APPENDIX A

Air Quality Impact Analysis

for

Mission Canyon Park Project
Santa Monica Mountains
Los Angeles, California

Prepared for

IECG

Prepared by

BlueScape Environmental

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Introduction

The Mission Canyon Trailhead and Recreational Area Project (Project) is located at the site of a decommissioned landfill in the Santa Monica mountains, and consists of: a) the demolition of an old asphalt parking lot and buildings that currently exist at the Project site trailhead; b) the construction of a new parking lot with restrooms and picnic area; c) the grading of a hiking trail loop that connects to the trailhead parking lot; d) the construction of a secondary parking lot located on Mulholland Drive; and e) the construction of fitness stairs that connect parts of the hiking trail loop. The Project area covers approximately 500 acres of land, but the trailhead parking lots and the total trail area account for only a small portion of the 500-acre project site. The lead agency in charge of reviewing environmental impacts due to the Project is The Mountains Recreation and Conservation Authority. There are multiple small optional improvements that have been proposed for this Project, but these are not anticipated to be included in the Project and thus are not included in this analysis.

This CEQA Air Quality Impact and GHG Analysis (AQIA/GHG) was performed using guidance provided by the South Coast Air Quality Management District (SCAQMD), since the Project is located in SCAQMD's jurisdiction. Although SCAQMD is not the lead agency for CEQA AQIA/GHG analyses in its jurisdiction, it has a role to provide methodology guidance and to comment on the environmental impact of projects in the Los Angeles area as the local air pollution control agency. Because SCAQMD has not yet finalized their Air Quality Analysis Handbook for CEQA projects, interim supplemental guidance documents found on the SCAQMD website, as well as ongoing communications with SCAQMD staff were utilized to ensure compliance with district practices.

Project Description

The Project is planned on an approximately 500-acre site located in the Santa Monica Mountains, adjacent to the 405 Freeway in Los Angeles. While the hiking trail loop is planned to cover 2.5 miles throughout the site, the total acreage of construction activities for the project elements evaluated is estimated at 5.8 acres. The site was previously the Mission Canyon Landfill and was operated from 1959 to 1980 by the Los Angeles County Sanitation District. By 1982, the entire landfill had been covered with a three to seven foot layer of dirt, gas controls and monitoring systems were installed, and the landfill was decommissioned. The paved road that the dump trucks had used when the landfill was active, known as Mission Dump Road, will be where the hiking trail loop will be constructed. The parking lot and structures currently located at the entrance to the landfill at 2301 N. Sepulveda Blvd. will be demolished and a new 100-space parking lot with restrooms, picnic areas, and a connection to the new trailhead will be constructed. A secondary 50-space parking lot on Mulholland Drive near Corda Drive, where there currently exists an empty lot, will be graded and paved with asphalt and gravel. A series of fitness stairs connecting parts of the new hiking trail loop will also be constructed.

Landfill gas emissions due to construction activities are not evaluated in this study.

However, SCAQMD advises that an assessment addressing landfill gas emissions should be performed if the project plans call for the removal or moving of soil that covers the refuse in the decommissioned landfill. Further, if any grading or excavation exposes buried refuse, a Rule 1150 excavation plan would be needed and monitoring and mitigation under the plan would be required.[1] It is assumed that the project will not involve the movement or removal of soil covering landfill refuse.

Air Quality Setting

The SCAQMD monitors air quality conditions at 38 locations throughout the Basin. The Project site is located between the Reseda Monitoring Station at 18330 Gault St. in Reseda, California and the West Los Angeles Monitoring Station near Wilshire Blvd. and Sawtelle Blvd. in Los Angeles, California. Because the Reseda monitoring station reports $PM_{2.5}$ data, while the West LA station does not, and it reports higher numbers for ozone, the Reseda station data was used to review background air quality for the Project. Table 1 shows background pollutant levels, the State standards, and the number of exceedances recorded at the Reseda Monitoring Station from 2014 to 2016.

Table 1

Ambient Air Quality Monitoring Data
Reseda Monitoring Station

Pollutant	Averaging Period	2014		2015		2016	
		Max Conc. (ppm)	Days above standard	Max Conc. (ppm)	Days above standard	Max Conc. (ppm)	Days above standard
Ozone	1-hr	0.116	6	0.119	11	0.122	9
	8-hr	0.093	31	0.095	34	0.099	23
Carbon Monoxide	8-hr	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported
Nitrogen Dioxide	1-hr	58	0	72	0	55	0
PM_{10}	24-hr	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported
$PM_{2.5}$	24-hr	55.9	0	65.1	1	41.5	0
Sulfur Dioxide	24-hr	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported

Reference: CARB's iADAM Air Quality Data Statistics, Top 4 Summary for the Reseda station: http://www.arb.ca.gov/adam/topfour/topfour1.php

The Reseda air monitor observes impacts over the air quality standards for individual days. Exceedances of the air quality standards were observed for Ozone

[1] Per Gordon Mize of SCAQMD in an email dated 8/3/17.

and $PM_{2.5}$. This station did not report any data for carbon monoxide, PM_{10}, and sulfur dioxide for 2014 - 2016. However, other Los Angeles area monitoring stations, such as the station on Westchester Parkway, report that the area has been in attainment for PM_{10} and sulfur dioxide in recent past years, and the Reseda station reports that the area has been in attainment for carbon monoxide in the most recent years reported (2010 – 2012).

SCAQMD has monitored regional air quality to determine health impacts from carcinogens. Estimated background carcinogenic risk in the central LA vicinity is 646 in one million.[2]

SCAQMD has developed an Air Quality Management Plan (AQMP) to improve air quality within the South Coast Air Basin while planning for responsible growth. Compliance with zoning requirements in the local community plan demonstrates compliance with SCAQMD's AQMP.

Air Quality Analysis

SCAQMD has developed methodologies for quantifying project impacts and for determining if a project may have a significant impact on air quality.

SCAQMD has set regional significance thresholds for construction and operational emissions identified in Table 2. A project may be considered significant if it exceeds regional SCAQMD thresholds for VOC (or ROG), NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$.[3]

Table 2
SCAQMD Regional Significant Emissions Thresholds

Pollutant	Construction Emissions (lbs/day)	Operational Emissions (lbs/day)
Volatile Organic Compounds (VOC / ROG)	75	55
Nitrogen Oxides (NO_X)	100	55
Carbon Monoxide (CO)	550	550
Sulfur Oxides (SO_X)	150	150
Respirable Particulate Matter (PM_{10})	150	150
Fine Particulate Matter ($PM_{2.5}$)	55	55
Source: *SCAQMD Air Quality Significance Thresholds*, March 2015 www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook		

In addition, SCAQMD sets significance thresholds for:

[2] Reference SCAQMD's Multiple Air Toxics Exposure Study (MATES IV), May 2015, Table 4-7: http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7

[3] Volatile Organic Compounds (VOC) is synonymous to Reactive Organic Compounds (ROG) for the purpose of this analysis.

Toxic Air Contaminants (TAC) – Maximum Incremental Cancer Risk ≥ 10 in 1 million, Cancer Burden > 0.5 excess cancer cases, and Chronic or Acute Hazard Index ≥ 1.0.

Odors – Creating an odor nuisance under SCAQMD Rule 402

GHG – 3,000 MT/yr CO_2 equivalent (for residential buildings) or

10,000 MT/yr CO_2 equivalent (for industrial projects)

For comparison with significance standards, construction and operational emissions are calculated using the California Emissions Estimator Model (CalEEMod version 2016.3.1). CalEEMod is a land use air emissions model developed in collaboration with SCAQMD for use in planning analyses. Based on project parameters CalEEMod calculates air emissions for each phase of construction and for operations. Default parameters assumed by CalEEMod may be updated with project specific data for refinement.

CalEEMod Inputs

The following parameters were entered into CalEEMod for this AQIA. The project is expected to be finished and in operation in 2019:

Trailhead Parking Lot and Fitness Stairs:

- Parking Lot Size = 1.5 acres; Picnic Area Size = 0.75 acres; Fitness Stairs = 0.2 acres (measured using Google Earth and architectural drawings)
- Land Usages: "City Park" for picnic areas and fitness stairs (Total of 0.95 acres); "Parking Lot" for 100-space parking lot (1.5 acres)
- City Park Land Use building sq. ft.: Restrooms = 355 sq. ft.; Utility Shed = 206 sq. ft.[4]
- Construction Phases:
    - Start June 2018 and complete within one year.
    - Demolition of existing buildings at new parking lot location: 17,000 sq. ft. of buildings to demolish
    - Construction Phase Durations = Default values

Hiking Trail Loop:

- Lot Size = 2.5 acres total[5]
- Land Usage: "City Park"[6]
- Construction Phases:
    - Start August 2018 and complete within 9 months.
    - Grading is the only Construction Phase

[4] From architectural drawings provided by AHBE Landscape Architects.
[5] Based on lot acreage from Cut/Fill report (M. Nguyen, dated 7/12/17) for trail earthwork. 109,429 sq. ft of surface area = 2.5 acres.
[6] Per Gordon Mize of SCAQMD, City Park land use is the closest match to a recreational park in CalEEMod.

Mulholland Drive Secondary Parking Lot:

- Lot Size = 0.84 acres total[7]
- Land Usage: "Parking Lot"
- Construction Phases:
  - Start August 2018 and complete within 2 weeks.
  - Construction Phases: Site Prep. (1 day), Grading (2 days), Paving (5 days), and Arch. Coating (5 days).

All of the other parameters used were default values.

Construction Phase Analysis

CalEEMod quantifies direct on-site emissions from construction, as well as off-site emissions from vehicle use and indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

In addition to the regional daily thresholds for air pollutants, SCAQMD requires a comparison of construction emissions versus Localized Significance Thresholds (LSTs) to determine whether emissions from the project site may cause or contribute to adverse localized air quality impacts. LSTs are only applicable to on-site emissions of NO_X, CO, PM_{10}, and $PM_{2.5}$ and are provided in SCAQMD look-up tables.[8]

An LST analysis is only required if the project site is located within 0.25 mile of the nearest resident or worker receptor.[9] Since the trailhead parking lot and fitness staircase are located approximately 0.37 miles from the nearest resident or worker receptor, the trailhead parking lot and fitness staircase construction and operational emissions are not included in the LST analysis. Only the emissions from the construction of the hiking trail loop and the secondary parking lot at Mulholland Drive are included in the LST analysis.

The attached CalEEMod report summarizes project assumptions. The construction emission estimates are summarized in Table 3 and compared with SCAQMD significance thresholds. GHG emissions due to construction are summarized in Table 4. These construction GHG emissions are amortized over a 30-year period and added to operational emissions for overall project GHG impacts (see Table 7). The on-site construction emission estimates are summarized in Table 5 and compared with SCAQMD LSTs.

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[7] Based on lot acreage from Cut/Fill report (M. Nguyen, dated 7/12/17) for Mulholland Drive parking lot earthwork. 36,319 sq. ft of surface area = 0.84 acres.

[8] Reference SCAQMD Air Quality Analysis Handbook, Localized Significance Thresholds, Appendix C – Mass Rate LST Look-up Table, dated Oct. 21, 2009: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2

[9] Per G. Mize of SCAQMD, localized significance thresholds are applicable for projects within 0.25 miles of the nearest resident or worker.

The daily CalEEMod results tables for regional and localized criteria pollutant emissions are included in Attachment A. Annual CalEEMod emissions results tables for GHG emissions are included in Attachment B.

Table 3

Estimated Regional Construction Emissions: Trailhead Parking Lot, Hiking Trail Loop, Fitness Staircase, and Mulholland Dr. Parking Lot

Construction Year and Season (lb/day)	VOC/ ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
2018						
Summer	45.1	60.8	39.0	0.08	9.71	6.11
Winter	45.1	60.8	38.6	0.08	9.71	6.11
2019						
Summer	2.10	23.0	10.8	0.02	3.97	2.53
Winter	2.10	24.6	10.7	0.02	3.97	2.53
SCAQMD Significance Threshold	75	100	550	150	150	55
Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Table 4

Estimated Construction GHG Emissions*: Trailhead Parking Lot, Hiking Trail Loop, Fitness Staircase, and Mulholland Dr. Parking Lot

Construction Year	CO_2	CH_4	N_2O	CO_2e**
	Emissions, metric tons/year			
Annually				
2018 CO_2e Emissions	325	0.07	0	326
2019 CO_2e Emissions	70.7	0.02	0	71.3
Annualized Emissions Amortized over 30 years* **				**13.3**

* Where CalEEMod reports "0.0000" for lb/day emissions of a pollutant, it is assumed that emissions of this pollutant are negligible and are reported as "0."

** Differences between total CO_2e reported vs. the sum of CO_2 + CH_4 + N_2O reported in the table above are due to rounding issues when adding results from three different CalEEMod runs included in Attachment B: "Mission Canyon Trailhead Parking Lot & Fitness Stairs Annual CalEEMod Results 090817.pdf", "Mission Canyon Trail Construction Annual CalEEMod Results 091117.pdf", and "Mission Canyon Mulholland Parking Lot Annual CalEEMod Results 091117.pdf."

*** Per SCAQMD Interim GHG Significance Threshold guidance, construction GHG emissions are amortized over 30 years, and then added to operational GHG emissions for GHG impact analysis.

Table 5
Localized Construction Emissions: Hiking Trail Loop and Mulholland Drive Parking Lot

Construction Year and Season (lb/day)	NO_x	CO	PM_{10}	$PM_{2.5}$
2018				
Summer	35.2	19.7	5.44	3.48
Winter	35.2	19.6	5.44	3.48
2019				
Summer	23.0	10.8	3.97	2.53
Winter	23.0	10.7	3.97	2.53
SCAQMD Localized Significance Threshold	184	1179	10	5
Exceed Thresholds?	**No**	**No**	**No**	**No**

Source: CalEEMod v. 2016.3.1, output attached. SCAQMD Localized Significance Thresholds, October 2009 www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook for 3.5-acre project site in Source Receptor Area 2 (NW Coastal LA County) at receptor distance of 25 m.

Daily construction emissions for VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ would not exceed the SCAQMD regional significance thresholds. Therefore, the proposed Project would result in a less-than-significant impact related to regional construction emissions. The annualized CO_2e emissions are added to the total increase in operational GHG emissions in Table 7 (below).

Daily construction emissions for NO_X, CO, PM_{10} and $PM_{2.5}$ would not exceed the SCAQMD localized significance thresholds. Therefore, the proposed Project would result in a less-than-significant impact related to localized construction emissions.

Emissions of diesel particulate associated with heavy-duty construction equipment are a carcinogenic TAC. The majority of heavy-duty equipment construction activity would occur from grading activity. Since $PM_{2.5}$ emissions do not exceed the significance threshold and since these are short-term emissions, the diesel particulate emissions during construction are not expected to contribute to a significant carcinogenic TAC health risk. Non-carcinogenic health impacts (acute and chronic) are not expected to be significant as long as diesel particulate risks are not significant.

The construction of hiking trails, parking lots, and fitness stairs for the Mission Canyon Trailhead and Recreational Area Project is not expected to be a significant source of odor impacts.

Dust Mitigation

SCAQMD requires all construction projects in the Basin to comply with SCAQMD Rules 403 and 1466 for Fugitive Dust. Rule 403 and 1466 control requirements are

incorporated to reduce regional $PM_{2.5}$ and PM_{10} emissions associated with construction activities. The Project is expected to comply with Rules 403 and 1466.

Operational Analysis

CalEEMod was used to calculate operational emissions of the hiking trails, fitness stairs, and parking lots after completion of the Project. This includes energy use for landscaping equipment, use of consumer products, and motor vehicles. Very minimal operational emissions are expected from this project.

Operational emissions due to hiking trails and the fitness stairs are extremely low, since the trails and stairs are for foot traffic only. The trailhead and Mulholland Drive parking lots are the predominant sources of operation emissions.

In addition to the regional daily thresholds for air pollutants, SCAQMD requires a comparison of operational emissions versus Localized Significance Thresholds (LSTs) to determine whether emissions from the project site may cause or contribute to adverse localized air quality impacts. LSTs are only applicable to on-site emissions of NO_X, CO, PM_{10}, and $PM_{2.5}$ and are provided in SCAQMD look-up tables. The fitness stairs and the trailhead parking lot are not included in the LST analysis, since they are more than 0.25 miles away from the nearest resident. Only the operational emissions from the hiking trail loop and the secondary parking lot at Mulholland Drive are included in the LST analysis.

The CalEEMod reports included in Attachments A and B summarize project assumptions. Defaults were used for operational and mitigation emission calculations, except as noted in the reports. The operational emission estimates are summarized in Table 6 and compared with SCAQMD regional significance thresholds. The operational GHG impacts are summarized in Table 7. The on-site operational emission estimates are summarized in Table 8 and compared with SCAQMD LSTs.

Table 6

Estimated Regional Operational Emissions*: Trailhead and Mulholland Drive Parking Lots, Hiking Trail Loop, and Fitness Stairs

Operation Source, Season (lb/day)	VOC/ ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer Emissions						
Area	0.98	0	6.0E-04	0	0	0
Energy	0	0	0	0	0	0
Mobile	0.17	0.85	2.28	0.01	0.56	0.16
Total	**1.16**	**0.85**	**2.28**	**0.01**	**0.56**	**0.16**
SCAQMD Significance Thresholds	55	55	550	150	150	55
Exceed thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Area	0.99	0	6.0E-04	0	0	0
Energy	0	0	0	0	0	0
Mobile	0.16	0.87	2.14	0.01	0.56	0.16
Total	**1.15**	**0.87**	**2.14**	**0.01**	**0.56**	**0.16**
SCAQMD Significance Thresholds	55	55	550	150	150	55
Exceed thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

* Where CalEEMod reports "0.0000" for lb/day emissions of a pollutant, it is assumed that emissions of this pollutant are negligible and are reported as "0."

Table 7

Estimated Operational and Project GHG Emissions: Trailhead and Mulholland Drive Parking Lots, Hiking Trail Loop, and Fitness Stairs

Operational Category	CO_2e Emissions, metric tons/year
Annually	
Area	0.00
Energy	50.1
Mobile	36.1
Waste	0.15
Water	25.5
Operational Total	**112**
Annualized Construction GHG (Table 4):	13.3
Project Total	**125**
SCAQMD Threshold (Residential)	3,000
Exceeds Threshold?	**No**

Table 8

Localized Operational Emissions*: Hiking Trail Loop and Mulholland Drive Parking Lot

Operation Source, Season (lb/day)	NO_x	CO	PM_{10}	$PM_{2.5}$
Summer Emissions				
Area	0	3.50E-04	0	0
Energy	0	0	0	0
Total Emissions	**0**	**3.50E-04**	**0**	**0**
SCAQMD Localized Significance Threshold	184	1179	2.5	1.5
Exceed thresholds?	**No**	**No**	**No**	**No**
Winter Emissions				
Area	0	3.50E-04	0	0
Energy	0	0	0	0
Total Emissions	**0**	**3.50E-04**	**0**	**0**
SCAQMD Localized Significance Threshold	184	1179	2.5	1.5
Exceed thresholds?	**No**	**No**	**No**	**No**

Source: CalEEMod v. 2016.3.1, output attached. SCAQMD Localized Significance Thresholds, October 2009 www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook for 3.5-acre project site in Source Receptor Area 2 (NW Coastal LA County) at receptor distance of 25 m.
* Where CalEEMod reports "0.0000" for lb/day emissions of a pollutant, it is assumed that emissions of this pollutant are negligible and are reported as "0."

Daily regional operational emissions for VOC, NO_X, CO, SO_X, PM_{10}, $PM_{2.5}$, and CO_2e would not exceed the SCAQMD significance thresholds. Therefore, the proposed Project would result in a less-than-significant impact related to regional operational emissions.

Daily localized operational emissions for NO_X, CO, PM_{10} and $PM_{2.5}$ are very close to zero for all four of these pollutants, and would not exceed the SCAQMD localized significance thresholds. Therefore, the proposed Project would result in a less-than-significant impact related to localized operational emissions.

Since the proposed Project consists of hiking trails and fitness stairs with foot traffic only, a trailhead parking lot located over 0.25 mile away from the nearest resident or worker, and a small parking lot near residents, the operational phase of the Project is not anticipated to generate significant quantities of odors or TAC emissions.

Conclusions

Based on BlueScape's analysis using CalEEMod, the project impacts do not exceed any significance criteria. Since the Project will have negligible operational emissions, and construction emissions that are far away from residents and workers, this is to be expected. Odor and dust emissions are also expected to be negligible.

Since this project is occurring on the site of a decommissioned landfill, SCAQMD recommends that if project plans call for the removal or moving of soil that covers the refuse waste, an assessment that addresses landfill gas emissions should be performed.

If not already performed, BlueScape recommends an evaluation of project areas to determine if they are to be constructed on top of buried waste, and if so, to perform an analysis of methane gas emissions due to construction activities. Further, if any grading or excavation exposes buried refuse, a Rule 1150 excavation plan would be needed and monitoring and mitigation under the plan would be required.

It is assumed based on conversations with IECG that this analysis is not applicable because these activities will not be occurring.

Attachment A

CalEEMod Results: Daily Construction and Operational Emissions

Mission Canyon Trailhead Project

CalEEMod Summer & Winter Results:

Summary Tables

Mission Canyon Trailhead Project
Location: 2301 N. Sepulveda Blvd., L.A., CA 90049
Mitigated Construction Regional Impacts

References: "Mission Canyon Trailhead Parking Lot & Fitness Stairs Summer CalEEMod Results 090817.pdf" and "Mission Canyon Trailhead Parking Lot & Fitness Stairs Winter CalEEMod Results 090817.pdf"

"Mission Canyon Mulholland Parking Lot Winter CalEEMod Results 091117.pdf", "Mission Canyon Mulholland Parking Lot Summer CalEEMod Results 091117.pdf"

"Mission Canyon Trail Construction Winter CalEEMod Results 091117.pdf", "Mission Canyon Trail Construction Summer CalEEMod Results 091117.pdf"

Trailhead Parking Lot/Recreation Area + Hiking Trail + Mulholland Drive Parking Lot + Fitness Stairs

Construction Year and Season (lb/day)	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
2018						
Summer	45.1176	60.7651	38.9508	0.0767	9.7084	6.1081
Winter	45.1308	60.7964	38.6408	0.0759	9.7084	6.1081
2019						
Summer	2.0970	23.0271	10.7873	0.0228	3.9735	2.5273
Winter	2.1036	24.6002	10.7291	0.0227	3.9735	2.5273
SCAQMD Significance Threshold	75	100	550	150	150	55
Exceed Significance?	No	No	No	No	No	No

Mission Canyon Trailhead Project
Location: 2301 N. Sepulveda Blvd., L.A., CA 90049
Mitigated Operational Regional Impacts

References: "Mission Canyon Trailhead Parking Lot & Fitness Stairs Summer CalEEMod Results 090817.pdf" and "Mission Canyon Trailhead Parking Lot & Fitness Stairs Winter CalEEMod Results 090817.pdf"

"Mission Canyon Mulholland Parking Lot Winter CalEEMod Results 091117.pdf", "Mission Canyon Mulholland Parking Lot Summer CalEEMod Results 091117.pdf"

"Mission Canyon Trail Construction Winter CalEEMod Results 091117.pdf", "Mission Canyon Trail Construction Summer CalEEMod Results 091117.pdf"

Trailhead Parking Lot/Recreation Area + Hiking Trail + Mulholland Drive Parking Lot + Fitness Stairs

Operation Source, Season (lb/day)	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer Emissions						
Area	0.9845	0.0000	0.0006	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1713	0.8509	2.2762	0.0073	0.5608	0.1555
Total	**1.16**	**0.85**	**2.28**	**0.01**	**0.56**	**0.16**
SCAQMD Significance Thresholds	55	55	550	150	150	55
Exceed thresholds?	No	No	No	No	No	No
Winter Emissions						
Area	0.9845	0.0000	0.0006	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1635	0.8720	2.1364	0.0069	0.5608	0.1555
Total	**1.15**	**0.87**	**2.14**	**0.01**	**0.56**	**0.16**
SCAQMD Significance Thresholds	55	55	550	150	150	55
Exceed thresholds?	No	No	No	No	No	No

Mission Canyon Trailhead Project
Location: 2301 N. Sepulveda Blvd., L.A., CA 90049
Localized Significance Thresholds Analysis
Hiking Trails and Mulholland Parking Lot Construction and Operation*

References: Mission Canyon Mulholland Parking Lot Winter CalEEMod Results 091117.pdf, "Mission Canyon Mulholland Parking Lot Summer CalEEMod Results 091117.pdf"
Mission Canyon Trail Construction Winter CalEEMod Results 091117.pdf, "Mission Canyon Trail Construction Summer CalEEMod Results 091117.pdf"

Construction Emissions

Construction Year and Season (lb/day)	NO_x	CO	PM_{10}	$PM_{2.5}$
2018				
Summer	35.15	19.72	5.44	3.48
Winter	35.18	19.61	5.44	3.48
2019				
Summer	23.03	10.79	3.97	2.53
Winter	23.03	10.73	3.97	2.53
SCAQMD Localized Significance Threshold	184	1179	10	5
Exceed Significance?	No	No	No	No

Emission Thresholds are based on 25 m receptor distance in Source Receptor Area #2, for a 3.5 acre project (interpolated from 2 acre and 5 acre emission thresholds).

Operation Emissions

Operation Source, Season (lb/day)	NO_x	CO	PM_{10}	$PM_{2.5}$
Summer Emissions				
Area	0.00000	0.00035	0.00000	0.00000
Energy	0.00000	0.00000	0.00000	0.00000
Total Emissions	**0.0000**	**0.0004**	**0.0000**	**0.0000**
SCAQMD Localized Significance Threshold	184	1179	2.5	1.5
Exceed thresholds?	No	No	No	No
Winter Emissions				
Area	0.00000	0.00035	0.00000	0.00000
Energy	0.00000	0.00000	0.00000	0.00000
Total Emissions	**0.0000**	**0.0004**	**0.0000**	**0.0000**
SCAQMD Localized Significance Threshold	184	1179	2.5	1.5
Exceed thresholds?	No	No	No	No

* Per Gordon Mize of SCAQMD (Email dated 8/1/17), LST analyses are required for projects that are within 0.25 mile of a sensitive receptor. Since the trailhead parking lot and fitness stairs are 0.37 miles away from the nearest resident, only the emissions from the hiking trai and Mulholland Drive parking lot are considered in this LST analysis.

Mission Canyon Trailhead Project
Location: 2301 N. Sepulveda Blvd., L.A., CA 90049

Assumptions

1. Project site for the trailhead parking lot is approx. 2.25 acres in size (measured using Google Earth)
2. Entire project site, including hiking trails, covers approx. 500 acres.
3. Assuming construction of parking lots, hiking trails, and fitness stairs starting in June 2018 with goal to complete by April 2019.
4. Demolition phase for the trailhead parking lot includes demo of existing buildings: Total square footage estimated at 17,000 sq. ft., measured using Google Earth.
5. Used default Construction phase timeframes and equipment types for Trailhead parking lot and Fitness Stairs.
6. Mulholland Dr. parking lot construction phases consist of site preparation (1 day), grading (2 days), paving (5 days), and arch. Coating (5 days). Used default values for equipment numbers and types.
7. Hiking Trail construction phases consist of grading only (175 days). Used default values for equipment numbers and types.
8. City Park land usage for Trailhead parking lot and picnic area: Buildings are one restroom (355 sq. ft.) and one utility shed (206 sq. ft). Total sq. footage = 561 sq. ft.
9. LST analysis consists of hiking trail and Mulholland Dr. parking lot construction emissions only, because the parking lot/picnic area and fitness stairs are further than 0.25 mile from the nearest resident.
10. According to AQMD's SRA/City Table (Source Receptor Area), the Mission Canyon landfill falls under #2 for NW Coastal LA County.
11. Hiking trail area is 2.5 acres. Mulholland Dr. parking lot area is 0.84 acres. Assuming 3.5 acres (interpolating from 2 acre and 5 acre emission limits) for Localized Significance Thresholds (LSTs).
12. Assuming 25m to receptor for LST look-up table / Appendix C based on proximity of nearby residences to the hiking trails and Mulholland Dr. parking lot.

CalEEMod Summer & Winter Results:

Trailhead Parking Lot and Fitness Stairs

Los Angeles Mission Canyon Trailhead Parking Lot & Fitness Stairs

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.50	Acre	1.50	65,340.00	0
City Park	0.95	Acre	0.95	41,382.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2019
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 - Per E. Raoof-Smith, construction is to begin summer 2018 and be completed in one year.

Land Use - Bldg. Sq. Feet = Restrooms (355 sq. ft) + Utility Shed (206 sq. ft).
City Park land use = picnic areas, restrooms, utility shed, and fitness stairs. Picnic areas/restrooms + fitness stairs acreage = 0.95 acres.

Construction Phase -

Demolition - Existing buildings at the Mission Trailhead measured using Google Earth.

Architectural Coating -

Construction Off-road Equipment Mitigation -

Area Coating -

Energy Use -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblLandUse	BuildingSpaceSquareFeet	0.00	41,382.00
tblLandUse	GreenSpaceSquareFeet	41,382.00	0.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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					
2018	40.5376	25.6154	19.2306	0.0374	6.7029	1.4425	7.8723	3.4074	1.3487	4.4833	0.0000	3,591.6502	3,591.6502	0.7729	0.0000	3,605.6682
Maximum	**40.5376**	**25.6154**	**19.2306**	**0.0374**	**6.7029**	**1.4425**	**7.8723**	**3.4074**	**1.3487**	**4.4833**	**0.0000**	**3,591.6502**	**3,591.6502**	**0.7729**	**0.0000**	**3,605.6682**

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					
2018	40.5376	25.6154	19.2306	0.0374	3.0991	1.4425	4.2686	1.5553	1.3487	2.6312	0.0000	3,591.6502	3,591.6502	0.7729	0.0000	3,605.6682
Maximum	**40.5376**	**25.6154**	**19.2306**	**0.0374**	**3.0991**	**1.4425**	**4.2686**	**1.5553**	**1.3487**	**2.6312**	**0.0000**	**3,591.6502**	**3,591.6502**	**0.7729**	**0.0000**	**3,605.6682**

	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**	**53.76**	**0.00**	**45.78**	**54.36**	**0.00**	**41.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.9526	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Energy	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
Mobile	0.0472	0.2343	0.6268	2.0100e-003	0.1522	2.2300e-003	0.1544	0.0407	2.1000e-003	0.0428		203.7441	203.7441	0.0106		204.0099
Total	**0.9998**	**0.2343**	**0.6270**	**2.0100e-003**	**0.1522**	**2.2300e-003**	**0.1544**	**0.0407**	**2.1000e-003**	**0.0428**		**203.7446**	**203.7446**	**0.0106**	**0.0000**	**204.0105**

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	0.9526	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Energy	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
Mobile	0.0472	0.2343	0.6268	2.0100e-003	0.1522	2.2300e-003	0.1544	0.0407	2.1000e-003	0.0428		203.7441	203.7441	0.0106		204.0099
Total	**0.9998**	**0.2343**	**0.6270**	**2.0100e-003**	**0.1522**	**2.2300e-003**	**0.1544**	**0.0407**	**2.1000e-003**	**0.0428**		**203.7446**	**203.7446**	**0.0106**	**0.0000**	**204.0105**

	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	0.00

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	6/4/2018	6/29/2018	5	20	
2	Site Preparation	Site Preparation	6/30/2018	7/4/2018	5	3	
3	Grading	Grading	7/5/2018	7/12/2018	5	6	
4	Building Construction	Building Construction	7/13/2018	11/29/2018	5	220	
5	Paving	Paving	11/30/2018	12/13/2018	5	10	
6	Architectural Coating	Architectural Coating	12/14/2018	12/27/2018	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 62,073; Non-Residential Outdoor: 20,691; Striped Parking Area: 3,920 (Architectural Coating – sqft)

OffRoad Equipment

Los Angeles Mission Canyon Trailhead Parking Lot & Fitness Stairs - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	77.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	45.00	17.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	19.80	7.90	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	lb/day										lb/day					
Fugitive Dust					0.8367	0.0000	0.8367	0.1267	0.0000	0.1267			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429		2,391.1659	2,391.1659	0.6058		2,406.3105
Total	**2.4838**	**24.3641**	**15.1107**	**0.0241**	**0.8367**	**1.4365**	**2.2732**	**0.1267**	**1.3429**	**1.4696**		**2,391.1659**	**2,391.1659**	**0.6058**		**2,406.3105**

3.2 Demolition - 2018

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	0.0334	1.1854	0.2195	3.0600e-003	0.0673	4.5600e-003	0.0718	0.0184	4.3600e-003	0.0228		329.8627	329.8627	0.0226		330.4267
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	0.0881	0.0659	0.8563	2.1300e-003	0.1957	1.5300e-003	0.1972	0.0519	1.4100e-003	0.0533		212.4124	212.4124	7.1500e-003		212.5913
Total	**0.1215**	**1.2514**	**1.0758**	**5.1900e-003**	**0.2630**	**6.0900e-003**	**0.2691**	**0.0703**	**5.7700e-003**	**0.0761**		**542.2751**	**542.2751**	**0.0297**		**543.0180**

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					0.3765	0.0000	0.3765	0.0570	0.0000	0.0570			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429	0.0000	2,391.1659	2,391.1659	0.6058		2,406.3105
Total	**2.4838**	**24.3641**	**15.1107**	**0.0241**	**0.3765**	**1.4365**	**1.8130**	**0.0570**	**1.3429**	**1.3999**	**0.0000**	**2,391.1659**	**2,391.1659**	**0.6058**		**2,406.3105**

3.2 Demolition - 2018

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	0.0334	1.1854	0.2195	3.0600e-003	0.0673	4.5600e-003	0.0718	0.0184	4.3600e-003	0.0228		329.8627	329.8627	0.0226		330.4267
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	0.0881	0.0659	0.8563	2.1300e-003	0.1957	1.5300e-003	0.1972	0.0519	1.4100e-003	0.0533		212.4124	212.4124	7.1500e-003		212.5913
Total	**0.1215**	**1.2514**	**1.0758**	**5.1900e-003**	**0.2630**	**6.0900e-003**	**0.2691**	**0.0703**	**5.7700e-003**	**0.0761**		**542.2751**	**542.2751**	**0.0297**		**543.0180**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777		2,468.4131	2,468.4131	0.7685		2,487.6244
Total	**1.8995**	**23.6201**	**12.7461**	**0.0245**	**1.5908**	**0.9540**	**2.5448**	**0.1718**	**0.8777**	**1.0494**		**2,468.4131**	**2,468.4131**	**0.7685**		**2,487.6244**

3.3 Site Preparation - 2018

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	0.0542	0.0406	0.5269	1.3100e-003	0.1204	9.4000e-004	0.1214	0.0319	8.7000e-004	0.0328		130.7153	130.7153	4.4000e-003		130.8254
Total	**0.0542**	**0.0406**	**0.5269**	**1.3100e-003**	**0.1204**	**9.4000e-004**	**0.1214**	**0.0319**	**8.7000e-004**	**0.0328**		**130.7153**	**130.7153**	**4.4000e-003**		**130.8254**

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					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777	0.0000	2,468.4131	2,468.4131	0.7685		2,487.6244
Total	**1.8995**	**23.6201**	**12.7461**	**0.0245**	**0.7158**	**0.9540**	**1.6698**	**0.0773**	**0.8777**	**0.9550**	**0.0000**	**2,468.4131**	**2,468.4131**	**0.7685**		**2,487.6244**

3.3 Site Preparation - 2018

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	0.0542	0.0406	0.5269	1.3100e-003	0.1204	9.4000e-004	0.1214	0.0319	8.7000e-004	0.0328		130.7153	130.7153	4.4000e-003		130.8254
Total	**0.0542**	**0.0406**	**0.5269**	**1.3100e-003**	**0.1204**	**9.4000e-004**	**0.1214**	**0.0319**	**8.7000e-004**	**0.0328**		**130.7153**	**130.7153**	**4.4000e-003**		**130.8254**

3.4 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	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748		2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**6.5523**	**1.1683**	**7.7206**	**3.3675**	**1.0748**	**4.4423**		**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.4 Grading - 2018

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	0.0678	0.0507	0.6587	1.6400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		163.3942	163.3942	5.5000e-003		163.5317
Total	**0.0678**	**0.0507**	**0.6587**	**1.6400e-003**	**0.1505**	**1.1800e-003**	**0.1517**	**0.0399**	**1.0800e-003**	**0.0410**		**163.3942**	**163.3942**	**5.5000e-003**		**163.5317**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**2.9486**	**1.1683**	**4.1169**	**1.5154**	**1.0748**	**2.5902**	**0.0000**	**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.4 Grading - 2018

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	0.0678	0.0507	0.6587	1.6400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		163.3942	163.3942	5.5000e-003		163.5317
Total	**0.0678**	**0.0507**	**0.6587**	**1.6400e-003**	**0.1505**	**1.1800e-003**	**0.1517**	**0.0399**	**1.0800e-003**	**0.0410**		**163.3942**	**163.3942**	**5.5000e-003**		**163.5317**

3.5 Building Construction - 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	lb/day										lb/day					
Off-Road	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051		2,329.7759	2,329.7759	0.5019		2,342.3232
Total	**2.9127**	**20.7077**	**15.7183**	**0.0250**		**1.2575**	**1.2575**		**1.2051**	**1.2051**		**2,329.7759**	**2,329.7759**	**0.5019**		**2,342.3232**

3.5 Building Construction - 2018

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	0.0786	2.1981	0.5484	4.9500e-003	0.1245	0.0171	0.1416	0.0358	0.0164	0.0522		526.6005	526.6005	0.0341		527.4522
Worker	0.3049	0.2283	2.9640	7.3900e-003	0.6774	5.3000e-003	0.6826	0.1796	4.8800e-003	0.1845		735.2738	735.2738	0.0248		735.8928
Total	**0.3835**	**2.4263**	**3.5123**	**0.0123**	**0.8019**	**0.0224**	**0.8243**	**0.2155**	**0.0213**	**0.2367**		**1,261.8743**	**1,261.8743**	**0.0588**		**1,263.3450**

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					
Off-Road	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051	0.0000	2,329.7759	2,329.7759	0.5019		2,342.3232
Total	**2.9127**	**20.7077**	**15.7183**	**0.0250**		**1.2575**	**1.2575**		**1.2051**	**1.2051**	**0.0000**	**2,329.7759**	**2,329.7759**	**0.5019**		**2,342.3232**

3.5 Building Construction - 2018

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	0.0786	2.1981	0.5484	4.9500e-003	0.1245	0.0171	0.1416	0.0358	0.0164	0.0522		526.6005	526.6005	0.0341		527.4522
Worker	0.3049	0.2283	2.9640	7.3900e-003	0.6774	5.3000e-003	0.6826	0.1796	4.8800e-003	0.1845		735.2738	735.2738	0.0248		735.8928
Total	**0.3835**	**2.4263**	**3.5123**	**0.0123**	**0.8019**	**0.0224**	**0.8243**	**0.2155**	**0.0213**	**0.2367**		**1,261.8743**	**1,261.8743**	**0.0588**		**1,263.3450**

3.6 Paving - 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	lb/day										lb/day					
Off-Road	1.4046	14.2518	11.9787	0.0178		0.8505	0.8505		0.7836	0.7836		1,774.2430	1,774.2430	0.5419		1,787.7896
Paving	0.3930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7976**	**14.2518**	**11.9787**	**0.0178**		**0.8505**	**0.8505**		**0.7836**	**0.7836**		**1,774.2430**	**1,774.2430**	**0.5419**		**1,787.7896**

3.6 Paving - 2018

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	0.1016	0.0761	0.9880	2.4600e-003	0.2258	1.7700e-003	0.2276	0.0599	1.6300e-003	0.0615		245.0913	245.0913	8.2500e-003		245.2976
Total	**0.1016**	**0.0761**	**0.9880**	**2.4600e-003**	**0.2258**	**1.7700e-003**	**0.2276**	**0.0599**	**1.6300e-003**	**0.0615**		**245.0913**	**245.0913**	**8.2500e-003**		**245.2976**

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					
Off-Road	1.4046	14.2518	11.9787	0.0178		0.8505	0.8505		0.7836	0.7836	0.0000	1,774.2430	1,774.2430	0.5419		1,787.7896
Paving	0.3930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7976**	**14.2518**	**11.9787**	**0.0178**		**0.8505**	**0.8505**		**0.7836**	**0.7836**	**0.0000**	**1,774.2430**	**1,774.2430**	**0.5419**		**1,787.7896**

3.6 Paving - 2018

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	0.1016	0.0761	0.9880	2.4600e-003	0.2258	1.7700e-003	0.2276	0.0599	1.6300e-003	0.0615		245.0913	245.0913	8.2500e-003		245.2976
Total	**0.1016**	**0.0761**	**0.9880**	**2.4600e-003**	**0.2258**	**1.7700e-003**	**0.2276**	**0.0599**	**1.6300e-003**	**0.0615**		**245.0913**	**245.0913**	**8.2500e-003**		**245.2976**

3.7 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	40.1780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**40.4767**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

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	0.0610	0.0457	0.5928	1.4800e-003	0.1355	1.0600e-003	0.1365	0.0359	9.8000e-004	0.0369		147.0548	147.0548	4.9500e-003		147.1786
Total	**0.0610**	**0.0457**	**0.5928**	**1.4800e-003**	**0.1355**	**1.0600e-003**	**0.1365**	**0.0359**	**9.8000e-004**	**0.0369**		**147.0548**	**147.0548**	**4.9500e-003**		**147.1786**

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	40.1780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**40.4767**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

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	0.0610	0.0457	0.5928	1.4800e-003	0.1355	1.0600e-003	0.1365	0.0359	9.8000e-004	0.0369		147.0548	147.0548	4.9500e-003		147.1786
Total	**0.0610**	**0.0457**	**0.5928**	**1.4800e-003**	**0.1355**	**1.0600e-003**	**0.1365**	**0.0359**	**9.8000e-004**	**0.0369**		**147.0548**	**147.0548**	**4.9500e-003**		**147.1786**

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	0.0472	0.2343	0.6268	2.0100e-003	0.1522	2.2300e-003	0.1544	0.0407	2.1000e-003	0.0428		203.7441	203.7441	0.0106		204.0099
Unmitigated	0.0472	0.2343	0.6268	2.0100e-003	0.1522	2.2300e-003	0.1544	0.0407	2.1000e-003	0.0428		203.7441	203.7441	0.0106		204.0099

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.80	21.61	15.90	21,994	21,994
Parking Lot	0.00	0.00	0.00		
Total	1.80	21.61	15.90	21,994	21,994

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
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
City Park	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

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					
City Park	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
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
Total		**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**

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					
City Park	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
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
Total		**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**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	0.9526	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Unmitigated	0.9526	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004

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	0.1101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8425					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Total	**0.9526**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.4000e-004**	**5.4000e-004**	**0.0000**		**5.7000e-004**

6.2 Area by SubCategory

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	0.1101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8425					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Total	**0.9526**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.4000e-004**	**5.4000e-004**	**0.0000**		**5.7000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Los Angeles Mission Canyon Trailhead Parking Lot & Fitness Stairs

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.50	Acre	1.50	65,340.00	0
City Park	0.95	Acre	0.95	41,382.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2019
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 - Per E. Raoof-Smith, construction is to begin summer 2018 and be completed in one year.

