise	760.00	Dwelling Unit	0.00	643,200.00	2174
Condo/Townhouse High Rise	190.00	Dwelling Unit	0.00	160,800.00	543
Strip Mall	61.80	1000sqft	0.00	61,800.00	0
Supermarket	40.00	1000sqft	0.00	40,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	595	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - ARB Statewide CO2 Intensity Factor for RPS of 33 percent

Land Use - Site Specific

Trips and VMT -

Architectural Coating -

Vehicle Trips - Project Specific Traffic Study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - No fireplaces within residences

Area Coating -

Energy Use - Land uses adjusted to account for 2013/2016 Building Energy Efficiency Standards.

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation - Consistency with Title 24.

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblApplianceMitigation	PercentImprovement	30.00	15.00

tblApplianceMitigation	PercentImprovement	50.00	30.00
tblApplianceMitigation	PercentImprovement	15.00	30.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	926,100.00	813,050.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,778,300.00	2,439,150.00
tblAreaCoating	Area_Nonresidential_Interior	2778300	2439150
tblEnergyUse	LightingElect	2.63	2.33
tblEnergyUse	T24E	185.97	87.41
tblEnergyUse	T24E	230.21	108.20
tblEnergyUse	T24E	3.92	0.40
tblEnergyUse	T24E	5.62	3.65
tblEnergyUse	T24E	9.91	6.44
tblEnergyUse	T24E	3.12	2.03
tblEnergyUse	T24E	9.91	6.44
tblEnergyUse	T24E	4.90	3.19
tblEnergyUse	T24E	5.40	3.51
tblEnergyUse	T24NG	5,157.80	3,868.35
tblEnergyUse	T24NG	14,173.61	10,630.21
tblEnergyUse	T24NG	10.54	7.38
tblEnergyUse	T24NG	45.23	31.66
tblEnergyUse	T24NG	20.96	14.67
tblEnergyUse	T24NG	45.23	31.66
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	10.35	7.25
tblFireplaces	NumberGas	646.00	0.00
tblFireplaces	NumberGas	161.50	190.00
tblFireplaces	NumberNoFireplace	76.00	760.00
tblFireplaces	NumberNoFireplace	19.00	0.00
tblFireplaces	NumberWood	38.00	0.00
tblFireplaces	NumberWood	9.50	0.00
tblLandUse	LandUseSquareFeet	997,600.00	1,223,700.00
tblLandUse	LandUseSquareFeet	447,216.00	348,500.00
tblLandUse	LandUseSquareFeet	760,000.00	643,200.00
tblLandUse	LandUseSquareFeet	190,000.00	160,800.00
tblLandUse	LotAcreage	2.18	8.00
tblLandUse	LotAcreage	22.45	0.00
tblLandUse	LotAcreage	0.96	0.00
tblLandUse	LotAcreage	10.27	0.00
tblLandUse	LotAcreage	0.96	0.00
tblLandUse	LotAcreage	12.26	0.00
tblLandUse	LotAcreage	2.97	0.00
tblLandUse	LotAcreage	1.42	0.00
tblLandUse	LotAcreage	0.92	0.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	595
tblProjectCharacteristics	OperationalYear	2014	2022
tblTripsAndVMT	VendorTripNumber	405.00	368.00
tblTripsAndVMT	WorkerTripNumber	1,442.00	1,347.00
tblTripsAndVMT	WorkerTripNumber	288.00	269.00
tblVehicleTrips	ST_TR	7.16	7.23
tblVehicleTrips	ST_TR	7.16	6.31
tblVehicleTrips	ST_TR	42.04	40.50

tblVehicleTrips	SU_TR	6.07	6.13
tblVehicleTrips	SU_TR	6.07	5.35
tblVehicleTrips	SU_TR	20.43	19.68
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	6.59	5.81
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	44.32	42.70
tblWoodstoves	NumberCatalytic	38.00	0.00
tblWoodstoves	NumberCatalytic	9.50	0.00
tblWoodstoves	NumberNoncatalytic	38.00	0.00
tblWoodstoves	NumberNoncatalytic	9.50	0.00

2.0 Emissions Summary

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																62.3120
Energy																6,297.1705
Mobile																21,389.2569
Waste																690.3211
Water																743.7520
Total																**29,182.8125**

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																62.3120
Energy																5,551.5819
Mobile																12,138.4979
Waste																345.1606
Water																449.0241
Total																**18,546.5765**

	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	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**36.45**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

Improve Pedestrian Network

Provide Traffic Calming Measures

	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					
Unmitigated																21,389.2569
Mitigated																12,138.4979