Land Use - Bldg. Sq. Feet = Restrooms (355 sq. ft) + Utility Shed (206 sq. ft).
City Park land use = picnic areas, restrooms, utility shed, and fitness stairs. Picnic areas/restrooms + fitness stairs acreage = 0.95 acres.

Construction Phase -

Demolition - Existing buildings at the Mission Trailhead measured using Google Earth.

Architectural Coating -

Construction Off-road Equipment Mitigation -

Area Coating -

Energy Use -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblLandUse	BuildingSpaceSquareFeet	0.00	41,382.00
tblLandUse	GreenSpaceSquareFeet	41,382.00	0.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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					
2018	40.5438	25.6383	18.9840	0.0367	6.7029	1.4426	7.8723	3.4074	1.3487	4.4833	0.0000	3,530.6154	3,530.6154	0.7726	0.0000	3,544.6515
Maximum	**40.5438**	**25.6383**	**18.9840**	**0.0367**	**6.7029**	**1.4426**	**7.8723**	**3.4074**	**1.3487**	**4.4833**	**0.0000**	**3,530.6154**	**3,530.6154**	**0.7726**	**0.0000**	**3,544.6515**

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					
2018	40.5438	25.6383	18.9840	0.0367	3.0991	1.4426	4.2686	1.5553	1.3487	2.6312	0.0000	3,530.6154	3,530.6154	0.7726	0.0000	3,544.6515
Maximum	**40.5438**	**25.6383**	**18.9840**	**0.0367**	**3.0991**	**1.4426**	**4.2686**	**1.5553**	**1.3487**	**2.6312**	**0.0000**	**3,530.6154**	**3,530.6154**	**0.7726**	**0.0000**	**3,544.6515**

	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**	**53.76**	**0.00**	**45.78**	**54.36**	**0.00**	**41.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.9526	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Energy	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
Mobile	0.0450	0.2401	0.5883	1.9000e-003	0.1522	2.2400e-003	0.1544	0.0407	2.1100e-003	0.0428		192.8320	192.8320	0.0106		193.0968
Total	**0.9977**	**0.2401**	**0.5885**	**1.9000e-003**	**0.1522**	**2.2400e-003**	**0.1544**	**0.0407**	**2.1100e-003**	**0.0428**		**192.8326**	**192.8326**	**0.0106**	**0.0000**	**193.0974**

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	0.9526	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Energy	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
Mobile	0.0450	0.2401	0.5883	1.9000e-003	0.1522	2.2400e-003	0.1544	0.0407	2.1100e-003	0.0428		192.8320	192.8320	0.0106		193.0968
Total	**0.9977**	**0.2401**	**0.5885**	**1.9000e-003**	**0.1522**	**2.2400e-003**	**0.1544**	**0.0407**	**2.1100e-003**	**0.0428**		**192.8326**	**192.8326**	**0.0106**	**0.0000**	**193.0974**

	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	0.00

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	6/4/2018	6/29/2018	5	20	
2	Site Preparation	Site Preparation	6/30/2018	7/4/2018	5	3	
3	Grading	Grading	7/5/2018	7/12/2018	5	6	
4	Building Construction	Building Construction	7/13/2018	11/29/2018	5	220	
5	Paving	Paving	11/30/2018	12/13/2018	5	10	
6	Architectural Coating	Architectural Coating	12/14/2018	12/27/2018	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 62,073; Non-Residential Outdoor: 20,691; Striped Parking Area: 3,920 (Architectural Coating – sqft)

OffRoad Equipment

Los Angeles Mission Canyon Trailhead Parking Lot & Fitness Stairs - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	77.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	45.00	17.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	19.80	7.90	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	lb/day										lb/day					
Fugitive Dust					0.8367	0.0000	0.8367	0.1267	0.0000	0.1267			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429		2,391.1659	2,391.1659	0.6058		2,406.3105
Total	**2.4838**	**24.3641**	**15.1107**	**0.0241**	**0.8367**	**1.4365**	**2.2732**	**0.1267**	**1.3429**	**1.4696**		**2,391.1659**	**2,391.1659**	**0.6058**		**2,406.3105**

3.2 Demolition - 2018

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	0.0344	1.2020	0.2381	3.0000e-003	0.0673	4.6500e-003	0.0719	0.0184	4.4500e-003	0.0229		323.9457	323.9457	0.0236		324.5357
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	0.0970	0.0723	0.7688	2.0000e-003	0.1957	1.5300e-003	0.1972	0.0519	1.4100e-003	0.0533		198.6607	198.6607	6.6700e-003		198.8275
Total	**0.1313**	**1.2742**	**1.0068**	**5.0000e-003**	**0.2630**	**6.1800e-003**	**0.2691**	**0.0703**	**5.8600e-003**	**0.0762**		**522.6064**	**522.6064**	**0.0303**		**523.3632**

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					0.3765	0.0000	0.3765	0.0570	0.0000	0.0570			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429	0.0000	2,391.1659	2,391.1659	0.6058		2,406.3105
Total	**2.4838**	**24.3641**	**15.1107**	**0.0241**	**0.3765**	**1.4365**	**1.8130**	**0.0570**	**1.3429**	**1.3999**	**0.0000**	**2,391.1659**	**2,391.1659**	**0.6058**		**2,406.3105**

3.2 Demolition - 2018

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	0.0344	1.2020	0.2381	3.0000e-003	0.0673	4.6500e-003	0.0719	0.0184	4.4500e-003	0.0229		323.9457	323.9457	0.0236		324.5357
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	0.0970	0.0723	0.7688	2.0000e-003	0.1957	1.5300e-003	0.1972	0.0519	1.4100e-003	0.0533		198.6607	198.6607	6.6700e-003		198.8275
Total	**0.1313**	**1.2742**	**1.0068**	**5.0000e-003**	**0.2630**	**6.1800e-003**	**0.2691**	**0.0703**	**5.8600e-003**	**0.0762**		**522.6064**	**522.6064**	**0.0303**		**523.3632**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777		2,468.4131	2,468.4131	0.7685		2,487.6244
Total	**1.8995**	**23.6201**	**12.7461**	**0.0245**	**1.5908**	**0.9540**	**2.5448**	**0.1718**	**0.8777**	**1.0494**		**2,468.4131**	**2,468.4131**	**0.7685**		**2,487.6244**

3.3 Site Preparation - 2018

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	0.0597	0.0445	0.4731	1.2300e-003	0.1204	9.4000e-004	0.1214	0.0319	8.7000e-004	0.0328		122.2527	122.2527	4.1100e-003		122.3554
Total	**0.0597**	**0.0445**	**0.4731**	**1.2300e-003**	**0.1204**	**9.4000e-004**	**0.1214**	**0.0319**	**8.7000e-004**	**0.0328**		**122.2527**	**122.2527**	**4.1100e-003**		**122.3554**

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					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777	0.0000	2,468.4131	2,468.4131	0.7685		2,487.6244
Total	**1.8995**	**23.6201**	**12.7461**	**0.0245**	**0.7158**	**0.9540**	**1.6698**	**0.0773**	**0.8777**	**0.9550**	**0.0000**	**2,468.4131**	**2,468.4131**	**0.7685**		**2,487.6244**

3.3 Site Preparation - 2018

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	0.0597	0.0445	0.4731	1.2300e-003	0.1204	9.4000e-004	0.1214	0.0319	8.7000e-004	0.0328		122.2527	122.2527	4.1100e-003		122.3554
Total	**0.0597**	**0.0445**	**0.4731**	**1.2300e-003**	**0.1204**	**9.4000e-004**	**0.1214**	**0.0319**	**8.7000e-004**	**0.0328**		**122.2527**	**122.2527**	**4.1100e-003**		**122.3554**

3.4 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	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748		2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**6.5523**	**1.1683**	**7.7206**	**3.3675**	**1.0748**	**4.4423**		**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.4 Grading - 2018

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	0.0746	0.0556	0.5914	1.5400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		152.8159	152.8159	5.1300e-003		152.9442
Total	**0.0746**	**0.0556**	**0.5914**	**1.5400e-003**	**0.1505**	**1.1800e-003**	**0.1517**	**0.0399**	**1.0800e-003**	**0.0410**		**152.8159**	**152.8159**	**5.1300e-003**		**152.9442**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**2.9486**	**1.1683**	**4.1169**	**1.5154**	**1.0748**	**2.5902**	**0.0000**	**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.4 Grading - 2018

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	0.0746	0.0556	0.5914	1.5400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		152.8159	152.8159	5.1300e-003		152.9442
Total	**0.0746**	**0.0556**	**0.5914**	**1.5400e-003**	**0.1505**	**1.1800e-003**	**0.1517**	**0.0399**	**1.0800e-003**	**0.0410**		**152.8159**	**152.8159**	**5.1300e-003**		**152.9442**

3.5 Building Construction - 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	lb/day										lb/day					
Off-Road	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051		2,329.7759	2,329.7759	0.5019		2,342.3232
Total	**2.9127**	**20.7077**	**15.7183**	**0.0250**		**1.2575**	**1.2575**		**1.2051**	**1.2051**		**2,329.7759**	**2,329.7759**	**0.5019**		**2,342.3232**

3.5 Building Construction - 2018

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	0.0818	2.2073	0.6045	4.8200e-003	0.1245	0.0173	0.1419	0.0358	0.0166	0.0524		513.1678	513.1678	0.0365		514.0792
Worker	0.3356	0.2501	2.6611	6.9100e-003	0.6774	5.3000e-003	0.6826	0.1796	4.8800e-003	0.1845		687.6717	687.6717	0.0231		688.2490
Total	**0.4174**	**2.4574**	**3.2657**	**0.0117**	**0.8019**	**0.0226**	**0.8245**	**0.2155**	**0.0215**	**0.2369**		**1,200.8394**	**1,200.8394**	**0.0596**		**1,202.3282**

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					
Off-Road	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051	0.0000	2,329.7759	2,329.7759	0.5019		2,342.3232
Total	**2.9127**	**20.7077**	**15.7183**	**0.0250**		**1.2575**	**1.2575**		**1.2051**	**1.2051**	**0.0000**	**2,329.7759**	**2,329.7759**	**0.5019**		**2,342.3232**

3.5 Building Construction - 2018

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	0.0818	2.2073	0.6045	4.8200e-003	0.1245	0.0173	0.1419	0.0358	0.0166	0.0524		513.1678	513.1678	0.0365		514.0792
Worker	0.3356	0.2501	2.6611	6.9100e-003	0.6774	5.3000e-003	0.6826	0.1796	4.8800e-003	0.1845		687.6717	687.6717	0.0231		688.2490
Total	**0.4174**	**2.4574**	**3.2657**	**0.0117**	**0.8019**	**0.0226**	**0.8245**	**0.2155**	**0.0215**	**0.2369**		**1,200.8394**	**1,200.8394**	**0.0596**		**1,202.3282**

3.6 Paving - 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	lb/day										lb/day					
Off-Road	1.4046	14.2518	11.9787	0.0178		0.8505	0.8505		0.7836	0.7836		1,774.2430	1,774.2430	0.5419		1,787.7896
Paving	0.3930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7976**	**14.2518**	**11.9787**	**0.0178**		**0.8505**	**0.8505**		**0.7836**	**0.7836**		**1,774.2430**	**1,774.2430**	**0.5419**		**1,787.7896**

3.6 Paving - 2018

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	0.1119	0.0834	0.8871	2.3000e-003	0.2258	1.7700e-003	0.2276	0.0599	1.6300e-003	0.0615		229.2239	229.2239	7.7000e-003		229.4163
Total	**0.1119**	**0.0834**	**0.8871**	**2.3000e-003**	**0.2258**	**1.7700e-003**	**0.2276**	**0.0599**	**1.6300e-003**	**0.0615**		**229.2239**	**229.2239**	**7.7000e-003**		**229.4163**

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					
Off-Road	1.4046	14.2518	11.9787	0.0178		0.8505	0.8505		0.7836	0.7836	0.0000	1,774.2430	1,774.2430	0.5419		1,787.7896
Paving	0.3930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7976**	**14.2518**	**11.9787**	**0.0178**		**0.8505**	**0.8505**		**0.7836**	**0.7836**	**0.0000**	**1,774.2430**	**1,774.2430**	**0.5419**		**1,787.7896**

3.6 Paving - 2018

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	0.1119	0.0834	0.8871	2.3000e-003	0.2258	1.7700e-003	0.2276	0.0599	1.6300e-003	0.0615		229.2239	229.2239	7.7000e-003		229.4163
Total	**0.1119**	**0.0834**	**0.8871**	**2.3000e-003**	**0.2258**	**1.7700e-003**	**0.2276**	**0.0599**	**1.6300e-003**	**0.0615**		**229.2239**	**229.2239**	**7.7000e-003**		**229.4163**

3.7 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	40.1780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**40.4767**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

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	0.0671	0.0500	0.5322	1.3800e-003	0.1355	1.0600e-003	0.1365	0.0359	9.8000e-004	0.0369		137.5343	137.5343	4.6200e-003		137.6498
Total	**0.0671**	**0.0500**	**0.5322**	**1.3800e-003**	**0.1355**	**1.0600e-003**	**0.1365**	**0.0359**	**9.8000e-004**	**0.0369**		**137.5343**	**137.5343**	**4.6200e-003**		**137.6498**

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	40.1780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**40.4767**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

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	0.0671	0.0500	0.5322	1.3800e-003	0.1355	1.0600e-003	0.1365	0.0359	9.8000e-004	0.0369		137.5343	137.5343	4.6200e-003		137.6498
Total	**0.0671**	**0.0500**	**0.5322**	**1.3800e-003**	**0.1355**	**1.0600e-003**	**0.1365**	**0.0359**	**9.8000e-004**	**0.0369**		**137.5343**	**137.5343**	**4.6200e-003**		**137.6498**

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	0.0450	0.2401	0.5883	1.9000e-003	0.1522	2.2400e-003	0.1544	0.0407	2.1100e-003	0.0428		192.8320	192.8320	0.0106		193.0968
Unmitigated	0.0450	0.2401	0.5883	1.9000e-003	0.1522	2.2400e-003	0.1544	0.0407	2.1100e-003	0.0428		192.8320	192.8320	0.0106		193.0968

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.80	21.61	15.90	21,994	21,994
Parking Lot	0.00	0.00	0.00		
Total	1.80	21.61	15.90	21,994	21,994

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
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
City Park	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

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					
City Park	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
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
Total		**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**

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					
City Park	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
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
Total		**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**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	0.9526	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Unmitigated	0.9526	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004

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	0.1101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8425					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Total	**0.9526**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.4000e-004**	**5.4000e-004**	**0.0000**		**5.7000e-004**

6.2 Area by SubCategory

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	0.1101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8425					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.7000e-004
Total	**0.9526**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.4000e-004**	**5.4000e-004**	**0.0000**		**5.7000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Summer & Winter Results:

Hiking Trails

LA Mission Canyon Trailhead_Hiking Trails

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.50	Acre	2.50	109,429.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2019
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 - Per E. Raoof-Smith, construction is to begin Summer 2018 and be completed in one year.

Land Use - Lot Acreage for trails taken from Cut/Fill Report for trail earthwork: 109,429 sq. ft. of surface area = 2.5 acres.

Construction Phase - Construction of the hiking trails consists of grading the existing roads with no building demolition or construction.

Demolition -

Grading - Amount of materilal exported is from a Cut/Fill report for Mission Canyon trail earthwork calculation spreadsheet

Architectural Coating -

Construction Off-road Equipment Mitigation -

Area Coating -

Energy Use -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	6.00	175.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	3.00	0.00
tblConstructionPhase	PhaseEndDate	9/26/2019	4/7/2019
tblConstructionPhase	PhaseEndDate	8/7/2019	4/7/2019
tblConstructionPhase	PhaseEndDate	8/31/2018	8/5/2018
tblConstructionPhase	PhaseEndDate	9/19/2018	4/5/2019
tblConstructionPhase	PhaseEndDate	9/2/2019	4/7/2019
tblConstructionPhase	PhaseEndDate	9/7/2018	8/31/2018
tblConstructionPhase	PhaseStartDate	9/3/2019	4/8/2019
tblConstructionPhase	PhaseStartDate	9/20/2018	4/8/2019
tblConstructionPhase	PhaseStartDate	9/8/2018	8/6/2018
tblConstructionPhase	PhaseStartDate	8/8/2019	4/8/2019
tblGrading	AcresOfGrading	87.50	2.50
tblGrading	AcresOfGrading	0.00	2.50
tblGrading	MaterialExported	0.00	1,147.00
tblLandUse	LandUseSquareFeet	108,900.00	109,429.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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					
2018	2.2263	24.5918	11.0857	0.0229	6.2098	2.3929	7.3803	3.3575	2.2229	4.4344	0.0000	2,310.8724	2,310.8724	0.6570	0.0000	2,327.2983
2019	2.0970	23.0271	10.7873	0.0228	6.2194	1.9725	7.2944	3.3599	1.8687	4.3489	0.0000	2,268.7014	2,268.7014	0.6554	0.0000	2,285.0874
Maximum	**2.2263**	**24.5918**	**11.0857**	**0.0229**	**6.2194**	**2.3929**	**7.3803**	**3.3599**	**2.2229**	**4.4344**	**0.0000**	**2,310.8724**	**2,310.8724**	**0.6570**	**0.0000**	**2,327.2983**

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					
2018	2.2263	24.5918	11.0857	0.0229	2.8889	2.3929	4.0594	1.5359	2.2229	2.6128	0.0000	2,310.8724	2,310.8724	0.6570	0.0000	2,327.2983
2019	2.0970	23.0271	10.7873	0.0228	2.8985	1.9725	3.9735	1.5383	1.8687	2.5273	0.0000	2,268.7014	2,268.7014	0.6554	0.0000	2,285.0874
Maximum	**2.2263**	**24.5918**	**11.0857**	**0.0229**	**2.8985**	**2.3929**	**4.0594**	**1.5383**	**2.2229**	**2.6128**	**0.0000**	**2,310.8724**	**2,310.8724**	**0.6570**	**0.0000**	**2,327.2983**

LA Mission Canyon Trailhead_Hiking Trails - South Coast AQMD Air District, Summer

	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	53.44	0.00	45.26	54.23	0.00	41.48	0.00	0.00	0.00	0.00	0.00	0.00

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	0.0161	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Energy	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
Mobile	0.1241	0.6166	1.6494	5.2800e-003	0.4005	5.8600e-003	0.4064	0.1072	5.5200e-003	0.1127		536.1687	536.1687	0.0280		536.8681
Total	**0.1402**	**0.6166**	**1.6496**	**5.2800e-003**	**0.4005**	**5.8600e-003**	**0.4064**	**0.1072**	**5.5200e-003**	**0.1127**		**536.1692**	**536.1692**	**0.0280**	**0.0000**	**536.8687**

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	0.0161	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Energy	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
Mobile	0.1241	0.6166	1.6494	5.2800e-003	0.4005	5.8600e-003	0.4064	0.1072	5.5200e-003	0.1127		536.1687	536.1687	0.0280		536.8681
Total	**0.1402**	**0.6166**	**1.6496**	**5.2800e-003**	**0.4005**	**5.8600e-003**	**0.4064**	**0.1072**	**5.5200e-003**	**0.1127**		**536.1692**	**536.1692**	**0.0280**	**0.0000**	**536.8687**

	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	0.00

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	8/6/2018	8/5/2018	5	0	
2	Site Preparation	Site Preparation	9/1/2018	8/31/2018	5	0	
3	Grading	Grading	8/6/2018	4/5/2019	5	175	Grading existing roads
4	Building Construction	Building Construction	4/8/2019	4/7/2019	5	0	
5	Paving	Paving	4/8/2019	4/7/2019	5	0	
6	Architectural Coating	Architectural Coating	4/8/2019	4/7/2019	5	0	

Acres of Grading (Site Preparation Phase): 2.5

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

LA Mission Canyon Trailhead_Hiking Trails - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Scrapers	1	8.00	367	0.48
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	5	13.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	143.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	46.00	18.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	19.80	7.90	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	lb/day										lb/day					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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	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
Total	**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**

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	0.0000	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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	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
Total	**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**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2018

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	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	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
Total	**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**

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	0.0000	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2018

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	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	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
Total	**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**

3.4 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	lb/day										lb/day					
Fugitive Dust					6.0380	0.0000	6.0380	3.3120	0.0000	3.3120			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748		2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**6.0380**	**1.1683**	**7.2063**	**3.3120**	**1.0748**	**4.3868**		**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.4 Grading - 2018

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	7.0800e-003	0.2516	0.0466	6.5000e-004	0.0213	9.7000e-004	0.0223	5.6400e-003	9.3000e-004	6.5700e-003		70.0117	70.0117	4.7900e-003		70.1314
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	0.0678	0.0507	0.6587	1.6400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		163.3942	163.3942	5.5000e-003		163.5317
Total	**0.0748**	**0.3023**	**0.7053**	**2.2900e-003**	**0.1718**	**2.1500e-003**	**0.1740**	**0.0456**	**2.0100e-003**	**0.0476**		**233.4059**	**233.4059**	**0.0103**		**233.6631**

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					2.7171	0.0000	2.7171	1.4904	0.0000	1.4904			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**2.7171**	**1.1683**	**3.8854**	**1.4904**	**1.0748**	**2.5652**	**0.0000**	**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.4 Grading - 2018

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	7.0800e-003	0.2516	0.0466	6.5000e-004	0.0213	9.7000e-004	0.0223	5.6400e-003	9.3000e-004	6.5700e-003		70.0117	70.0117	4.7900e-003		70.1314
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	0.0678	0.0507	0.6587	1.6400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		163.3942	163.3942	5.5000e-003		163.5317
Total	**0.0748**	**0.3023**	**0.7053**	**2.2900e-003**	**0.1718**	**2.1500e-003**	**0.1740**	**0.0456**	**2.0100e-003**	**0.0476**		**233.4059**	**233.4059**	**0.0103**		**233.6631**

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.0380	0.0000	6.0380	3.3120	0.0000	3.3120			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871		2,041.2539	2,041.2539	0.6458		2,057.3997
Total	**2.0287**	**22.7444**	**10.1518**	**0.0206**	**6.0380**	**1.0730**	**7.1110**	**3.3120**	**0.9871**	**4.2991**		**2,041.2539**	**2,041.2539**	**0.6458**		**2,057.3997**

3.4 Grading - 2019

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	6.7100e-003	0.2379	0.0455	6.4000e-004	0.0309	8.8000e-004	0.0318	7.9900e-003	8.4000e-004	8.8300e-003		69.1971	69.1971	4.7200e-003		69.3151
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	0.0616	0.0448	0.5900	1.5900e-003	0.1505	1.1500e-003	0.1517	0.0399	1.0600e-003	0.0410		158.2505	158.2505	4.8900e-003		158.3727
Total	**0.0683**	**0.2827**	**0.6355**	**2.2300e-003**	**0.1814**	**2.0300e-003**	**0.1834**	**0.0479**	**1.9000e-003**	**0.0498**		**227.4475**	**227.4475**	**9.6100e-003**		**227.6878**

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					2.7171	0.0000	2.7171	1.4904	0.0000	1.4904			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	0.0000	2,041.2539	2,041.2539	0.6458		2,057.3997
Total	**2.0287**	**22.7444**	**10.1518**	**0.0206**	**2.7171**	**1.0730**	**3.7901**	**1.4904**	**0.9871**	**2.4775**	**0.0000**	**2,041.2539**	**2,041.2539**	**0.6458**		**2,057.3997**

3.4 Grading - 2019

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	6.7100e-003	0.2379	0.0455	6.4000e-004	0.0309	8.8000e-004	0.0318	7.9900e-003	8.4000e-004	8.8300e-003		69.1971	69.1971	4.7200e-003		69.3151
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	0.0616	0.0448	0.5900	1.5900e-003	0.1505	1.1500e-003	0.1517	0.0399	1.0600e-003	0.0410		158.2505	158.2505	4.8900e-003		158.3727
Total	**0.0683**	**0.2827**	**0.6355**	**2.2300e-003**	**0.1814**	**2.0300e-003**	**0.1834**	**0.0479**	**1.9000e-003**	**0.0498**		**227.4475**	**227.4475**	**9.6100e-003**		**227.6878**

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	lb/day										lb/day					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	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	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
Total	**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**

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					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	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	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
Total	**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**

3.6 Paving - 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	lb/day										lb/day					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2019

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	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	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
Total	**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**

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					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2019

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	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	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
Total	**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**

3.7 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2019

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	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	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
Total	**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**

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	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2019

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	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	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
Total	**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**

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	0.1241	0.6166	1.6494	5.2800e-003	0.4005	5.8600e-003	0.4064	0.1072	5.5200e-003	0.1127		536.1687	536.1687	0.0280		536.8681
Unmitigated	0.1241	0.6166	1.6494	5.2800e-003	0.4005	5.8600e-003	0.4064	0.1072	5.5200e-003	0.1127		536.1687	536.1687	0.0280		536.8681

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	4.73	56.88	41.85	57,880	57,880
Total	4.73	56.88	41.85	57,880	57,880

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
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

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					
City Park	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
Total		**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**

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					
City Park	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
Total		**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**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	0.0161	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Unmitigated	0.0161	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Total	**0.0161**	**0.0000**	**2.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.5000e-004**	**5.5000e-004**	**0.0000**		**5.8000e-004**

6.2 Area by SubCategory

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Total	**0.0161**	**0.0000**	**2.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.5000e-004**	**5.5000e-004**	**0.0000**		**5.8000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Mission Canyon Trailhead_Hiking Trails

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.50	Acre	2.50	109,429.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2019
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 - Per E. Raoof-Smith, construction is to begin Summer 2018 and be completed in one year.

Land Use - Lot Acreage for trails taken from Cut/Fill Report for trail earthwork: 109,429 sq. ft. of surface area = 2.5 acres.

Construction Phase - Construction of the hiking trails consists of grading the existing roads with no building demolition or construction.

Demolition -

Grading - Amount of materilal exported is from a Cut/Fill report for Mission Canyon trail earthwork calculation spreadsheet

Architectural Coating -

Construction Off-road Equipment Mitigation -

Area Coating -

Energy Use -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	6.00	175.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	3.00	0.00
tblConstructionPhase	PhaseEndDate	9/26/2019	4/7/2019
tblConstructionPhase	PhaseEndDate	8/7/2019	4/7/2019
tblConstructionPhase	PhaseEndDate	8/31/2018	8/5/2018
tblConstructionPhase	PhaseEndDate	9/19/2018	4/5/2019
tblConstructionPhase	PhaseEndDate	9/2/2019	4/7/2019
tblConstructionPhase	PhaseEndDate	9/7/2018	8/31/2018
tblConstructionPhase	PhaseStartDate	9/3/2019	4/8/2019
tblConstructionPhase	PhaseStartDate	9/20/2018	4/8/2019
tblConstructionPhase	PhaseStartDate	9/8/2018	8/6/2018
tblConstructionPhase	PhaseStartDate	8/8/2019	4/8/2019
tblGrading	AcresOfGrading	87.50	2.50
tblGrading	AcresOfGrading	0.00	2.50
tblGrading	MaterialExported	0.00	1,147.00
tblLandUse	LandUseSquareFeet	108,900.00	109,429.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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					
2018	2.2263	24.5918	11.0857	0.0229	6.2098	2.3929	7.3803	3.3575	2.2229	4.4344	0.0000	2,310.8724	2,310.8724	0.6570	0.0000	2,327.2983
2019	2.0970	23.0271	10.7873	0.0228	6.2194	1.9725	7.2944	3.3599	1.8687	4.3489	0.0000	2,268.7014	2,268.7014	0.6554	0.0000	2,285.0874
Maximum	**2.2263**	**24.5918**	**11.0857**	**0.0229**	**6.2194**	**2.3929**	**7.3803**	**3.3599**	**2.2229**	**4.4344**	**0.0000**	**2,310.8724**	**2,310.8724**	**0.6570**	**0.0000**	**2,327.2983**

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					
2018	2.2263	24.5918	11.0857	0.0229	2.8889	2.3929	4.0594	1.5359	2.2229	2.6128	0.0000	2,310.8724	2,310.8724	0.6570	0.0000	2,327.2983
2019	2.0970	23.0271	10.7873	0.0228	2.8985	1.9725	3.9735	1.5383	1.8687	2.5273	0.0000	2,268.7014	2,268.7014	0.6554	0.0000	2,285.0874
Maximum	**2.2263**	**24.5918**	**11.0857**	**0.0229**	**2.8985**	**2.3929**	**4.0594**	**1.5383**	**2.2229**	**2.6128**	**0.0000**	**2,310.8724**	**2,310.8724**	**0.6570**	**0.0000**	**2,327.2983**

LA Mission Canyon Trailhead_Hiking Trails - South Coast AQMD Air District, Summer

	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	53.44	0.00	45.26	54.23	0.00	41.48	0.00	0.00	0.00	0.00	0.00	0.00

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	0.0161	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Energy	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
Mobile	0.1241	0.6166	1.6494	5.2800e-003	0.4005	5.8600e-003	0.4064	0.1072	5.5200e-003	0.1127		536.1687	536.1687	0.0280		536.8681
Total	**0.1402**	**0.6166**	**1.6496**	**5.2800e-003**	**0.4005**	**5.8600e-003**	**0.4064**	**0.1072**	**5.5200e-003**	**0.1127**		**536.1692**	**536.1692**	**0.0280**	**0.0000**	**536.8687**

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	0.0161	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Energy	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
Mobile	0.1241	0.6166	1.6494	5.2800e-003	0.4005	5.8600e-003	0.4064	0.1072	5.5200e-003	0.1127		536.1687	536.1687	0.0280		536.8681
Total	**0.1402**	**0.6166**	**1.6496**	**5.2800e-003**	**0.4005**	**5.8600e-003**	**0.4064**	**0.1072**	**5.5200e-003**	**0.1127**		**536.1692**	**536.1692**	**0.0280**	**0.0000**	**536.8687**

	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	0.00

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	8/6/2018	8/5/2018	5	0	
2	Site Preparation	Site Preparation	9/1/2018	8/31/2018	5	0	
3	Grading	Grading	8/6/2018	4/5/2019	5	175	Grading existing roads
4	Building Construction	Building Construction	4/8/2019	4/7/2019	5	0	
5	Paving	Paving	4/8/2019	4/7/2019	5	0	
6	Architectural Coating	Architectural Coating	4/8/2019	4/7/2019	5	0	

Acres of Grading (Site Preparation Phase): 2.5

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

LA Mission Canyon Trailhead_Hiking Trails - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Scrapers	1	8.00	367	0.48
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	5	13.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	143.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	46.00	18.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	19.80	7.90	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	lb/day										lb/day					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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	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
Total	**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**

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	0.0000	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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	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
Total	**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**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2018

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	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	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
Total	**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**

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	0.0000	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2018

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	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	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
Total	**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**

3.4 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	lb/day										lb/day					
Fugitive Dust					6.0380	0.0000	6.0380	3.3120	0.0000	3.3120			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748		2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**6.0380**	**1.1683**	**7.2063**	**3.3120**	**1.0748**	**4.3868**		**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.4 Grading - 2018

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	7.0800e-003	0.2516	0.0466	6.5000e-004	0.0213	9.7000e-004	0.0223	5.6400e-003	9.3000e-004	6.5700e-003		70.0117	70.0117	4.7900e-003		70.1314
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	0.0678	0.0507	0.6587	1.6400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		163.3942	163.3942	5.5000e-003		163.5317
Total	**0.0748**	**0.3023**	**0.7053**	**2.2900e-003**	**0.1718**	**2.1500e-003**	**0.1740**	**0.0456**	**2.0100e-003**	**0.0476**		**233.4059**	**233.4059**	**0.0103**		**233.6631**

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					2.7171	0.0000	2.7171	1.4904	0.0000	1.4904			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**2.7171**	**1.1683**	**3.8854**	**1.4904**	**1.0748**	**2.5652**	**0.0000**	**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.4 Grading - 2018

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	7.0800e-003	0.2516	0.0466	6.5000e-004	0.0213	9.7000e-004	0.0223	5.6400e-003	9.3000e-004	6.5700e-003		70.0117	70.0117	4.7900e-003		70.1314
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	0.0678	0.0507	0.6587	1.6400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		163.3942	163.3942	5.5000e-003		163.5317
Total	**0.0748**	**0.3023**	**0.7053**	**2.2900e-003**	**0.1718**	**2.1500e-003**	**0.1740**	**0.0456**	**2.0100e-003**	**0.0476**		**233.4059**	**233.4059**	**0.0103**		**233.6631**

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.0380	0.0000	6.0380	3.3120	0.0000	3.3120			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871		2,041.2539	2,041.2539	0.6458		2,057.3997
Total	**2.0287**	**22.7444**	**10.1518**	**0.0206**	**6.0380**	**1.0730**	**7.1110**	**3.3120**	**0.9871**	**4.2991**		**2,041.2539**	**2,041.2539**	**0.6458**		**2,057.3997**

3.4 Grading - 2019

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	6.7100e-003	0.2379	0.0455	6.4000e-004	0.0309	8.8000e-004	0.0318	7.9900e-003	8.4000e-004	8.8300e-003		69.1971	69.1971	4.7200e-003		69.3151
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	0.0616	0.0448	0.5900	1.5900e-003	0.1505	1.1500e-003	0.1517	0.0399	1.0600e-003	0.0410		158.2505	158.2505	4.8900e-003		158.3727
Total	**0.0683**	**0.2827**	**0.6355**	**2.2300e-003**	**0.1814**	**2.0300e-003**	**0.1834**	**0.0479**	**1.9000e-003**	**0.0498**		**227.4475**	**227.4475**	**9.6100e-003**		**227.6878**

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					2.7171	0.0000	2.7171	1.4904	0.0000	1.4904			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	0.0000	2,041.2539	2,041.2539	0.6458		2,057.3997
Total	**2.0287**	**22.7444**	**10.1518**	**0.0206**	**2.7171**	**1.0730**	**3.7901**	**1.4904**	**0.9871**	**2.4775**	**0.0000**	**2,041.2539**	**2,041.2539**	**0.6458**		**2,057.3997**

3.4 Grading - 2019

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	6.7100e-003	0.2379	0.0455	6.4000e-004	0.0309	8.8000e-004	0.0318	7.9900e-003	8.4000e-004	8.8300e-003		69.1971	69.1971	4.7200e-003		69.3151
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	0.0616	0.0448	0.5900	1.5900e-003	0.1505	1.1500e-003	0.1517	0.0399	1.0600e-003	0.0410		158.2505	158.2505	4.8900e-003		158.3727
Total	**0.0683**	**0.2827**	**0.6355**	**2.2300e-003**	**0.1814**	**2.0300e-003**	**0.1834**	**0.0479**	**1.9000e-003**	**0.0498**		**227.4475**	**227.4475**	**9.6100e-003**		**227.6878**

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	lb/day										lb/day					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	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	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
Total	**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**

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					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	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	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
Total	**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**

3.6 Paving - 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	lb/day										lb/day					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2019

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	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	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
Total	**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**

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					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2019

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	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	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
Total	**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**

3.7 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2019

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	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	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
Total	**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**

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	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2019

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	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	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
Total	**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**

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	0.1241	0.6166	1.6494	5.2800e-003	0.4005	5.8600e-003	0.4064	0.1072	5.5200e-003	0.1127		536.1687	536.1687	0.0280		536.8681
Unmitigated	0.1241	0.6166	1.6494	5.2800e-003	0.4005	5.8600e-003	0.4064	0.1072	5.5200e-003	0.1127		536.1687	536.1687	0.0280		536.8681

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	4.73	56.88	41.85	57,880	57,880
Total	4.73	56.88	41.85	57,880	57,880

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
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

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					
City Park	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
Total		**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**

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					
City Park	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
Total		**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**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	0.0161	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Unmitigated	0.0161	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Total	**0.0161**	**0.0000**	**2.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.5000e-004**	**5.5000e-004**	**0.0000**		**5.8000e-004**

6.2 Area by SubCategory

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.5000e-004	5.5000e-004	0.0000		5.8000e-004
Total	**0.0161**	**0.0000**	**2.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.5000e-004**	**5.5000e-004**	**0.0000**		**5.8000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Summer & Winter Results:

Mulholland Drive Parking Lot

LA Mission Canyon Trailhead_Mulholland Parking Lot

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	0.84	Acre	0.84	36,590.40	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2019
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 - Per E. Raoof-Smith, construction is to begin Summer 2018 and be completed in one year.

Land Use - Parking lot acreage taken from Earthwork Cut/Fill calculation spreadsheet.

Construction Phase - Parking lot construction consists of grading and paving an empty lot. No building demolition or construction.

Grading - Dirt exported from Mulholland Dr Earthwork Cut/Fill report.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	9/26/2019	8/22/2018
tblConstructionPhase	PhaseEndDate	8/7/2019	8/8/2018
tblConstructionPhase	PhaseEndDate	8/31/2018	8/5/2018
tblConstructionPhase	PhaseEndDate	9/19/2018	8/8/2018
tblConstructionPhase	PhaseEndDate	9/2/2019	8/15/2018
tblConstructionPhase	PhaseEndDate	9/7/2018	8/6/2018
tblConstructionPhase	PhaseStartDate	9/3/2019	8/16/2018
tblConstructionPhase	PhaseStartDate	9/20/2018	8/9/2018
tblConstructionPhase	PhaseStartDate	9/8/2018	8/7/2018
tblConstructionPhase	PhaseStartDate	8/8/2019	8/9/2018
tblConstructionPhase	PhaseStartDate	9/1/2018	8/6/2018
tblGrading	AcresOfGrading	0.00	0.84
tblGrading	AcresOfGrading	0.50	0.84
tblGrading	MaterialExported	0.00	56.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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					
2018	2.3537	10.5579	8.6345	0.0164	1.4130	1.3404	2.0411	0.5190	1.2548	1.1184	0.0000	1,632.6196	1,632.6196	0.3116	0.0000	1,638.9053
Maximum	**2.3537**	**10.5579**	**8.6345**	**0.0164**	**1.4130**	**1.3404**	**2.0411**	**0.5190**	**1.2548**	**1.1184**	**0.0000**	**1,632.6196**	**1,632.6196**	**0.3116**	**0.0000**	**1,638.9053**

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					
2018	2.3537	10.5579	8.6345	0.0164	0.7523	1.3404	1.3804	0.2647	1.2548	0.8641	0.0000	1,632.6196	1,632.6196	0.3116	0.0000	1,638.9053
Maximum	**2.3537**	**10.5579**	**8.6345**	**0.0164**	**0.7523**	**1.3404**	**1.3804**	**0.2647**	**1.2548**	**0.8641**	**0.0000**	**1,632.6196**	**1,632.6196**	**0.3116**	**0.0000**	**1,638.9053**

	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**	**46.76**	**0.00**	**32.37**	**48.99**	**0.00**	**22.74**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.0158	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Energy	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
Mobile	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
Total	**0.0158**	**0.0000**	**9.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.0000**	**2.0000e-004**

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	0.0158	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Energy	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
Mobile	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
Total	**0.0158**	**0.0000**	**9.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.0000**	**2.0000e-004**

	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	0.00

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	8/6/2018	8/5/2018	5	0	
2	Site Preparation	Site Preparation	8/6/2018	8/6/2018	5	1	
3	Grading	Grading	8/7/2018	8/8/2018	5	2	
4	Building Construction	Building Construction	8/9/2018	8/8/2018	5	0	
5	Paving	Paving	8/9/2018	8/15/2018	5	5	
6	Architectural Coating	Architectural Coating	8/16/2018	8/22/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.84

Acres of Grading (Grading Phase): 0.84

Acres of Paving: 0.84

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,195 (Architectural Coating – sqft)

OffRoad Equipment

LA Mission Canyon Trailhead_Mulholland Parking Lot - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	7.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	15.00	6.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	19.80	7.90	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	lb/day										lb/day					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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	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
Total	**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**

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	0.0000	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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	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
Total	**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**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					0.8908	0.0000	0.8908	0.0962	0.0000	0.0962			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.8908**	**0.4180**	**1.3088**	**0.0962**	**0.3846**	**0.4808**		**982.7113**	**982.7113**	**0.3059**		**990.3596**

3.3 Site Preparation - 2018

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	0.0339	0.0254	0.3293	8.2000e-004	0.0753	5.9000e-004	0.0759	0.0200	5.4000e-004	0.0205		81.6971	81.6971	2.7500e-003		81.7659
Total	**0.0339**	**0.0254**	**0.3293**	**8.2000e-004**	**0.0753**	**5.9000e-004**	**0.0759**	**0.0200**	**5.4000e-004**	**0.0205**		**81.6971**	**81.6971**	**2.7500e-003**		**81.7659**

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					0.4009	0.0000	0.4009	0.0433	0.0000	0.0433			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.4009**	**0.4180**	**0.8189**	**0.0433**	**0.3846**	**0.4278**	**0.0000**	**982.7113**	**982.7113**	**0.3059**		**990.3596**

3.3 Site Preparation - 2018

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	0.0339	0.0254	0.3293	8.2000e-004	0.0753	5.9000e-004	0.0759	0.0200	5.4000e-004	0.0205		81.6971	81.6971	2.7500e-003		81.7659
Total	**0.0339**	**0.0254**	**0.3293**	**8.2000e-004**	**0.0753**	**5.9000e-004**	**0.0759**	**0.0200**	**5.4000e-004**	**0.0205**		**81.6971**	**81.6971**	**2.7500e-003**		**81.7659**

3.4 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	lb/day										lb/day					
Fugitive Dust					1.2013	0.0000	1.2013	0.4624	0.0000	0.4624			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**1.2013**	**0.6228**	**1.8241**	**0.4624**	**0.5943**	**1.0566**		**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

3.4 Grading - 2018

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	0.0304	1.0777	0.1996	2.7800e-003	0.0612	4.1400e-003	0.0653	0.0168	3.9600e-003	0.0207		299.8752	299.8752	0.0205		300.3879
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	0.0678	0.0507	0.6587	1.6400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		163.3942	163.3942	5.5000e-003		163.5317
Total	**0.0981**	**1.1284**	**0.8582**	**4.4200e-003**	**0.2117**	**5.3200e-003**	**0.2170**	**0.0567**	**5.0400e-003**	**0.0617**		**463.2694**	**463.2694**	**0.0260**		**463.9197**

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					0.5406	0.0000	0.5406	0.2081	0.0000	0.2081			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**0.5406**	**0.6228**	**1.1634**	**0.2081**	**0.5943**	**0.8024**	**0.0000**	**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

3.4 Grading - 2018

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	0.0304	1.0777	0.1996	2.7800e-003	0.0612	4.1400e-003	0.0653	0.0168	3.9600e-003	0.0207		299.8752	299.8752	0.0205		300.3879
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	0.0678	0.0507	0.6587	1.6400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		163.3942	163.3942	5.5000e-003		163.5317
Total	**0.0981**	**1.1284**	**0.8582**	**4.4200e-003**	**0.2117**	**5.3200e-003**	**0.2170**	**0.0567**	**5.0400e-003**	**0.0617**		**463.2694**	**463.2694**	**0.0260**		**463.9197**

3.5 Building Construction - 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	lb/day										lb/day					
Off-Road	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
Total	**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**

3.5 Building Construction - 2018

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	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	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
Total	**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**

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					
Off-Road	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
Total	**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**

3.5 Building Construction - 2018

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	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	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
Total	**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**

3.6 Paving - 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	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3604**	**8.7447**	**7.2240**	**0.0113**		**0.5109**	**0.5109**		**0.4735**	**0.4735**		**1,070.1372**	**1,070.1372**	**0.3017**		**1,077.6798**

3.6 Paving - 2018

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	0.1220	0.0913	1.1856	2.9600e-003	0.2709	2.1200e-003	0.2731	0.0719	1.9500e-003	0.0738		294.1095	294.1095	9.9000e-003		294.3571
Total	**0.1220**	**0.0913**	**1.1856**	**2.9600e-003**	**0.2709**	**2.1200e-003**	**0.2731**	**0.0719**	**1.9500e-003**	**0.0738**		**294.1095**	**294.1095**	**9.9000e-003**		**294.3571**

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					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3604**	**8.7447**	**7.2240**	**0.0113**		**0.5109**	**0.5109**		**0.4735**	**0.4735**	**0.0000**	**1,070.1372**	**1,070.1372**	**0.3017**		**1,077.6798**

3.6 Paving - 2018

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	0.1220	0.0913	1.1856	2.9600e-003	0.2709	2.1200e-003	0.2731	0.0719	1.9500e-003	0.0738		294.1095	294.1095	9.9000e-003		294.3571
Total	**0.1220**	**0.0913**	**1.1856**	**2.9600e-003**	**0.2709**	**2.1200e-003**	**0.2731**	**0.0719**	**1.9500e-003**	**0.0738**		**294.1095**	**294.1095**	**9.9000e-003**		**294.3571**

3.7 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	2.0348					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**2.3334**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

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	0.0203	0.0152	0.1976	4.9000e-004	0.0452	3.5000e-004	0.0455	0.0120	3.3000e-004	0.0123		49.0183	49.0183	1.6500e-003		49.0595
Total	**0.0203**	**0.0152**	**0.1976**	**4.9000e-004**	**0.0452**	**3.5000e-004**	**0.0455**	**0.0120**	**3.3000e-004**	**0.0123**		**49.0183**	**49.0183**	**1.6500e-003**		**49.0595**

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	2.0348					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**2.3334**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

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	0.0203	0.0152	0.1976	4.9000e-004	0.0452	3.5000e-004	0.0455	0.0120	3.3000e-004	0.0123		49.0183	49.0183	1.6500e-003		49.0595
Total	**0.0203**	**0.0152**	**0.1976**	**4.9000e-004**	**0.0452**	**3.5000e-004**	**0.0455**	**0.0120**	**3.3000e-004**	**0.0123**		**49.0183**	**49.0183**	**1.6500e-003**		**49.0595**

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	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

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
Total		**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**

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
Total		**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**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	0.0158	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Unmitigated	0.0158	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004

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	2.7900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Total	**0.0158**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.8000e-004**	**1.8000e-004**	**0.0000**		**2.0000e-004**

6.2 Area by SubCategory

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	2.7900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Total	**0.0158**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.8000e-004**	**1.8000e-004**	**0.0000**		**2.0000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Mission Canyon Trailhead_Mulholland Parking Lot

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	0.84	Acre	0.84	36,590.40	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2019
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 - Per E. Raoof-Smith, construction is to begin Summer 2018 and be completed in one year.

Land Use - Parking lot acreage taken from Earthwork Cut/Fill calculation spreadsheet.

Construction Phase - Parking lot construction consists of grading and paving an empty lot. No building demolition or construction.

Grading - Dirt exported from Mulholland Dr Earthwork Cut/Fill report.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	9/26/2019	8/22/2018
tblConstructionPhase	PhaseEndDate	8/7/2019	8/8/2018
tblConstructionPhase	PhaseEndDate	8/31/2018	8/5/2018
tblConstructionPhase	PhaseEndDate	9/19/2018	8/8/2018
tblConstructionPhase	PhaseEndDate	9/2/2019	8/15/2018
tblConstructionPhase	PhaseEndDate	9/7/2018	8/6/2018
tblConstructionPhase	PhaseStartDate	9/3/2019	8/16/2018
tblConstructionPhase	PhaseStartDate	9/20/2018	8/9/2018
tblConstructionPhase	PhaseStartDate	9/8/2018	8/7/2018
tblConstructionPhase	PhaseStartDate	8/8/2019	8/9/2018
tblConstructionPhase	PhaseStartDate	9/1/2018	8/6/2018
tblGrading	AcresOfGrading	0.00	0.84
tblGrading	AcresOfGrading	0.50	0.84
tblGrading	MaterialExported	0.00	56.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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					
2018	2.3558	10.5778	8.5840	0.0163	1.4130	1.3405	2.0412	0.5190	1.2548	1.1184	0.0000	1,616.6622	1,616.6622	0.3109	0.0000	1,622.9623
Maximum	**2.3558**	**10.5778**	**8.5840**	**0.0163**	**1.4130**	**1.3405**	**2.0412**	**0.5190**	**1.2548**	**1.1184**	**0.0000**	**1,616.6622**	**1,616.6622**	**0.3109**	**0.0000**	**1,622.9623**

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					
2018	2.3558	10.5778	8.5840	0.0163	0.7523	1.3405	1.3804	0.2647	1.2548	0.8642	0.0000	1,616.6622	1,616.6622	0.3109	0.0000	1,622.9623
Maximum	**2.3558**	**10.5778**	**8.5840**	**0.0163**	**0.7523**	**1.3405**	**1.3804**	**0.2647**	**1.2548**	**0.8642**	**0.0000**	**1,616.6622**	**1,616.6622**	**0.3109**	**0.0000**	**1,622.9623**

	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**	**46.76**	**0.00**	**32.37**	**48.99**	**0.00**	**22.74**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.0158	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Energy	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
Mobile	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
Total	**0.0158**	**0.0000**	**9.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.0000**	**2.0000e-004**

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	0.0158	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Energy	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
Mobile	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
Total	**0.0158**	**0.0000**	**9.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.0000**	**2.0000e-004**

	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	0.00

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	8/6/2018	8/5/2018	5	0	
2	Site Preparation	Site Preparation	8/6/2018	8/6/2018	5	1	
3	Grading	Grading	8/7/2018	8/8/2018	5	2	
4	Building Construction	Building Construction	8/9/2018	8/8/2018	5	0	
5	Paving	Paving	8/9/2018	8/15/2018	5	5	
6	Architectural Coating	Architectural Coating	8/16/2018	8/22/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.84

Acres of Grading (Grading Phase): 0.84

Acres of Paving: 0.84

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,195 (Architectural Coating – sqft)

OffRoad Equipment

LA Mission Canyon Trailhead_Mulholland Parking Lot - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	7.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	15.00	6.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	19.80	7.90	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	lb/day										lb/day					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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	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
Total	**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**

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	0.0000	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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	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
Total	**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**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					0.8908	0.0000	0.8908	0.0962	0.0000	0.0962			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.8908**	**0.4180**	**1.3088**	**0.0962**	**0.3846**	**0.4808**		**982.7113**	**982.7113**	**0.3059**		**990.3596**

3.3 Site Preparation - 2018

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	0.0373	0.0278	0.2957	7.7000e-004	0.0753	5.9000e-004	0.0759	0.0200	5.4000e-004	0.0205		76.4080	76.4080	2.5700e-003		76.4721
Total	**0.0373**	**0.0278**	**0.2957**	**7.7000e-004**	**0.0753**	**5.9000e-004**	**0.0759**	**0.0200**	**5.4000e-004**	**0.0205**		**76.4080**	**76.4080**	**2.5700e-003**		**76.4721**

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					0.4009	0.0000	0.4009	0.0433	0.0000	0.0433			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.4009**	**0.4180**	**0.8189**	**0.0433**	**0.3846**	**0.4278**	**0.0000**	**982.7113**	**982.7113**	**0.3059**		**990.3596**

3.3 Site Preparation - 2018

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	0.0373	0.0278	0.2957	7.7000e-004	0.0753	5.9000e-004	0.0759	0.0200	5.4000e-004	0.0205		76.4080	76.4080	2.5700e-003		76.4721
Total	**0.0373**	**0.0278**	**0.2957**	**7.7000e-004**	**0.0753**	**5.9000e-004**	**0.0759**	**0.0200**	**5.4000e-004**	**0.0205**		**76.4080**	**76.4080**	**2.5700e-003**		**76.4721**

3.4 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	lb/day										lb/day					
Fugitive Dust					1.2013	0.0000	1.2013	0.4624	0.0000	0.4624			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**1.2013**	**0.6228**	**1.8241**	**0.4624**	**0.5943**	**1.0566**		**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

3.4 Grading - 2018

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	0.0313	1.0927	0.2164	2.7300e-003	0.0612	4.2200e-003	0.0654	0.0168	4.0400e-003	0.0208		294.4961	294.4961	0.0215		295.0325
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	0.0746	0.0556	0.5914	1.5400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		152.8159	152.8159	5.1300e-003		152.9442
Total	**0.1058**	**1.1483**	**0.8078**	**4.2700e-003**	**0.2117**	**5.4000e-003**	**0.2171**	**0.0567**	**5.1200e-003**	**0.0618**		**447.3120**	**447.3120**	**0.0266**		**447.9767**

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					0.5406	0.0000	0.5406	0.2081	0.0000	0.2081			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**0.5406**	**0.6228**	**1.1634**	**0.2081**	**0.5943**	**0.8024**	**0.0000**	**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

3.4 Grading - 2018

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	0.0313	1.0927	0.2164	2.7300e-003	0.0612	4.2200e-003	0.0654	0.0168	4.0400e-003	0.0208		294.4961	294.4961	0.0215		295.0325
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	0.0746	0.0556	0.5914	1.5400e-003	0.1505	1.1800e-003	0.1517	0.0399	1.0800e-003	0.0410		152.8159	152.8159	5.1300e-003		152.9442
Total	**0.1058**	**1.1483**	**0.8078**	**4.2700e-003**	**0.2117**	**5.4000e-003**	**0.2171**	**0.0567**	**5.1200e-003**	**0.0618**		**447.3120**	**447.3120**	**0.0266**		**447.9767**

3.5 Building Construction - 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	lb/day										lb/day					
Off-Road	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
Total	**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**

3.5 Building Construction - 2018

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	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	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
Total	**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**

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					
Off-Road	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
Total	**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**

3.5 Building Construction - 2018

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	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	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
Total	**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**

3.6 Paving - 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	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3604**	**8.7447**	**7.2240**	**0.0113**		**0.5109**	**0.5109**		**0.4735**	**0.4735**		**1,070.1372**	**1,070.1372**	**0.3017**		**1,077.6798**

3.6 Paving - 2018

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	0.1342	0.1000	1.0645	2.7600e-003	0.2709	2.1200e-003	0.2731	0.0719	1.9500e-003	0.0738		275.0687	275.0687	9.2400e-003		275.2996
Total	**0.1342**	**0.1000**	**1.0645**	**2.7600e-003**	**0.2709**	**2.1200e-003**	**0.2731**	**0.0719**	**1.9500e-003**	**0.0738**		**275.0687**	**275.0687**	**9.2400e-003**		**275.2996**

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					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3604**	**8.7447**	**7.2240**	**0.0113**		**0.5109**	**0.5109**		**0.4735**	**0.4735**	**0.0000**	**1,070.1372**	**1,070.1372**	**0.3017**		**1,077.6798**

3.6 Paving - 2018

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	0.1342	0.1000	1.0645	2.7600e-003	0.2709	2.1200e-003	0.2731	0.0719	1.9500e-003	0.0738		275.0687	275.0687	9.2400e-003		275.2996
Total	**0.1342**	**0.1000**	**1.0645**	**2.7600e-003**	**0.2709**	**2.1200e-003**	**0.2731**	**0.0719**	**1.9500e-003**	**0.0738**		**275.0687**	**275.0687**	**9.2400e-003**		**275.2996**

3.7 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	2.0348					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**2.3334**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

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	0.0224	0.0167	0.1774	4.6000e-004	0.0452	3.5000e-004	0.0455	0.0120	3.3000e-004	0.0123		45.8448	45.8448	1.5400e-003		45.8833
Total	**0.0224**	**0.0167**	**0.1774**	**4.6000e-004**	**0.0452**	**3.5000e-004**	**0.0455**	**0.0120**	**3.3000e-004**	**0.0123**		**45.8448**	**45.8448**	**1.5400e-003**		**45.8833**

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	2.0348					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**2.3334**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.7 Architectural Coating - 2018

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	0.0224	0.0167	0.1774	4.6000e-004	0.0452	3.5000e-004	0.0455	0.0120	3.3000e-004	0.0123		45.8448	45.8448	1.5400e-003		45.8833
Total	**0.0224**	**0.0167**	**0.1774**	**4.6000e-004**	**0.0452**	**3.5000e-004**	**0.0455**	**0.0120**	**3.3000e-004**	**0.0123**		**45.8448**	**45.8448**	**1.5400e-003**		**45.8833**

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	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

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
Total		**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**

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
Total		**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**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	0.0158	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Unmitigated	0.0158	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004

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	2.7900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Total	**0.0158**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.8000e-004**	**1.8000e-004**	**0.0000**		**2.0000e-004**

6.2 Area by SubCategory

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	2.7900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.8000e-004	1.8000e-004	0.0000		2.0000e-004
Total	**0.0158**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.8000e-004**	**1.8000e-004**	**0.0000**		**2.0000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment B

CalEEMod Results: Annual GHG Construction and Operational Emissions

Mission Canyon Trailhead Project

CalEEMod Annual Results:

Summary Tables

Mission Canyon Trailhead Project
Location: 2301 N. Sepulveda Blvd., L.A., CA 90049
Operational Year: 2019
Mitigated GHG Impacts

References: "Mission Canyon Trailhead Parking Lot & Fitness Stairs Annual CalEEMod Results 090817.pdf"
"Mission Canyon Mulholland Parking Lot Annual CalEEMod Results 0091117.pdf"
"Mission Canyon Trail Construction Annual CalEEMod Results 0091117.pdf"

Trailhead Parking Lot/Recreation Area + Hiking Trail + Mulholland Drive Parking Lot + Fitness Stairs

Construction Year	CO_2	CH_4	N_2O	CO_2e
	Emissions, metric tons/year			
Annually				
2018 CO_2e Emissions	324.6108	0.06944	0	326.35
2019 CO_2e Emissions	70.7473	0.0205	0	71.26
Emissions amortized over 30 years				13.25

Operational Category	CO_2e Emissions, metric tons/year
Annually	
Area	0.00
Energy	50.06
Mobile	36.10
Waste	0.15
Water	25.49
Total	**112**

Total GHG Emissions (metric tons/yr):	**125**

CalEEMod Annual Results:

Trailhead Parking Lot and Fitness Stairs

Los Angeles Mission Canyon Trailhead Parking Lot & Fitness Stairs

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.50	Acre	1.50	65,340.00	0
City Park	0.95	Acre	0.95	41,382.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2019
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 - Per E. Raoof-Smith, construction is to begin summer 2018 and be completed in one year.

Land Use - Bldg. Sq. Feet = Restrooms (355 sq. ft) + Utility Shed (206 sq. ft).
City Park land use = picnic areas, restrooms, utility shed, and fitness stairs. Picnic areas/restrooms + fitness stairs acreage = 0.95 acres.

Construction Phase -

Demolition - Existing buildings at the Mission Trailhead measured using Google Earth.

Architectural Coating -

Construction Off-road Equipment Mitigation -

Area Coating -

Energy Use -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblLandUse	BuildingSpaceSquareFeet	0.00	41,382.00
tblLandUse	GreenSpaceSquareFeet	41,382.00	0.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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	0.4126	1.6078	1.2423	2.3700e-003	0.0748	0.0884	0.1631	0.0236	0.0840	0.1076	0.0000	208.1519	208.1519	0.0367	0.0000	209.0682
Maximum	**0.4126**	**1.6078**	**1.2423**	**2.3700e-003**	**0.0748**	**0.0884**	**0.1631**	**0.0236**	**0.0840**	**0.1076**	**0.0000**	**208.1519**	**208.1519**	**0.0367**	**0.0000**	**209.0682**

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					
2018	0.4126	1.6078	1.2423	2.3700e-003	0.0580	0.0884	0.1464	0.0172	0.0840	0.1012	0.0000	208.1517	208.1517	0.0367	0.0000	209.0681
Maximum	**0.4126**	**1.6078**	**1.2423**	**2.3700e-003**	**0.0580**	**0.0884**	**0.1464**	**0.0172**	**0.0840**	**0.1012**	**0.0000**	**208.1517**	**208.1517**	**0.0367**	**0.0000**	**209.0681**

	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**	**22.38**	**0.00**	**10.25**	**27.13**	**0.00**	**5.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-4-2018	9-3-2018	0.8840	0.8840
2	9-4-2018	9-30-2018	0.2549	0.2549
		Highest	0.8840	0.8840

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	0.1739	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	32.0248	32.0248	7.6000e-004	1.6000e-004	32.0904
Mobile	2.4600e-003	0.0137	0.0334	1.1000e-004	8.3600e-003	1.2000e-004	8.4800e-003	2.2400e-003	1.2000e-004	2.3600e-003	0.0000	9.9276	9.9276	5.3000e-004	0.0000	9.9409
Waste						0.0000	0.0000		0.0000	0.0000	0.0162	0.0000	0.0162	9.6000e-004	0.0000	0.0402
Water						0.0000	0.0000		0.0000	0.0000	0.0000	7.0041	7.0041	1.7000e-004	3.0000e-005	7.0184
Total	**0.1763**	**0.0137**	**0.0335**	**1.1000e-004**	**8.3600e-003**	**1.2000e-004**	**8.4800e-003**	**2.2400e-003**	**1.2000e-004**	**2.3600e-003**	**0.0162**	**48.9565**	**48.9728**	**2.4200e-003**	**1.9000e-004**	**49.0900**

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	0.1739	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	32.0248	32.0248	7.6000e-004	1.6000e-004	32.0904
Mobile	2.4600e-003	0.0137	0.0334	1.1000e-004	8.3600e-003	1.2000e-004	8.4800e-003	2.2400e-003	1.2000e-004	2.3600e-003	0.0000	9.9276	9.9276	5.3000e-004	0.0000	9.9409
Waste						0.0000	0.0000		0.0000	0.0000	0.0162	0.0000	0.0162	9.6000e-004	0.0000	0.0402
Water						0.0000	0.0000		0.0000	0.0000	0.0000	7.0041	7.0041	1.7000e-004	3.0000e-005	7.0184
Total	**0.1763**	**0.0137**	**0.0335**	**1.1000e-004**	**8.3600e-003**	**1.2000e-004**	**8.4800e-003**	**2.2400e-003**	**1.2000e-004**	**2.3600e-003**	**0.0162**	**48.9565**	**48.9728**	**2.4200e-003**	**1.9000e-004**	**49.0900**

	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**	**0.00**

3.0 Construction Detail

Construction Phase

Los Angeles Mission Canyon Trailhead Parking Lot & Fitness Stairs - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/4/2018	6/29/2018	5	20	
2	Site Preparation	Site Preparation	6/30/2018	7/4/2018	5	3	
3	Grading	Grading	7/5/2018	7/12/2018	5	6	
4	Building Construction	Building Construction	7/13/2018	11/29/2018	5	220	
5	Paving	Paving	11/30/2018	12/13/2018	5	10	
6	Architectural Coating	Architectural Coating	12/14/2018	12/27/2018	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 62,073; Non-Residential Outdoor: 20,691; Striped Parking Area: 3,920 (Architectural Coating – sqft)

OffRoad Equipment

Los Angeles Mission Canyon Trailhead Parking Lot & Fitness Stairs - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	77.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	45.00	17.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	19.80	7.90	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					8.3700e-003	0.0000	8.3700e-003	1.2700e-003	0.0000	1.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2436	0.1511	2.4000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297
Total	**0.0248**	**0.2436**	**0.1511**	**2.4000e-004**	**8.3700e-003**	**0.0144**	**0.0227**	**1.2700e-003**	**0.0134**	**0.0147**	**0.0000**	**21.6923**	**21.6923**	**5.5000e-003**	**0.0000**	**21.8297**

3.2 Demolition - 2018

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	3.4000e-004	0.0122	2.2800e-003	3.0000e-005	6.6000e-004	5.0000e-005	7.1000e-004	1.8000e-004	4.0000e-005	2.3000e-004	0.0000	2.9699	2.9699	2.1000e-004	0.0000	2.9751
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	8.8000e-004	7.4000e-004	7.9200e-003	2.0000e-005	1.9200e-003	2.0000e-005	1.9400e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.8332	1.8332	6.0000e-005	0.0000	1.8347
Total	**1.2200e-003**	**0.0130**	**0.0102**	**5.0000e-005**	**2.5800e-003**	**7.0000e-005**	**2.6500e-003**	**6.9000e-004**	**5.0000e-005**	**7.5000e-004**	**0.0000**	**4.8031**	**4.8031**	**2.7000e-004**	**0.0000**	**4.8098**

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					3.7700e-003	0.0000	3.7700e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2436	0.1511	2.4000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297
Total	**0.0248**	**0.2436**	**0.1511**	**2.4000e-004**	**3.7700e-003**	**0.0144**	**0.0181**	**5.7000e-004**	**0.0134**	**0.0140**	**0.0000**	**21.6923**	**21.6923**	**5.5000e-003**	**0.0000**	**21.8297**

3.2 Demolition - 2018

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	3.4000e-004	0.0122	2.2800e-003	3.0000e-005	6.6000e-004	5.0000e-005	7.1000e-004	1.8000e-004	4.0000e-005	2.3000e-004	0.0000	2.9699	2.9699	2.1000e-004	0.0000	2.9751
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	8.8000e-004	7.4000e-004	7.9200e-003	2.0000e-005	1.9200e-003	2.0000e-005	1.9400e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.8332	1.8332	6.0000e-005	0.0000	1.8347
Total	**1.2200e-003**	**0.0130**	**0.0102**	**5.0000e-005**	**2.5800e-003**	**7.0000e-005**	**2.6500e-003**	**6.9000e-004**	**5.0000e-005**	**7.5000e-004**	**0.0000**	**4.8031**	**4.8031**	**2.7000e-004**	**0.0000**	**4.8098**

3.3 Site Preparation - 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					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8500e-003	0.0354	0.0191	4.0000e-005		1.4300e-003	1.4300e-003		1.3200e-003	1.3200e-003	0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851
Total	**2.8500e-003**	**0.0354**	**0.0191**	**4.0000e-005**	**2.3900e-003**	**1.4300e-003**	**3.8200e-003**	**2.6000e-004**	**1.3200e-003**	**1.5800e-003**	**0.0000**	**3.3590**	**3.3590**	**1.0500e-003**	**0.0000**	**3.3851**

3.3 Site Preparation - 2018

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	8.0000e-005	7.0000e-005	7.3000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1692	0.1692	1.0000e-005	0.0000	0.1694
Total	**8.0000e-005**	**7.0000e-005**	**7.3000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1692**	**0.1692**	**1.0000e-005**	**0.0000**	**0.1694**

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					1.0700e-003	0.0000	1.0700e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8500e-003	0.0354	0.0191	4.0000e-005		1.4300e-003	1.4300e-003		1.3200e-003	1.3200e-003	0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851
Total	**2.8500e-003**	**0.0354**	**0.0191**	**4.0000e-005**	**1.0700e-003**	**1.4300e-003**	**2.5000e-003**	**1.2000e-004**	**1.3200e-003**	**1.4400e-003**	**0.0000**	**3.3590**	**3.3590**	**1.0500e-003**	**0.0000**	**3.3851**

3.3 Site Preparation - 2018

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	8.0000e-005	7.0000e-005	7.3000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1692	0.1692	1.0000e-005	0.0000	0.1694
Total	**8.0000e-005**	**7.0000e-005**	**7.3000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1692**	**0.1692**	**1.0000e-005**	**0.0000**	**0.1694**

3.4 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					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4500e-003	0.0729	0.0311	6.0000e-005		3.5000e-003	3.5000e-003		3.2200e-003	3.2200e-003	0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979
Total	**6.4500e-003**	**0.0729**	**0.0311**	**6.0000e-005**	**0.0197**	**3.5000e-003**	**0.0232**	**0.0101**	**3.2200e-003**	**0.0133**	**0.0000**	**5.6539**	**5.6539**	**1.7600e-003**	**0.0000**	**5.6979**

3.4 Grading - 2018

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	2.0000e-004	1.7000e-004	1.8300e-003	0.0000	4.4000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4230	0.4230	1.0000e-005	0.0000	0.4234
Total	**2.0000e-004**	**1.7000e-004**	**1.8300e-003**	**0.0000**	**4.4000e-004**	**0.0000**	**4.5000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.4230**	**0.4230**	**1.0000e-005**	**0.0000**	**0.4234**

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					8.8500e-003	0.0000	8.8500e-003	4.5500e-003	0.0000	4.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4500e-003	0.0729	0.0311	6.0000e-005		3.5000e-003	3.5000e-003		3.2200e-003	3.2200e-003	0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979
Total	**6.4500e-003**	**0.0729**	**0.0311**	**6.0000e-005**	**8.8500e-003**	**3.5000e-003**	**0.0124**	**4.5500e-003**	**3.2200e-003**	**7.7700e-003**	**0.0000**	**5.6539**	**5.6539**	**1.7600e-003**	**0.0000**	**5.6979**

3.4 Grading - 2018

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	2.0000e-004	1.7000e-004	1.8300e-003	0.0000	4.4000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4230	0.4230	1.0000e-005	0.0000	0.4234
Total	**2.0000e-004**	**1.7000e-004**	**1.8300e-003**	**0.0000**	**4.4000e-004**	**0.0000**	**4.5000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.4230**	**0.4230**	**1.0000e-005**	**0.0000**	**0.4234**

3.5 Building Construction - 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					
Off-Road	0.1456	1.0354	0.7859	1.2500e-003		0.0629	0.0629		0.0603	0.0603	0.0000	105.6769	105.6769	0.0228	0.0000	106.2460
Total	**0.1456**	**1.0354**	**0.7859**	**1.2500e-003**		**0.0629**	**0.0629**		**0.0603**	**0.0603**	**0.0000**	**105.6769**	**105.6769**	**0.0228**	**0.0000**	**106.2460**

3.5 Building Construction - 2018

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	4.0000e-003	0.1124	0.0288	2.4000e-004	6.1300e-003	8.6000e-004	6.9900e-003	1.7700e-003	8.2000e-004	2.5900e-003	0.0000	23.6303	23.6303	1.5900e-003	0.0000	23.6701
Worker	0.0152	0.0129	0.1370	3.5000e-004	0.0332	2.6000e-004	0.0335	8.8300e-003	2.4000e-004	9.0700e-003	0.0000	31.7276	31.7276	1.0700e-003	0.0000	31.7543
Total	**0.0192**	**0.1253**	**0.1658**	**5.9000e-004**	**0.0394**	**1.1200e-003**	**0.0405**	**0.0106**	**1.0600e-003**	**0.0117**	**0.0000**	**55.3579**	**55.3579**	**2.6600e-003**	**0.0000**	**55.4244**

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	0.1456	1.0354	0.7859	1.2500e-003		0.0629	0.0629		0.0603	0.0603	0.0000	105.6767	105.6767	0.0228	0.0000	106.2459
Total	**0.1456**	**1.0354**	**0.7859**	**1.2500e-003**		**0.0629**	**0.0629**		**0.0603**	**0.0603**	**0.0000**	**105.6767**	**105.6767**	**0.0228**	**0.0000**	**106.2459**

3.5 Building Construction - 2018

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	4.0000e-003	0.1124	0.0288	2.4000e-004	6.1300e-003	8.6000e-004	6.9900e-003	1.7700e-003	8.2000e-004	2.5900e-003	0.0000	23.6303	23.6303	1.5900e-003	0.0000	23.6701
Worker	0.0152	0.0129	0.1370	3.5000e-004	0.0332	2.6000e-004	0.0335	8.8300e-003	2.4000e-004	9.0700e-003	0.0000	31.7276	31.7276	1.0700e-003	0.0000	31.7543
Total	**0.0192**	**0.1253**	**0.1658**	**5.9000e-004**	**0.0394**	**1.1200e-003**	**0.0405**	**0.0106**	**1.0600e-003**	**0.0117**	**0.0000**	**55.3579**	**55.3579**	**2.6600e-003**	**0.0000**	**55.4244**

3.6 Paving - 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					
Off-Road	7.0200e-003	0.0713	0.0599	9.0000e-005		4.2500e-003	4.2500e-003		3.9200e-003	3.9200e-003	0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093
Paving	1.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.9900e-003**	**0.0713**	**0.0599**	**9.0000e-005**		**4.2500e-003**	**4.2500e-003**		**3.9200e-003**	**3.9200e-003**	**0.0000**	**8.0478**	**8.0478**	**2.4600e-003**	**0.0000**	**8.1093**

3.6 Paving - 2018

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	5.1000e-004	4.3000e-004	4.5700e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0576	1.0576	4.0000e-005	0.0000	1.0585
Total	**5.1000e-004**	**4.3000e-004**	**4.5700e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0576**	**1.0576**	**4.0000e-005**	**0.0000**	**1.0585**

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	7.0200e-003	0.0713	0.0599	9.0000e-005		4.2500e-003	4.2500e-003		3.9200e-003	3.9200e-003	0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093
Paving	1.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.9900e-003**	**0.0713**	**0.0599**	**9.0000e-005**		**4.2500e-003**	**4.2500e-003**		**3.9200e-003**	**3.9200e-003**	**0.0000**	**8.0478**	**8.0478**	**2.4600e-003**	**0.0000**	**8.1093**

3.6 Paving - 2018

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	5.1000e-004	4.3000e-004	4.5700e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0576	1.0576	4.0000e-005	0.0000	1.0585
Total	**5.1000e-004**	**4.3000e-004**	**4.5700e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0576**	**1.0576**	**4.0000e-005**	**0.0000**	**1.0585**

3.7 Architectural Coating - 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					
Archit. Coating	0.2009					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4900e-003	0.0100	9.2700e-003	1.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797
Total	**0.2024**	**0.0100**	**9.2700e-003**	**1.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.2000e-004**	**0.0000**	**1.2797**

3.7 Architectural Coating - 2018

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	3.0000e-004	2.6000e-004	2.7400e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6346	0.6346	2.0000e-005	0.0000	0.6351
Total	**3.0000e-004**	**2.6000e-004**	**2.7400e-003**	**1.0000e-005**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.6346**	**0.6346**	**2.0000e-005**	**0.0000**	**0.6351**

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	0.2009					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4900e-003	0.0100	9.2700e-003	1.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797
Total	**0.2024**	**0.0100**	**9.2700e-003**	**1.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.2000e-004**	**0.0000**	**1.2797**

3.7 Architectural Coating - 2018

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	3.0000e-004	2.6000e-004	2.7400e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6346	0.6346	2.0000e-005	0.0000	0.6351
Total	**3.0000e-004**	**2.6000e-004**	**2.7400e-003**	**1.0000e-005**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.6346**	**0.6346**	**2.0000e-005**	**0.0000**	**0.6351**

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	2.4600e-003	0.0137	0.0334	1.1000e-004	8.3600e-003	1.2000e-004	8.4800e-003	2.2400e-003	1.2000e-004	2.3600e-003	0.0000	9.9276	9.9276	5.3000e-004	0.0000	9.9409
Unmitigated	2.4600e-003	0.0137	0.0334	1.1000e-004	8.3600e-003	1.2000e-004	8.4800e-003	2.2400e-003	1.2000e-004	2.3600e-003	0.0000	9.9276	9.9276	5.3000e-004	0.0000	9.9409

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.80	21.61	15.90	21,994	21,994
Parking Lot	0.00	0.00	0.00		
Total	1.80	21.61	15.90	21,994	21,994

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
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
City Park	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	32.0248	32.0248	7.6000e-004	1.6000e-004	32.0904
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.0248	32.0248	7.6000e-004	1.6000e-004	32.0904
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

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					
City Park	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
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
Total		**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**

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					
City Park	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
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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	57499.2	32.0248	7.6000e-004	1.6000e-004	32.0904
Total		**32.0248**	**7.6000e-004**	**1.6000e-004**	**32.0904**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	57499.2	32.0248	7.6000e-004	1.6000e-004	32.0904
Total		**32.0248**	**7.6000e-004**	**1.6000e-004**	**32.0904**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	0.1739	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Unmitigated	0.1739	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005

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	0.0201					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1538					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Total	**0.1739**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0000**	**6.0000e-005**

6.2 Area by SubCategory

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	0.0201					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1538					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Total	**0.1739**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0000**	**6.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	7.0041	1.7000e-004	3.0000e-005	7.0184
Unmitigated	7.0041	1.7000e-004	3.0000e-005	7.0184

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.13191	7.0041	1.7000e-004	3.0000e-005	7.0184
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**7.0041**	**1.7000e-004**	**3.0000e-005**	**7.0184**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.13191	7.0041	1.7000e-004	3.0000e-005	7.0184
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**7.0041**	**1.7000e-004**	**3.0000e-005**	**7.0184**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0162	9.6000e-004	0.0000	0.0402
Unmitigated	0.0162	9.6000e-004	0.0000	0.0402

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.08	0.0162	9.6000e-004	0.0000	0.0402
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0162**	**9.6000e-004**	**0.0000**	**0.0402**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.08	0.0162	9.6000e-004	0.0000	0.0402
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0162**	**9.6000e-004**	**0.0000**	**0.0402**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Annual Results:

Hiking Trails

LA Mission Canyon Trailhead_Hiking Trails

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.50	Acre	2.50	109,429.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2019
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 - Per E. Raoof-Smith, construction is to begin Summer 2018 and be completed in one year.

Land Use - Lot Acreage for trails taken from Cut/Fill Report for trail earthwork: 109,429 sq. ft. of surface area = 2.5 acres.

Construction Phase - Construction of the hiking trails consists of grading the existing roads with no building demolition or construction.

Demolition -

Grading - Amount of materilal exported is from a Cut/Fill report for Mission Canyon trail earthwork calculation spreadsheet

Architectural Coating -

Construction Off-road Equipment Mitigation -

Area Coating -

Energy Use -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	6.00	175.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	3.00	0.00
tblConstructionPhase	PhaseEndDate	9/26/2019	4/7/2019
tblConstructionPhase	PhaseEndDate	8/7/2019	4/7/2019
tblConstructionPhase	PhaseEndDate	8/31/2018	8/5/2018
tblConstructionPhase	PhaseEndDate	9/19/2018	4/5/2019
tblConstructionPhase	PhaseEndDate	9/2/2019	4/7/2019
tblConstructionPhase	PhaseEndDate	9/7/2018	8/31/2018
tblConstructionPhase	PhaseStartDate	9/3/2019	4/8/2019
tblConstructionPhase	PhaseStartDate	9/20/2018	4/8/2019
tblConstructionPhase	PhaseStartDate	9/8/2018	8/6/2018
tblConstructionPhase	PhaseStartDate	8/8/2019	4/8/2019
tblGrading	AcresOfGrading	87.50	2.50
tblGrading	AcresOfGrading	0.00	2.50
tblGrading	MaterialExported	0.00	1,147.00
tblLandUse	LandUseSquareFeet	108,900.00	109,429.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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	0.1180	1.3041	0.5850	1.2100e-003	0.5373	0.0620	0.5993	0.2922	0.0571	0.3492	0.0000	110.7007	110.7007	0.0316	0.0000	111.4903
2019	0.0723	0.7949	0.3706	7.8000e-004	0.5345	0.0371	0.5716	0.2914	0.0341	0.3255	0.0000	70.7474	70.7474	0.0205	0.0000	71.2601
Maximum	**0.1180**	**1.3041**	**0.5850**	**1.2100e-003**	**0.5373**	**0.0620**	**0.5993**	**0.2922**	**0.0571**	**0.3492**	**0.0000**	**110.7007**	**110.7007**	**0.0316**	**0.0000**	**111.4903**

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					
2018	0.1180	1.3041	0.5850	1.2100e-003	0.2467	0.0620	0.3087	0.1328	0.0571	0.1899	0.0000	110.7006	110.7006	0.0316	0.0000	111.4901
2019	0.0723	0.7949	0.3706	7.8000e-004	0.2439	0.0371	0.2810	0.1320	0.0341	0.1662	0.0000	70.7473	70.7473	0.0205	0.0000	71.2601
Maximum	**0.1180**	**1.3041**	**0.5850**	**1.2100e-003**	**0.2467**	**0.0620**	**0.3087**	**0.1328**	**0.0571**	**0.1899**	**0.0000**	**110.7006**	**110.7006**	**0.0316**	**0.0000**	**111.4901**

	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**	**54.23**	**0.00**	**49.63**	**54.62**	**0.00**	**47.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**8-6-2018**	**11-5-2018**	0.8814	0.8814
2	**11-6-2018**	**2-5-2019**	0.8599	0.8599
3	**2-6-2019**	**5-5-2019**	0.5297	0.5297
		Highest	0.8814	0.8814

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	2.9400e-003	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	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
Mobile	6.4900e-003	0.0360	0.0880	2.8000e-004	0.0220	3.3000e-004	0.0223	5.8900e-003	3.1000e-004	6.2000e-003	0.0000	26.1251	26.1251	1.4100e-003	0.0000	26.1603
Waste						0.0000	0.0000		0.0000	0.0000	0.0426	0.0000	0.0426	2.5200e-003	0.0000	0.1056
Water						0.0000	0.0000		0.0000	0.0000	0.0000	18.4318	18.4318	4.4000e-004	9.0000e-005	18.4695
Total	**9.4300e-003**	**0.0360**	**0.0880**	**2.8000e-004**	**0.0220**	**3.3000e-004**	**0.0223**	**5.8900e-003**	**3.1000e-004**	**6.2000e-003**	**0.0426**	**44.5569**	**44.5996**	**4.3700e-003**	**9.0000e-005**	**44.7354**

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	2.9400e-003	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	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
Mobile	6.4900e-003	0.0360	0.0880	2.8000e-004	0.0220	3.3000e-004	0.0223	5.8900e-003	3.1000e-004	6.2000e-003	0.0000	26.1251	26.1251	1.4100e-003	0.0000	26.1603
Waste						0.0000	0.0000		0.0000	0.0000	0.0426	0.0000	0.0426	2.5200e-003	0.0000	0.1056
Water						0.0000	0.0000		0.0000	0.0000	0.0000	18.4318	18.4318	4.4000e-004	9.0000e-005	18.4695
Total	**9.4300e-003**	**0.0360**	**0.0880**	**2.8000e-004**	**0.0220**	**3.3000e-004**	**0.0223**	**5.8900e-003**	**3.1000e-004**	**6.2000e-003**	**0.0426**	**44.5569**	**44.5996**	**4.3700e-003**	**9.0000e-005**	**44.7354**

	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**	**0.00**

3.0 Construction Detail

Construction Phase

LA Mission Canyon Trailhead_Hiking Trails - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/6/2018	8/5/2018	5	0	
2	Site Preparation	Site Preparation	9/1/2018	8/31/2018	5	0	
3	Grading	Grading	8/6/2018	4/5/2019	5	175	Grading existing roads
4	Building Construction	Building Construction	4/8/2019	4/7/2019	5	0	
5	Paving	Paving	4/8/2019	4/7/2019	5	0	
6	Architectural Coating	Architectural Coating	4/8/2019	4/7/2019	5	0	

Acres of Grading (Site Preparation Phase): 2.5

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

LA Mission Canyon Trailhead_Hiking Trails - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Scrapers	1	8.00	367	0.48
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	5	13.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	143.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	46.00	18.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	19.80	7.90	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	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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
Total	**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**

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	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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
Total	**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**

3.3 Site Preparation - 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	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2018

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	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
Total	**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**

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	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2018

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	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
Total	**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**

3.4 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					0.5283	0.0000	0.5283	0.2898	0.0000	0.2898	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1140	1.2873	0.5502	1.0900e-003		0.0619	0.0619		0.0570	0.0570	0.0000	99.8862	99.8862	0.0311	0.0000	100.6636
Total	**0.1140**	**1.2873**	**0.5502**	**1.0900e-003**	**0.5283**	**0.0619**	**0.5902**	**0.2898**	**0.0570**	**0.3468**	**0.0000**	**99.8862**	**99.8862**	**0.0311**	**0.0000**	**100.6636**

3.4 Grading - 2018

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	3.8000e-004	0.0138	2.5600e-003	3.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	2.9000e-004	5.0000e-005	3.4000e-004	0.0000	3.3409	3.3409	2.3000e-004	0.0000	3.3467
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	3.5700e-003	3.0300e-003	0.0323	8.0000e-005	7.8300e-003	6.0000e-005	7.8900e-003	2.0800e-003	6.0000e-005	2.1400e-003	0.0000	7.4736	7.4736	2.5000e-004	0.0000	7.4799
Total	**3.9500e-003**	**0.0168**	**0.0348**	**1.1000e-004**	**8.9400e-003**	**1.1000e-004**	**9.0500e-003**	**2.3700e-003**	**1.1000e-004**	**2.4800e-003**	**0.0000**	**10.8145**	**10.8145**	**4.8000e-004**	**0.0000**	**10.8266**