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	5,054.00	5,494.80	4658.80	17,292,546	9,496,182
Condo/Townhouse High Rise	1,103.90	1,198.90	1016.50	3,775,904	2,073,533
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	1,047.85	225.15	93.10	2,557,610	1,404,509
High Turnover (Sit Down Restaurant)	5,289.44	6,588.19	5484.54	7,499,449	4,118,314
Hotel	2,516.36	2,522.52	1832.60	5,773,484	3,170,502
Quality Restaurant	3,741.92	3,925.38	3001.86	5,213,914	2,863,215
Strip Mall	2,638.86	2,502.90	1216.22	4,597,057	2,524,469
Supermarket	4,089.60	7,103.60	6657.60	6,448,292	3,541,072
Total	25,481.93	29,561.44	23,961.22	53,158,256	29,191,797

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.524776	0.057859	0.179826	0.126122	0.039940	0.006459	0.017277	0.035948	0.002564	0.003184	0.003733	0.000527	0.001784

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	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					
NaturalGas Mitigated																1,671.0319
NaturalGas Unmitigated																1,781.7640
Electricity Mitigated																3,880.5500
Electricity Unmitigated																4,515.4066

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					
Apartments High Rise	4.20307e+006																225.6566
Condo/Townhouse High Rise	2.59858e+006																139.5143
Enclosed Parking with Elevator	0																0.0000
General Office Building	738150																39.6302
High Turnover (Sit Down Restaurant)	9.1287e+006																490.1071
Hotel	6.52741e+006																350.4471
Quality Restaurant	9.1287e+006																490.1071
Strip Mall	82812																4.4461
Supermarket	779600																41.8556
Total																	**1,781.7640**

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					

Condo/Townhouse High Rise	2.29562e+006																123.2487
Enclosed Parking with Elevator	0																0.0000
General Office Building	632985																33.9841
High Turnover (Sit Down Restaurant)	8.93115e+006																479.5005
Hotel	5.76053e+006																309.2747
Quality Restaurant	8.93115e+006																479.5005
Strip Mall	74932.5																4.0230
Supermarket	736100																39.5202
Apartments High Rise	3.76207e+006																201.9804
Total																	**1,671.0319**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.57086e+006				696.7219
Condo/Townhouse High Rise	804678				218.0738
Enclosed Parking with Elevator	3.5732e+006				968.3647
General Office Building	1.1932e+006				323.3660
High Turnover (Sit Down Restaurant)	1.8071e+006				489.7385
Hotel	2.58239e+006				699.8454
Quality Restaurant	1.8071e+006				489.7385
Strip Mall	831828				225.4315
Supermarket	1.4912e+006				404.1262
Total					**4,515.4066**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.33572e+006				632.9978
Condo/Townhouse High Rise	726382				196.8549
Enclosed Parking with Elevator	2.78698e+006				755.2913
General Office Building	1.02277e+006				277.1782
High Turnover (Sit Down Restaurant)	1.67498e+006				453.9326
Hotel	2.21332e+006				599.8270

Quality Restaurant	1.60778e+006				435.7196
Strip Mall	693489				187.9406
Supermarket	1.25756e+006				340.8080
Total					**3,880.5500**

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					
Unmitigated																62.3120
Mitigated																62.3120

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																0.0000
Consumer Products																0.0000
Hearth																45.9037
Landscaping																16.4082
Total																**62.3120**

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																0.0000
Consumer Products																0.0000
Hearth																45.9037
Landscaping																16.4082
Total																**62.3120**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated				743.7520
Mitigated				449.0241

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	49.5171 / 31.2173				330.1308
Condo/Townhouse High Rise	12.3793 / 7.80432				82.5327
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	16.8847 / 10.3487				111.6793
High Turnover (Sit Down Restaurant)	12.627 / 0.805979				62.6429
Hotel	7.81297 / 0.868107				39.8726
Quality Restaurant	12.627 / 0.805979				62.6429
Strip Mall	4.57768 / 2.80568				30.2778
Supermarket	4.93073 / 0.152497				23.9730
Total					**743.7520**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	32.1861 / 15.6086				196.5442
Condo/Townhouse High Rise	8.04652 / 3.90216				49.1360
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	10.9751 / 5.17435				66.5735
High Turnover (Sit Down Restaurant)	8.20755 / 0.402989				39.3486
Hotel	5.07843 / 0.434054				24.9031
Quality Restaurant	8.20755 / 0.402989				39.3486

Strip Mall	2.97549 / 1.40284			18.0490
Supermarket	3.20497 / 0.0762484			15.1211
Total				**449.0241**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				345.1606
Unmitigated				690.3211