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					0.2378	0.0000	0.2378	0.1304	0.0000	0.1304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1140	1.2873	0.5502	1.0900e-003		0.0619	0.0619		0.0570	0.0570	0.0000	99.8861	99.8861	0.0311	0.0000	100.6635
Total	**0.1140**	**1.2873**	**0.5502**	**1.0900e-003**	**0.2378**	**0.0619**	**0.2997**	**0.1304**	**0.0570**	**0.1874**	**0.0000**	**99.8861**	**99.8861**	**0.0311**	**0.0000**	**100.6635**

3.4 Grading - 2018

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	3.8000e-004	0.0138	2.5600e-003	3.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	2.9000e-004	5.0000e-005	3.4000e-004	0.0000	3.3409	3.3409	2.3000e-004	0.0000	3.3467
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	3.5700e-003	3.0300e-003	0.0323	8.0000e-005	7.8300e-003	6.0000e-005	7.8900e-003	2.0800e-003	6.0000e-005	2.1400e-003	0.0000	7.4736	7.4736	2.5000e-004	0.0000	7.4799
Total	**3.9500e-003**	**0.0168**	**0.0348**	**1.1000e-004**	**8.9400e-003**	**1.1000e-004**	**9.0500e-003**	**2.3700e-003**	**1.1000e-004**	**2.4800e-003**	**0.0000**	**10.8145**	**10.8145**	**4.8000e-004**	**0.0000**	**10.8266**

3.4 Grading - 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					
Fugitive Dust					0.5283	0.0000	0.5283	0.2898	0.0000	0.2898	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0700	0.7847	0.3502	7.1000e-004		0.0370	0.0370		0.0341	0.0341	0.0000	63.8869	63.8869	0.0202	0.0000	64.3922
Total	**0.0700**	**0.7847**	**0.3502**	**7.1000e-004**	**0.5283**	**0.0370**	**0.5653**	**0.2898**	**0.0341**	**0.3239**	**0.0000**	**63.8869**	**63.8869**	**0.0202**	**0.0000**	**64.3922**

3.4 Grading - 2019

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	2.3000e-004	8.4700e-003	1.6300e-003	2.0000e-005	1.0500e-003	3.0000e-005	1.0800e-003	2.7000e-004	3.0000e-005	3.0000e-004	0.0000	2.1492	2.1492	1.5000e-004	0.0000	2.1530
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	2.1100e-003	1.7400e-003	0.0188	5.0000e-005	5.1000e-003	4.0000e-005	5.1400e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.7113	4.7113	1.5000e-004	0.0000	4.7149
Total	**2.3400e-003**	**0.0102**	**0.0204**	**7.0000e-005**	**6.1500e-003**	**7.0000e-005**	**6.2200e-003**	**1.6200e-003**	**7.0000e-005**	**1.6900e-003**	**0.0000**	**6.8605**	**6.8605**	**3.0000e-004**	**0.0000**	**6.8679**

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					0.2378	0.0000	0.2378	0.1304	0.0000	0.1304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0700	0.7847	0.3502	7.1000e-004		0.0370	0.0370		0.0341	0.0341	0.0000	63.8868	63.8868	0.0202	0.0000	64.3922
Total	**0.0700**	**0.7847**	**0.3502**	**7.1000e-004**	**0.2378**	**0.0370**	**0.2748**	**0.1304**	**0.0341**	**0.1645**	**0.0000**	**63.8868**	**63.8868**	**0.0202**	**0.0000**	**64.3922**

3.4 Grading - 2019

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	2.3000e-004	8.4700e-003	1.6300e-003	2.0000e-005	1.0500e-003	3.0000e-005	1.0800e-003	2.7000e-004	3.0000e-005	3.0000e-004	0.0000	2.1492	2.1492	1.5000e-004	0.0000	2.1530
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	2.1100e-003	1.7400e-003	0.0188	5.0000e-005	5.1000e-003	4.0000e-005	5.1400e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.7113	4.7113	1.5000e-004	0.0000	4.7149
Total	**2.3400e-003**	**0.0102**	**0.0204**	**7.0000e-005**	**6.1500e-003**	**7.0000e-005**	**6.2200e-003**	**1.6200e-003**	**7.0000e-005**	**1.6900e-003**	**0.0000**	**6.8605**	**6.8605**	**3.0000e-004**	**0.0000**	**6.8679**

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	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
Total	**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**

3.5 Building Construction - 2019

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	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
Total	**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**

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	0.0000	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
Total	**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**

3.5 Building Construction - 2019

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	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
Total	**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**

3.6 Paving - 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	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
Paving	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
Total	**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**

3.6 Paving - 2019

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	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
Total	**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**

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	0.0000	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
Paving	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
Total	**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**

3.6 Paving - 2019

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	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
Total	**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**

3.7 Architectural Coating - 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					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2019

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	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
Total	**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**

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	0.0000	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2019

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	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
Total	**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**

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	6.4900e-003	0.0360	0.0880	2.8000e-004	0.0220	3.3000e-004	0.0223	5.8900e-003	3.1000e-004	6.2000e-003	0.0000	26.1251	26.1251	1.4100e-003	0.0000	26.1603
Unmitigated	6.4900e-003	0.0360	0.0880	2.8000e-004	0.0220	3.3000e-004	0.0223	5.8900e-003	3.1000e-004	6.2000e-003	0.0000	26.1251	26.1251	1.4100e-003	0.0000	26.1603

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	4.73	56.88	41.85	57,880	57,880
Total	4.73	56.88	41.85	57,880	57,880

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
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

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					
City Park	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
Total		**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**

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					
City Park	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	2.9400e-003	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Unmitigated	2.9400e-003	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	**2.9400e-003**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0000**	**7.0000e-005**

6.2 Area by SubCategory

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					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	**2.9400e-003**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0000**	**7.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	18.4318	4.4000e-004	9.0000e-005	18.4695
Unmitigated	18.4318	4.4000e-004	9.0000e-005	18.4695

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.9787	18.4318	4.4000e-004	9.0000e-005	18.4695
Total		**18.4318**	**4.4000e-004**	**9.0000e-005**	**18.4695**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.9787	18.4318	4.4000e-004	9.0000e-005	18.4695
Total		**18.4318**	**4.4000e-004**	**9.0000e-005**	**18.4695**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0426	2.5200e-003	0.0000	0.1056
Unmitigated	0.0426	2.5200e-003	0.0000	0.1056

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.21	0.0426	2.5200e-003	0.0000	0.1056
Total		**0.0426**	**2.5200e-003**	**0.0000**	**0.1056**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.21	0.0426	2.5200e-003	0.0000	0.1056
Total		**0.0426**	**2.5200e-003**	**0.0000**	**0.1056**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Annual Results:

Mulholland Drive Parking Lot

LA Mission Canyon Trailhead_Mulholland Parking Lot

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	0.84	Acre	0.84	36,590.40	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2019
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 - Per E. Raoof-Smith, construction is to begin Summer 2018 and be completed in one year.

Land Use - Parking lot acreage taken from Earthwork Cut/Fill calculation spreadsheet.

Construction Phase - Parking lot construction consists of grading and paving an empty lot. No building demolition or construction.

Grading - Dirt exported from Mulholland Dr Earthwork Cut/Fill report.

Energy Use -

LA Mission Canyon Trailhead_Mulholland Parking Lot - South Coast AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	9/26/2019	8/22/2018
tblConstructionPhase	PhaseEndDate	8/7/2019	8/8/2018
tblConstructionPhase	PhaseEndDate	8/31/2018	8/5/2018
tblConstructionPhase	PhaseEndDate	9/19/2018	8/8/2018
tblConstructionPhase	PhaseEndDate	9/2/2019	8/15/2018
tblConstructionPhase	PhaseEndDate	9/7/2018	8/6/2018
tblConstructionPhase	PhaseStartDate	9/3/2019	8/16/2018
tblConstructionPhase	PhaseStartDate	9/20/2018	8/9/2018
tblConstructionPhase	PhaseStartDate	9/8/2018	8/7/2018
tblConstructionPhase	PhaseStartDate	8/8/2019	8/9/2018
tblConstructionPhase	PhaseStartDate	9/1/2018	8/6/2018
tblGrading	AcresOfGrading	0.00	0.84
tblGrading	AcresOfGrading	0.50	0.84
tblGrading	MaterialExported	0.00	56.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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	0.0112	0.0427	0.0368	7.0000e-005	2.6700e-003	2.5000e-003	5.1600e-003	7.8000e-004	2.3600e-003	3.1400e-003	0.0000	5.7585	5.7585	1.1400e-003	0.0000	5.7869
Maximum	**0.0112**	**0.0427**	**0.0368**	**7.0000e-005**	**2.6700e-003**	**2.5000e-003**	**5.1600e-003**	**7.8000e-004**	**2.3600e-003**	**3.1400e-003**	**0.0000**	**5.7585**	**5.7585**	**1.1400e-003**	**0.0000**	**5.7869**

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					
2018	0.0112	0.0427	0.0368	7.0000e-005	1.7600e-003	2.5000e-003	4.2600e-003	5.0000e-004	2.3600e-003	2.8600e-003	0.0000	5.7585	5.7585	1.1400e-003	0.0000	5.7869
Maximum	**0.0112**	**0.0427**	**0.0368**	**7.0000e-005**	**1.7600e-003**	**2.5000e-003**	**4.2600e-003**	**5.0000e-004**	**2.3600e-003**	**2.8600e-003**	**0.0000**	**5.7585**	**5.7585**	**1.1400e-003**	**0.0000**	**5.7869**

	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**	**34.08**	**0.00**	**17.44**	**35.90**	**0.00**	**8.92**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-6-2018	9-30-2018	0.0489	0.0489
		Highest	0.0489	0.0489

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	2.8700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	17.9339	17.9339	4.2000e-004	9.0000e-005	17.9706
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8700e-003**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**17.9339**	**17.9339**	**4.2000e-004**	**9.0000e-005**	**17.9706**

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	2.8700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	17.9339	17.9339	4.2000e-004	9.0000e-005	17.9706
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8700e-003**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**17.9339**	**17.9339**	**4.2000e-004**	**9.0000e-005**	**17.9706**

	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**	**0.00**

3.0 Construction Detail

Construction Phase

LA Mission Canyon Trailhead_Mulholland Parking Lot - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/6/2018	8/5/2018	5	0	
2	Site Preparation	Site Preparation	8/6/2018	8/6/2018	5	1	
3	Grading	Grading	8/7/2018	8/8/2018	5	2	
4	Building Construction	Building Construction	8/9/2018	8/8/2018	5	0	
5	Paving	Paving	8/9/2018	8/15/2018	5	5	
6	Architectural Coating	Architectural Coating	8/16/2018	8/22/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.84

Acres of Grading (Grading Phase): 0.84

Acres of Paving: 0.84

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,195 (Architectural Coating – sqft)

OffRoad Equipment

LA Mission Canyon Trailhead_Mulholland Parking Lot - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	7.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	15.00	6.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	19.80	7.90	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	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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
Total	**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**

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	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
Off-Road	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
Total	**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**

3.2 Demolition - 2018

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	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
Total	**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**

3.3 Site Preparation - 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					4.5000e-004	0.0000	4.5000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9000e-004	4.8800e-003	2.1300e-003	0.0000		2.1000e-004	2.1000e-004		1.9000e-004	1.9000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492
Total	**3.9000e-004**	**4.8800e-003**	**2.1300e-003**	**0.0000**	**4.5000e-004**	**2.1000e-004**	**6.6000e-004**	**5.0000e-005**	**1.9000e-004**	**2.4000e-004**	**0.0000**	**0.4458**	**0.4458**	**1.4000e-004**	**0.0000**	**0.4492**

3.3 Site Preparation - 2018

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	2.0000e-005	1.0000e-005	1.5000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0353	0.0353	0.0000	0.0000	0.0353
Total	**2.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0353**	**0.0353**	**0.0000**	**0.0000**	**0.0353**

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					2.0000e-004	0.0000	2.0000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9000e-004	4.8800e-003	2.1300e-003	0.0000		2.1000e-004	2.1000e-004		1.9000e-004	1.9000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492
Total	**3.9000e-004**	**4.8800e-003**	**2.1300e-003**	**0.0000**	**2.0000e-004**	**2.1000e-004**	**4.1000e-004**	**2.0000e-005**	**1.9000e-004**	**2.1000e-004**	**0.0000**	**0.4458**	**0.4458**	**1.4000e-004**	**0.0000**	**0.4492**

3.3 Site Preparation - 2018

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	2.0000e-005	1.0000e-005	1.5000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0353	0.0353	0.0000	0.0000	0.0353
Total	**2.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0353**	**0.0353**	**0.0000**	**0.0000**	**0.0353**

3.4 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					1.2000e-003	0.0000	1.2000e-003	4.6000e-004	0.0000	4.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005		6.2000e-004	6.2000e-004		5.9000e-004	5.9000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
Total	**1.0600e-003**	**9.4300e-003**	**7.7800e-003**	**1.0000e-005**	**1.2000e-003**	**6.2000e-004**	**1.8200e-003**	**4.6000e-004**	**5.9000e-004**	**1.0500e-003**	**0.0000**	**1.0608**	**1.0608**	**2.0000e-004**	**0.0000**	**1.0659**

3.4 Grading - 2018

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	3.0000e-005	1.1100e-003	2.1000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2700	0.2700	2.0000e-005	0.0000	0.2705
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	7.0000e-005	6.0000e-005	6.1000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1410	0.1410	0.0000	0.0000	0.1411
Total	**1.0000e-004**	**1.1700e-003**	**8.2000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.4110**	**0.4110**	**2.0000e-005**	**0.0000**	**0.4116**

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					5.4000e-004	0.0000	5.4000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005		6.2000e-004	6.2000e-004		5.9000e-004	5.9000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
Total	**1.0600e-003**	**9.4300e-003**	**7.7800e-003**	**1.0000e-005**	**5.4000e-004**	**6.2000e-004**	**1.1600e-003**	**2.1000e-004**	**5.9000e-004**	**8.0000e-004**	**0.0000**	**1.0608**	**1.0608**	**2.0000e-004**	**0.0000**	**1.0659**

3.4 Grading - 2018

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	3.0000e-005	1.1100e-003	2.1000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2700	0.2700	2.0000e-005	0.0000	0.2705
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	7.0000e-005	6.0000e-005	6.1000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1410	0.1410	0.0000	0.0000	0.1411
Total	**1.0000e-004**	**1.1700e-003**	**8.2000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.4110**	**0.4110**	**2.0000e-005**	**0.0000**	**0.4116**

3.5 Building Construction - 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					
Off-Road	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
Total	**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**

3.5 Building Construction - 2018

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	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
Total	**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**

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	0.0000	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
Total	**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**

3.5 Building Construction - 2018

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	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
Total	**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**

3.6 Paving - 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					
Off-Road	2.3000e-003	0.0219	0.0181	3.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving	1.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.4000e-003**	**0.0219**	**0.0181**	**3.0000e-005**		**1.2800e-003**	**1.2800e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**2.4270**	**2.4270**	**6.8000e-004**	**0.0000**	**2.4441**

3.6 Paving - 2018

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	3.0000e-004	2.6000e-004	2.7400e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6346	0.6346	2.0000e-005	0.0000	0.6351
Total	**3.0000e-004**	**2.6000e-004**	**2.7400e-003**	**1.0000e-005**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.6346**	**0.6346**	**2.0000e-005**	**0.0000**	**0.6351**

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	2.3000e-003	0.0219	0.0181	3.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving	1.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.4000e-003**	**0.0219**	**0.0181**	**3.0000e-005**		**1.2800e-003**	**1.2800e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**2.4270**	**2.4270**	**6.8000e-004**	**0.0000**	**2.4441**

3.6 Paving - 2018

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	3.0000e-004	2.6000e-004	2.7400e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6346	0.6346	2.0000e-005	0.0000	0.6351
Total	**3.0000e-004**	**2.6000e-004**	**2.7400e-003**	**1.0000e-005**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.6346**	**0.6346**	**2.0000e-005**	**0.0000**	**0.6351**

3.7 Architectural Coating - 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					
Archit. Coating	5.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398
Total	**5.8400e-003**	**5.0100e-003**	**4.6400e-003**	**1.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**6.0000e-005**	**0.0000**	**0.6398**

3.7 Architectural Coating - 2018

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	5.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1058	0.1058	0.0000	0.0000	0.1059
Total	**5.0000e-005**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1058**	**0.1058**	**0.0000**	**0.0000**	**0.1059**

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	5.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398
Total	**5.8400e-003**	**5.0100e-003**	**4.6400e-003**	**1.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**6.0000e-005**	**0.0000**	**0.6398**

3.7 Architectural Coating - 2018

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	5.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1058	0.1058	0.0000	0.0000	0.1059
Total	**5.0000e-005**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1058**	**0.1058**	**0.0000**	**0.0000**	**0.1059**

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	0.0000	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	17.9339	17.9339	4.2000e-004	9.0000e-005	17.9706
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17.9339	17.9339	4.2000e-004	9.0000e-005	17.9706
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

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
Total		**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**

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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	32199.6	17.9339	4.2000e-004	9.0000e-005	17.9706
Total		**17.9339**	**4.2000e-004**	**9.0000e-005**	**17.9706**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	32199.6	17.9339	4.2000e-004	9.0000e-005	17.9706
Total		**17.9339**	**4.2000e-004**	**9.0000e-005**	**17.9706**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	2.8700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	2.8700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**2.8800e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

6.2 Area by SubCategory

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	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**2.8800e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

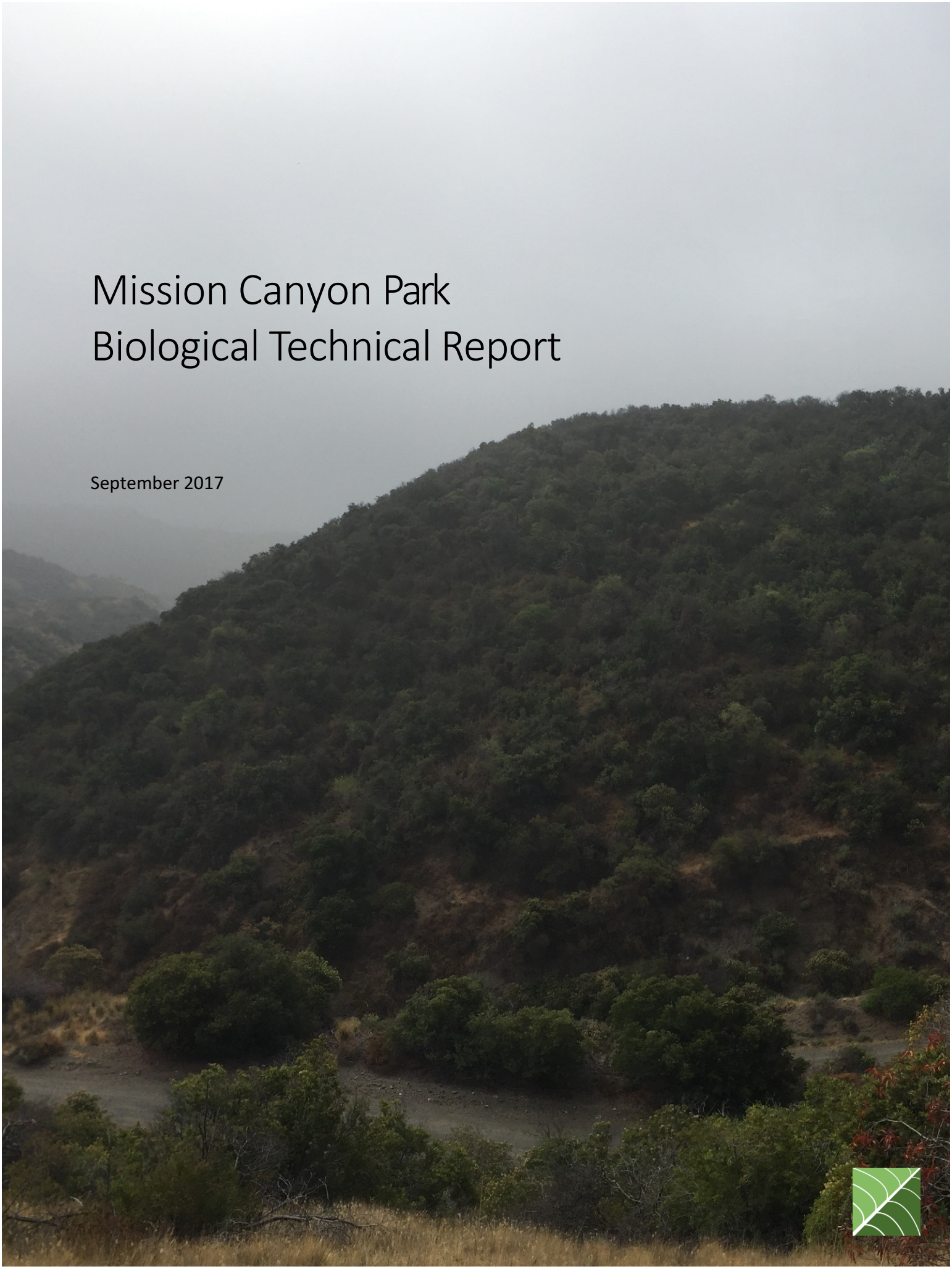
Equipment Type	Number

11.0 Vegetation

APPENDIX B

Mission Canyon Park
Biological Technical Report

September 2017



DRAFT Mission Canyon Park Biological Technical Report

September 2017

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1 Introduction

This biological technical report was prepared at the request of IECG, Inc. in order to analyze the potential effects on biological resources due to implementation of the Mission Canyon Park Project by the Mountains Recreation and Conservation Authority. The project seeks to preserve the former Mission Canyon Landfill site in perpetuity as a publicly-accessible open space with a trail connection to other open space areas in the Santa Monica Mountains region.

As described herein, the natural vegetation communities on the site have the potential to harbor considerable biological diversity despite past anthropogenic uses and the presence of Interstate 405 along the site's eastern edge. Long-term preservation of the site by an agency tasked with open space preservation and management has the potential to improve the quality of this area for biological resources in the long term.

2 Methods

This section describes the methods used to obtain and assemble vegetation community, plant, and wildlife data used in this report.

2.1 Field Survey

The author of this report (Marcus C. England) and biologist Michael Cady conducted a reconnaissance-level survey of the project site on July 1, 2017 from 0800 to 1550h. Survey coverage of the study area was ensured using the aerial photographs, with special attention to sensitive habitats, areas potentially supporting special-status flora, and potential jurisdictional features. Due to steep terrain covering much of the slopes of the study area, some areas were inaccessible by foot. In these areas, binoculars were used to scan the vegetation and aerial photographs were used to confirm observations made in the field.

The emphasis of the two biologists was different but overlapping:

- England, the biology lead on this project, was documenting vegetation communities and wildlife.
- Cady was documenting the site's flora and potential jurisdictional features. Cady provided a memorandum with survey results that were included in this report.

2.2 Vegetation Communities

Vegetation communities were mapped at a broad scale using Holland (1986) or similar community types, noting what Manual of California Vegetation (Sawyer et al. 2009) alliances were observed to be present within the Holland types. This broad-scale mapping was agreed by both biologists to be sufficient given the nature of the proposed project. Mapping was achieved through copious notes and geotagged reference photos in the field, with data layers completed in the office using QGIS 2.18 on recent high resolution aerial photography from the US Geological Survey.

2.3 Botanical Survey and Jurisdictional Delineation

The following describes the methodology used for the botanical survey, rare plant habitat assessment, and jurisdictional waters assessment for the project.

2.3.1 Literature Review

Prior to the field investigation, a literature review was conducted for the study area and surrounding vicinity that included a review of California Natural Diversity Database (CNDDB), which is a California Department of Fish and Wildlife (CDFW) species account database (CDFW

2017). The vicinity of the study area for the database search included the following U.S. Geologic Survey (USGS) topographic quadrangles: Van Nuys, Canoga Park, Burbank, Oat Mountain, San Fernando, Sunland, Topanga, Beverly Hills, and Hollywood. Federal Register listings, survey protocols, and species data provided by the U.S. Fish and Wildlife Service (USFWS 2017a) and the California Native Plant Society (CNPS 2017) were reviewed in conjunction with anticipated federal and State-listed species potentially occurring within the vicinity. Soil mapping data provided by the United States Department of Agriculture Natural Resources Conservation Service (NRCS) soils mapping was also reviewed (NRCS 2017). The USFWS web-based Wetland Mapper was reviewed to identify features previously mapped by the agency (USFWS 2017b). In addition, numerous regional flora field guides were utilized to assist in the identification of species and suitable habitats, and relevant local policies were also reviewed.

2.3.2 Assessment of Special-Status Plant Species

Special-status species are plants in one or more of the following categories:

- Species listed or proposed for listing as threatened or endangered under the federal ESA (50 CFR 17.12 [listed plants] and various notices in the Federal Register [proposed species]).
- Species that are candidates for possible future listing as threatened or endangered under ESA (67 Federal Register 40657, June 13, 2002).
- Species listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 California Code of Regulations [CCR] 670.5).
- Species that meet the definitions of rare or endangered under the CEQA (State CEQA Guidelines Section 15380).
- Plants listed as rare under the California Native Plant Protection Act (CDFG Code Section 1900 et seq.).
- Plant considered by the CNPS to be “rare, threatened, or endangered in California” (Lists 1B and 2).
- Plant listed by the CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4), which may be included as special-status species on the basis of local significance or recent biological information.

Potential for occurrence of special-status plant species within the study area was assessed following the database searches and field survey. During the assessment, each species was assigned to one of the categories listed below:

- **Present**: Species is known to occur within the study area, based on recent (within 20 years) CNDDB or other records, and there is suitable habitat present within the study area, or the species was observed within the study area during the field survey.
- **Medium Potential:** Species is known to occur in the vicinity of the study area (based on recent [within 20 years] CNDDB or other records or based on professional expertise

specific to the study area or species), and there is suitable habitat within the study area that makes the probability of the species occurring there high. Alternatively, there is suitable habitat within the study area and within the known range of the species.

- **Low Potential**: Species is known to occur in the vicinity of the study area (within the area comprised by the surrounding USGS quadrangles); however, there is only poor quality or marginal habitat within the study area and the probability of the species occurring is low.
- **Absent**: There is no suitable habitat for the species within the study area, or the area is located outside the known range of the species. Alternatively, a species was surveyed for during the appropriate season with unequivocal negative results for species occurrence.

2.4 Wildlife

2.4.1 Data Sources

The following public databases were utilized to derive potential wildlife species lists for the proposed project. Sources for species records are noted where the species are discussed in this report.

- **California Natural Diversity Database (CNDDB)** – The California Natural Diversity Database (CDFW 2017) is an inventory of the status and locations of rare plants and animals in California. CNDDB staff work with partners to maintain current lists of rare species as well as maintain an ever-growing database of GIS-mapped locations for these species. The database is updated monthly. The newest available update was used in the preparation of this report. Records from the CNDDB were pulled for the US Geological Survey's 7.5-minute *Beverly Hills* quadrangle (where most of the study area is located), and all surrounding quadrangles.
- **California Wildlife Habitat Relationships Database (CWHR)** – The California Wildlife Habitat Relationships Database (CDFW 2014) provides range maps in GIS shapefile format for all wildlife species occurring in California. Based on these data, a list was derived of all species with mapped ranges that overlap the study area.

2.4.2 Taxonomy and Nomenclature

Every effort was made to use naming standards that are recognized by the scientific community, with the understanding that—for many wildlife groups—scientists may not always agree on a standard source. Because of this, some common names used in this report may not be the same as those used by readers for that species (indeed, some names are different than regularly used by the author!), or those used by the underlying data sources for species records. In general, the author closely followed nomenclature guidelines provided by the U.S. Fish and Wildlife Service's *North American Fauna Guides for Authors* (USFWS 2017). Taxonomic sources were as follows:

- **Birds** – American Ornithologists Union Check-list and Supplements (AOU 1998).
- **Mammals** – Revised Checklist of North American Mammals North of Mexico, 2014 (Bradley et al. 2014).
- **Reptiles and Amphibians** – Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding, seventh edition (SSAR 2012) as interpreted in detail on California Herps (http://californiaherps.com), an important and detailed online reference for the California herpetofauna.
- **Fish** – Common and Scientific Names of Fishes from the United States, Canada, and Mexico, 7th edition (AFS 2013).
- **Invertebrates** – no naming standard was identified that was current and applicable to freshwater and terrestrial invertebrates. Names used by the underlying data sources when a species was first identified were retained.

Birds have the most well-established naming standards of all taxonomic groups. These standards include instructions for the proper use of capitalization for common names in order to make clear that, for example, someone mentioning a Blue-winged Teal is referring to the species "Blue-winged Teal" and not any species of teal with blue wings. The capitalization standards used for birds have been used with other wildlife taxa as well throughout this report.

2.4.3 Occurrence Potential

Occurrence potential was assessed for all wildlife species generated through the data sources listed in Section 2.5.1. Each species occurrence potential was defined as follows:

- **None** – the species is not expected to occur in the project area based on habitat and distribution.
- **Low** – the species is highly unlikely to occur in the project area based on habitat and distribution.
- **Moderate** – the species may occur within the project area based on habitat and distribution.
- **High** – the species is likely to occur within the project area based on habitat and distribution.
- **Present** – the species has been documented in the project area.

2.5 Storage and Use of Geospatial Data

With a handful of exceptions, the majority of geospatial data acquired by the author during this project was stored in a PostGIS geospatial database which was viewed and queried using QGIS 2.18 desktop GIS software. The use of PostGIS as a data format allowed simplification of many analytical and mapping steps due to the built-in SQL (server query language) functions in PostGIS.

3 Study Area Setting

The Study Area for this report is the former Mission Canyon Landfill. The landfill was operated from approximately 1959 to 1980 by the Los Angeles County Sanitation District. From the landfill's inception, Mission Canyon was intended to be used for park and recreation purposes after the landfill ceased operations.

3.1 Proposed Project Description

The Mountains Recreation and Conservation Authority (MRCA) proposes to complete the Mission Canyon Trailhead project. The Mission Canyon Trailhead project proposes two parking areas that meet current ADA codes located at different entry points of the park, one 100 parking space parking area located off Sepulveda Blvd., and the other 50 space parking area located off Mulholland Dr. The parking areas will consist of a paved vehicle circulation routes with gravel base parking stalls for water percolation. The project's amenities will include flush toilet restrooms, a drinking fountain, 2.5-mile loop trail with a connection to another regional trail, picnic tables, benches, gates and fences, connector trail stairs, trash and recycling receptacles, signage, and information kiosk. Possible other improvements proposed include, mountain bike trail, riparian restoration, and advanced trails, contingent on funding availability. The project plan is shown below on Figure 1.

Current visitation anticipation is high due to the project's ideal location near the 405 and Mulholland. The site currently has high use without it being open to the public. MRCA expects that the usage be approximately 100-500 weekend visitors.

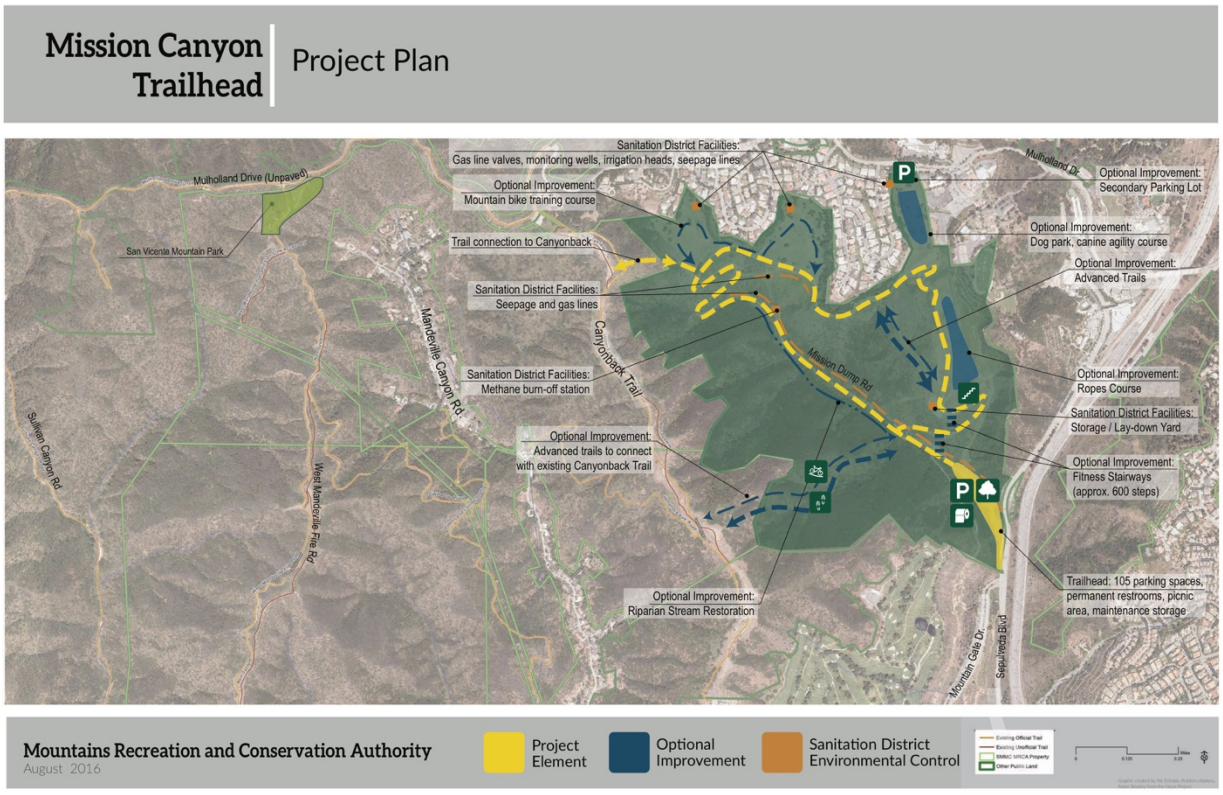
3.2 Location

The Study Area is located at the western end of the boundary between the US Geological Survey's (USGS) 7.5-minute *Van Nuys* and *Beverly Hills* quadrangles. It is bounded on the eastern end by Sepulveda Boulevard and Interstate 405, to the north by Mulholland Drive and residential neighborhoods, to the west by open space and the existing Canyonback Trail, and to the south by open space and a golf course. The analyzed parcel (APN 4490-002-906) is approximately 361.5 acres in extent and is located within the jurisdiction of the City of Los Angeles (see Exhibit 1).

Topography within the Study Area varies from steep and semi-mountainous to flat over extended areas, with elevations ranging from 940 feet above mean sea level (amsl) at the southeastern entrance to 1,580 feet amsl along the western boundary. A number of minor drainages flow northeastward from the southwestern hills, all emptying in a larger drainage that flows southeast and roughly bisecting the Study Area. None of the drainages are named on USGS topographic maps (see Exhibit 2).

The Study Area is centrally-located within the eastern half of the Santa Monica Mountains, a region which includes a patchwork of open space areas operated by various local, state, and federal agencies, as well as residential and commercial development and major transportation thoroughfares.

Figure 1. Mission Canyon Park Project Plan (Source: Mountains Recreation and Conservation Authority)



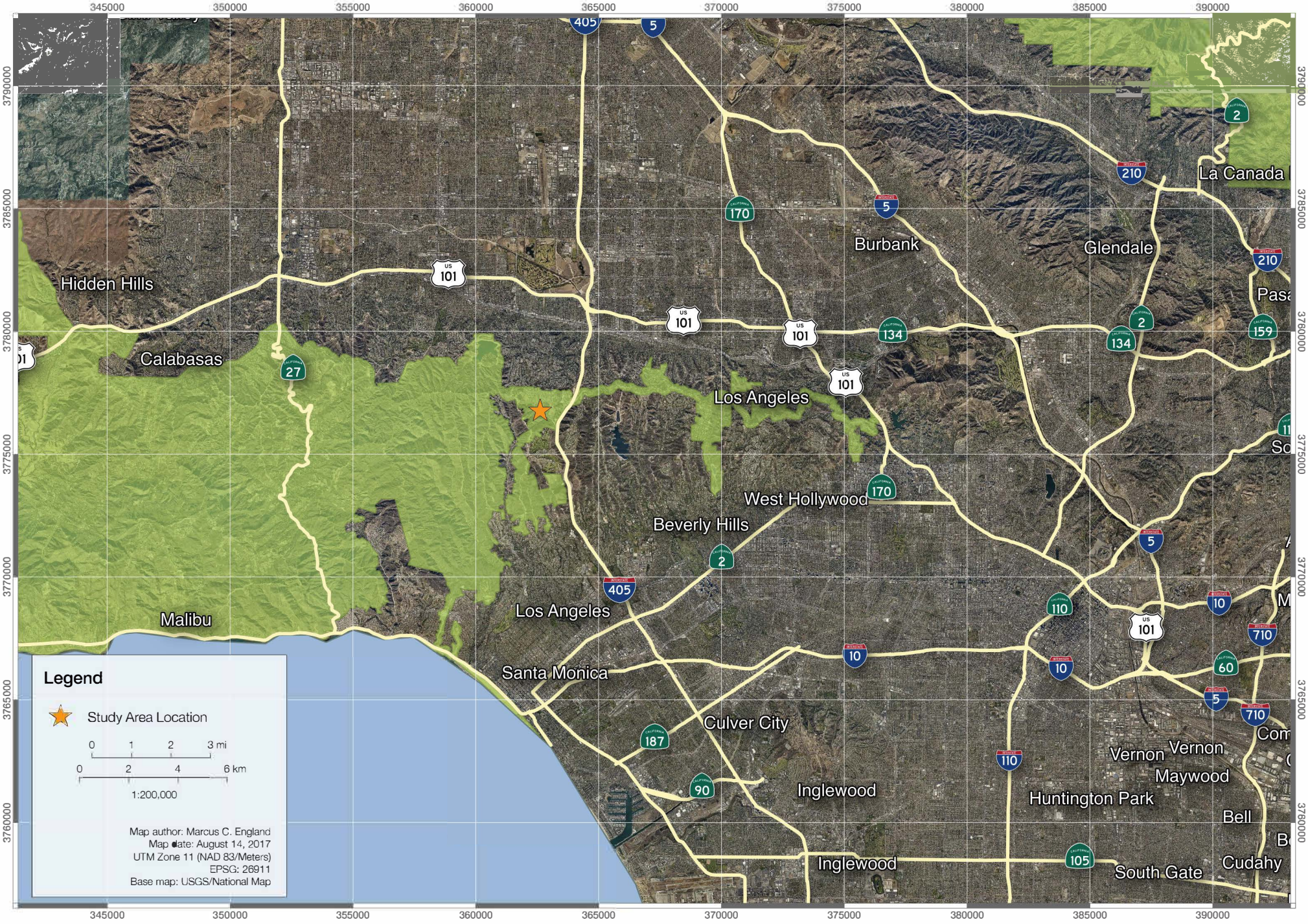


Exhibit 1. Location Map

Mission Canyon Park | Los Angeles County, California

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Exhibit 2. Site Map

Mission Canyon Park | Los Angeles County, California

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4 Legal Setting

This section describes the legal protections that are applicable to resources found in the Study Area. Important terms used to classify the status of resources are highlighted where used, as they will be used elsewhere in this report.

4.1 Federal

4.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) is the federal government's tool to protect rare and declining plant and wildlife species. FESA protects species using the following status designations:

- A federally **endangered** species is a species of invertebrate, plant, or wildlife formally listed by the U.S. Fish and Wildlife Service (USFWS) under FESA as facing extinction throughout all or a significant portion of its geographic range.
- A federally **threatened** species is one formally listed by the USFWS as likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
- A **proposed** threatened or endangered species is one officially proposed by the USFWS for addition to the federal threatened or endangered species lists.

"Take" of a federally endangered or threatened species or its habitat is prohibited by federal law without a special permit. The term "take", under FESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. "Harm" is defined by the USFWS to encompass "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3).

Section 10(a)(1)(B) of the ESA allows for take of a threatened or endangered species incidental to development activities once a Habitat Conservation Plan (HCP) has been prepared to the satisfaction of the USFWS and a Section 10(a) incidental take permit has been issued to the applicant. For federal projects (including those involving federal funding), Section 7 of the ESA allows for consultation between the affected agency and the USFWS to determine what measures may be necessary to compensate for the incidental take of a listed species. A "federal" project is any project that is proposed by a federal agency or is at least partially funded or authorized by a federal agency. Additionally, if the listed species or its habitat occurs in a portion of the project subject to federal jurisdiction (such as "Waters of the United States"), then consultation under Section 7 of the Act is usually permissible and may be required.

FESA also requires the USFWS to consider whether there are areas of habitat essential to conservation for each listed species. **Critical habitat** designations protect these areas, including habitat that is currently unoccupied but may be essential to the recovery of a species. An area is designated as critical habitat after the Service publishes a proposed Federal regulation in the Federal Register and then receives and considers public comments on the proposal. The final boundaries of critical habitat are officially designated when published in the Federal Register.

4.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) is a federal law governing the taking, killing, possession, transportation, and importation of various birds, their eggs, parts and nests. The take of any number of a bird species listed as protected on any one of four treaty lists is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreational purposes and requiring harvest to be limited to levels that prevent overutilization. The MBTA also prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, certain bird species, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11).

4.1.3 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940, and amended several times since then, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." For purposes of the guidelines, "disturb" means: “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

4.2 State of California

4.2.1 California Endangered Species Act

Sections 2081(b) and (c) of the California Endangered Species Act (CESA) allow the California Department of Fish and Wildlife (CDFW) to issue an incidental take permit for a State listed

threatened and endangered species only if specific criteria are met. These criteria are as follows:

1. The authorized take is incidental to an otherwise lawful activity;
2. The impacts of the authorized take are minimized and fully mitigated;
3. The measures required to minimize and fully mitigate the impacts of the authorized take:
    a. are roughly proportional in extent to the impact of the taking on the species,
    b. maintain the applicant's objectives to the greatest extent possible, and
    c. are capable of successful implementation;
4. Adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with and the effectiveness of the measures; and
5. Issuance of the permit will not jeopardize the continued existence of a State-listed species.

Measures to minimize the take of species covered by the permit (Covered Species) and to mitigate the impacts caused by the take will be set forth in one or more attachments to the permit. This attachment will generally be a mitigation plan prepared and submitted by the Permittee in coordination with CDFW staff. The mitigation plan should identify measures to avoid and minimize the take of State-listed species and to fully mitigate the impact of that take.

Fish and Game Code Section 2080.1 allows an applicant who has obtained a federal incidental take statement pursuant to a federal Section 7 consultation or a federal Section 10(a) incidental take permit to notify the Director of CDFW in writing that the applicant has been issued an incidental take statement or an incidental take permit pursuant to the federal Endangered Species Act of 1973. The applicant must submit the federal opinion incidental take statement or permit to the Director of Fish and Wildlife for a determination as to whether the federal document is "consistent" with CESA. If CDFW determines that the federal statement/permit is not consistent with CESA, the applicant must apply for a State Incidental Take Permit under section 2081(b) of the Fish and Game Code as described above.

The State of California considers an **endangered** species one whose prospects of survival and reproduction are in immediate jeopardy; a **threatened** species is one present in such small numbers throughout its range that it is considered likely to become an endangered species in the near future in the absence of special protection or management; and a rare species is one present in such small numbers throughout its range that it may become endangered if its present environment worsens. The designation "rare species" applies only to California native plants. State threatened and endangered species include both plants and wildlife − but do not include invertebrates − and are legally protected against "take" as this term is defined in the CESA (California Fish & Game Code Section 2050 et seq.).

Species of special concern is an informal designation used by the CDFW for some declining wildlife species that are not officially listed as endangered, threatened, or rare. This designation

does not provide legal protection, but signifies that these species are recognized as vulnerable by CDFW.

Species that are California **fully protected** include those protected by special legislation for various reasons, such as the White-tailed Kite (*Elanus leucurus*).

4.2.2 California Environmental Quality Act

Appendix G of the CEQA Guidelines is used by public agencies to determine whether a project may have a significant impact on biological resources. Under Appendix G (Section IV), a project may have a significant impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS.
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFW or USFWS.
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 tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands).
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.

In addition, Section 15065(a) of the CEQA Guidelines establishes that a significant impact may occur if "[t]he project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, [or] reduce the number or restrict the range of an endangered, rare or threatened species."

4.2.3 California Native Plant Society

While not a government agency, the California Native Plant Society (CNPS) is a statewide resource conservation organization that has developed an inventory of California's special-status plant species that is highly regarded by the agencies and biologists. This inventory is a summary of information on the distribution, rarity, and endangerment of California's vascular plants. Rare or potentially rare plant species are ranked using the following system:

- 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere.
- 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
- 2A: Plants Presumed Extirpated in California, But Common Elsewhere
- 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3: Plants About Which More Information is Needed - A Review List
- 4: Plants of Limited Distribution - A Watch List

After each rarity ranking, there is also a threat ranking:

- 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

5 Vegetation Communities

Despite previous use as a landfill, the Study Area contains a variety of vegetation communities that serve as wildlife habitat. Understanding the habitats in an area is critically important to understanding what wildlife species occur or potentially occur in an area.

5.1 Fire History

Fire is well-established as an important component of many, if not most, western vegetation communities and wildlife habitats. Fire is important for helping to clear out dense undergrowth, maintain or create a number of open habitat types, and even critical to the reproduction of many types of plants. Fire is also important to the current state of the habitats at the project site.

According to data from (Cal Fire 2016), the only fire to have burned a significant portion of the site is the Mandeville Fire in 1978. That fire burned the southern two thirds of the site. Numerous smaller fires happened prior to the Mandeville Fire, but did not burn into significant portions of the site. The northern third of the site has no fire history in the Cal Fire data.

5.2 Extant Vegetation Community Descriptions

Six broad-level vegetation communities were mapped in the Study Area (Exhibit 3, Table 1). These communities are described below.

Table 1. Vegetation Community Summary

Vegetation Community	**Extent (Acres)**
Chaparral	147.45
Coastal Sage Scrub	84.93
Annual Grassland	71.22
Disturbed	25.36
Riparian Woodland	18.16
Ornamental Trees	14.54

5.2.1 Chaparral

Various types of chaparral, predominantly Holland's (1986) Chamise Chaparral (Holland Code 37200), cover the majority of the Study Area, particularly in the southern half of the Study Area in the higher hills and north-facing slopes (Figure 2). Important canopy species within the Chaparral include chamise (*Adenostoma fasciculatum*), scrub oak (*Quercus berberidifolia*), and black sage (*Salvia mellifera*). Some portions of the areas mapped as Chaparral include a significant canopy of California black walnut (*Juglans californica*) which, when mapped

independently, are considered a sensitive community. Within the areas mapped as Chaparral are a variety of vegetation alliances (Sawyer et al. 2009), including:

- *Adenostoma fasciculatum* Shrubland Alliance
- *Quercus berberidifolia - Adenostoma fasciculatum* Shrubland Alliance
- *Adenostoma fasciculatum - Salvia mellifera* Shrubland Alliance
- *Juglans californica* Woodland Alliance

Figure 2. An example of Chaparral on a north-facing slope in the Study Area. Riparian woodland fills the canyons, and coastal sage scrub is in the foreground.

5.2.2 Coastal Sage Scrub

Coastal Sage Scrub (Holland Code 32000) is the second-most prominent community in the Study Area (Figure 3), predominantly found at the margins of Chaparral and on warmer south-facing slopes. Much of this community within the Study Area appears to be significantly disturbed with an open canopy and variety of non-native grasses and shrubs. In most portions of the Study Area, this community is dominated in the canopy by California buckwheat (*Eriogonum fasciculatum*), with varying degrees of cover contribution by California sagebrush

(*Artemisia californica*), black sage (*Salvia mellifera*), laurel sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), and prickly pear (*Opuntia littoralis*). While a variety of sensitive wildlife species are dependent upon this habitat, it is unclear how many of these species (particularly California Gnatcatcher [*Polioptila californica*]) are present. Within the areas mapped as Coastal Sage Scrub are the following vegetation alliances (Sawyer et al. 2009):

- *Eriogonum fasciculatum* Shrubland Alliance
- *Artemisia californica - Eriogonum fasciculatum* Shrubland Alliance

Figure 3. An example of Coastal Sage Scrub in the Study Area.

5.2.3 Annual Grassland

Annual Grasslands, also known as Holland's (1986) Non-Native Grassland (Holland Code 42200), are a significant cover-type within the northern portion of the Study Area (Figure 4). These areas were not analyzed for potential alliance classifications. This community, while dominated by non-native and often invasive species, can be an important wildlife habitat as it provides habitat for many native grassland wildlife species as well as foraging areas for raptors. Common

grasses found within this community include several species of oats (*Avena* sp.), bromes (*Bromus* sp.), and barleys (*Hordeum* sp.), as well as fountain grass (*Pennisetum setaceum*).

Figure 4. An example of Annual Grassland in Study Area.

5.2.4 Disturbed

Areas mapped as Disturbed (Figure 5) were generally devoid of vegetation and include paved and unpaved roads and other areas with significant anthropogenic disturbance. While these areas, for the most part, have little value as wildlife habitat, they can provide sunning areas for reptiles.

Figure 5. This road is one of many areas mapped as Disturbed in the Study Area.

5.2.5 Riparian Woodland

Riparian Woodland (Holland [1986] code 6200) is found within the Study Area's main drainage and adjacent canyons (Figure 6). The canopy throughout much of the mapped area was comprised of a mix of tree species, including coast live oak (*Quercus agrifolia*), California sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), bigleaf maple (*Acer macrophyllum*), California bay (*Umbellularia californica*) and several species of willow (*Salix* sp.). The shade and water provided by this community are important to many species in adjacent habitats. A variety of wildlife species are uniquely found in riparian communities, especially amphibians. The tree canopies are important nesting areas for many species of birds.

Figure 6. This image shows a Red-tailed Hawk in a California Sycamore (Platanus racemosa), a tree that is indicative of Riparian Woodland.

5.2.6 Ornamental Trees

A variety of Ornamental Trees are found in the Study Area (Figure 7), predominantly at the margins of the residential areas along the northern end. While these areas do not fit standard natural community classifications, they do have significant canopy cover and can be important for wildlife, particularly as foraging, perching, and nesting areas for birds. Many of these trees are found within large areas of annual grassland and are structurally similar to native meadows or savannas. Common trees within these mapped areas include blue gum (*Eucalyptus globulus*), Canary Island pine (*Pinus canariensis*), Aleppo pine (*P. halepensis*), and Italian stone pine (*Pinus pinea*).

Figure 7. Ornamental Trees in the northern portion of the Study Area within a mowed annual grassland.

5.3 Potentially-Occurring Sensitive Communities

The CNDDB search produced seven sensitive vegetation communities known to occur within the analyzed area. These communities and their potential for occurrence are described below.

5.3.1 Southern Dune Scrub

Southern Dune Scrub (Holland [1986] code 21330) is restricted to coastal areas and not found on or near the Study Area.

5.3.2 Riversidian Alluvial Fan Sage Scrub

Riversidean Alluvial Fan Sage Scrub (Holland [1986] code 32720) is a type of coastal sage scrub found on broad alluvial fans. While this community is related to the Coastal Sage Scrub community found in the Study Area and has many of the same plants, the two communities are not identical.

5.3.3 Southern Coastal Salt Marsh

Southern Coastal Salt Marsh (Holland [1986] code 52120) is restricted to coastal areas and not found on or near the Study Area.

5.3.4 Southern Coast Live Oak Riparian Forest

Southern Coast Live Oak Riparian Forest (Holland [1986] code 61310) is a forest-type dominated by coast live oak and found on bottomlands and outer floodplains along larger streams and on fine-grained, rich alluvium (Holland 1986). While coast live oaks are present in the riparian woodlands on the site, these areas are not extensive enough to be classified as Southern Coast Live Oak Riparian Forest.

5.3.5 Southern Cottonwood Willow Riparian Forest

Southern Cottonwood Willow Riparian Forest (Holland [1986] code 61330) is a forest-type dominated by one or more species of cottonwood and several species of tree willow found along stream and river courses that are often prone to flooding (Holland 1986). While cottonwoods and willows are present in the riparian woodlands on the site, these areas are not extensive enough to be classified as Southern Cottonwood Willow Riparian Forest.

5.3.6 Southern Sycamore Alder Riparian Woodland

Southern Sycamore Alder Riparian Woodland (Holland [1986] code 62400) is found along rocky streambeds subject to seasonal flooding (Holland 1986). While California sycamores are present in the riparian woodlands on the site, alders are absent and these areas are not extensive enough to be classified as Southern Sycamore Alder Riparian Woodland.

5.3.7 California Walnut Woodland

California Walnut Woodland (Holland [1986] code 71210), as the name implies, is a woodland dominated by California black walnut. Within this report, the author mapped areas with sometimes significant walnut cover within the areas mapped as Chaparral. A more detailed vegetation mapping effort could reasonably be expected to include this sensitive natural community, especially on some of the western slopes.

5.4 Jurisdictional Waters

The drainage of Mission Canyon consists of an ephemeral stream that has been altered by human activity and does not have its traditional connection downstream. Prior to anthropological disturbances, waters from Mission Canyon would have flowed downstream into Sepulveda Canyon, which would have then flown into the Pacific Ocean. Within the Mission Canyon watershed there are numerous minor drainages contributing to the Mission Canyon ephemeral stream. It is expected that all of these features would be jurisdictional waters regulated by USACE, RWQCB, and CDFW.

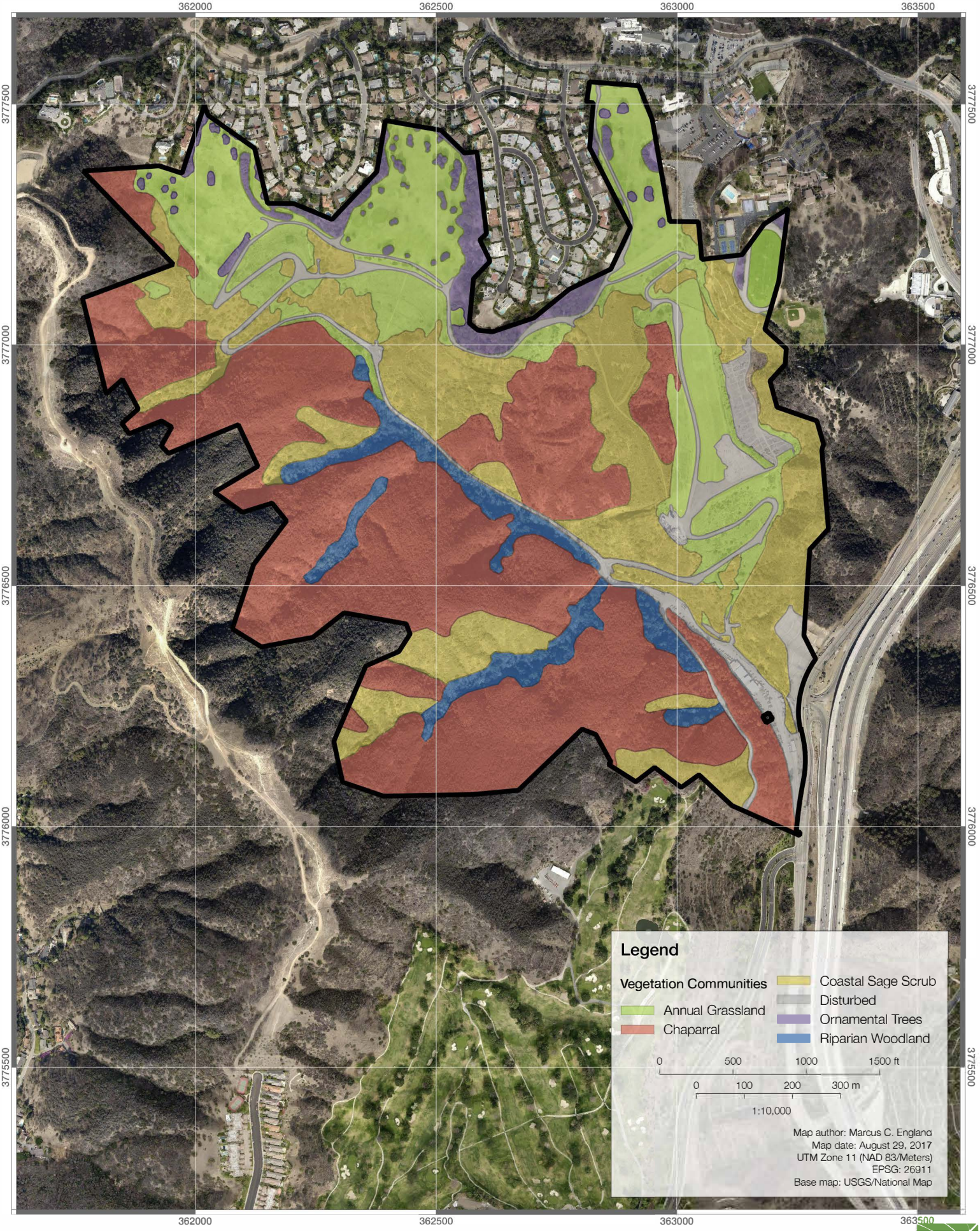

Exhibit 3. Vegetation Community Map

Mission Canyon Park | Los Angeles County, California

England|Ecology

6 Plants

6.1 Potentially-Occurring Sensitive Plant Species

One hundred and thirty-eight plant species were identified during the survey (see Appendix A). There were also numerous non-native, ornamental landscaping species associated with the residential parcels surrounding the study area. No special-status plant species were observed. The study area consisted of areas of natural vegetation communities that were comprised of primarily native species and areas that had been developed or disturbed that consisted of non-native, ruderal species.

6.2 Habitat Assessment for Special-Status Plant Species

Thirty-nine special-status plant species have recorded occurrences in the vicinity of the study area. Of these, 35 of the species are not expected to occur in the Study Area due to the lack of associated habitats being present or the Study Area is out of the current known range of the species (see Appendix B). The four species with some potential to occur in the Study Area are listed in Table 2.

Table 2. Special-status Plant Species with Potential to Occur in the Study Area

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CRPR**	**General Habitat Association**	**Micro-habitat Association**	**Status Onsite**
slender mariposa-lily *Calochortus clavatus* var. *gracilis*	None	None	1B.2	Chaparral, coastal scrub, valley and foothill grassland.	Shaded foothill canyons; often on grassy slopes within other habitat. 210-1815 m.	Low Potential. There is marginal habitat for the species onsite.
Plummer's mariposa-lily *Calochortus plummerae*	None	None	4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	Medium Potential. The species was documented just north of the study area.
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	None	None	4.3	Chaparral, coastal scrub.	Dry soils, shrubland. 4-1435 m.	Medium Potential. The species has a record within two miles to the southwest in the Santa Monica Mountains.

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CRPR**	**General Habitat Association**	**Micro-habitat Association**	**Status Onsite**
white-veined monardella *Monardella hypoleuca* ssp. *hypoleuca*	None	None	1B.3	Chaparral, cismontane woodland.	Dry slopes. 50-1280 m.	Medium Potential. The species has a 2008 record within four miles to the southwest in the Santa Monica Mountains.

1. CRPR Status Key

1B Rare, Threatened, or Endangered in CA and elsewhere; eligible for state listing.

4 On watch list for plants of limited distribution.

.2 - Fairly threatened in California (moderate degree/immediacy of threat)

.3 - Not very threatened in California (low degree/immediacy of threats or no current threats known)

7 Wildlife

7.1 Potentially-Occurring Sensitive Wildlife Species

The following species accounts summarize all special status wildlife species known or suspected of potentially occurring within the Study Area per the methods discussion in Section 2.5. The reason for including each species is listed after "Source". Text for "Habitat" and "Distribution", except where other citations are included, is excerpted directly from the species accounts provided by the California Department of Fish and Wildlife at https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range with internal citations omitted.

7.1.1 Invertebrates

Sixteen sensitive invertebrate species were listed as potentially-occurring during desktop analysis.

Detailed habitat and distributional information is lacking for many species, so that information is not presented here for invertebrate species.

Table 3. Potentially-Occurring Sensitive Invertebrates

Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Riverside Fairy Shrimp	*Streptocephalus wootton*i	Low	CNDDB	FE
Sandy Beach Tiger Beetle	*Cicindela hirticollis gravida*	None	CNDDB	SA
Senile Tiger Beetle	*Cicindela senilis frosti*	None	CNDDB	SA
Globose Dune Beetle	*Coelus globosus*	None	CNDDB	SA
Lange's El Segundo Dune Weevil	*Onychobaris langei*	None	CNDDB	SA
Dorothy's El Segundo Dune Weevil	*Trigonoscuta dorothea dorothea*	None	CNDDB	SA
Belkin's Dune Tabanid Fly	*Brennania belkini*	None	CNDDB	SA
Crotch Bumble Bee	*Bombus crotchii*	None	CNDDB	SA
Henne's Eucosman Moth	*Eucosma hennei*	None	CNDDB	SA
Busck's Gallmoth	*Carolella busckana*	None	CNDDB	SA
Wandering (=Saltmarsh) Skipper	*Panoquina errans*	None	CNDDB	SA
El Segundo Blue Butterfly	*Euphilotes battoides allyni*	None	CNDDB	FE
Monarch - California overwintering population	*Danaus plexippus pop. 1*	Low	CNDDB	SA

Santa Monica Shieldback Katydid	*Aglaothorax longipennis*	None	CNDDB	SA
Gertsch's Socalchemmis Spider	*Socalchemmis gertschi*	None	CNDDB	SA
Mimic Tryonia (=California brackishwater snail)	*Tryonia imitator*	None	CNDDB	SA

Status Key:
FE = Federal Endangered
SA = CNDDB-designated Special Animal

7.1.1.1 *Riverside Fairy Shrimp* (Streptocephalus woottoni)

Source: CNDDB
Special Status: Federal Endangered
Occurrence Potential: Low. The species is not known from the Santa Monica Mountains area and vernal pools used by the species are likely not present on the site.

7.1.1.2 Sandy Beach Tiger Beetle (Cicindela hirticollis gravida)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.3 Senile Tiger Beetle (Cicindela senilis frosti)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site.

7.1.1.4 Globose Dune Beetle (Coelus globosus)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.5 Lange's El Segundo Dune Weevil (Onychobaris langei)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.6 Dorothy's El Segundo Dune Weevil (Trigonoscuta dorothea dorothea)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.7 Belkin's Dune Tabanid Fly (Brennania belkini)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.8 Crotch Bumble Bee (Bombus crotchii)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: Low. While habitat is present, the species has become very rare.

7.1.1.9 Henne's Eucosman Moth (Eucosma hennei)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.10 Busck's Gallmoth (Carolella busckana)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.11 Wandering Skipper (Panoquina errans)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.12 El Segundo Blue Butterfly (Euphilotes battoides allyni)

Source: CNDDB
Special Status: Federal Endangered
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.13 Monarch - California overwintering population (Danaus plexippus pop. 1)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: Low. While Monarch's are certainly present on the site, this CNDDB record pertains to overwintering, which would not be expected.

7.1.1.14 Santa Monica Shieldback Katydid (Aglaothorax longipennis)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.15 Gertsch's Socalchemmis Spider (Socalchemmis gertschi)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.1.16 Mimic Tryonia (Tryonia imitator)

Source: CNDDB
Special Status: CNDDB-designated Special Animal
Occurrence Potential: None. There is no habitat for this species on the site.

7.1.2 Fish

Table 4. Potentially-Occurring Sensitive Fish

Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Steelhead - southern California DPS	*Oncorhynchus mykiss irideus*	None	CNDDB	FE

Status Key:
FE = Federal Endangered

7.1.2.1 Steelhead - southern California DPS (Oncorhynchus mykiss irideus)

Source: CNDDB
Special Status: Federal Endangered
Habitat & Distribution: Steelhead are capable of surviving in a wide range of temperature conditions. They do best where dissolved oxygen concentration is at least 7 parts per million. In streams, deep low-velocity pools are important wintering habitats. Spawning habitat consists of gravel substrates free of excessive silt. In the United States, steelhead trout are found along the entire Pacific Coast. Worldwide, steelhead are naturally found in the Western Pacific south through the Kamchatka peninsula. They have been introduced worldwide. (Excerpted directly from NOAA 2017).
Occurrence Potential: None. There is no habitat for this species on the site.

7.1.3 Amphibians

Table 5. Potentially-Occurring Sensitive Amphibians

Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Arroyo Toad	*Anaxyrus californicus*	Moderate	CNDDB	FE, SSC
California Red-legged Frog	*Rana draytonii*	Low	CWHR	FT, SSC
Western Spadefoot	*Spea hammondii*	Low	CWHR	SSC
California Newt	*Taricha torosa*	Moderate	CWHR	SSC

Status Key:
FE = Federal Endangered
FT = Federal Threatened
SSC = California Species of Special Concern

7.1.3.1 Arroyo Toad (Anaxyrus californicus)

Source: CNDDB
Special Status: FESA: Endangered; CDFW: Species of Special Concern
Habitat: Found in semi-arid regions near washes or intermittent streams. Habitats used include valley-foothill and desert riparian as well as a variety of more arid habitats including desert wash, palm oasis, and Joshua tree, mixed chaparral and sagebrush.
Distribution: Southern part of the Coast Ranges from northern San Luis Obispo Co. south to Baja California.
Occurrence Potential: Moderate. Appropriate habitat is present, however, former and surrounding land uses decrease the potential for occurrence.

7.1.3.2 California Red-legged Frog (Rana draytonii)

Source: CWHR
Special Status: FESA: Threatened; CDFW: Species of Special Concern
Habitat: Inhabits quiet pools of streams, marshes, and occasionally ponds.
Distribution: Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges, usually below 1200 m (3936 ft).
Occurrence Potential: Low. Appropriate habitat may be present, however, former and surrounding land uses decrease the potential for occurrence. There are no CNDDB records for the analyzed area.

7.1.3.3 Western Spadefoot (Spea hammondii)

Source: CWHR
Special Status: CDFW: Species of Special Concern
Habitat: Occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood woodlands.
Distribution: Ranges throughout the Central Valley and adjacent foothills, and is usually quite common where it occurs. In the Coast Ranges it is

found from Point Conception, Santa Barbara Co., south to the Mexican border. Elevations of occurrence extend from near sea level to 1363 m (4460 ft) in the southern Sierra foothills.

Occurrence Potential: Low. Appropriate habitat may be present, however, former and surrounding land uses decrease the potential for occurrence. There are no CNDDB records for the analyzed area.

7.1.3.4 *California Newt* (Taricha torosa)

Source: CWHR

Special Status: CDFW: Species of Special Concern

Habitat: Occurs primarily in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub and mixed chaparral, but is also known from annual grassland and mixed conifer types.

Distribution: Occurs commonly in the Coast Ranges from central Mendocino Co. south to northern San Diego Co. Populations are also known from the Peninsular Ranges of San Diego Co. south to the vicinity of Boulder Creek (Stebbins 1985). It is found in the southern Sierra Nevada foothills, south of the Kaweah River. Elevation range extends from near sea level to about 1830 m (6000 ft).

Occurrence Potential: Moderate. Appropriate habitat is present, however, former and surrounding land uses decrease the potential for occurrence.

7.1.4 Reptiles

Table 6. Potentially-Occurring Sensitive Reptiles

Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Southern Western Pond Turtle	*Actinemys pallida*	None	CWHR, CNDDB	SSC
Southern California Legless Lizard	*Anniella stebbinsi*	Moderate	CWHR, CNDDB	SSC
Blainville's Horned Lizard	*Phrynosoma blainvillii*	High	CWHR, CNDDB	SSC
Tiger Whiptail	*Aspidoscelis tigris*	Present	CWHR, CNDDB	SSC
Glossy Snake	*Arizona elegans*	High	CNDDB	SSC
Ring-necked Snake	*Diadophis punctatus*	High	CWHR, CNDDB	SA
Two-striped Gartersnake	*Thamnophis hammondii*	High	CWHR, CNDDB	SSC
Common Gartersnake	*Thamnophis sirtalis*	Low	CWHR	SSC

Status Key:
SSC = California Species of Special Concern
SA = CNDDB-designated Special Animal

7.1.4.1 *Southern Western Pond Turtle* (Actinemys pallida)

Source: CWHR, CNDDB
Special Status: CDFW: Species of Special Concern
Habitat: Associated with permanent or nearly permanent water in a wide variety of habitat types.
Distribution: Uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Elevation range extends from near sea level to 1430 m (4690 ft).
Occurrence Potential: None. The drainages on-site are unlikely to have sufficient flow to harbor this species.

7.1.4.2 *Southern California Legless Lizard* (Anniella stebbinsi)

Source: CWHR, CNDDB
Special Status: CDFW: Species of Special Concern
Habitat: Common in several habitats but especially in coastal dune, valley-foothill, chaparral, and coastal scrub types.
Distribution: Common in suitable habitats in the Coast Ranges from the vicinity of Antioch, Contra Costa Co. south to the Mexican border. Legless lizards are of spotty occurrence throughout the rest of their range, which includes the floor of the San Joaquin Valley from San Joaquin Co. south, the west slope of the southern Sierra, the Tehachapi Mountains west of the desert, and the mountains of southern California. An isolated desert population is known from Whitewater, Riverside Co. Elevation is from near sea level to about 1800 m (6000 ft) in the Sierra.
Occurrence Potential: Moderate. This species is extremely difficult to detect without special surveys.

7.1.4.3 *Blainville's Horned Lizard* (Phrynosoma blainvillii)

Source: CNDDB, CWHR
Special Status: CDFW: Species of Special Concern
Habitat: Occurs in valley- foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats.
Distribution: Occurs in the Sierra Nevada foothills from Butte Co. to Kern Co. and throughout the central and southern California coast. Its elevational range extends up to 1200 m (4000 ft) in the Sierra Nevada foothills and up to 1800 m (6000 ft) in the mountains of southern California.
Occurrence Potential: High. Appropriate habitat and food (carpenter ants) is present on the site.

7.1.4.4 *Tiger Whiptail* (Aspidoscelis tigris)

Source: CWHR, CNDDB
Special Status: CDFW: Species of Special Concern
Habitat: The species occurs in a variety of habitats including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, mixed conifer, pine-juniper, chamise-redshank chaparral, mixed chaparral, desert scrub, desert wash, alkali scrub, and annual grassland.
Distribution: This whiptail is widely distributed but uncommon over much of its range in California, except in desert regions where it is abundant in suitable habitats. The species is found throughout the state except in the humid northwest, along the humid outer Coast Ranges, or mountainous regions above 2290 m (7500 ft). Also absent from much of the northern part of the Central Valley.
Occurrence Potential: Present. This species was observed during surveys.

7.1.4.5 *Glossy Snake* (Arizona elegans)

Source: CNDDB
Special Status: CDFW: Species of Special Concern
Habitat: Most common in desert habitats but also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grassland.
Distribution: Common throughout southern California especially in desert regions. Less common to the north, glossy snakes occur in the interior Coast Ranges as far as Mount Diablo in Contra Costa Co. Elevation from below sea level to 1830 m (6,000 ft).
Occurrence Potential: High. This species is present elsewhere in the Santa Monica Mountains and appropriate habitat is located on-site.

7.1.4.6 *Ring-necked Snake* (Diadophis punctatus)

Source: CWHR, CNDDB
Special Status: CNDDB-designated Special Animal
Habitat: Most common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.
Distribution: Widespread in California, absent only from large portions of the Central Valley, high mountains, desert (except in the Providence Mountains, San Bernardino Co.), and those regions east of the Sierra-Cascade crest. Elevation sea level to 2100 m (7000 ft).
Occurrence Potential: High. This species has a fairly high tolerance for disturbance and is present in similar habitats with less contiguous open space.

7.1.4.7 *Two-striped Gartersnake* (Thamnophis hammondii)

Source: CWHR, CNDDB
Special Status: CDFW: Species of Special Concern
Habitat: It is associated with permanent or semi-permanent bodies of water in a variety of habitats from sea level to 2,400 m (8,000 ft).
Distribution: It is distributed from the southeastern slope of the Diablo Range and the Salinas Valley south along the South Coast and Transverse ranges to the Mexican border, and on Santa Catalina Island. It is now gone from about 40% of its historical range.
Occurrence Potential: High. Occurs in similar riparian habitat nearby to the southwest.

7.1.4.8 Common Gartersnake (Thamnophis sirtalis)

Source: CWHR
Special Status: CDFW: Species of Special Concern
Habitat: Associated with permanent or semi-permanent bodies of water in a variety of habitats.
Distribution: Wide-ranging and locally very abundant. Absent only from Alpine Co. southward (east of the Sierra crest), the southern desert regions, and coastally from northern San Diego Co. south to the Mexican border. Elevation sea level to 2400 m (8000 ft).
Occurrence Potential: Low. There are no CNDDB records for this species in the analyzed area.

7.1.5 Birds

Table 7. Potentially-Occurring Sensitive Birds

Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
California Black Rail	*Laterallus jamaicensis coturniculus*	None	CNDDB	ST, FP
Snowy Plover	*Charadrius nivosus*	None	CWHR, CNDDB	FT, SSC
California Least Tern	*Sternula antillarum browni*	None	CNDDB	FE, SE, FP
American White Pelican	*Pelecanus erythrorhynchos*	None	CWHR	SSC
California Brown Pelican	*Pelecanus occidentalis californicus*	None	CNDDB	FP
Least Bittern	*Ixobrychus exilis*	None	CWHR	SSC
Bald Eagle	*Haliaeetus leucocephalus*	Low	CWHR	SE, FP
Northern Harrier	*Circus hudsonius*	Moderate	CWHR	SSC
Swainson's Hawk	*Buteo swainsoni*	Low	CNDDB	ST
Golden Eagle	*Aquila chrysaetos*	Moderate	CWHR	FP
Burrowing Owl	*Athene cunicularia*	Low	CNDDB	SSC
Short-eared Owl	*Asio flammeus*	Low	CWHR	SSC

Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
American Peregrine Falcon	*Falco peregrinus anatum*	Moderate	CNDDB	FP
Southwestern Willow Flycatcher	*Empidonax traillii extimus*	Low	CNDDB	FE, SE
Loggerhead Shrike	*Lanius ludovicianus*	Low	CWHR	SSC
Least Bell's Vireo	*Vireo bellii pusillus*	Moderate	CNDDB	FE, SE
Bank Swallow	*Riparia riparia*	Low	CNDDB	ST
California Gnatcatcher	*Polioptila californica*	Moderate	CNDDB	FT, SSC
Rufous-crowned Sparrow	*Aimophila ruficeps*	High	CWHR, CNDDB	SA
Belding's Savannah Sparrow	*Passerculus sandwichensis beldingi*	None	CNDDB	SE
Tricolored Blackbird	*Agelaius tricolor*	None	CNDDB	SC, SSC
Yellow Warbler	*Setophaga petechia*	High	CWHR	SSC

Status Key:
FE = Federal Endangered
FT = Federal Threatened
SE = State Endangered
ST = State Threatened
SC = Candidate for state listing
FP = California fully protected
SSC = California Species of Special Concern
SA = CNDDB-designated Special Animal

7.1.5.1 *California Black Rail* (Laterallus jamaicensis coturniculus)

Source: CNDDB

Special Status: State Threatened, California Fully-Protected

Habitat & Distribution: Rarely seen, scarce, yearlong resident of saline, brackish, and fresh emergent wetlands in the San Francisco Bay area, Sacramento-San Joaquin Delta, coastal southern California at Morro Bay and a few other locations, the Salton Sea, and lower Colorado River area. Formerly a local resident in coastal wetlands from Santa Barbara Co. to San Diego Co.; still winters there rarely. Significant loss of saltwater and freshwater wetland habitat in recent decades probably has reduced population.

Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.5.2 *Snowy Plover* (Charadrius nivosus)

Source: CNDDB, CWHR

Special Status: Federal Threatened, California Species of Special Concern

Habitat & Distribution: In fall and winter, common on sandy marine and estuarine shores. Nests locally in these same habitats from April through August, but the major nesting habitat now appears to be on salt pond levees. Inland nesting areas occur at the Salton Sea, Mono Lake,

and at isolated sites on the shores of alkali lakes in northeastern California, in the Central Valley, and southeastern deserts.

Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.5.3 California Least Tern (Sternula antillarum browni)

Source: CNDDB

Special Status: Federal Endangered, State Endangered, California Fully-Protected

Habitat & Distribution: Migratory in California, usually arriving at breeding territory in late April in southern California to mid-May in northern California. In 1994, 2,750 breeding pairs were counted in California. Breeding colonies are located in southern California along marine and estuarine shores, and in San Francisco Bay in abandoned salt ponds and along estuarine shores. Feeds in nearby shallow, estuarine waters. After breeding, family groups regularly occur at lacustrine waters near the coast of southern California.

Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.5.4 American White Pelican (Pelecanus erythrorhynchos)

Source: CWHR

Special Status: California Species of Special Concern

Habitat & Distribution: In California, now nests only at large lakes in Klamath Basin, especially Clear Lake National Wildlife Refuge. It is common to abundant on nesting grounds April to August (sometimes March to September). From August to December common on salt ponds of San Francisco Bay and on the coastal slope from Sonoma Co. south. Locally uncommon to common on large lakes and estuaries in Central Valley Fairly common at Lake Tahoe and Salton Sea in late spring and summer. Common spring and fall migrant at Salton Sea and Colorado River. In fall and winter, rare at Salton Sea, Morro Bay, and San Diego Bay; sporadic elsewhere. Migrant flocks pass overhead almost any month, but mainly in spring and fall throughout the state, especially in southern California.

Occurrence Potential: None. There is no habitat for this species on the site.

7.1.5.5 California Brown Pelican (Pelecanus occidentalis californicus)

Source: CNDDB

Special Status: California Fully-Protected

Habitat & Distribution: Found in estuarine, marine subtidal, and marine pelagic waters along the California coast. Rare to uncommon on Salton Sea from July to September. Breeds on Channel Islands: Anacapa, Santa Barbara, and Santa Cruz from March to early August; most

numerous then within 20 km (12 mi) of those islands. In southern California, common along coast from June to October, especially within 30 km (19 mi) of shore, but regularly out to 175 km (109 mi). Fairly common the rest of year, with lowest numbers April to May.

Occurrence Potential: None. There is no habitat for this species on the site. This species occurs on the coast.

7.1.5.6 Least Bittern (Ixobrychus exilis)

Source: CWHR

Special Status: California Species of Special Concern

Habitat & Distribution: In southern California, common summer resident (especially April to September), at Salton Sea and Colorado River, in dense emergent wetlands near sources of freshwater, and in desert riparian (saltcedar scrub). Probably nests only in emergent wetlands. In deserts and coastal lowlands, quite rare, but breeds locally in the Owens Valley and Mojave Desert. Rare to uncommon April to September in large, fresh emergent wetlands of cattails and tules in San Diego county, and the Sacramento and San Joaquin Valleys, and where it nests. In northeastern California, recent breeding records exist in Siskiyou, Modoc and Lassen counties.

Occurrence Potential: None. There is no habitat for this species on the site.

7.1.5.7 Bald Eagle (Haliaeetus leucocephalus)

Source: CWHR

Special Status: California Endangered, Bald and Golden Eagle Protection Act

Habitat & Distribution: Permanent resident, and uncommon winter migrant, now restricted to breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity cos. About half of the wintering population is in the Klamath Basin. More common at lower elevations; not found in the high Sierra Nevada. Fairly common as a local winter migrant at a few favored inland waters in southern California. Largest numbers occur at Big Bear Lake, Cachuma Lake, Lake Mathews, Nacimiento Reservoir, San Antonio Reservoir, and along the Colorado River.

Occurrence Potential: Low. If it were to be observed, it would not be regularly present as there is no appropriate habitat to support this species.

7.1.5.8 Northern Harrier (Circus hudsonius)

Source: CWHR

Special Status: California Species of Special Concern

Habitat: Occurs from annual grassland up to lodgepole pine and alpine meadow habitats, as high as 3000 m (10,000 ft). Destruction of wetland habitat, native grassland, and moist meadows, and burning and plowing of nesting areas during early stages of breeding cycle, are major reasons for the decline.

Distribution: Breeds from sea level to 1700 m (0-5700 ft) in the Central Valley and Sierra Nevada, and up to 800 m (3600 ft) in northeastern California. Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Permanent resident of the northeastern plateau and coastal areas; less common resident of the Central Valley. Widespread winter resident and migrant in suitable habitat. California population has decreased in recent decades, but can be locally abundant where suitable habitat remains free of disturbance, especially from intensive agriculture. Breeding population much reduced, especially in southern coastal district.

Occurrence Potential: Moderate. There is limited suitable habitat; most likely to occur as a migrant.

7.1.5.9 Swainson's Hawk (Buteo swainsoni)

Source: CNDDB

Special Status: State Threatened

Habitat & Distribution: Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen Co., and Mojave Desert. Very limited breeding reported from Lanfair Valley, Owens Valley, Fish Lake Valley, and Antelope Valley. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. In southern California, now mostly limited to spring and fall transient. Formerly abundant in California with wider breeding range. Decline resulted in part from loss of nesting habitat.

Occurrence Potential: Low. There is not appropriate habitat for this species on the site, but it could be detected as a migrant.

7.1.5.10 Golden Eagle (Aquila chrysaetos)

Source: CWHR

Special Status: California Fully-Protected, Bald and Golden Eagle Protection Act

Habitat: Habitat typically rolling foothills, mountain areas, sage-juniper flats, desert.

Distribution: Uncommon permanent resident and migrant throughout California, except center of Central Valley. Perhaps more common

in southern California than in north. Ranges from sea level up to 3833 m (0-11,500 ft).

Occurrence Potential: Moderate. Unlikely to be present on a regular basis because of anthropogenic disturbance, but habitat is appropriate for the species to occur, even if transiently.

7.1.5.11 Burrowing Owl (Athene cunicularia)

Source: CNDDB

Special Status: California Species of Special Concern

Habitat: A yearlong resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats.

Distribution: Formerly common in appropriate habitats throughout the state, excluding the humid northwest coastal forests and high mountains. Numbers markedly reduced in recent decades. Present on the larger offshore islands. Found as high as 1600 m (5300 ft) in Lassen Co.

Occurrence Potential: Low. There is limited suitable habitat and this species is rare on the coastal slope of Los Angeles County.

7.1.5.12 Short-eared Owl (Asio flammeus)

Source: CWHR

Special Status: California Species of Special Concern

Habitat & Distribution: Formerly a resident locally the length of the state, excluding higher mountains. A widespread winter migrant, found primarily in the Central Valley, in the western Sierra Nevada foothills, and along the coastline. An uncommon winter migrant in southern California, including the Channel Islands. Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands. Numbers have declined over most of the range in recent decades because of destruction and fragmentation of grassland and wetland habitats, and grazing. Increased levels of predation on this ground nester may also contribute to its decline.

Occurrence Potential: Low. There is limited habitat on the site for this species.

7.1.5.13 American Peregrine Falcon (Falco peregrinus anatum)

Source: CNDDB

Special Status: California Fully-Protected

Habitat: Breeds mostly in woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.

Distribution: Very uncommon breeding resident, and uncommon as a migrant. Active nesting sites are known along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. In winter, found inland throughout the Central Valley, and occasionally on the Channel Islands. Migrants occur along the coast, and in the western Sierra Nevada in spring and fall.

Occurrence Potential: Moderate. Most likely to occur as a migrant or winter resident.

7.1.5.14 Southwestern Willow Flycatcher (Empidonax traillii extimus)

Source: CNDDB

Special Status: Federal Endangered

Habitat & Distribution: (NOTE: Discussion pertains to species as a whole) A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats at 600-2500 m (2000-8000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows. Has been observed breeding along the Santa Ynez river in Santa Barbara Co., and along the Santa Clara river in Ventura Co. May still nest elsewhere in lowland California, as in San Diego Co., but definite records are lacking. Common spring (mid-May to early June) and fall (mid-August to early September) migrant at lower elevations, primarily in riparian habitats throughout the state exclusive of the North Coast.

Occurrence Potential: Low. Could occur as a migrant in riparian areas on the site, though the habitat structure is not appropriate for this species.

7.1.5.15 Loggerhead Shrike (Lanius ludovicianus)

Source: CWHR

Special Status: California Species of Special Concern.

Habitat & Distribution: A common resident and winter visitor in lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. In the Great Basin, from Inyo Co. north, population declines markedly from November through March. Rare on coastal slope north of Mendocino Co., occurring only in winter. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Sometimes uses edges of denser habitats.