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	349.6				159.0386
Condo/Townhouse High Rise	87.4				39.7596
Enclosed Parking with Elevator	0				0.0000
General Office Building	88.35				40.1918
High Turnover (Sit Down Restaurant)	495.04				225.2015
Hotel	168.63				76.7125
Quality Restaurant	37.96				17.2686
Strip Mall	64.89				29.5195
Supermarket	225.6				102.6290
Total					**690.3211**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	174.8				79.5193

Condo/Townhouse High Rise	43.7			19.8798
Enclosed Parking with Elevator	0			0.0000
General Office Building	44.175			20.0959
High Turnover (Sit Down Restaurant)	247.52			112.6008
Hotel	84.315			38.3562
Quality Restaurant	18.98			8.6343
Strip Mall	32.445			14.7597
Supermarket	112.8			51.3145
Total				**345.1606**

9.0 Operational Offroad

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

10.0 Vegetation

Crossroads Project Conditions-Post 2030 for RPS of 50%

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	95.00	1000sqft	8.00	95,000.00	0
Enclosed Parking with Elevator	2,494.00	Space	0.00	1,223,700.00	0
High Turnover (Sit Down Restaurant)	41.60	1000sqft	0.00	41,600.00	0
Hotel	308.00	Room	0.00	348,500.00	0
Quality Restaurant	41.60	1000sqft	0.00	41,600.00	0
Apartments High Rise	760.00	Dwelling Unit	0.00	643,200.00	2174
Condo/Townhouse High Rise	190.00	Dwelling Unit	0.00	160,800.00	543
Strip Mall	61.80	1000sqft	0.00	61,800.00	0
Supermarket	40.00	1000sqft	0.00	40,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2030
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	393	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - ARB Statewide CO2 Intensity Factor for RPS Post 2030

Land Use - Site Specific

Trips and VMT -

Architectural Coating -

Vehicle Trips - Project Specific Traffic Study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - No fireplaces within residences

Area Coating -

Energy Use - Land uses adjusted to account for 2013/2016 Building Energy Efficiency Standards.

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation - Consistency with Title 24.

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblApplianceMitigation	PercentImprovement	30.00	15.00

tblApplianceMitigation	PercentImprovement	50.00	30.00
tblApplianceMitigation	PercentImprovement	15.00	30.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	926,100.00	813,050.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,778,300.00	2,439,150.00
tblAreaCoating	Area_Nonresidential_Interior	2778300	2439150
tblEnergyUse	LightingElect	2.63	2.33
tblEnergyUse	T24E	185.97	87.41
tblEnergyUse	T24E	230.21	108.20
tblEnergyUse	T24E	3.92	0.40
tblEnergyUse	T24E	5.62	3.65
tblEnergyUse	T24E	9.91	6.44
tblEnergyUse	T24E	3.12	2.03
tblEnergyUse	T24E	9.91	6.44
tblEnergyUse	T24E	4.90	3.19
tblEnergyUse	T24E	5.40	3.51
tblEnergyUse	T24NG	5,157.80	3,868.35
tblEnergyUse	T24NG	14,173.61	10,630.21
tblEnergyUse	T24NG	10.54	7.38
tblEnergyUse	T24NG	45.23	31.66
tblEnergyUse	T24NG	20.96	14.67
tblEnergyUse	T24NG	45.23	31.66
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	10.35	7.25
tblFireplaces	NumberGas	646.00	0.00
tblFireplaces	NumberGas	161.50	190.00
tblFireplaces	NumberNoFireplace	76.00	760.00
tblFireplaces	NumberNoFireplace	19.00	0.00
tblFireplaces	NumberWood	38.00	0.00
tblFireplaces	NumberWood	9.50	0.00
tblLandUse	LandUseSquareFeet	997,600.00	1,223,700.00
tblLandUse	LandUseSquareFeet	447,216.00	348,500.00
tblLandUse	LandUseSquareFeet	760,000.00	643,200.00
tblLandUse	LandUseSquareFeet	190,000.00	160,800.00
tblLandUse	LotAcreage	2.18	8.00
tblLandUse	LotAcreage	22.45	0.00
tblLandUse	LotAcreage	0.96	0.00
tblLandUse	LotAcreage	10.27	0.00
tblLandUse	LotAcreage	0.96	0.00
tblLandUse	LotAcreage	12.26	0.00
tblLandUse	LotAcreage	2.97	0.00
tblLandUse	LotAcreage	1.42	0.00
tblLandUse	LotAcreage	0.92	0.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	393
tblProjectCharacteristics	OperationalYear	2014	2022
tblTripsAndVMT	VendorTripNumber	405.00	368.00
tblTripsAndVMT	WorkerTripNumber	1,442.00	1,347.00
tblTripsAndVMT	WorkerTripNumber	288.00	269.00
tblVehicleTrips	ST_TR	7.16	7.23
tblVehicleTrips	ST_TR	7.16	6.31
tblVehicleTrips	ST_TR	42.04	40.50