Occurrence Potential: Low. Most likely to occur as a vagrant.

7.1.5.16 Least Bell's Vireo (Vireo bellii pusillus)

Source: CNDDB

Special Status: Federal Endangered, California Endangered

Habitat & Distribution: Formerly a common and widespread summer resident below about 600 m (2000 ft) in western Sierra Nevada, throughout Sacramento and San Joaquin valleys, and in the coastal valleys and foothills from Santa Clara Co. south. Also was common in coastal southern California from Santa Barbara Co. south, below about 1200 m (4000 ft) east of the Sierra Nevada, in Owens and Benton valleys, along Mojave River and other streams at western edge of southeastern deserts, and along entire length of Colorado River (Grinnell and Miller 1944). Has declined drastically or vanished entirely throughout California range in recent decades, apparently from cowbird parasitism and habitat destruction and degradation. Now a rare, local, summer resident below about 600 m (2000 ft) in willows and other low, dense valley foothill riparian habitat and lower portions of canyons mostly in San Benito and Monterey cos.; in coastal southern California from Santa Barbara Co. south; and along the western edge of the deserts in desert riparian habitat.

Occurrence Potential: Moderate. Could occur as a migrant in riparian areas on the site, though areas with appropriate habitat structure are limited.

7.1.5.17 Bank Swallow (Riparia riparia)

Source: CNDDB

Special Status: California Threatened

Habitat & Distribution: A neotropical migrant found primarily in riparian and other lowland habitats in California west of the deserts during the spring-fall period. A spring and fall migrant in the interior, less common on coast; an uncommon and very local summer resident. Casual in southern California in winter; a few winter records along central coast to San Mateo Co. In summer, restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils, into which it digs nesting holes. In migration, flocks with other swallows over many open habitats. Range in California estimated to be reduced 50% since 1900. Formerly more common as breeder in California.

Occurrence Potential: Low. There is limited habitat to support this species, however, it could occur as a transient.

7.1.5.18 California Gnatcatcher (Polioptila californica)

Source: CNDDB

Special Status: Federal Threatened, California Species of Special Concern

Habitat & Distribution: a local, uncommon, obligate resident of arid coastal scrub below about 500 m (1,500 ft) from eastern Orange and southwestern Riverside cos. south through the coastal foothills of San Diego Co.; along the immediate coast at Palos Verdes Peninsula, Los Angeles Co.; at Camp Pendleton and in Tijuana River Valley, San Diego Co. May still occur along lower, coastal slopes of San Gabriel and San Bernardino Mts., Los Angeles and San Bernardino cos., but status uncertain.

Occurrence Potential: Moderate. There is appropriate habitat on the site, however, this species has not been detected.

7.1.5.19 Rufous-crowned Sparrow (Aimophila ruficeps)

Source: CWHR, CNDDB

Special Status: CNDDB-designated Special Animal

Habitat & Distribution: Common resident of sparse, mixed chaparral and coastal scrub habitats (especially coastal sage) from Mendocino and Tehama cos. south to the Mexican border. Uncommon on lower slopes of western Sierra Nevada, and on Santa Cruz Island. Most numerous in western portion of range in California. Frequents relatively steep, often rocky hillsides with grass and forb patches; also grassy slopes without shrubs, if rock outcrops are present.

Occurrence Potential: High. Significant portions of the site have ideal habitat for this species.

7.1.5.20 Belding's Savannah Sparrow (Passerculus sandwichensis beldingi)

Source: CNDDB

Special Status: California Endangered

Habitat & Distribution: Found year-round in scattered southern coastal wetlands. Other Savannah Sparrow subspecies are more widespread and use a wider array of habitats.

Occurrence Potential: None. There is no habitat on the site for this subspecies. Other subspecies of Savannah Sparrow are likely to be present as migrants or winter residents.

7.1.5.21 Tricolored Blackbird (Agelaius tricolor)

Source: CNDDB

Special Status: California Candidate, California Species of Special Concern

Habitat & Distribution: Mostly a resident in California. Common locally throughout Central Valley and in coastal districts from Sonoma Co. south. Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs. Feeds in grassland and cropland habitats. Breeds locally in northeastern California. In winter, becomes more

widespread along central coast and San Francisco Bay area and is found in portions of the Colorado Desert. Numbers appear to be declining in California.

Occurrence Potential: None. There is no habitat on the site for this species, and it is no longer expected to occur on the coastal slope of southern California.

7.1.5.22 Yellow Warbler (Setophaga petechia)

Source: CWHR

Special Status: California Species of Special Concern

Habitat & Distribution: Breeding distribution includes from the coast range in Del Norte county, east to Modoc plateau, south along coast range to Santa Barbara and Ventura counties and along western slope of Sierra Nevada south to Kern county. Also breeds along eastern side of California from the Lake Tahoe area south through Inyo co. Also breeds in several southern California mountain ranges and throughout most of San Diego county. Winters in Imperial and Colorado river valleys. Breeds in riparian woodlands from coastal and desert lowlands up to 2500 m (8000 ft) in Sierra Nevada. Also breeds in montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush. Numbers of breeding pairs have declined dramatically in recent decades in many lowland areas (southern coast, Colorado River, San Joaquin and Sacramento valleys). Now rare to uncommon in many lowland areas where formerly common.

Occurrence Potential: High. While this species was not detected during surveys, it almost certainly occurs in the riparian areas.

7.1.6 Mammals

Table 8. Potentially-Occurring Sensitive Mammals

Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Southern California Saltmarsh Shrew	*Sorex ornatus salicornicus*	None	CNDDB	SSC
Western Bonneted Bat	*Eumops perotis*	Moderate	CWHR, CNDDB	SSC
Pocketed Free-tailed Bat	*Nyctinomops femorosaccus*	Low	CNDDB	SSC
Big Free-tailed Bat	*Nyctinomops macrotis*	Low	CNDDB	SSC
Pallid Bat	*Antrozous pallidus*	Moderate	CWHR, CNDDB	SSC
Townsend's Big-eared Bat	*Corynorhinus townsendii*	Moderate	CWHR	SSC
Silver-haired Bat	*Lasionycteris noctivagans*	Moderate	CWHR, CNDDB	SA
Western Red Bat	*Lasiurus blossevillii*	Moderate	CWHR	SSC
Hoary Bat	*Lasiurus cinereus*	High	CWHR, CNDDB	SA

Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Western Yellow Bat	*Lasiurus xanthinus*	Low	CNDDB	SSC
American Badger	*Taxidea taxus*	Low	CWHR, CNDDB	SSC
South Coast Marsh Vole	*Microtus californicus stephensi*	None	CNDDB	SSC
San Diego Desert Woodrat	*Neotoma lepida intermedia*	Moderate	CNDDB	SSC
Southern Grasshopper Mouse	*Onychomys torridus*	Low	CWHR, CNDDB	SSC
Los Angeles Pocket Mouse	*Perognathus longimembris brevinasus*	High	CNDDB	SSC
Pacific Pocket Mouse	*Perognathus longimembris pacificus*	Low	CNDDB	FE, SSC

Status Key:
FE = Federal Endangered
FT = Federal Threatened
FC = Candidate for federal listing
SE = State Endangered
ST = State Threatened
SC = Candidate for state listing
FP = California fully protected
SSC = California Species of Special Concern
SA = CNDDB-designated Special Animal

7.1.6.1 Southern California Saltmarsh Shrew (Sorex ornatus salicornicus)

Source: CNDDB
Special Status: California Species of Special Concern
Habitat & Distribution: The ornate shrew is common in the southern two-thirds of California west of the Sierra Nevada, from Mendocino and Butte cos. south to the Mexican border. Its optimum habitats are valley foothill and montane riparian, but it also occurs in a wide variety of woodland, chaparral, grassland, and emergent wetland habitats. The ornate shrew is generally found below 1875 m (6000 ft). There are two reported specimens from Santa Catalina Island.
Occurrence Potential: None. There is no habitat for this subspecies on the site.

7.1.6.2 Western Bonneted Bat (Eumops perotis)

Source: CWHR, CNDDB
Special Status: California Species of Special Concern
Habitat & Distribution: Uncommon resident in southeastern San Joaquin Valley and Coastal Ranges from Monterey Co. southward through southern California, from the coast eastward to the Colorado Desert. Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban.
Occurrence Potential: Moderate. Occurs in a wide variety of habitats but is uncommon.

7.1.6.3 Pocketed Free-tailed Bat (Nyctinomops femorosaccus)

Source: CNDDB
Special Status: California Species of Special Concern
Habitat: Habitats used include pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.
Distribution: Found in Riverside, San Diego, and Imperial cos. This species is rare in California, but is more common in Mexico.
Occurrence Potential: Low. The site is outside of its expected range.

7.1.6.4 Big Free-tailed Bat (Nyctinomops macrotis)

Source: CNDDB
Special Status: California Species of Special Concern
Habitat & Distribution: Rare in California. Records of the species are from urban areas of San Diego Co., and vagrants found in fall and winter. A probable vagrant was collected in Alameda Co., but this record is suspect. Big free-tailed bats in other areas prefer rugged, rocky terrain. Found to 2500 m (8000 ft) in New Mexico, southern Arizona, and Texas. Probably a yearlong resident.
Occurrence Potential: Low.

7.1.6.5 Pallid Bat (Antrozous pallidus)

Source: CWHR, CNDDB
Special Status: California Species of Special Concern
Habitat: A wide variety of habitats is occupied, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. The species is most common in open, dry habitats with rocky areas for roosting.
Distribution: Occurs throughout California except for the high Sierra Nevada from Shasta to Kern cos., and the northwestern corner of the state from Del Norte and western Siskiyou cos. to northern Mendocino Co.
Occurrence Potential: Moderate. This species uses a wide variety of habitats and may be present.

7.1.6.6 Townsend's Big-eared Bat (Corynorhinus townsendii)

Source: CWHR
Special Status: California Species of Special Concern
Habitat: Found in all but subalpine and alpine habitats, and may be found at any season throughout its range.
Distribution: Found throughout California, but the details of its distribution are not well known. It is most abundant in mesic habitats.

Occurrence Potential: Moderate. This species uses a wide variety of habitats and may be present.

7.1.6.7 Silver-haired Bat (Lasionycteris noctivagans)

Source: CWHR, CNDDB
Special Status: California Species of Special Concern
Habitat & Distribution: The distribution of the silver-haired bat includes coastal and montane forests from the Oregon border south along the coast to San Francisco Bay, and along the Sierra Nevada and Great Basin region to Inyo Co. It also occurs in southern California from Ventura and San Bernardino Cos. south to Mexico and on some of the Channel Islands. This species also is recorded in Sacramento, Stanislaus, Monterey and Yolo Cos. During spring and fall migrations the silver-haired bat may be found anywhere in California. There may be some sexual segregation in the summer range, females occurring further to the north. Silver-haired bats are common, but erratic in abundance. Summer habitats include coastal and montane coniferous forests, valley foothill woodlands, pinyon-juniper woodlands, and valley foothill and montane riparian habitats. Summer range is generally below 2750 m (9000 ft).
Occurrence Potential: Moderate. This species is found in a wide variety of habitats.

7.1.6.8 Western Red Bat (Lasiurus blossevillii)

Source: CWHR
Special Status: California Species of Special Concern
Habitat: Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Not found in desert areas.
Distribution: Locally common in some areas of California, occurring from Shasta Co. to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts. The winter range includes western lowlands and coastal regions south of San Francisco Bay. There is migration between summer and winter ranges, and migrants may be found outside the normal range.
Occurrence Potential: Moderate. This species uses a wide variety of habitats and may be present.

7.1.6.9 Hoary Bat (Lasiurus cinereus)

Source: CWHR, CNDDB
Special Status: CNDDB-designated Special Animal

Habitat & Distribution: The hoary bat is the most widespread North American bat. May be found at any location in California, although distribution patchy in southeastern deserts. This common, solitary species winters along the coast and in southern California, breeding inland and north of the winter range. During migration, may be found at locations far from the normal range, such as the Channel Islands and the Farallon Islands. Habitats suitable for bearing young include all woodlands and forests with medium to large-size trees and dense foliage. Hoary bats have been recorded from sea level to 4125 m (13,200 ft). There is evidence that sexes are separate during the warm months, females being more abundant in the northeastern U.S., males in the west. Both sexes occur on the winter range. During migration in southern California, males are found in foothills, deserts and mountains; females in lowlands and coastal valleys.

Occurrence Potential: High. This species is widespread and occurs in a large number of habitats.

7.1.6.10 Western Yellow Bat (Lasiurus xanthinus)

Source: CNDDB

Special Status: California Species of Special Concern

Habitat: This species has been recorded below 600 m (2000 ft) in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.

Distribution: Uncommon in California, known only in Los Angeles and San Bernardino Cos. south to the Mexican border.

Occurrence Potential: Low. The site is at the margins of this species' range and it is uncommon.

7.1.6.11 American Badger (Taxidea taxus)

Source: CWHR, CNDDB

Special Status: California Species of Special Concern

Habitat: Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.

Distribution: Uncommon, permanent resident found throughout most of the state, except in the northern North Coast area.

Occurrence Potential: Low. This species would not be expected because of historical and surrounding land uses.

7.1.6.12 South Coast Marsh Vole (Microtus californicus stephensi)

Source: CNDDB

Special Status: California Species of Special Concern

Habitat: Occurs in a wide variety of habitats, but most abundant in early seral stages of montane riparian, dense annual grassland, and wet meadow.

Distribution: Occurs from the Sierra Nevada and Cascades west to the Pacific Coast, and from Trinity, Mendocino, and Shasta cos. south to San Diego Co. It is absent from northern Humboldt and Del Norte cos., and from the southern deserts. Occurs in the Owens Valley, and in disjunct populations in Inyo, Siskiyou, and Humboldt cos.

Occurrence Potential: None. There is no appropriate habitat on the site for this species.

7.1.6.13 San Diego Desert Woodrat (Neotoma lepida intermedia)

Source: CNDDB

Special Status: California Species of Special Concern

Habitat: Common to abundant in Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats. Also found in a variety of other habitats. Most abundant in rocky areas with Joshua trees.

Distribution: Inhabits virtually all of southern California, with range extending northward along the coast to Monterey Co., and along the Coast Range to San Francisco Bay. In southeastern California, found from southern Mono Co. south throughout the Mojave Desert and from north-central Tulare Co. south through the Tehachapi and San Bernardino Mts. Elevational range from sea level to 2600 m (8500 ft). Northern and elevational distribution may be limited by temperature.

Occurrence Potential: Moderate. This species is likely to be present, though it is unclear which subspecies occurs in the area.

7.1.6.14 Southern Grasshopper Mouse (Onychomys torridus)

Source: CWHR, CNDDB

Special Status: California Species of Special Concern

Habitat: Alkali desert scrub and desert scrub habitats are preferred, with somewhat lower densities expected in other desert habitats, including succulent shrub, wash, and riparian areas. Also occurs in coastal scrub, mixed chaparral, sagebrush, low sage, and bitterbrush habitats. Uncommon in valley foothill and montane riparian, and in a variety of other habitats.

Distribution: Common in arid desert habitats of the Mojave Desert and southern Central Valley of California.

Occurrence Potential: Low. The site is at the limits of this species' range and does not have preferred habitat.

7.1.6.15 Los Angeles Pocket Mouse (Perognathus longimembris brevinasus)

Source: CWHR
Special Status: California Species of Special Concern
Habitat: Preferred habitats include desert riparian, desert scrub, desert wash, coastal scrub, and sagebrush. Elevations range from sea level to 1700 m (5600 ft).
Distribution: Common to abundant yearlong resident of the southern deserts. Range extends northward into southeastern Mono, Tulare, and Kern cos. It also is found on the Northeastern Plateau in eastern Modoc and Lassen cos., and in the Los Angeles Basin south through coastal areas to Mexico.
Occurrence Potential: High. While the species is likely present, *P. l. brevinasus* would be the expected subspecies in this area.

7.1.6.16 *Pacific Pocket Mouse* (Perognathus longimembris pacificus)

Source: CNDDB
Special Status: Federal Endangered. California Species of Special Concern.
Habitat: Preferred habitats include desert riparian, desert scrub, desert wash, coastal scrub, and sagebrush. Elevations range from sea level to 1700 m (5600 ft).
Distribution: Common to abundant yearlong resident of the southern deserts. Range extends northward into southeastern Mono, Tulare, and Kern cos. It also is found on the Northeastern Plateau in eastern Modoc and Lassen cos., and in the Los Angeles Basin south through coastal areas to Mexico.
Occurrence Potential: Low. While the species is likely present, *P. l. brevinasus* would be the expected subspecies in this area.

7.2 Wildlife Movement

Wildlife movement within the Study Area has not been studied. While terrestrial species have the potential for unrestricted movement within the Study Area and adjacent open space to the west and south, movement is highly restricted to the north (residential development), south (golf course), and—especially—to the east (Interstate 405). It is unclear to what extent, if at all, terrestrial wildlife are able to move between the Study Area and open space areas east of Interstate 405. Preservation of the Study Area as parkland provides potential to improve any such linkage in the future.

8 Potential Project Effects

Implementation of the proposed project is expected to have long-term beneficial effects on the biological resources within the Study Area due to perpetual preservation of the lands for conservation and outdoor recreation activities and minimal construction of new infrastructure, most of which would occur in existing disturbed areas. Based on the results of the site reconnaissance, however, nesting bird monitoring would be required during construction to avoid adverse impacts on some biological resources present or potentially present on the site. The potential biological resources impacts are discussed in the following paragraphs.

8.1 CEQA Guidelines, Appendix G (IV): Biological Resources

(a) Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS?

The proposed project is unlikely to have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS. The proposed project's infrastructure development would be predominantly within existing disturbed areas, and the intent of the proposed project is to preserve open space in perpetuity.

(b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFW or USFWS?

No riparian habitats or other sensitive natural communities identified in City or regional plans, policies, or regulations by the CDFW or USFWS would be affected by the proposed project.

(c) Would the project 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?

No federally protected wetlands would be affected through direct removal, filling, hydrological interruption, or other means.

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

The project has the potential to improve wildlife movement and the availability of wildlife corridors nursery sites through preservation and management of the Study Area for wildlife resources.

(e) Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

The proposed project would not conflict with any local policies or ordinances protecting biological resources.

(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?

The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

8.2 Mitigation Measures

To comply with the Migratory Bird Treaty Act, it is recommended that pre-construction surveys for nesting birds by a qualified biologist take place within 500 feet of all project work areas within one week of the commencement of project infrastructure construction if work occurs during the nesting bird season, which is generally accepted as February 1 to September 30. The biologist will also determine if areas near the proposed work areas are occupied by any special-status wildlife species just prior to construction. In the event that special-status species are found close enough to work areas that incidental take could occur, project activities may need to be curtailed until the species have departed. Likewise, to avoid potential take under the Migratory Bird Treaty Act, construction activities should not take place in the vicinity of any active bird nests. The recommended construction buffer zone around active bird nests varies by species and would need to be determined on an individual basis based on the opinion of the surveying biologist as agreed upon by the California Department of Fish and Wildlife.

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Appendix A. Floral Compendium

Family	Scientific Name	Common Name	Lifeform	Status
Adoxaceae	*Sambucus nigra* ssp. *caerulea*	Blue elderberry	shrub	native
Agavaceae	*Hesperoyucca whipplei*	Chaparral yucca	shrub	native
Aizoaceae	*Carpobrotus chilensis*	Sea fig	perennial herb	invasive non-native
Anacardiaceae	*Malosma laurina*	Laurel sumac	tree, shrub	native
	Rhus aromatica	Fragrant sumac	shrub	native
	Rhus integrifolia	Lemonade berry	shrub	native
	Rhus ovata	Sugar bush	shrub	native
	Schinus molle	Peruvian pepper tree	tree	invasive non-native
	Toxicodendron diversilobum	Poison oak	vine, shrub	native
Apiaceae	*Conium maculatum*	Poison hemlock	perennial herb	invasive non-native
	Foeniculum vulgare	Fennel	perennial herb	invasive non-native
Apocynaceae	*Vinca major*	Vinca	perennial herb	invasive non-native
Arecaceae	*Washingtonia robusta*	Mexican fan palm	tree	invasive non-native
Asteraceae	*Achillea millefolium*	Yarrow	perennial herb	native
	Ambrosia psilostachya	Ragweed	perennial herb	native
	Artemisia californica	Coastal sage brush	shrub	native
	Artemisia douglasiana	California mugwort	perennial herb	native
	Artemisia dracunculus	Tarragon	perennial herb	native
	Baccharis pilularis	Coyote brush	shrub	native
	Baccharis salicifolia	Mule fat	shrub	native
	Baccharis sarothroides	Desert baccharis	shrub	native
	Carduus pycnocephalus	Italian thistle	annual herb	invasive non-native
	Centaurea melitensis	Tocalote	annual herb	invasive non-native
	Centaurea solstitialis	Yellow starthistle	annual herb	invasive non-native
	Cirsium occidentale	Cobweb thistle	perennial herb	native
	Cirsium vulgare	Bullthistle	perennial herb	invasive non-native
	Deinandra fasciculata	Clustered tarweed	annual herb	native
	Encelia californica	Bush sunflower	shrub	native
	Ericameria parishii	Parish's rabbitbrush	shrub	native

Family	Scientific Name	Common Name	Lifeform	Status
	Ericameria pinifolia	Pine bush	shrub	native
	Erigeron canadensis	Canada horseweed	annual herb	native
	Hazardia squarrosa var. *squarrosa*	Saw toothed goldenbush	shrub	native
	Helianthus annuus	Hairy leaved sunflower	annual herb	native
	Helianthus gracilentus	Slender sunflower	perennial herb	native
	Helminthotheca echioides	Bristly ox-tongue	annual, perennial herb	invasive non-native
	Heterotheca grandiflora	Telegraph weed	annual, perennial herb	native
	Lactuca serriola	Prickly lettuce	annual herb	invasive non-native
	Pseudognaphalium californicum	Ladies' tobacco	annual, perennial herb	native
	Rafinesquia californica	California chicory	annual herb	native
	Silybum marianum	Milk thistle	annual, perennial herb	invasive non-native
	Sonchus asper ssp. *asper*	Sow thistle	annual herb	invasive non-native
	Sonchus oleraceus	Sow thistle	annual herb	non-native
	Xanthium strumarium	Cocklebur	annual herb	native
Boraginaceae	*Amsinckia intermedia*	Common fiddleneck	annual herb	native
	Eriodictyon crassifolium var. *crassifolium*	Thick leaved yerba santa	shrub	native
Brassicaceae	*Brassica nigra*	Black mustard	annual herb	invasive non-native
	Brassica rapa	Common mustard	annual herb	invasive non-native
	Hirschfeldia incana	Shortpod mustard	perennial herb	invasive non-native
	Raphanus sativus	Jointed charlock	annual, biennial herb	invasive non-native
	Sisymbrium officinale	Hedge mustard	annual herb	non-native
Cactaceae	*Opuntia ficus-indica*	Tuna	shrub (stem succulent)	non-native
	Opuntia littoralis	Prickly pear	shrub (stem succulent)	native
Chenopodiaceae	*Salsola tragus*	Russian thistle	annual herb	invasive non-native
Convolvulaceae	*Calystegia macrostegia*	Island morning glory	perennial herb, vine	native
	Cuscuta californica	California dodder	annual herb, vine (parasitic)	native
Crassulaceae	*Dudleya lanceolata*	Lance-leaf dudleya	perennial herb	native
	Dudleya pulverulenta	Chalk dudleya	perennial herb	native
Cucurbitaceae	*Marah macrocarpa*	Chilicothe	perennial herb, vine	native
Dryopteridaceae	*Dryopteris arguta*	Wood fern	fern	native
Ericaceae	*Arctostaphylos glandulosa*	Eastwood manzanita	shrub	native
Euphorbiaceae	*Croton setiger*	Turkey-mullein	annual herb	native

Family	Scientific Name	Common Name	Lifeform	Status
	Ricinus communis	Castor bean	shrub	invasive non-native
Fabaceae	*Acmispon glaber*	Deerweed	perennial herb	native
	Lupinus longifolius	Long leaf bush lupine	shrub	native
	Melilotus indicus	Annual yellow sweetclover	annual herb	non-native
	Spartium junceum	Spanish broom	shrub	invasive non-native
	Quercus agrifolia	Coast live oak	tree	native
	Quercus berberidifolia	Inland scrub oak	tree	native
Geraniaceae	*Erodium cicutarium*	Coastal heron's bill	annual herb	invasive non-native
Grossulariaceae	*Ribes malvaceum*	Chaparral currant	shrub	native
	Ribes speciosum	Fuchsia flowered gooseberry	shrub	native
Juglandaceae	*Juglans californica*	Southern california black walnut	tree	native
Lamiaceae	*Marrubium vulgare*	White horehound	perennial herb	invasive non-native
	Salvia columbariae	Chia sage	annual herb	native
	Salvia leucophylla	Purple sage	shrub	native
	Salvia mellifera	Black sage	shrub	native
Lauraceae	*Umbellularia californica*	California bay	tree	native
Malvaceae	*Malacothamnus fasciculatus*	Santa cruz island bush mallow	shrub	native
	Malva parviflora	Cheeseweed	annual herb	non-native
Myrtaceae	*Eucalyptus globulus*	Blue gum	tree	invasive non-native
Nyctaginaceae	*Mirabilis laevis*	Desert wishbone bush	perennial herb	native
Onagraceae	*Epilobium canum*	California fuchsia, zauschneria	perennial herb	native
Orobanchaceae	*Castilleja affinis*	Indian paintbrush	perennial herb	native
Papaveraceae	*Eschscholzia californica*	California poppy	annual, perennial herb	native
Phrymaceae	*Mimulus aurantiacus*	Sticky monkeyflower	shrub	native
Pinaceae	*Pinus canariensis*	Canary island pine	tree	non-native
	Pinus halepensis	Aleppo pine	tree	non-native
	Pinus pinea	Italian stone pine	tree	non-native
Plantaginaceae	*Keckiella cordifolia*	Heart leaved keckiella	shrub	native
Platanaceae	*Platanus racemosa*	California sycamore	tree	native
Poaceae	*Avena barbata*	Slim oat	annual, perennial grass	invasive non-native

Family	Scientific Name	Common Name	Lifeform	Status
	Avena fatua	Wildoats	annual grass	invasive non-native
	Bromus diandrus	Ripgut brome	annual grass	invasive non-native
	Bromus hordeaceus	Soft chess	annual grass	invasive non-native
	Bromus madritensis ssp. *rubens*	Foxtail brome	annual grass	invasive non-native
	Bromus tectorum	Downy chess	annual grass	invasive non-native
	Cynodon dactylon	Bermuda grass	perennial grass	invasive non-native
	Digitaria sanguinalis	Crabgrass	annual grass	non-native
	Elymus condensatus	Giant wild rye	perennial grass	native
	Hordeum murinum	Foxtail barley	annual grass	invasive non-native
	Hordeum vulgare	Common barley	annual grass	non-native
	Pennisetum setaceum	Fountaingrass	perennial grass	invasive non-native
	Schismus barbatus	Old han schismus	annual grass	invasive non-native
	Stipa pulchra	Purple needle grass	perennial grass	native
Polemoniaceae	*Linanthus californicus*	Prickly phlox	shrub	native
Polygonaceae	*Chorizanthe staticoides*	Turkish rugging	annual herb	native
	Eriogonum elongatum	Longstem buckwheat	perennial herb	native
	Eriogonum fasciculatum	California buckwheat	shrub	native
	Eriogonum gracile	Slender buckwheat	annual herb	native
	Rumex crispus	Curly dock	perennial herb	invasive non-native
Ranunculaceae	*Clematis pauciflora*	Virgin's bower	perennial herb, vine	native
Rhamnaceae	*Ceanothus crassifolius*	Hoary leaved ceanothus	shrub	native
	Ceanothus cuneatus var. *cuneatus*	Buck brush	shrub	native
	Ceanothus megacarpus	Big pod ceanothus	shrub	native
	Frangula californica	California coffeeberry	shrub	native
	Rhamnus crocea	Redberry	shrub	native
	Rhamnus ilicifolia	Evergreen buckthorn	shrub	native
Rosaceae	*Adenostoma fasciculatum*	Chamise	tree, shrub	native
	Cercocarpus betuloides	Birch leaf mountain mahogany	tree, shrub	native
	Prunus ilicifolia	Holly leaf cherry	tree, shrub	native
	Rubus ursinus	California blackberry	vine, shrub	native
	Sanguisorba minor	Small burnet	perennial herb	non-native
Rubiaceae	*Galium angustifolium*	Narrow leaved bedstraw	perennial herb	native

Family	Scientific Name	Common Name	Lifeform	Status
Salicaceae	*Populus fremontii*	Fremont cottonwood	tree	native
	Salix exigua	Narrowleaf willow	tree, shrub	native
	Salix laevigata	Polished willow	tree	native
	Salix lasiolepis	Arroyo willow	tree, shrub	native
Sapindaceae	*Acer macrophyllum*	Bigleaf maple	tree	native
Simaroubaceae	*Ailanthus altissima*	Tree of heaven	tree	invasive non-native
Solanaceae	*Datura wrightii*	Jimsonweed	perennial herb	native
	Nicotiana glauca	Tree tobacco	tree, shrub	invasive non-native
	Solanum americanum	White nightshade	annual, perennial herb	native
	Solanum douglasii	Douglas' nightshade	perennial herb	native
	Solanum xanti	Nightshade	perennial herb, shrub	native
Typhaceae	*Typha latifolia*	Boradleaf cattail	perennial herb (aquatic)	native
Viscaceae	*Phoradendron leucarpum* ssp. *macrophyllum*	Big leaf mistletoe	shrub (parasitic)	native
	Phoradendron leucarpum ssp. *tomentosum*	Mistletoe	shrub (parasitic)	native
Zygophyllaceae	*Tribulus terrestris*	Puncture vine	annual herb	invasive non-native

Appendix B. Special Status Plant Species Habitat Assessment

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CRPR**[1]	**General Habitat Association**	**Micro-habitat Association**	**Status Onsite**
marsh sandwort *Arenaria paludicola*	Endangered	Endangered	1B.1	Marshes and swamps.	Growing up through dense mats of *Typha, Juncus, Scirpus*, etc. in freshwater marsh. Sandy soil. 3-170 m.	Absent. The general and micro-habitat associations are not found onsite.
Braunton's milk-vetch *Astragalus brauntonii*	Endangered	None	1B.1	Chaparral, coastal scrub, valley and foothill grassland.	Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 3-640 m.	Absent. The micro-habitat association is not found onsite.
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	Endangered	Endangered	1B.1	Marshes and swamps, coastal dunes, coastal scrub.	Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs. 1-35 m.	Absent. The micro-habitat association is not found onsite.
coastal dunes milk-vetch *Astragalus tener* var. *titi*	Endangered	Endangered	1B.1	Coastal bluff scrub, coastal dunes, coastal prairie.	Moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one site on a clay terrace. 1-45 m.	Absent. The micro-habitat association is not found onsite.
Coulter's saltbush *Atriplex coulteri*	None	None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland.	Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2-460 m.	Absent. The micro-habitat association is not found onsite.

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CRPR**[1]	**General Habitat Association**	**Micro-habitat Association**	**Status Onsite**
south coast saltscale *Atriplex pacifica*	None	None	1B.2	Coastal scrub, coastal bluff scrub, playas, coastal dunes.	Alkali soils. 1-400 m.	Absent. The micro-habitat association is not found onsite.
Parish's brittlescale *Atriplex parishii*	None	None	1B.1	Vernal pools, chenopod scrub, playas.	Usually on drying alkali flats with fine soils. 5-1420 m.	Absent. The general and micro-habitat associations are not found onsite.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	None	None	1B.2	Coastal bluff scrub, coastal scrub.	Alkaline soil. 0-460 m.	Absent. The micro-habitat association is not found onsite.
Nevin's barberry *Berberis nevinii*	Endangered	Endangered	1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, N-facing slopes or in low grade sandy washes. 290-1575 m.	Absent. The micro-habitat association is not found onsite.
round-leaved filaree *California macrophylla*	None	None	1B.2	Cismontane woodland, valley and foothill grassland.	Clay soils. 15-1200 m.	Absent. The micro-habitat association is not found onsite.
slender mariposa-lily *Calochortus clavatus* var. *gracilis*	None	None	1B.2	Chaparral, coastal scrub, valley and foothill grassland.	Shaded foothill canyons; often on grassy slopes within other habitat. 210-1815 m.	Low Potential. There is marginal habitat for the species onsite.
Plummer's mariposa-lily *Calochortus plummerae*	None	None	4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	Medium Potential. The species was documented just north of the study area.
lucky morning-glory *Calystegia felix*	None	None	3.1	Meadows and seeps, riparian scrub.	Sometimes alkaline, alluvial. 30-215 m.	Absent. The general and micro-habitat associations are not found onsite.
southern tarplant *Centromadia parryi* ssp. *australis*	None	None	1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools.	Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 m.	Absent. The general and micro-habitat associations are not found onsite.

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CRPR**[1]	**General Habitat Association**	**Micro-habitat Association**	**Status Onsite**
salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	Endangered	Endangered	1B.2	Marshes and swamps, coastal dunes.	Limited to the higher zones of salt marsh habitat. 0-10 m.	Absent. The general and micro-habitat associations are not found onsite.
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	Proposed Threatened	Endangered	1B.1	Coastal scrub, valley and foothill grassland.	Sandy soils. 15-1015 m.	Absent. Out of the current known range of the species.
Santa Susana tarplant *Deinandra minthornii*	None	Rare	1B.2	Chaparral, coastal scrub.	On sandstone outcrops and crevices, in shrubland. 280-705 m.	Absent. The micro-habitat association is not found onsite.
beach spectaclepod *Dithyrea maritima*	None	Threatened	1B.1	Coastal dunes, coastal scrub.	Sea shores, on sand dunes, and sandy places near the shore. 3-65 m.	Absent. The micro-habitat association is not found onsite.
slender-horned spineflower *Dodecahema leptoceras*	Endangered	Endangered	1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	Flood deposited terraces and washes; associates include *Encelia, Dalea, Lepidospartum*, etc. Sandy soils. 200-765 m.	Absent. The micro-habitat association is not found onsite.
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	None	None	1B.1	Coastal scrub, coastal bluff scrub, chaparral, valley and foothill grassland.	Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. 5-450 m.	Absent. The micro-habitat association is not found onsite.
Santa Monica dudleya *Dudleya cymosa* ssp. *ovatifolia*	Threatened	None	1B.1	Chaparral, coastal scrub.	In canyons on volcanic or sedimentary substrates; primarily on north-facing slopes. 150-335 m.	Absent. The micro-habitat association is not found onsite.
many-stemmed dudleya *Dudleya multicaulis*	None	None	1B.2	Chaparral, coastal scrub, valley and foothill grassland.	In heavy, often clayey soils or grassy slopes. 15-790 m.	Absent. The micro-habitat association is not found onsite.
Palmer's grapplinghook *Harpagonella palmeri*	None	None	4.2	Chaparral, coastal scrub, valley and foothill grassland.	Clay soils; open grassy areas within shrubland. 20-955 m.	Absent. The micro-habitat association is not found onsite.

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CRPR**[1]	**General Habitat Association**	**Micro-habitat Association**	**Status Onsite**
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	None	None	1A	Marshes and swamps (coastal salt and freshwater).	10-1524 m.	Absent. The general and association is not found onsite.
mesa Horkelia *Horkelia cuneata* var. *puberula*	None	None	1B.1	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	Absent. The micro-habitat association is not found onsite.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	None	None	1B.1	Coastal salt marshes, playas, vernal pools.	Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m.	Absent. The general and micro-habitat associations are not found onsite.
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	None	None	4.3	Chaparral, coastal scrub.	Dry soils, shrubland. 4-1435 m.	MedPotential. The species has a record within two miles to the southwest in the Santa Monica Mountains.
Davidson's bush-mallow *Malacothamnus davidsonii*	None	None	1B.2	Coastal scrub, riparian woodland, chaparral, cismontane woodland.	Sandy washes. 150-1525 m.	Absent. The micro-habitat association is not found onsite.
white-veined monardella *Monardella hypoleuca* ssp. *hypoleuca*	None	None	1B.3	Chaparral, cismontane woodland.	Dry slopes. 50-1280 m.	Medium Potential. The species has a 2008 record within four miles to the southwest in the Santa Monica Mountains.
mud nama *Nama stenocarpa*	None	None	2B.2	Marshes and swamps.	Lake shores, river banks, intermittently wet areas. 5-500 m.	Absent. The general and micro-habitat associations are not found onsite.
Gambel's water cress *Nasturtium gambelii*	Endangered	Threatened	1B.1	Marshes and swamps.	Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-330 m.	Absent. The general and micro-habitat associations are not found onsite.
prostrate vernal pool Navarretia *Navarretia prostrata*	None	None	1B.1	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps.	Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m.	Absent. The micro-habitat association is not found onsite.

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CRPR**[1]	**General Habitat Association**	**Micro-habitat Association**	**Status Onsite**
California Orcutt grass *Orcuttia californica*	Endangered	Endangered	1B.1	Vernal pools.	10-660 m.	Absent. The general habitat association is not found onsite.
white rabbit-tobacco *Pseudognaphalium leucocephalum*	None	None	2B.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral.	Sandy, gravelly sites. 35-515 m.	Absent. The micro-habitat association is not found onsite.
Nuttall's scrub oak *Quercus dumosa*	None	None	1B.1	Closed-cone coniferous forest, chaparral, coastal scrub.	Generally on sandy soils near the coast; sometimes on clay loam. 15-640 m.	Absent. The micro-habitat association is not found onsite.
Salt Spring checkerbloom *Sidalcea neomexicana*	None	None	2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.	Alkali springs and marshes. 0-1530 m.	Absent. The micro-habitat association is not found onsite.
western bristly scaleseed *Spermolepis lateriflora*	None	None	2A	Sonoran desert scrub.	Rocky or sandy. 365-670 m.	Absent. The general habitat association is not found onsite.
San Bernardino aster *Symphyotrichum defoliatum*	None	None	1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040 m.	Absent. The micro-habitat association is not found onsite.
Greata's aster *Symphyotrichum greatae*	None	None	1B.3	Chaparral, cismontane woodland, broadleafed upland forest, lower montane coniferous forest, riparian woodland.	Mesic canyons. 335-2015 m.	Absent. The micro-habitat association is not found onsite.

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CRPR[1]**	**General Habitat Association**	**Micro-habitat Association**	**Status Onsite**
1. CRPR Status Key 1A CNPS Priority List 1A: plant presumed extinct in CA.						
1B Rare, Threatened, or Endangered in CA and elsewhere; eligible for state listing.						
2 Rare, Threatened, or Endangered in CA, but more common elsewhere; eligible for state listing.						
3 More information is needed about this species; some eligible for state listing.						
4 On watch list for plants of limited distribution.						
.1 - Seriously threatened in California (high degree/immediacy of threat)						
.2 - Fairly threatened in California (moderate degree/immediacy of threat)						
.3 - Not very threatened in California (low degree/immediacy of threats or no current threats known)						

Appendix C. Potentially-Occurring Vertebrate Wildlife Species

The following is a list of vertebrate wildlife species that includes 11 amphibians, 22 reptiles, 194 birds, and 58 mammals that were identified as potentially occurring in the study area based on an analysis of the California Natural Diversity Database and the California Wildlife Habitats Relationships database.

Amphibians

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Anura	Bufonidae	Western Toad	Anaxyrus boreas	High	CWHR	
Anura	Bufonidae	Arroyo Toad	Anaxyrus californicus	Moderate	CNDDB	FE, SSC
Anura	Ranidae	American Bullfrog	Lithobates catesbeianus	High	CWHR	
Anura	Ranidae	California Red-legged Frog	Rana draytonii	Low	CWHR	FT, SSC
Anura	Hylidae	California Treefrog	Pseudacris cadaverina	Moderate	CWHR	
Anura	Hylidae	Pacific Treefrog	Pseudacris regilla	Moderate	CWHR	
Anura	Scaphiopodidae	Western Spadefoot	Spea hammondii	Low	CWHR	SSC
Caudata	Plethodontidae	Arboreal Salamander	Aneides lugubris	Moderate	CWHR	
Caudata	Plethodontidae	Black-bellied Slender Salamander	Batrachoseps nigriventris	High	CWHR	
Caudata	Plethodontidae	Ensatina	Ensatina eschscholtzii	Low	CWHR	
Caudata	Salamandridae	California Newt	Taricha torosa	Moderate	CWHR	SSC

Reptiles

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Testudines	Emydidae	Southern Western Pond Turtle	Actinemys pallida	None	CWHR, CNDDB	SSC
Squamata	Anguidae	Southern Alligator Lizard	Elgaria multicarinata	High	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Squamata	Anniellidae	Southern California Legless Lizard	Anniella stebbinsi	Moderate	CWHR, CNDDB	SSC
Squamata	Phrynosomatidae	Blainville's Horned Lizard	Phrynosoma blainvillii	High	CWHR, CNDDB	SSC
Squamata	Phrynosomatidae	Western Fence Lizard	Sceloporus occidentalis	Present	CWHR	
Squamata	Phrynosomatidae	Common Side-blotched Lizard	Uta stansburiana	High	CWHR	
Squamata	Scincidae	Western Skink	Plestiodon skiltonianus	High	CWHR	
Squamata	Teiidae	Tiger Whiptail	Aspidoscelis tigris	Present	CWHR, CNDDB	SSC
Squamata	Colubridae	Glossy Snake	Arizona elegans	High	CNDDB	SSC
Squamata	Colubridae	North American Racer	Coluber constrictor	High	CWHR	
Squamata	Colubridae	Striped Racer	Coluber lateralis	High	CWHR	
Squamata	Colubridae	Ring-necked Snake	Diadophis punctatus	High	CWHR, CNDDB	SA
Squamata	Colubridae	Desert Nightsnake	Hypsiglena chlorophaea	Moderate	CWHR	
Squamata	Colubridae	California Kingsnake	Lampropeltis californiae	Moderate	CWHR	
Squamata	Colubridae	California Mountain Kingsnake	Lampropeltis zonata	Low	CWHR	
Squamata	Colubridae	Gopher Snake	Pituophis catenifer	High	CWHR	
Squamata	Colubridae	Western Black-headed Snake	Tantilla planiceps	Moderate	CWHR	
Squamata	Colubridae	Two-striped Gartersnake	Thamnophis hammondii	High	CWHR, CNDDB	SSC
Squamata	Colubridae	Common Gartersnake	Thamnophis sirtalis	Low	CWHR	SSC
Squamata	Colubridae	Sonoran Lyresnake	Trimorphodon lambda	Low	CWHR	
Squamata	Leptotyphlopidae	Western Threadsnake	Rena humilis	Moderate	CWHR	
Squamata	Viperidae	Western Rattlesnake	Crotalus oreganus	High	CWHR	

Birds

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Anseriformes	Anatidae	Snow Goose	Chen caerulescens	Low	CWHR	
Anseriformes	Anatidae	Ross's Goose	Chen rossii	Low	CWHR	
Anseriformes	Anatidae	Canada Goose	Branta canadensis	Moderate	CWHR	
Anseriformes	Anatidae	Wood Duck	Aix sponsa	Low	CWHR	
Anseriformes	Anatidae	Blue-winged Teal	Spatula discors	Low	CWHR	
Anseriformes	Anatidae	Cinnamon Teal	Spatula cyanoptera	Low	CWHR	
Anseriformes	Anatidae	Northern Shoveler	Spatula clypeata	Low	CWHR	
Anseriformes	Anatidae	Gadwall	Mareca strepera	Low	CWHR	
Anseriformes	Anatidae	Eurasian Wigeon	Mareca penelope	Low	CWHR	
Anseriformes	Anatidae	American Wigeon	Mareca americana	Low	CWHR	
Anseriformes	Anatidae	Mallard	Anas platyrhynchos	Moderate	CWHR	
Anseriformes	Anatidae	Northern Pintail	Anas acuta	Low	CWHR	
Anseriformes	Anatidae	Green-winged Teal	Anas crecca	Low	CWHR	
Anseriformes	Anatidae	Canvasback	Aythya valisineria	Low	CWHR	
Anseriformes	Anatidae	Ring-necked Duck	Aythya collaris	Low	CWHR	
Anseriformes	Anatidae	Lesser Scaup	Aythya affinis	Low	CWHR	
Anseriformes	Anatidae	Bufflehead	Bucephala albeola	Low	CWHR	
Anseriformes	Anatidae	Common Goldeneye	Bucephala clangula	Low	CWHR	
Anseriformes	Anatidae	Hooded Merganser	Lophodytes cucullatus	Low	CWHR	
Anseriformes	Anatidae	Common Merganser	Mergus merganser	Low	CWHR	
Anseriformes	Anatidae	Ruddy Duck	Oxyura jamaicensis	Low	CWHR	
Galliformes	Odontophoridae	Mountain Quail	Oreortyx pictus	Low	CWHR	
Galliformes	Odontophoridae	California Quail	Callipepla californica	Present	CWHR	
Podicipediformes	Podicipedidae	Pied-billed Grebe	Podilymbus podiceps	None	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Podicipediformes	Podicipedidae	Eared Grebe	Podiceps nigricollis	None	CWHR	
Podicipediformes	Podicipedidae	Western Grebe	Aechmophorus occidentalis	None	CWHR	
Podicipediformes	Podicipedidae	Clark's Grebe	Aechmophorus clarkii	None	CWHR	
Columbiformes	Columbidae	Rock Pigeon	Columba livia	High	CWHR	
Columbiformes	Columbidae	Band-tailed Pigeon	Patagioenas fasciata	Present	CWHR	
Columbiformes	Columbidae	Spotted Dove	Streptopelia chinensis	Low	CWHR	
Columbiformes	Columbidae	Mourning Dove	Zenaida macroura	Present	CWHR	
Cuculiformes	Cuculidae	Greater Roadrunner	Geococcyx californianus	High	CWHR	
Caprimulgiformes	Caprimulgidae	Common Poorwill	Phalaenoptilus nuttallii	High	CWHR	
Apodiformes	Apodidae	Chimney Swift	Chaetura pelagica	Low	CWHR	
Apodiformes	Apodidae	White-throated Swift	Aeronautes saxatalis	High	CWHR	
Apodiformes	Trochilidae	Black-chinned Hummingbird	Archilochus alexandri	High	CWHR	
Apodiformes	Trochilidae	Anna's Hummingbird	Calypte anna	Present	CWHR	
Apodiformes	Trochilidae	Costa's Hummingbird	Calypte costae	Low	CWHR	
Apodiformes	Trochilidae	Allen's Hummingbird	Selasphorus sasin	Present	CWHR	
Gruiformes	Rallidae	California Black Rail	Laterallus jamaicensis coturniculus	None	CNDDB	ST, FP
Gruiformes	Rallidae	Virginia Rail	Rallus limicola	Low	CWHR	
Gruiformes	Rallidae	Common Gallinule	Gallinula galeata	Low	CWHR	
Gruiformes	Rallidae	American Coot	Fulica americana	Low	CWHR	
Charadriiformes	Charadriidae	Snowy Plover	Charadrius nivosus	None	CWHR, CNDDB	FT, SSC
Charadriiformes	Charadriidae	Semipalmated Plover	Charadrius semipalmatus	None	CWHR	
Charadriiformes	Charadriidae	Killdeer	Charadrius vociferus	Moderate	CWHR	
Charadriiformes	Scolopacidae	Long-billed Curlew	Numenius americanus	None	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Charadriiformes	Scolopacidae	Marbled Godwit	Limosa fedoa	None	CWHR	
Charadriiformes	Scolopacidae	Spotted Sandpiper	Actitis macularius	Low	CWHR	
Charadriiformes	Scolopacidae	Dunlin	Calidris alpina	None	CWHR	
Charadriiformes	Scolopacidae	Least Sandpiper	Calidris minutilla	None	CWHR	
Charadriiformes	Scolopacidae	Long-billed Dowitcher	Limnodromus scolopaceus	None	CWHR	
Charadriiformes	Scolopacidae	Wilson's Snipe	Gallinago delicata	Low	CWHR	
Charadriiformes	Scolopacidae	Wandering Tattler	Tringa incana	None	CWHR	
Charadriiformes	Scolopacidae	Willet	Tringa semipalmata	None	CWHR	
Charadriiformes	Laridae	Heermann's Gull	Larus heermanni	None	CWHR	
Charadriiformes	Laridae	Ring-billed Gull	Larus delawarensis	High	CWHR	
Charadriiformes	Laridae	Western Gull	Larus occidentalis	Present	CWHR	
Charadriiformes	Laridae	California Gull	Larus californicus	High	CWHR	
Charadriiformes	Laridae	California Least Tern	Sternula antillarum browni	None	CNDDB	FE, SE, FP
Suliformes	Phalacrocoracidae	Double-crested Cormorant	Phalacrocorax auritus	Low	CWHR	
Pelecaniformes	Pelecanidae	American White Pelican	Pelecanus erythrorhynchos	None	CWHR	SSC
Pelecaniformes	Pelecanidae	California Brown Pelican	Pelecanus occidentalis californicus	None	CNDDB	FP
Pelecaniformes	Ardeidae	American Bittern	Botaurus lentiginosus	None	CWHR	
Pelecaniformes	Ardeidae	Least Bittern	Ixobrychus exilis	None	CWHR	SSC
Pelecaniformes	Ardeidae	Great Blue Heron	Ardea herodias	High	CWHR	
Pelecaniformes	Ardeidae	Great Egret	Ardea alba	Moderate	CWHR	
Pelecaniformes	Ardeidae	Snowy Egret	Egretta thula	Moderate	CWHR	
Pelecaniformes	Ardeidae	Cattle Egret	Bubulcus ibis	Low	CWHR	
Pelecaniformes	Ardeidae	Green Heron	Butorides virescens	Moderate	CWHR	
Pelecaniformes	Ardeidae	Black-crowned Night Heron	Nycticorax nycticorax	Moderate	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Cathartiformes	Cathartidae	Turkey Vulture	Cathartes aura	Present	CWHR	
Accipitriformes	Pandionidae	Osprey	Pandion haliaetus	Low	CWHR	
Accipitriformes	Accipitridae	White-tailed Kite	Elanus leucurus	Moderate	CWHR	
Accipitriformes	Accipitridae	Bald Eagle	Haliaeetus leucocephalus	Low	CWHR	SE, FP
Accipitriformes	Accipitridae	Northern Harrier	Circus hudsonius	Moderate	CWHR	SSC
Accipitriformes	Accipitridae	Sharp-shinned Hawk	Accipiter striatus	High	CWHR	
Accipitriformes	Accipitridae	Cooper's Hawk	Accipiter cooperii	Present	CWHR	
Accipitriformes	Accipitridae	Red-shouldered Hawk	Buteo lineatus	High	CWHR	
Accipitriformes	Accipitridae	Swainson's Hawk	Buteo swainsoni	Low	CNDDB	ST
Accipitriformes	Accipitridae	Red-tailed Hawk	Buteo jamaicensis	Present	CWHR	
Accipitriformes	Accipitridae	Ferruginous Hawk	Buteo regalis	Low	CWHR	
Accipitriformes	Accipitridae	Rough-legged Hawk	Buteo lagopus	Low	CWHR	
Accipitriformes	Accipitridae	Golden Eagle	Aquila chrysaetos	Moderate	CWHR	FP
Strigiformes	Tytonidae	Barn Owl	Tyto alba	Moderate	CWHR	
Strigiformes	Strigidae	Western Screech-Owl	Megascops kennicottii	High	CWHR	
Strigiformes	Strigidae	Great Horned Owl	Bubo virginianus	High	CWHR	
Strigiformes	Strigidae	Burrowing Owl	Athene cunicularia	Low	CNDDB	SSC
Strigiformes	Strigidae	Short-eared Owl	Asio flammeus	Low	CWHR	SSC
Coraciiformes	Alcedinidae	Belted Kingfisher	Megaceryle alcyon	Low	CWHR	
Piciformes	Picidae	Acorn Woodpecker	Melanerpes formicivorus	High	CWHR	
Piciformes	Picidae	Red-breasted Sapsucker	Sphyrapicus ruber	Moderate	CWHR	
Piciformes	Picidae	Nuttall's Woodpecker	Picoides nuttallii	Present	CWHR	
Piciformes	Picidae	Downy Woodpecker	Picoides pubescens	Moderate	CWHR	
Piciformes	Picidae	Hairy Woodpecker	Picoides villosus	Moderate	CWHR	
Piciformes	Picidae	Northern Flicker	Colaptes auratus	High	CWHR	
Falconiformes	Falconidae	American Kestrel	Falco sparverius	High	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Falconiformes	Falconidae	Merlin	Falco columbarius	Moderate	CWHR	
Falconiformes	Falconidae	Peregrine Falcon	Falco peregrinus	Moderate	CWHR	
Falconiformes	Falconidae	American Peregrine Falcon	Falco peregrinus anatum	Moderate	CNDDB	FP
Falconiformes	Falconidae	Prairie Falcon	Falco mexicanus	Low	CWHR	
Passeriformes	Tyrannidae	Western Wood-Pewee	Contopus sordidulus	High	CWHR	
Passeriformes	Tyrannidae	Southwestern Willow Flycatcher	Empidonax traillii extimus	Low	CNDDB	FE, SE
Passeriformes	Tyrannidae	Pacific-slope Flycatcher	Empidonax difficilis	Present	CWHR	
Passeriformes	Tyrannidae	Black Phoebe	Sayornis nigricans	Present	CWHR	
Passeriformes	Tyrannidae	Say's Phoebe	Sayornis saya	High	CWHR	
Passeriformes	Tyrannidae	Ash-throated Flycatcher	Myiarchus cinerascens	Present	CWHR	
Passeriformes	Tyrannidae	Cassin's Kingbird	Tyrannus vociferans	High	CWHR	
Passeriformes	Tyrannidae	Western Kingbird	Tyrannus verticalis	High	CWHR	
Passeriformes	Laniidae	Loggerhead Shrike	Lanius ludovicianus	Low	CWHR	SSC
Passeriformes	Vireonidae	Least Bell's Vireo	Vireo bellii pusillus	Moderate	CNDDB	FE, SE
Passeriformes	Vireonidae	Hutton's Vireo	Vireo huttoni	Present	CWHR	
Passeriformes	Vireonidae	Warbling Vireo	Vireo gilvus	High	CWHR	
Passeriformes	Corvidae	California Scrub-Jay	Aphelocoma californica	Present	CWHR	
Passeriformes	Corvidae	American Crow	Corvus brachyrhynchos	High	CWHR	
Passeriformes	Corvidae	Common Raven	Corvus corax	Present	CWHR	
Passeriformes	Alaudidae	Horned Lark	Eremophila alpestris	Moderate	CWHR	
Passeriformes	Hirundinidae	Northern Rough-winged Swallow	Stelgidopteryx serripennis	Present	CWHR	
Passeriformes	Hirundinidae	Bank Swallow	Riparia riparia	Low	CNDDB	ST
Passeriformes	Hirundinidae	Cliff Swallow	Petrochelidon pyrrhonota	High	CWHR	
Passeriformes	Hirundinidae	Barn Swallow	Hirundo rustica	Present	CWHR	
Passeriformes	Paridae	Mountain Chickadee	Poecile gambeli	Moderate	CWHR	
Passeriformes	Paridae	Oak Titmouse	Baeolophus inornatus	Present	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Passeriformes	Aegithalidae	Bushtit	Psaltriparus minimus	Present	CWHR	
Passeriformes	Sittidae	Red-breasted Nuthatch	Sitta canadensis	Low	CWHR	
Passeriformes	Sittidae	White-breasted Nuthatch	Sitta carolinensis	Present	CWHR	
Passeriformes	Troglodytidae	Rock Wren	Salpinctes obsoletus	Low	CWHR	
Passeriformes	Troglodytidae	Canyon Wren	Catherpes mexicanus	Present	CWHR	
Passeriformes	Troglodytidae	House Wren	Troglodytes aedon	High	CWHR	
Passeriformes	Troglodytidae	Pacific Wren	Troglodytes pacificus	Low	CWHR	
Passeriformes	Troglodytidae	Marsh Wren	Cistothorus palustris	Low	CWHR	
Passeriformes	Troglodytidae	Bewick's Wren	Thryomanes bewickii	Present	CWHR	
Passeriformes	Troglodytidae	Cactus Wren	Campylorhynchus brunneicapillus	None	CWHR	
Passeriformes	Polioptilidae	Blue-gray Gnatcatcher	Polioptila caerulea	Present	CWHR	
Passeriformes	Polioptilidae	California Gnatcatcher	Polioptila californica	Moderate	CNDDB	FT, SSC
Passeriformes	Regulidae	Golden-crowned Kinglet	Regulus satrapa	None	CWHR	
Passeriformes	Regulidae	Ruby-crowned Kinglet	Regulus calendula	High	CWHR	
Passeriformes	Sylviidae	Wrentit	Chamaea fasciata	Present	CWHR	
Passeriformes	Turdidae	Western Bluebird	Sialia mexicana	Present	CWHR	
Passeriformes	Turdidae	Townsend's Solitaire	Myadestes townsendi	None	CWHR	
Passeriformes	Turdidae	Swainson's Thrush	Catharus ustulatus	High	CWHR	
Passeriformes	Turdidae	Hermit Thrush	Catharus guttatus	High	CWHR	
Passeriformes	Turdidae	American Robin	Turdus migratorius	High	CWHR	
Passeriformes	Turdidae	Varied Thrush	Ixoreus naevius	Low	CWHR	
Passeriformes	Mimidae	California Thrasher	Toxostoma redivivum	Present	CWHR	
Passeriformes	Mimidae	Northern Mockingbird	Mimus polyglottos	Present	CWHR	
Passeriformes	Sturnidae	European Starling	Sturnus vulgaris	High	CWHR	
Passeriformes	Bombycillidae	Cedar Waxwing	Bombycilla cedrorum	High	CWHR	
Passeriformes	Ptiliogonatidae	Phainopepla	Phainopepla nitens	Present	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Passeriformes	Estrildidae	Scaly-breasted Munia	Lonchura punctulata	Present	CWHR	
Passeriformes	Passeridae	House Sparrow	Passer domesticus	High	CWHR	
Passeriformes	Motacillidae	American Pipit	Anthus rubrescens	High	CWHR	
Passeriformes	Fringillidae	House Finch	Haemorhous mexicanus	Present	CWHR	
Passeriformes	Fringillidae	Purple Finch	Haemorhous purpureus	Moderate	CWHR	
Passeriformes	Fringillidae	Pine Siskin	Spinus pinus	Moderate	CWHR	
Passeriformes	Fringillidae	Lesser Goldfinch	Spinus psaltria	Present	CWHR	
Passeriformes	Fringillidae	Lawrence's Goldfinch	Spinus lawrencei	Present	CWHR	
Passeriformes	Fringillidae	American Goldfinch	Spinus tristis	High	CWHR	
Passeriformes	Passerellidae	Spotted Towhee	Pipilo maculatus	Present	CWHR	
Passeriformes	Passerellidae	Rufous-crowned Sparrow	Aimophila ruficeps	High	CWHR, CNDDB	SA
Passeriformes	Passerellidae	California Towhee	Melozone crissalis	Present	CWHR	
Passeriformes	Passerellidae	Chipping Sparrow	Spizella passerina	Moderate	CWHR	
Passeriformes	Passerellidae	Lark Sparrow	Chondestes grammacus	High	CWHR	
Passeriformes	Passerellidae	Bell's Sparrow	Artemisiospiza belli	Low	CWHR	
Passeriformes	Passerellidae	Savannah Sparrow	Passerculus sandwichensis	High	CWHR	
Passeriformes	Passerellidae	Belding's Savannah Sparrow	Passerculus sandwichensis beldingi	None	CNDDB	SE
Passeriformes	Passerellidae	Fox Sparrow	Passerella iliaca	High	CWHR	
Passeriformes	Passerellidae	Song Sparrow	Melospiza melodia	High	CWHR	
Passeriformes	Passerellidae	Lincoln's Sparrow	Melospiza lincolnii	High	CWHR	
Passeriformes	Passerellidae	White-throated Sparrow	Zonotrichia albicollis	Low	CWHR	
Passeriformes	Passerellidae	Harris's Sparrow	Zonotrichia querula	Low	CWHR	
Passeriformes	Passerellidae	White-crowned Sparrow	Zonotrichia leucophrys	High	CWHR	
Passeriformes	Passerellidae	Golden-crowned Sparrow	Zonotrichia atricapilla	High	CWHR	
Passeriformes	Passerellidae	Dark-eyed Junco	Junco hyemalis	Present	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Passeriformes	Icteridae	Western Meadowlark	Sturnella neglecta	High	CWHR	
Passeriformes	Icteridae	Hooded Oriole	Icterus cucullatus	Present	CWHR	
Passeriformes	Icteridae	Bullock's Oriole	Icterus bullockii	Present	CWHR	
Passeriformes	Icteridae	Red-winged Blackbird	Agelaius phoeniceus	Moderate	CWHR	
Passeriformes	Icteridae	Tricolored Blackbird	Agelaius tricolor	None	CNDDB	SC, SSC
Passeriformes	Icteridae	Brown-headed Cowbird	Molothrus ater	Present	CWHR	
Passeriformes	Icteridae	Brewer's Blackbird	Euphagus cyanocephalus	Moderate	CWHR	
Passeriformes	Parulidae	Orange-crowned Warbler	Oreothlypis celata	High	CWHR	
Passeriformes	Parulidae	Common Yellowthroat	Geothlypis trichas	High	CWHR	
Passeriformes	Parulidae	American Redstart	Setophaga ruticilla	Low	CWHR	
Passeriformes	Parulidae	Yellow Warbler	Setophaga petechia	High	CWHR	SSC
Passeriformes	Parulidae	Yellow-rumped Warbler	Setophaga coronata	High	CWHR	
Passeriformes	Parulidae	Black-throated Gray Warbler	Setophaga nigrescens	High	CWHR	
Passeriformes	Parulidae	Townsend's Warbler	Setophaga townsendi	High	CWHR	
Passeriformes	Parulidae	Hermit Warbler	Setophaga occidentalis	Moderate	CWHR	
Passeriformes	Cardinalidae	Western Tanager	Piranga ludoviciana	High	CWHR	
Passeriformes	Cardinalidae	Black-headed Grosbeak	Pheucticus melanocephalus	Present	CWHR	
Passeriformes	Cardinalidae	Blue Grosbeak	Passerina caerulea	High	CWHR	
Passeriformes	Cardinalidae	Lazuli Bunting	Passerina amoena	Present	CWHR	
Passeriformes	Cardinalidae	Indigo Bunting	Passerina cyanea	Low	CWHR	

Mammals

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Didelphimorphia	Didelphidae	Virginia Opossum	Didelphis virginiana	High	CWHR	
Lagomorpha	Leporidae	Black-tailed Jackrabbit	Lepus californicus	Low	CWHR	
Lagomorpha	Leporidae	Desert Cottontail	Sylvilagus audubonii	Present	CWHR	
Lagomorpha	Leporidae	Brush Rabbit	Sylvilagus bachmani	Moderate	CWHR	
Soricomorpha	Soricidae	Crawford's Desert Shrew	Notiosorex crawfordi	Low	CWHR	
Soricomorpha	Soricidae	Ornate Shrew	Sorex ornatus	Low	CWHR	
Soricomorpha	Soricidae	Southern California Saltmarsh Shrew	Sorex ornatus salicornicus	None	CNDDB	SSC
Soricomorpha	Talpidae	Broad-footed Mole	Scapanus latimanus	Moderate	CWHR	
Chiroptera	Molossidae	Western Bonneted Bat	Eumops perotis	Moderate	CWHR, CNDDB	SSC
Chiroptera	Molossidae	Pocketed Free-tailed Bat	Nyctinomops femorosaccus	Low	CNDDB	SSC
Chiroptera	Molossidae	Big Free-tailed Bat	Nyctinomops macrotis	Low	CNDDB	SSC
Chiroptera	Molossidae	Brazilian Free-tailed Bat	Tadarida brasiliensis	Moderate	CWHR	
Chiroptera	Vespertilionidae	Pallid Bat	Antrozous pallidus	Moderate	CWHR, CNDDB	SSC
Chiroptera	Vespertilionidae	Townsend's Big-eared Bat	Corynorhinus townsendii	Moderate	CWHR	SSC
Chiroptera	Vespertilionidae	Big Brown Bat	Eptesicus fuscus	High	CWHR	
Chiroptera	Vespertilionidae	Silver-haired Bat	Lasionycteris noctivagans	Moderate	CWHR, CNDDB	SA
Chiroptera	Vespertilionidae	Western Red Bat	Lasiurus blossevillii	Moderate	CWHR	SSC
Chiroptera	Vespertilionidae	Hoary Bat	Lasiurus cinereus	High	CWHR, CNDDB	SA
Chiroptera	Vespertilionidae	Western Yellow Bat	Lasiurus xanthinus	Low	CNDDB	SSC
Chiroptera	Vespertilionidae	California Myotis	Myotis californicus	High	CWHR	
Chiroptera	Vespertilionidae	Western Small-footed Myotis	Myotis ciliolabrum	Low	CWHR	
Chiroptera	Vespertilionidae	Long-eared Myotis	Myotis evotis	Moderate	CWHR	
Chiroptera	Vespertilionidae	Fringed Myotis	Myotis thysanodes	Low	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Chiroptera	Vespertilionidae	Long-legged Myotis	Myotis volans	Low	CWHR	
Chiroptera	Vespertilionidae	Yuma Myotis	Myotis yumanensis	Moderate	CWHR	
Chiroptera	Vespertilionidae	American Parastrelle	Parastrellus hesperus	High	CWHR	
Carnivora	Canidae	Coyote	Canis latrans	High	CWHR	
Carnivora	Canidae	Common Gray Fox	Urocyon cinereoargenteus	High	CWHR	
Carnivora	Canidae	Red Fox	Vulpes vulpes	Low	CWHR	
Carnivora	Felidae	Bobcat	Lynx rufus	High	CWHR	
Carnivora	Felidae	Mountain Lion	Puma concolor	Moderate	CWHR	
Carnivora	Mephitidae	Striped Skunk	Mephitis mephitis	High	CWHR	
Carnivora	Mephitidae	Western Spotted Skunk	Spilogale gracilis	Moderate	CWHR	
Carnivora	Mustelidae	Long-tailed Weasel	Mustela frenata	Moderate	CWHR	
Carnivora	Mustelidae	American Badger	Taxidea taxus	Low	CWHR, CNDDB	SSC
Carnivora	Procyonidae	Ringtail	Bassariscus astutus	Low	CWHR	
Carnivora	Procyonidae	Northern Raccoon	Procyon lotor	High	CWHR	
Artiodactyla	Cervidae	Mule Deer	Odocoileus hemionus	High	CWHR	
Rodentia	Cricetidae	California Vole	Microtus californicus	Low	CWHR	
Rodentia	Cricetidae	South Coast Marsh Vole	Microtus californicus stephensi	None	CNDDB	SSC
Rodentia	Cricetidae	Desert Woodrat	Neotoma lepida	High	CWHR	
Rodentia	Cricetidae	San Diego Desert Woodrat	Neotoma lepida intermedia	Moderate	CNDDB	SSC
Rodentia	Cricetidae	Big-eared Woodrat	Neotoma macrotis	High	CWHR	
Rodentia	Cricetidae	Southern Grasshopper Mouse	Onychomys torridus	Low	CWHR, CNDDB	SSC
Rodentia	Cricetidae	Brush Deermouse	Peromyscus boylii	High	CWHR	
Rodentia	Cricetidae	California Deermouse	Peromyscus californicus	High	CWHR	
Rodentia	Cricetidae	Cactus Deermouse	Peromyscus eremicus	High	CWHR	
Rodentia	Cricetidae	Baja Deermouse	Peromyscus fraterculus	Moderate	CWHR	
Rodentia	Cricetidae	North American Deermouse	Peromyscus maniculatus	High	CWHR	

Order	Family	Common Name	Scientific Name	Occurrence Potential	Source	Agency Status
Rodentia	Cricetidae	Western Harvest Mouse	Reithrodontomys megalotis	High	CWHR	
Rodentia	Geomyidae	Botta's Pocket Gopher	Thomomys bottae	High	CWHR	
Rodentia	Heteromyidae	California Pocket Mouse	Chaetodipus californicus	High	CWHR	
Rodentia	Heteromyidae	Agile Kangaroo Rat	Dipodomys agilis	High	CWHR	
Rodentia	Heteromyidae	Los Angeles Pocket Mouse	Perognathus longimembris brevinasus	High	CNDDB	SSC
Rodentia	Heteromyidae	Pacific Pocket Mouse	Perognathus longimembris pacificus	Low	CNDDB	FE, SSC
Rodentia	Muridae	House Mouse	Mus musculus	High	CWHR	
Rodentia	Muridae	Black Rat	Rattus rattus	High	CWHR	
Rodentia	Sciuridae	California Ground Squirrel	Ostospermophilus beecheyi	Present	CWHR	

APPENDIX C

Mission Canyon Trailhead Project
2301 N Sepulveda Blvd
Los Angeles, CA 90049

Inquiry Number: 5036832.2s
August 30, 2017

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2301 N SEPULVEDA BLVD
LOS ANGELES, CA 90049

COORDINATES

Latitude (North):	34.1226220 - 34° 7' 21.43''
Longitude (West):	118.4897100 - 118° 29' 22.95''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	362617.6
UTM Y (Meters):	3776559.2
Elevation:	1182 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5630733 BEVERLY HILLS, CA
Version Date:	2012
Northeast Map:	5630789 VAN NUYS, CA
Version Date:	2012
Southwest Map:	5630777 TOPANGA, CA
Version Date:	2012
Northwest Map:	5630737 CANOGA PARK, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140531, 20140514
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
2301 N SEPULVEDA BLVD
LOS ANGELES, CA 90049

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	MISSION CANYON #4-7	2501 NORTH SEPULVEDA	SWF/LF	Lower	1 ft.
A2	MISSION CANYON #8	2501 NORTH SEPULVEDA	SWF/LF	Lower	1 ft.
A3	LA CO., SANITATION D	2501 N SEPULVEDA BLV	FINDS	Lower	1 ft.
A4	LA COUNTY - SANITATI	2501 N SEPULVEDA BLV	FINDS	Lower	1 ft.
A5	MISSION CANYON (0038	2501 N SEPULVEDA BLV	SWEEPS UST, HIST UST, CA FID UST, EMI, LOS ANGELES...	Lower	1 ft.
A6	AT&T MOBILITY - SEPU	2501 1/2 N SEPULVEDA	FINDS	Lower	1 ft.
B7	FIRE STATION 109	16500 MULHOLLAND DR	HIST UST	Higher	685, 0.130, NNW
B8	LAFD - FIRE STATION	16500 W MULHOLLAND D	UST	Higher	685, 0.130, NNW
B9	LOS ANGELES FIRE STA	16500 MULHOLLAND DR	CA FID UST	Higher	685, 0.130, NNW
B10	LOS ANGELES FIRE STA	16500 MULHOLLAND DR	UST	Higher	685, 0.130, NNW
B11	LOS ANGELES FIRE STA	16500 W MULHOLLAND D	SWEEPS UST	Higher	685, 0.130, NNW
B12	LOS ANGELES FIRE STA	16500 MULHOLLAND DR	RCRA-SQG, FINDS, ECHO, HAZNET	Higher	685, 0.130, NNW
13	DOD - MOUNT DISAPPOI		SLIC	Higher	737, 0.140, North
C14	MISSION CANYON #1-3	2501 NORTH SEPULVEDA	SWF/LF	Lower	1282, 0.243, SSE
C15	MISSION CANYON #8	2201 NORTH SEPULVEDA	SWF/LF	Lower	1489, 0.282, SSE
D16	MISSION CANYON LANDF	2201 NORTH SEPULVEDA	ENVIROSTOR, EMI	Lower	1893, 0.359, SSE
D17	LA COUNTY SD-MISSION	2201 NORTH SEPULVEDA	WMUDS/SWAT	Lower	1893, 0.359, SSE
D18	MISSION CANYON LDFL	2201 N SEPULVEDA BLV	SEMS-ARCHIVE	Lower	1893, 0.359, SSE
D19	LA COUNTY SD-MISSION	2201 NORTH SEPULVEDA	WMUDS/SWAT	Lower	1893, 0.359, SSE
20	HAVENHURST & CALNEVA		Notify 65	Lower	3108, 0.589, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

State and tribal leaking storage tank lists

LUST ..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ..... Underground Storage Tank Listing
AST ..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP ..... Voluntary Cleanup Program Properties
INDIAN VCP ..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
AOCONCERN ..... San Gabriel Valley Areas of Concern
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information

DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ..... RCRA - Non Generators / No Longer Regulated
FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
ROD ..... Records Of Decision
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
ICIS ..... Integrated Compliance Information System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ..... PCB Transformer Registration Database
RADINFO ..... Radiation Information Database
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ..... Incident and Accident Data
CONSENT ..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV ..... Indian Reservations
FUSRAP ..... Formerly Utilized Sites Remedial Action Program
UMTRA ..... Uranium Mill Tailings Sites
LEAD SMELTERS ..... Lead Smelter Sites
US AIRS ..... Aerometric Information Retrieval System Facility Subsystem
US MINES ..... Mines Master Index File
ABANDONED MINES ..... Abandoned Mines
UXO ..... Unexploded Ordnance Sites
DOCKET HWC ..... Hazardous Waste Compliance Docket Listing
ECHO ..... Enforcement & Compliance History Information
FUELS PROGRAM ..... EPA Fuels Program Registered Listing
CA BOND EXP. PLAN ..... Bond Expenditure Plan
Cortese ..... "Cortese" Hazardous Waste & Substances Sites List
CUPA Listings ..... CUPA Resources List
DRYCLEANERS ..... Cleaner Facilities
ENF ..... Enforcement Action Listing
Financial Assurance ..... Financial Assurance Information Listing

HAZNET Facility and Manifest Data
ICE ICE
HIST CORTESE Hazardous Waste & Substance Site List
HWP EnviroStor Permitted Facilities Listing
HWT Registered Hazardous Waste Transporter Database
MINES Mines Site Location Listing
MWMP Medical Waste Management Program Listing
PEST LIC Pesticide Regulation Licenses Listing
PROC Certified Processors Database
LA Co. Site Mitigation Site Mitigation List
UIC UIC Listing
WASTEWATER PITS Oil Wastewater Pits Listing
WIP Well Investigation Program Case List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Auto EDR Exclusive Historic Gas Stations
EDR Hist Cleaner EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF Recovered Government Archive Solid Waste Facilities List
RGA LUST Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes

available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 02/07/2017 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON LDFL	2201 N SEPULVEDA BLV	SSE 1/4 - 1/2 (0.359 mi.)	D18	31

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOS ANGELES FIRE STA	***16500 MULHOLLAND DR***	***NNW 1/8 - 1/4 (0.130 mi.)***	***B12***	***22***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/31/2017 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON LANDF Facility Id: 19490011 Status: Refer: RWQCB	***2201 NORTH SEPULVEDA***	***SSE 1/4 - 1/2 (0.359 mi.)***	***D16***	***28***

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there are 4 SWF/LF sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON #4-7	2501 NORTH SEPULVEDA	0 - 1/8 (0.000 mi.)	A1	8
Database: LOS ANGELES CO. LF, Date of Government Version: 04/17/2017 Site ID: 1987 Status: Closed				
MISSION CANYON #8	2501 NORTH SEPULVEDA	0 - 1/8 (0.000 mi.)	A2	8
Database: LOS ANGELES CO. LF, Date of Government Version: 04/17/2017 Site ID: 1988 Status: Closed				
MISSION CANYON #1-3	2501 NORTH SEPULVEDA	SSE 1/8 - 1/4 (0.243 mi.)	C14	26
Database: SWF/LF (SWIS), Date of Government Version: 02/13/2017 Facility ID: 19-AA-0821 Operational Status: Closed Regulation Status: Unpermitted				
MISSION CANYON #8	2201 NORTH SEPULVEDA	SSE 1/4 - 1/2 (0.282 mi.)	C15	27
Database: SWF/LF (SWIS), Date of Government Version: 02/13/2017 Facility ID: 19-AA-0822 Facility ID: 19-AA-0823 Operational Status: Closed Regulation Status: Unpermitted Regulation Status: Permitted				

State and tribal leaking storage tank lists

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOD - MOUNT DISAPPOI		N 1/8 - 1/4 (0.140 mi.)	13	26
Database: SLIC REG 4, Date of Government Version: 11/17/2004 Database: SLIC, Date of Government Version: 06/12/2017 Facility Status: Open - Inactive Facility Status: Inactive Global Id: SLT43186184				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAFD - FIRE STATION Database: UST, Date of Government Version: 06/12/2017 Facility Id: FA0003851	16500 W MULHOLLAND D	NNW 1/8 - 1/4 (0.130 mi.)	B8	20
LOS ANGELES FIRE STA Database: UST, Date of Government Version: 06/12/2017 Facility Id: 23892	16500 MULHOLLAND DR	NNW 1/8 - 1/4 (0.130 mi.)	B10	21

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

A review of the WMUDS/SWAT list, as provided by EDR, and dated 04/01/2000 has revealed that there are 2 WMUDS/SWAT sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LA COUNTY SD-MISSION	2201 NORTH SEPULVEDA	SSE 1/4 - 1/2 (0.359 mi.)	D17	30
LA COUNTY SD-MISSION	2201 NORTH SEPULVEDA	SSE 1/4 - 1/2 (0.359 mi.)	D19	32

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOS ANGELES FIRE STA Comp Number: 2582	16500 W MULHOLLAND D	NNW 1/8 - 1/4 (0.130 mi.)	B11	21

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON (0038	***2501 N SEPULVEDA BLV***	***0 - 1/8 (0.000 mi.)***	***A5***	***10***

Comp Number: 350

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FIRE STATION 109 Facility Id: 00000047399	16500 MULHOLLAND DR	NNW 1/8 - 1/4 (0.130 mi.)	B7	20

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON (0038 Facility Id: 00000003976	***2501 N SEPULVEDA BLV***	***0 - 1/8 (0.000 mi.)***	***A5***	***10***

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 2 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOS ANGELES FIRE STA Facility Id: 19022497 Status: A	16500 MULHOLLAND DR	NNW 1/8 - 1/4 (0.130 mi.)	B9	21

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON (0038 Facility Id: 19053700 Status: I	***2501 N SEPULVEDA BLV***	***0 - 1/8 (0.000 mi.)***	***A5***	***10***

Other Ascertainable Records

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 04/04/2017 has revealed that there are 3 FINDS sites within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LA CO., SANITATION D	2501 N SEPULVEDA BLV	0 - 1/8 (0.000 mi.)	A3	9

Lower Elevation	Address	Direction / Distance	Map ID	Page
LA COUNTY - SANITATI	2501 N SEPULVEDA BLV	0 - 1/8 (0.000 mi.)	A4	9
AT&T MOBILITY - SEPU	2501 1/2 N SEPULVEDA	0 - 1/8 (0.000 mi.)	A6	19

EMI: Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies

A review of the EMI list, as provided by EDR, and dated 12/31/2015 has revealed that there is 1 EMI site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON (0038	***2501 N SEPULVEDA BLV***	***0 - 1/8 (0.000 mi.)***	***A5***	***10***
Facility Id: 21189				

Los Angeles County Industrial Waste and Underground Storage Tank Sites.

A review of the LOS ANGELES CO. HMS list, as provided by EDR, and dated 04/18/2017 has revealed that there is 1 LOS ANGELES CO. HMS site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON (0038	***2501 N SEPULVEDA BLV***	***0 - 1/8 (0.000 mi.)***	***A5***	***10***
Facility ID: 033064-054813				

NPDES: A listing of NPDES permits, including stormwater.

A review of the NPDES list, as provided by EDR, and dated 11/14/2016 has revealed that there is 1 NPDES site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON (0038	***2501 N SEPULVEDA BLV***	***0 - 1/8 (0.000 mi.)***	***A5***	***10***
Facility Status: Terminated				

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/16/2016 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAVENHURST & CALNEVA		NNW 1/2 - 1 (0.589 mi.)	20	33

WDS: California Water Resources Control Board - Waste Discharge System.

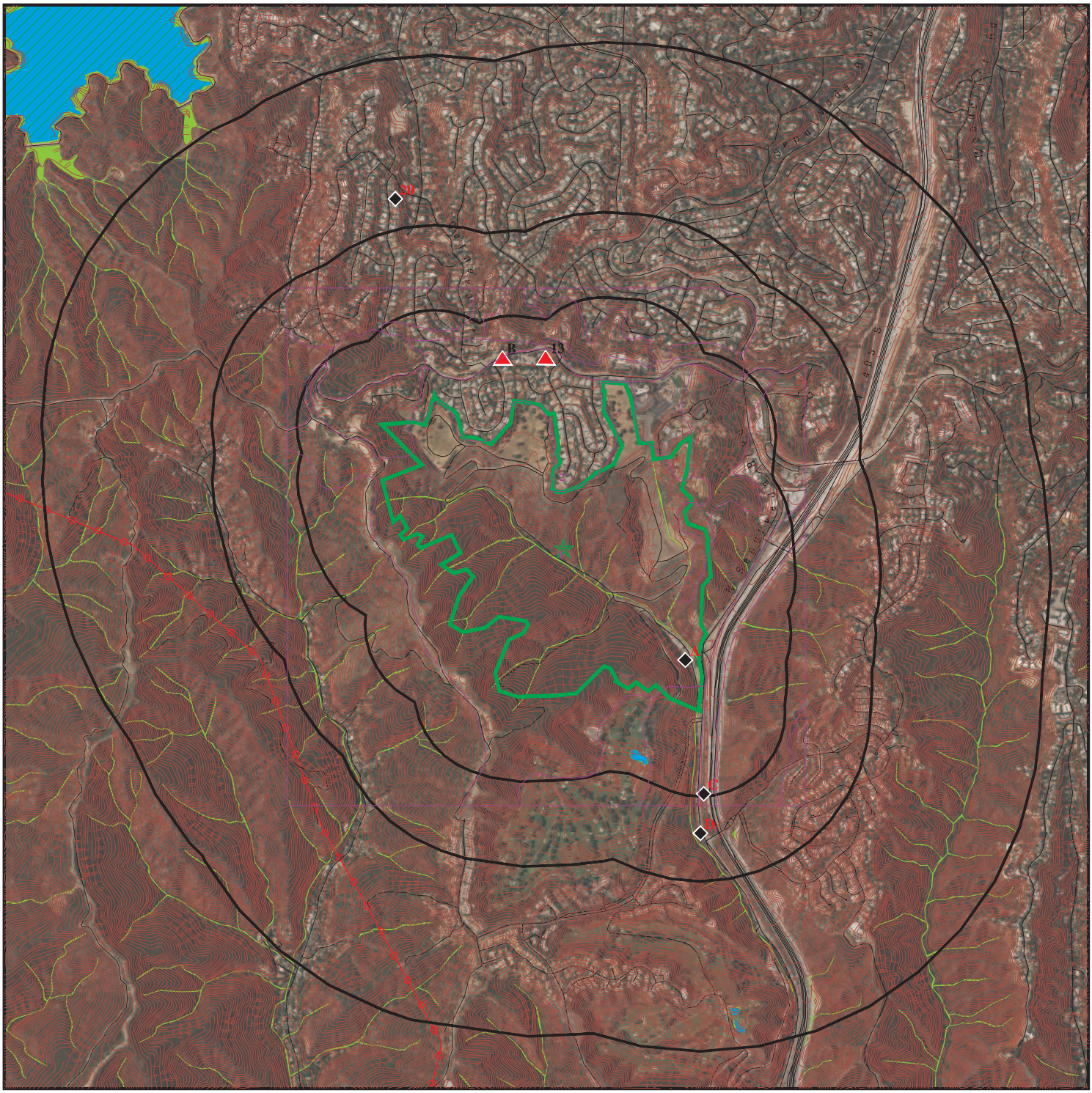
A review of the WDS list, as provided by EDR, and dated 06/19/2007 has revealed that there is 1 WDS site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION CANYON (0038	***2501 N SEPULVEDA BLV***	***0 - 1/8 (0.000 mi.)***	***A5***	***10***
Facility Status: A				
Facility Id: 4 19I006189				

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 5036832.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

0 1/4 1/2 1 Miles

- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Mission Canyon Trailhead Project	CLIENT: IEC Group
ADDRESS: 2301 N Sepulveda Blvd Los Angeles CA 90049	CONTACT: Eimon Raoof
LAT/LONG: 34.122622 / 118.48971	INQUIRY #: 5036832.2s DATE: August 30, 2017 1:24 pm

DETAIL MAP - 5036832.2S

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Mission Canyon Trailhead Project	CLIENT:	IEC Group
ADDRESS:	2301 N Sepulveda Blvd Los Angeles CA 90049	CONTACT:	Eimon Raoof
LAT/LONG:	34.122622 / 118.48971	INQUIRY #:	5036832.2s
		DATE:	August 30, 2017 1:32 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	1	0	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		2	1	1	NR	NR	4
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	1	0	NR	NR	1
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	2	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	2	NR	NR	2
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
AOCONCERN	1.000		0	0	0	0	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	1	NR	NR	NR	2
HIST UST	0.250		1	1	NR	NR	NR	2
CA FID UST	0.250		1	1	NR	NR	NR	2
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		3	NR	NR	NR	NR	3
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		1	NR	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
LOS ANGELES CO. HMS	0.001		1	NR	NR	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		1	NR	NR	NR	NR	1
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
LA Co. Site Mitigation	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		1	NR	NR	NR	NR	1
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	12	8	5	1	0	26

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **MISSION CANYON #4-7** **SWF/LF** **S118939147**
2501 NORTH SEPULVEDA BOULEVARD **N/A**
< 1/8 **LOS ANGELES, CA 90049**
1 ft.