tblVehicleTrips	SU_TR	6.07	6.13
tblVehicleTrips	SU_TR	6.07	5.35
tblVehicleTrips	SU_TR	20.43	19.68
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	6.59	5.81
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	44.32	42.70
tblWoodstoves	NumberCatalytic	38.00	0.00
tblWoodstoves	NumberCatalytic	9.50	0.00
tblWoodstoves	NumberNoncatalytic	38.00	0.00
tblWoodstoves	NumberNoncatalytic	9.50	0.00

2.0 Emissions Summary

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	See Project 2022 CalEEMod Output															
Energy																4,770.5439
Mobile	See Project 2022 CalEEMod Output															
Waste	See Project 2022 CalEEMod Output															
Water																543.1739
Total																

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	See Project 2022 CalEEMod Output															
Energy																4,239.5957
Mobile	See Project 2022 CalEEMod Output															
Waste																345.1606
Water	See Project 2022 CalEEMod Output															
Total																

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.66

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	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					
NaturalGas Mitigated																1,671.0319
NaturalGas Unmitigated																1,781.7640
Electricity Mitigated																2,568.5638
Electricity Unmitigated																2,988.7799

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					
Apartments High Rise	4.20307e+006																225.6566
Condo/Townhouse High Rise	2.59858e+006																139.5143
Enclosed Parking with Elevator	0																0.0000
General Office Building	738150																39.6302
High Turnover (Sit Down Restaurant)	9.1287e+006																490.1071
Hotel	6.52741e+006																350.4471
Quality Restaurant	9.1287e+006																490.1071
Strip Mall	82812																4.4461
Supermarket	779600																41.8556
Total																	**1,781.7640**

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					
Condo/Townhouse High Rise	2.29562e+006																123.2487
Enclosed Parking with Elevator	0																0.0000
General Office Building	632985																33.9841
High Turnover (Sit Down Restaurant)	8.93115e+006																479.5005
Hotel	5.76053e+006																309.2747
Quality Restaurant	8.93115e+006																479.5005
Strip Mall	74932.5																4.0230
Supermarket	736100																39.5202
Apartments High Rise	3.76207e+006																201.9804
Total																	**1,671.0319**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.57086e+006				461.1652
Condo/Townhouse High Rise	804678				144.3446
Enclosed Parking with Elevator	3.5732e+006				640.9675
General Office Building	1.1932e+006				214.0383
High Turnover (Sit Down Restaurant)	1.8071e+006				324.1614
Hotel	2.58239e+006				463.2327
Quality Restaurant	1.8071e+006				324.1614
Strip Mall	831828				149.2147
Supermarket	1.4912e+006				267.4940
Total					**2,988.7799**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.33572e+006				418.9858
Condo/Townhouse High Rise	726382				130.2997
Enclosed Parking with Elevator	2.78698e+006				499.9327

General Office Building	1.02277e+006				183.4662
High Turnover (Sit Down Restaurant)	1.67498e+006				300.4612
Hotel	2.21332e+006				397.0298
Quality Restaurant	1.60778e+006				288.4059
Strip Mall	693489				124.3992
Supermarket	1.25756e+006				225.5833
Total					**2,568.5638**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated				543.1739
Mitigated				330.2837

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	49.5171 / 31.2173				239.2762
Condo/Townhouse High Rise	12.3793 / 7.80432				59.8190
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	16.8847 / 10.3487				81.0003
High Turnover (Sit Down Restaurant)	12.627 / 0.805979				46.7577
Hotel	7.81297 / 0.868107				29.6676
Quality Restaurant	12.627 / 0.805979				46.7577
Strip Mall	4.57768 / 2.80568				21.9603
Supermarket	4.93073 / 0.152497				17.9351
Total					**543.1739**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	32.1861 / 15.6086				143.5881
Condo/Townhouse High Rise	8.04652 / 3.90216				35.8970
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	10.9751 / 5.17435				48.6668
High Turnover (Sit Down Restaurant)	8.20755 / 0.402989				29.4862
Hotel	5.07843 / 0.434054				18.6127
Quality Restaurant	8.20755 / 0.402989				29.4862
Strip Mall	2.97549 / 1.40284				13.1943
Supermarket	3.20497 / 0.0762484				11.3524
Total					**330.2837**