Site 1 of 6 in cluster A

Relative:
Lower

Actual:
980 ft.

LOS ANGELES CO. LF:

Site ID:	1987
Alt. Address:	2201 North Supulveda Boulevard, Los Angeles, CA 90049
Site Contact:	Not reported
Site Contact Phone:	Not reported
Site Email:	Not reported
Site Website:	Not reported
Site Type:	Designated Waste Landfill
Site SWIS Number:	19-AA-0822
Beginning Operation Date:	1965
Ending Operation Date:	1976
Local Enforcement Agency:	City of Los Angeles, Building and Safety
Maximun Depth Fill(Ft):	Not reported
Permitted Capacity:	Not reported
Present Use:	Mountaingate Country Club
Remaining Capacity(Million):	Not reported
Status:	Closed
Waste Accepted:	Not reported
Hours of Operation:	Not reported
Disposal Area (Acre):	Not reported

Detail As Of 01/2014:

Operator Name:	County of Los Angeles Sanitation Districts
Operator Address:	1955 Workman Mill Road
Operator City/State/Zip:	Whittier, CA 90601
Operator Contact:	Willy Mejia
Operator Telephone:	(562) 699-7411x6069
Operator Email:	wmejia@lacsd.org
Owner Name:	Multiple Owners (See Notes)
Owner Address:	Not reported
Owner City/State/Zip:	Not reported
Owner Contact:	Not reported
Owner Telephone:	Not reported
Owner Email:	Not reported

A2 **MISSION CANYON #8** **SWF/LF** **S118939148**
2501 NORTH SEPULVEDA BOULEVARD **N/A**
< 1/8 **LOS ANGELES, CA 90049**
1 ft.

Site 2 of 6 in cluster A

Relative:
Lower

Actual:
980 ft.

LOS ANGELES CO. LF:

Site ID:	1988
Alt. Address:	2201 North Supulveda Boulevard, Los Angeles, CA 90049; 1801 1/2 North Sepulveda Boulevard, Los Ange
Site Contact:	Not reported
Site Contact Phone:	Not reported
Site Email:	Not reported
Site Website:	Not reported
Site Type:	Designated Waste Landfill
Site SWIS Number:	19-AA-0823
Beginning Operation Date:	Not reported
Ending Operation Date:	1981
Local Enforcement Agency:	City of Los Angeles, Building and Safety
Maximun Depth Fill(Ft):	Not reported

MISSION CANYON #8 (Continued) **S118939148**

Permitted Capacity: Not reported
Present Use: Vacant
Remaining Capacity(Million): Not reported
Status: Closed
Waste Accepted: Not reported
Hours of Operation: Not reported
Disposal Area (Acre): Not reported

Detail As Of 01/2014:
Operator Name: County of Los Angeles Sanitation Districts
Operator Address: 1955 Workman Mill Road
Operator City/State/Zip: Whittier, CA 90601
Operator Contact: Willy Mejia
Operator Telephone: (562) 699-7411x6069
Operator Email: wmejia@lacsd.org
Owner Name: Multiple Owners (See Notes)
Owner Address: Not reported
Owner City/State/Zip: Not reported
Owner Contact: Not reported
Owner Telephone: Not reported
Owner Email: Not reported

A3 **LA CO., SANITATION DIST, MISSION CYNS1-3** **FINDS** **1014675605**
2501 N SEPULVEDA BLVD **N/A**
< 1/8 **LOS ANGELES, CA 90049**
1 ft.

Site 3 of 6 in cluster A

Relative: Lower

FINDS:

Registry ID: 110001159549

Actual: 980 ft.

Environmental Interest/Information System
HAZARDOUS AIR POLLUTANT MAJOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A4 **LA COUNTY - SANITATION DEPARTMENT** **FINDS** **1023229115**
2501 N SEPULVEDA BLVD **N/A**
< 1/8 **LOS ANGELES, CA 90049**
1 ft.

Site 4 of 6 in cluster A

Relative: Lower

FINDS:

Registry ID: 110065160907

Actual: 980 ft.

Environmental Interest/Information System
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A5 **MISSION CANYON (003864-I03999)** **SWEEPS UST** **1000382467**
2501 N SEPULVEDA BLVD **HIST UST** **N/A**
< 1/8 **LOS ANGELES, CA 90049** **CA FID UST**
1 ft. **EMI**
Site 5 of 6 in cluster A **LOS ANGELES CO. HMS**
NPDES
Relative: **WDS**
Lower

Actual: SWEEPS UST:
980 ft.

Status:	Not reported
Comp Number:	350
Number:	Not reported
Board Of Equalization:	44-011123
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-050-000350-000001
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	1

HIST UST:

File Number:	00027438
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00027438.pdf
Region:	STATE
Facility ID:	00000003976
Facility Type:	Other
Other Type:	CLOSED SANITARY IDFL
Contact Name:	GENE FULTON
Telephone:	2134712715
Owner Name:	COUNTY SANITATION DISTRICTS OF
Owner Address:	1955 WORKMAN MILL ROAD
Owner City,St,Zip:	WHITTIER, CA 90607
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	19053700
Regulated By:	UTNKI
Regulated ID:	00003976
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2134712715

MISSION CANYON (003864-I03999) (Continued) **1000382467**

Mail To: Not reported
Mailing Address: 1955 WORKMAN MILL RD
Mailing Address 2: Not reported
Mailing City,St,Zip: LOS ANGELES 900490000
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Inactive

EMI:

Year:	1987
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	5199
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	2
NOX - Oxides of Nitrogen Tons/Yr:	8
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	7
Part. Matter 10 Micrometers and Smllr Tons/Yr:	5

Year:	1990
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	9631
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	23
Reactive Organic Gases Tons/Yr:	11
Carbon Monoxide Emissions Tons/Yr:	61
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Year:	1995
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	9631
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3

MISSION CANYON (003864-I03999) (Continued) **1000382467**

Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	56
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Year:	1996
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	9631
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	38
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	3
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	3
Part. Matter 10 Micrometers and Smllr Tons/Yr:	3

Year:	1997
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4953
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	12
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	3
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Year:	1998
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4953
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	13
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	3
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

MISSION CANYON (003864-I03999) (Continued) **1000382467**

Year:	1999
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4953
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	12
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	3
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Year:	2000
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4953
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	12
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	3
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Year:	2001
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4953
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2002
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4953

MISSION CANYON (003864-I03999) (Continued) **1000382467**

Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2003
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4953
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2004
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4953
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.95538
Reactive Organic Gases Tons/Yr:	0.46
Carbon Monoxide Emissions Tons/Yr:	0.0234
NOX - Oxides of Nitrogen Tons/Yr:	0.445
SOX - Oxides of Sulphur Tons/Yr:	0.16
Particulate Matter Tons/Yr:	0.409
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.41

Year:	2009
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4952
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.251046025104602
Reactive Organic Gases Tons/Yr:	0.12
Carbon Monoxide Emissions Tons/Yr:	5.9999999999999998E-2

MISSION CANYON (003864-I03999) (Continued) **1000382467**

NOX - Oxides of Nitrogen Tons/Yr:	0.85999999999999999
SOX - Oxides of Sulphur Tons/Yr:	0.84999999999999998
Particulate Matter Tons/Yr:	0.89000000000000001
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.89000000000000001

Year:	2011
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4952
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.087490384684
Reactive Organic Gases Tons/Yr:	0.04103
Carbon Monoxide Emissions Tons/Yr:	0.03819
NOX - Oxides of Nitrogen Tons/Yr:	0.15504
SOX - Oxides of Sulphur Tons/Yr:	0.18007
Particulate Matter Tons/Yr:	0.18838
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.18838

Year:	2012
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	9999
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.064490205755
Reactive Organic Gases Tons/Yr:	0.03088
Carbon Monoxide Emissions Tons/Yr:	7e-005
NOX - Oxides of Nitrogen Tons/Yr:	0.19787
SOX - Oxides of Sulphur Tons/Yr:	0.16779
Particulate Matter Tons/Yr:	0.21133
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.21133

Year:	2013
County Code:	19
Air Basin:	SC
Facility ID:	21189
Air District Name:	SC
SIC Code:	4952
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.045041841004
Reactive Organic Gases Tons/Yr:	0.02153
Carbon Monoxide Emissions Tons/Yr:	0.00324
NOX - Oxides of Nitrogen Tons/Yr:	0.03181
SOX - Oxides of Sulphur Tons/Yr:	0.11817
Particulate Matter Tons/Yr:	0.08429
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.08429

MISSION CANYON (003864-I03999) (Continued) **1000382467**

LOS ANGELES CO. HMS:
- Region: LA
- Permit Category: Not reported
- Facility Id: 033064-054813
- Facility Type: Not reported
- Facility Status: OPEN
- Area: 5F
- Permit Number: Not reported
- Permit Status: Not reported

NPDES:

Npdes Number:	CAS000001
Facility Status:	Terminated
Agency Id:	0
Region:	4
Regulatory Measure Id:	189579
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19I006189
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/22/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	03/20/2015
Discharge Name:	Los Angeles County Sanitation Districts
Discharge Address:	PO Box 4998
Discharge City:	Whittier
Discharge State:	California
Discharge Zip:	90607
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported

MISSION CANYON (003864-I03999) (Continued) **1000382467**

DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4
Regulatory Measure Id:	189579
Order No:	Not reported
Regulatory Measure Type:	Industrial
Place Id:	Not reported
WDID:	4 19I006189
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	3/20/2015
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	5/9/2008
PROCESSED DATE:	4/22/1992
STATUS CODE NAME:	Terminated
STATUS DATE:	3/25/2015
PLACE SIZE:	496
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Beth C. Bax

MISSION CANYON (003864-I03999) (Continued) **1000382467**

FACILITY CONTACT TITLE:	Supervising Engineer
FACILITY CONTACT PHONE:	562-908-4288
FACILITY CONTACT PHONE EXT:	2440
FACILITY CONTACT EMAIL:	bbax@lacsd.org
OPERATOR NAME:	Los Angeles County Sanitation Districts
OPERATOR ADDRESS:	PO Box 4998
OPERATOR CITY:	Whittier
OPERATOR STATE:	California
OPERATOR ZIP:	90607
OPERATOR CONTACT NAME:	Robert Asgian
OPERATOR CONTACT TITLE:	Division Enginner I
OPERATOR CONTACT PHONE:	562-908-4288
OPERATOR CONTACT PHONE EXT:	6002
OPERATOR CONTACT EMAIL:	rasgian@lacsd.org
OPERATOR TYPE:	Special District
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	California
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Bolona Creek
CERTIFIER NAME:	Kristen Ruffell
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	25-MAY-12
PRIMARY SIC:	4953-Refuse Systems
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

WDS:

Facility ID:	4 19I006189
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water

MISSION CANYON (003864-I03999) (Continued) **1000382467**

	pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	4
Facility Telephone:	5626997315
Facility Contact:	FREEMON PATRICK
Agency Name:	L A CO SANITATION DIST
Agency Address:	PO Box 4998
Agency City,St,Zip:	Whittier 906074998
Agency Contact:	SNYDER DAVE
Agency Telephone:	5626997411
Agency Type:	?
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

A6 **AT&T MOBILITY - SEPULVEDA (11885)** **FINDS** **1023380613**
2501 1/2 N SEPULVEDA BLVD **N/A**
< 1/8 **LOS ANGELES, CA 90049**
1 ft.

Site 6 of 6 in cluster A

Relative: Lower

FINDS:

Registry ID: 110066792180

Actual: 980 ft.

Environmental Interest/Information System
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

B7 **FIRE STATION 109** **HIST UST** **U001561973**
NNW **16500 MULHOLLAND DR** **N/A**
1/8-1/4 **LOS ANGELES, CA 90049**
0.130 mi.
685 ft. **Site 1 of 6 in cluster B**

Relative:
Higher

Actual:
1362 ft.

HIST UST:

File Number:	000270DC
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000270DC.pdf
Region:	STATE
Facility ID:	00000047399
Facility Type:	Other
Other Type:	FIRE STATION
Contact Name:	Not reported
Telephone:	2139898609
Owner Name:	CITY OF LOS ANGELES
Owner Address:	200 N. MAIN ST.
Owner City,St,Zip:	LOS ANGELES, CA 90012
Total Tanks:	0003
Tank Num:	001
Container Num:	FS109-1
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	FS109-2
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	FS 109-3
Year Installed:	Not reported
Tank Capacity:	00000550
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

B8 **LAFD - FIRE STATION 109** **UST** **U004263786**
NNW **16500 W MULHOLLAND DR** **N/A**
1/8-1/4 **LOS ANGELES, CA 90049**
0.130 mi.
685 ft. **Site 2 of 6 in cluster B**

Relative:
Higher

Actual:
1362 ft.

UST:

Facility ID:	FA0003851
Permitting Agency:	Los Angeles City Fire Department
Latitude:	34.13092
Longitude:	-118.49264

B9 **LOS ANGELES FIRE STATION 109** **CA FID UST** **S101585307**
NNW **16500 MULHOLLAND DR** **N/A**
1/8-1/4 **LOS ANGELES, CA 90049**
0.130 mi.
685 ft. **Site 3 of 6 in cluster B**

Relative:
Higher

Actual:
1362 ft.

CA FID UST:

Facility ID:	19022497
Regulated By:	UTNKA
Regulated ID:	00047399
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2139898609
Mail To:	Not reported
Mailing Address:	200 N MAIN STREET-ROOM
Mailing Address 2:	Not reported
Mailing City,St,Zip:	LOS ANGELES 900490000
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

B10 **LOS ANGELES FIRE STATION 109** **UST** **U003780375**
NNW **16500 MULHOLLAND DR** **N/A**
1/8-1/4 **LOS ANGELES, CA 90049**
0.130 mi.
685 ft. **Site 4 of 6 in cluster B**

Relative:
Higher

Actual:
1362 ft.

UST:

Facility ID:	23892
Permitting Agency:	LOS ANGELES, CITY OF
Latitude:	34.1323576
Longitude:	-118.4907685

B11 **LOS ANGELES FIRE STATION 109** **SWEEPS UST** **S106928818**
NNW **16500 W MULHOLLAND DR** **N/A**
1/8-1/4 **LOS ANGELES, CA 90049**
0.130 mi.
685 ft. **Site 5 of 6 in cluster B**

Relative:
Higher

Actual:
1362 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	2582
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-050-002582-000001
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT

LOS ANGELES FIRE STATION 109 (Continued) **S106928818**

Content: REG UNLEADED
Number Of Tanks: 3

Status: Not reported
Comp Number: 2582
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-002582-000002
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 2582
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-002582-000003
Tank Status: Not reported
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

B12 **LOS ANGELES FIRE STA 109** **RCRA-SQG 1000102072**
NNW **16500 MULHOLLAND DR** **FINDS CAD981623861**
1/8-1/4 **SHERMAN OAKS, CA 91423** **ECHO**
0.130 mi. **HAZNET**
685 ft. **Site 6 of 6 in cluster B**

Relative:
Higher

Actual:
1362 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: LOS ANGELES FIRE STA 109
Facility address: 16500 MULHOLLAND DR
SHERMAN OAKS, CA 91423
EPA ID: CAD981623861
Mailing address: 200 N MAIN ST RM EIGHTH HUNDRE
LOS ANGELES, CA 90012
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09

LOS ANGELES FIRE STA 109 (Continued) **1000102072**

Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: LOS ANGELES CITY OF
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 01/26/1987
Site name: LOS ANGELES FIRE STA 109
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110006472174

LOS ANGELES FIRE STA 109 (Continued) **1000102072**

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000102072
Registry ID:	110006472174
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110006472174

HAZNET:

envid:	1000102072
Year:	2005
GEPAID:	CAD981623861
Contact:	LEE MOORE, MGMT. ANALYST II
Telephone:	2139783798
Mailing Name:	Not reported
Mailing Address:	111 E 1ST ST ROOM 600
Mailing City,St,Zip:	LOS ANGELES, CA 900120000
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	0.04
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

envid:	1000102072
Year:	2005
GEPAID:	CAD981623861
Contact:	LEE MOORE, MGMT. ANALYST II
Telephone:	2139783798
Mailing Name:	Not reported
Mailing Address:	111 E 1ST ST ROOM 600
Mailing City,St,Zip:	LOS ANGELES, CA 900120000
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	0.04
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

LOS ANGELES FIRE STA 109 (Continued) **1000102072**

envid: 1000102072
Year: 2003
GEPAID: CAD981623861
Contact: LEE MOORE, MGMT. ANALYST II
Telephone: 2139783798
Mailing Name: Not reported
Mailing Address: 111 E 1ST ST ROOM 600
Mailing City,St,Zip: LOS ANGELES, CA 900120000
Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Not reported
Tons: 0.06
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Los Angeles

envid: 1000102072
Year: 2003
GEPAID: CAD981623861
Contact: LEE MOORE, MGMT. ANALYST II
Telephone: 2139783798
Mailing Name: Not reported
Mailing Address: 111 E 1ST ST ROOM 600
Mailing City,St,Zip: LOS ANGELES, CA 900120000
Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Not reported
Tons: 0.06
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Los Angeles

envid: 1000102072
Year: 2001
GEPAID: CAD981623861
Contact: LEE MOORE, MGMT. ANALYST II
Telephone: 2139783798
Mailing Name: Not reported
Mailing Address: 111 E 1ST ST ROOM 600
Mailing City,St,Zip: LOS ANGELES, CA 900120000
Gen County: Not reported
TSD EPA ID: CAD009007626
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Disposal, Land Fill
Tons: 0.92
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Los Angeles

Click this hyperlink while viewing on your computer to access
3 additional CA_HAZNET: record(s) in the EDR Site Report.

13
North
1/8-1/4
0.140 mi.
737 ft.

DOD - MOUNT DISAPPOINTMENT ANG
LOS ANGELES, CA 90061

SLIC **S103546749**
N/A

Relative:
Higher

Actual:
1389 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Inactive**
Status Date:	01/29/2015
Global Id:	SLT43186184
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number:	Not reported
Latitude:	34.13084
Longitude:	-118.490639
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	0287
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SLIC REG 4:

Region:	4
Facility Status:	Inactive
SLIC:	0287
Substance:	Not reported
Staff:	Not reported

C14
SSE
1/8-1/4
0.243 mi.
1282 ft.

MISSION CANYON #1-3
2501 NORTH SEPULVEDA BLVD
LOS ANGELES (CITY), CA

Site 1 of 2 in cluster C

SWF/LF **S105155543**
N/A

Relative:
Lower

Actual:
927 ft.

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AA-0821
Lat/Long:	34.1102 / -118.4824
Owner Name:	Sanitation District L.A. County
Owner Telephone:	2136855217
Owner Address:	Not reported
Owner Address2:	1995 Workman Mill Rd.
Owner City,St,Zip:	Whittier, CA
Operational Status:	Closed
Operator:	Not reported
Operator Phone:	Not reported
Operator Address:	Not reported
Operator Address2:	Not reported
Operator City,St,Zip:	Not reported
Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	$0.00
Activity:	Solid Waste Disposal Site
Regulation Status:	Unpermitted

MISSION CANYON #1-3 (Continued) **S105155543**

Landuse Name: Residential,Park,Open Space - Irrigated
GIS Source: Map
Category: Disposal
Unit Number: 01
Inspection Frequency: Quarterly
Accepted Waste: Not reported
Closure Date: Not reported
Closure Type: Not reported
Disposal Acreage: $0.00
SWIS Num: 19-AA-0821
Waste Discharge Requirement Num: Not reported
Program Type: Not reported
Permitted Throughput with Units: 0
Actual Throughput with Units: Not reported
Permitted Capacity with Units: 0
Remaining Capacity: 0
Remaining Capacity with Units: Not reported
Lat/Long: 34.1102 / -118.4824

C15 **MISSION CANYON #8** **SWF/LF** **S102360708**
SSE **2201 NORTH SEPULVEDA** **N/A**
1/4-1/2 **LOS ANGELES (CITY), CA**
0.282 mi.
1489 ft. **Site 2 of 2 in cluster C**

Relative:
Lower

Actual:
919 ft.

SWF/LF (SWIS):
Region: STATE
Facility ID: 19-AA-0822
Lat/Long: 34.1 / -118.46667
Owner Name: American Golf Corporation
Owner Telephone: 2133154200
Owner Address: Not reported
Owner Address2: 1633 26th Street
Owner City,St,Zip: Santa Monica, CA 90404
Operational Status: Closed
Operator: Not reported
Operator Phone: Not reported
Operator Address: Not reported
Operator Address2: Not reported
Operator City,St,Zip: Not reported
Permit Date: Not reported
Permit Status: Not reported
Permitted Acreage: $0.00
Activity: Solid Waste Disposal Site
Regulation Status: Unpermitted
Landuse Name: Residential,Golf Course
GIS Source: Map
Category: Disposal
Unit Number: 01
Inspection Frequency: Quarterly
Accepted Waste: Not reported
Closure Date: Not reported
Closure Type: Not reported
Disposal Acreage: $0.00
SWIS Num: 19-AA-0822
Waste Discharge Requirement Num: Not reported
Program Type: Not reported
Permitted Throughput with Units: 0

MISSION CANYON #8 (Continued) **S102360708**

Actual Throughput with Units: Not reported
Permitted Capacity with Units: 0
Remaining Capacity: 0
Remaining Capacity with Units: Not reported
Lat/Long: 34.1 / -118.46667

Region: STATE
Facility ID: 19-AA-0823
Lat/Long: 34.1 / -118.46667
Owner Name: Barclay Hollander Corp
Owner Telephone: 8053731890
Owner Address: Not reported
Owner Address2: 325 East Hillcrest Drive, Suite 230
Owner City,St,Zip: Thousand Oaks, CA 91360
Operational Status: Closed
Operator: Not reported
Operator Phone: Not reported
Operator Address: Not reported
Operator Address2: Not reported
Operator City,St,Zip: Not reported
Permit Date: Not reported
Permit Status: Not reported
Permitted Acreage: $0.00
Activity: Solid Waste Disposal Site
Regulation Status: Permitted
Landuse Name: Golf Course
GIS Source: Map
Category: Disposal
Unit Number: 01
Inspection Frequency: Quarterly
Accepted Waste: Not reported
Closure Date: Not reported
Closure Type: Not reported
Disposal Acreage: $0.00
SWIS Num: 19-AA-0823
Waste Discharge Requirement Num: Not reported
Program Type: Not reported
Permitted Throughput with Units: 0
Actual Throughput with Units: Not reported
Permitted Capacity with Units: 0
Remaining Capacity: 0
Remaining Capacity with Units: Not reported
Lat/Long: 34.1 / -118.46667

D16 **MISSION CANYON LANDFILL** **ENVIROSTOR** **S106825792**
SSE **2201 NORTH SEPULVEDA BOULEVARD** **EMI** **N/A**
1/4-1/2 **LOS ANGELES, CA 90064**
0.359 mi.
1893 ft. **Site 1 of 4 in cluster D**

Relative:
Lower

Actual:
891 ft.

ENVIROSTOR:
Facility ID: 19490011
Status: Refer: RWQCB
Status Date: 11/02/1994
Site Code: Not reported
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported

MISSION CANYON LANDFILL (Continued) **S106825792**

NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: * Mmonroy
Division Branch: Cleanup Chatsworth
Assembly: 50
Senate: 26
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.11020
Longitude: -118.4824
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: * AQUEOUS SOLUTION WITH METALS Asbestos Containing Materials (ACM * Sludge - Paint * UNSPECIFIED SOLVENT MIXTURES * POLYMERIC RESIN WASTE
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD000605261
Alias Type: EPA Identification Number
Alias Name: 19490011
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 11/03/1994
Comments: SITE SCREENING/FILE REVIEW CONCLUDE NFA FOR DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 10/15/1980
Comments: Facility Identified: Eckhardt Survey.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

EMI:
Year: 1987
County Code: 19
Air Basin: SC
Facility ID: 35102
Air District Name: SC
SIC Code: 4953
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported

MISSION CANYON LANDFILL (Continued) **S106825792**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	31
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	4
Part. Matter 10 Micrometers and Smllr Tons/Yr:	4

Year:	1990
County Code:	19
Air Basin:	SC
Facility ID:	35102
Air District Name:	SC
SIC Code:	4953
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	9
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

D17 **LA COUNTY SD-MISSION CANYONS N** **WMUDS/SWAT** **S104156305**
SSE **2201 NORTH SEPULVEDA** **N/A**
1/4-1/2 **LOS ANGELES, CA**
0.359 mi.
1893 ft. **Site 2 of 4 in cluster D**

Relative:
Lower

Actual:
891 ft.

WMUDS/SWAT:

Edit Date:	Not reported
Complexity:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Base Meridian:	Not reported
NPID:	Not reported
Tonnage:	0
Regional Board ID:	60-116
Municipal Solid Waste:	False
Superorder:	False
Open To Public:	False
Waste List:	False
Agency Type:	Not reported
Agency Name:	LOS ANGELES COUNTY SANITATION
Agency Department:	CHIEF ENGINEER AND GENERAL MAN
Agency Address:	P.O. BOX 4998
Agency City,St,Zip:	WHITTIER 90607
Agency Contact:	MR. CHARLES W. CARRY
Agency Telephone:	2136855217
Land Owner Name:	LOS ANGELES COUNTY SANITATION
Land Owner Address:	P.O. BOX 4998
Land Owner City,St,Zip:	WHITTIER, CA 90607
Land Owner Contact:	MR. CHARLES W. CARRY

LA COUNTY SD-MISSION CANYONS N (Continued) **S104156305**

Land Owner Phone:	2136855217
Region:	4
Facility Type:	Not reported
Facility Description:	Not reported
Facility Telephone:	Not reported
SWAT Facility Name:	LA COUNTY SD-MISSION CANYONS NOS. 1-3
Primary SIC:	Not reported
Secondary SIC:	Not reported
Comments:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System:	False
Solid Waste Assessment Test Program:	True
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act:	False
Department of Defence:	False
Solid Waste Assessment Test Program:	LOS ANGELES COUNTY SANITATION DIST.
Threat to Water Quality:	Not reported
Sub Chapter 15:	False
Regional Board Project Officer:	B_P
Number of WMUDS at Facility:	1
Section Range:	Not reported
RCRA Facility:	Not reported
Waste Discharge Requirements:	Not reported
Self-Monitoring Rept. Frequency:	Not reported
Waste Discharge System ID:	4 190008NUR
Solid Waste Information ID:	19-AR-0504

D18 **MISSION CANYON LDFL** **SEMS-ARCHIVE** **1003878251**
SSE **2201 N SEPULVEDA BLVD** **CAD000605261**
1/4-1/2 **LOS ANGELES, CA 90049**
0.359 mi.
1893 ft. **Site 3 of 4 in cluster D**

Relative:
Lower

Actual:
891 ft.

SEMS-ARCHIVE:

Site ID:	900909
EPA ID:	CAD000605261
Federal Facility:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID:	0900909
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID:	13289353.00000
Person ID:	13003854.00000
Contact Sequence ID:	13294948.00000
Person ID:	13003858.00000
Contact Sequence ID:	13300806.00000
Person ID:	13004003.00000

MISSION CANYON LDFL (Continued) **1003878251**

CERCLIS-NFRAP Assessment History:

Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	04/01/80
Priority Level:	Low priority for further assessment
Action:	DISCOVERY
Date Started:	/ /
Date Completed:	11/01/79
Priority Level:	Not reported
Action:	ARCHIVE SITE
Date Started:	/ /
Date Completed:	12/21/88
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	12/21/88
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information

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D19 **LA COUNTY SD-MISSION CANYONS 4** **WMUDS/SWAT** **S104156306**
SSE **2201 NORTH SEPULVEDA BOULEVARD** **N/A**
1/4-1/2 **LOS ANGELES, CA**
0.359 mi.
1893 ft. **Site 4 of 4 in cluster D**

Relative:
Lower

Actual:
891 ft.

WMUDS/SWAT:

Edit Date:	Not reported
Complexity:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Base Meridian:	Not reported
NPID:	Not reported
Tonnage:	0
Regional Board ID:	60-116
Municipal Solid Waste:	False
Superorder:	False
Open To Public:	False
Waste List:	False
Agency Type:	Not reported
Agency Name:	LOS ANGELES COUNTY SANITATION
Agency Department:	CHIEF ENGINEER AND GENERAL MAN
Agency Address:	P.O. BOX 4998
Agency City,St,Zip:	WHITTIER 90607
Agency Contact:	MR. CHARLES W. CARRY
Agency Telephone:	2136855217
Land Owner Name:	LOS ANGELES COUNTY SANITATION
Land Owner Address:	P.O. BOX 4998
Land Owner City,St,Zip:	WHITTIER, CA 90607
Land Owner Contact:	MR. CHARLES W. CARRY
Land Owner Phone:	2136855217
Region:	4
Facility Type:	Not reported
Facility Description:	Not reported

LA COUNTY SD-MISSION CANYONS 4 (Continued) **S104156306**

Facility Telephone:	Not reported
SWAT Facility Name:	LA COUNTY SD-MISSION CANYONS 4-7
Primary SIC:	Not reported
Secondary SIC:	Not reported
Comments:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System:	False
Solid Waste Assessment Test Program:	True
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act:	False
Department of Defence:	False
Solid Waste Assessment Test Program:	LOS ANGELES COUNTY SANITATION DIST.
Threat to Water Quality:	Not reported
Sub Chapter 15:	False
Regional Board Project Officer:	B_P
Number of WMUDS at Facility:	1
Section Range:	Not reported
RCRA Facility:	Not reported
Waste Discharge Requirements:	Not reported
Self-Monitoring Rept. Frequency:	Not reported
Waste Discharge System ID:	4 190009NUR
Solid Waste Information ID:	19-AR-0507

20
NNW
1/2-1
0.589 mi.
3108 ft.

HAVENHURST & CALNEVA **Notify 65** **S100178502**
N/A

ENCINO, CA

Relative:
Lower

Actual:
1063 ft.

NOTIFY 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported

Count: 0 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 93

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 101

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 101

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 70
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 70

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/14/2017
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98
Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 01/03/2017
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 57
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/20/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 05/31/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 76

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 08/29/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 93

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 54

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 08/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 93

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 80

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/26/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/10/2017
Number of Days to Update: 65

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 37

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 105

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/26/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 65

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/25/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/23/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/08/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 35
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/25/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/11/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/22/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 21

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/04/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 35

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 79

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 64

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 42

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 147

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/23/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 05/03/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 104

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 67

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/16/2017
Date Data Arrived at EDR: 05/19/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 88

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 64

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/22/2017
Date Data Arrived at EDR: 05/24/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 86

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/22/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/22/2017
Date Data Arrived at EDR: 05/24/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 86
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/22/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2017
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 04/26/2017
Number of Days to Update: 13
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/25/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 78
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/15/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 107
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/07/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 79
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 12/22/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 70
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 31

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/07/2017
Date Data Arrived at EDR: 07/11/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 43

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 06/20/2017
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 49

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 04/27/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 104

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/23/2017
Date Data Arrived at EDR: 02/24/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 77

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/26/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 58

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/31/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 05/02/2017
Date Data Arrived at EDR: 05/04/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 92

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 50

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/31/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 30

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/20/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 57

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 101

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 81

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/09/2017
Date Data Arrived at EDR: 05/11/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 90

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 101

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 115

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/17/2017
Date Data Arrived at EDR: 04/18/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 14

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/18/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/17/2017
Date Data Arrived at EDR: 01/18/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 112

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/10/2017
Date Data Arrived at EDR: 01/13/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 110

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/02/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 63

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 76

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/08/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/22/2017
Date Data Arrived at EDR: 06/23/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 47

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 05/31/2017
Date Data Arrived at EDR: 06/01/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 85

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/08/2017
Date Data Arrived at EDR: 05/09/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 92

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/03/2017
Date Data Arrived at EDR: 05/11/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 99

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2016
Date Data Arrived at EDR: 11/11/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 73

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 85

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/09/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 77

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 35

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 1

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/19/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 98

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 04/04/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 127

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/06/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/03/2017
Date Data Arrived at EDR: 07/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 47

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/06/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 105

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 06/01/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 85

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/07/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 69

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 05/03/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 109
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/21/2017
Date Data Arrived at EDR: 03/23/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 47
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/16/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 54
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 33
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 64
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 89
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/04/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 80

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 63

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 08/29/2017
Number of Days to Update: 69

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 06/27/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 43

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/05/2017
Date Data Arrived at EDR: 07/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 47

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/10/2017
Date Data Arrived at EDR: 05/16/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 85

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 80

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List
Cupa facilities

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 93

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 04/27/2017
Date Data Arrived at EDR: 04/27/2017
Date Made Active in Reports: 08/10/2017
Number of Days to Update: 105

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 103

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 89

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/27/2017
Date Data Arrived at EDR: 03/15/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/29/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 51

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/10/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 02/01/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/12/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MISSION CANYON TRAILHEAD PROJECT
2301 N SEPULVEDA BLVD
LOS ANGELES, CA 90049

TARGET PROPERTY COORDINATES

Latitude (North):	34.122622 - 34° 7' 21.44''
Longitude (West):	118.48971 - 118° 29' 22.96''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	362617.6
UTM Y (Meters):	3776559.2
Elevation:	1182 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5630733 BEVERLY HILLS, CA
Version Date:	2012
Northeast Map:	5630789 VAN NUYS, CA
Version Date:	2012
Southwest Map:	5630777 TOPANGA, CA
Version Date:	2012
Northwest Map:	5630737 CANOGA PARK, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

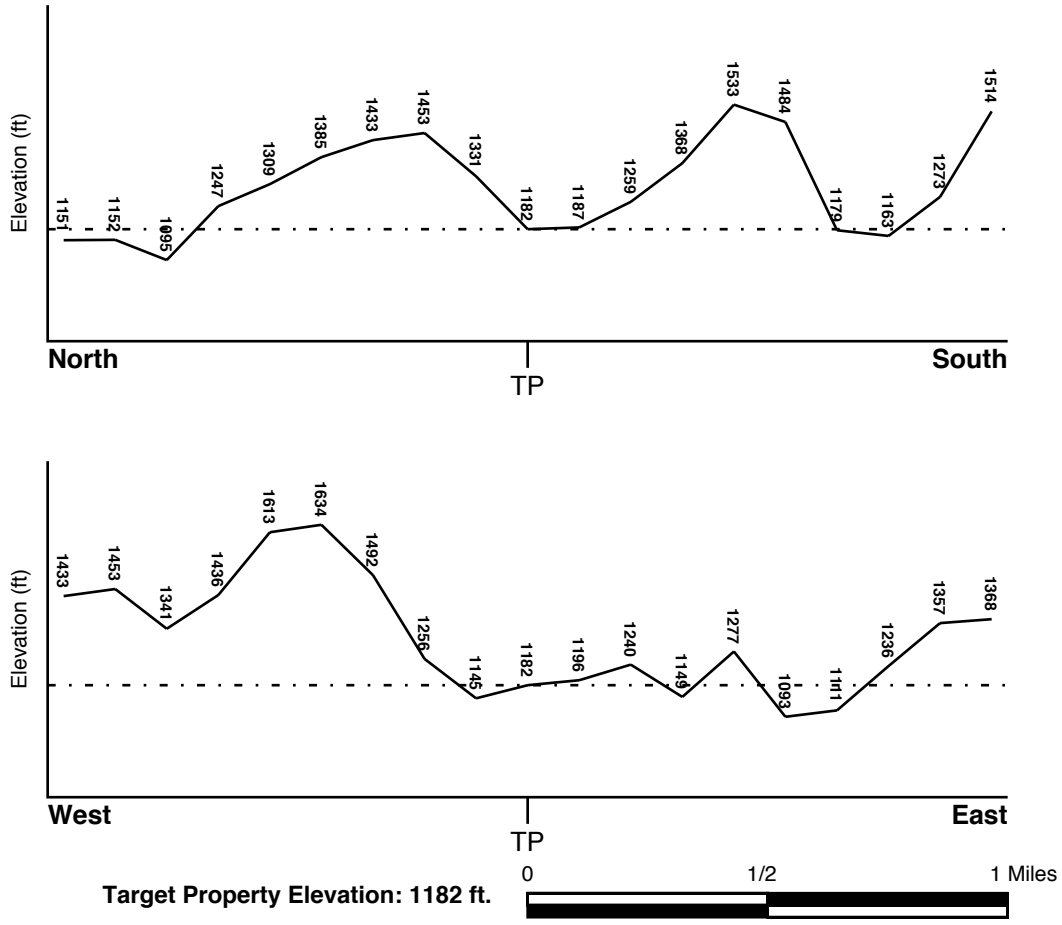
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06037C1580F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06037C1295F	FEMA FIRM Flood data
06037C1315F	FEMA FIRM Flood data
06037C1557F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
BEVERLY HILLS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

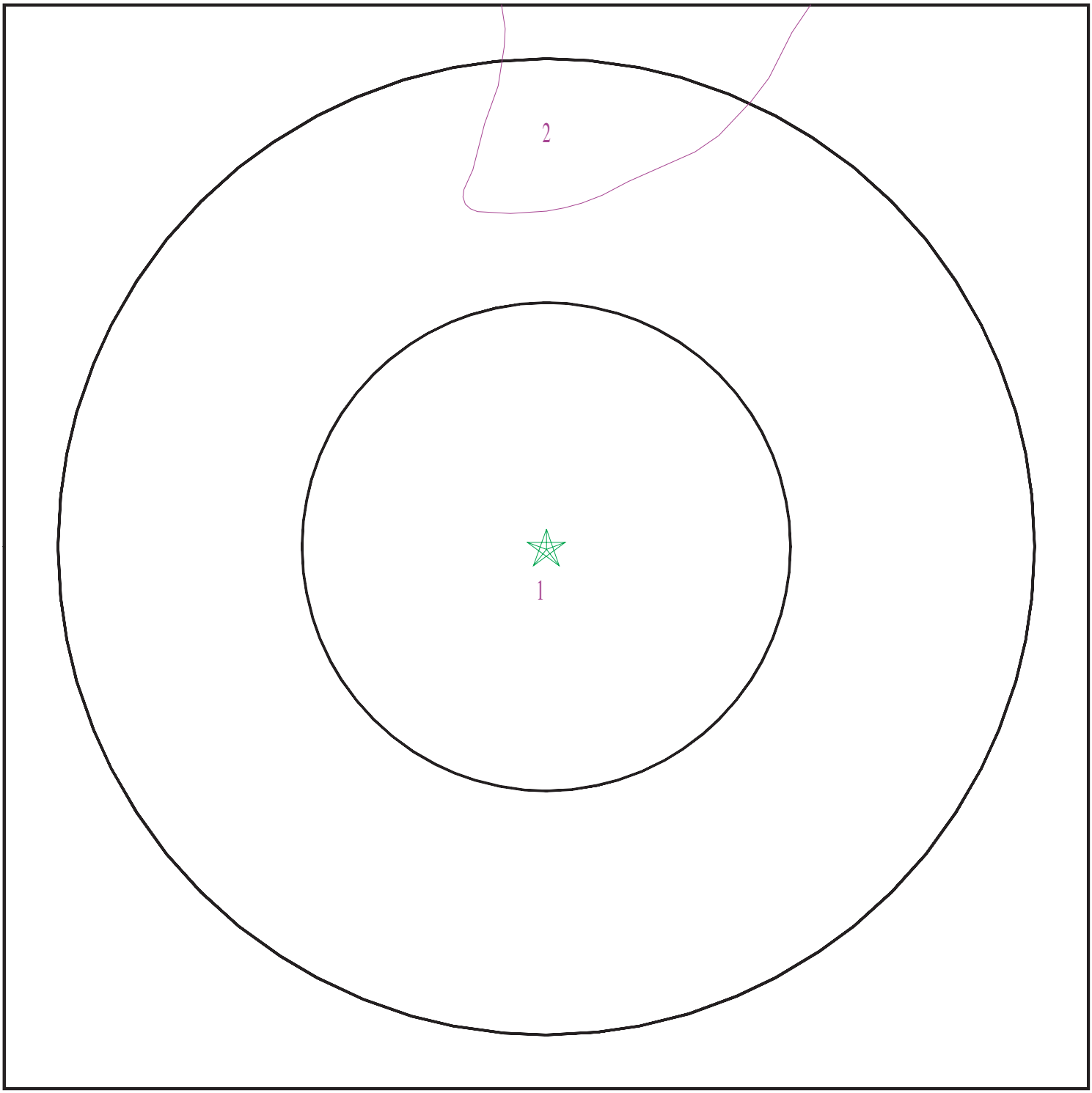
Era:	Mesozoic
System:	Lower Jurassic and Upper Triassic
Series:	Lower Mesozoic
Code:	lMze *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5036832.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Mission Canyon Trailhead Project	CLIENT:	IEC Group
ADDRESS:	2301 N Sepulveda Blvd Los Angeles CA 90049	CONTACT:	Eimon Raoof
LAT/LONG:	34.122622 / 118.48971	INQUIRY #:	5036832.2s
		DATE:	August 30, 2017 1:34 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Balcom

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	15 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	15 inches	36 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
3	36 inches	36 inches	weathered bedrock	Not reported	Not reported	Max: 0.06 Min: 0	Max: Min:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: Xerorthents

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2 Min: 0.6	Max: 8.4 Min: 6.6
2	3 inches	51 inches	loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2 Min: 0.6	Max: 8.4 Min: 6.6
3	51 inches	51 inches	weathered bedrock	Not reported	Not reported	Max: 0.06 Min: 0	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

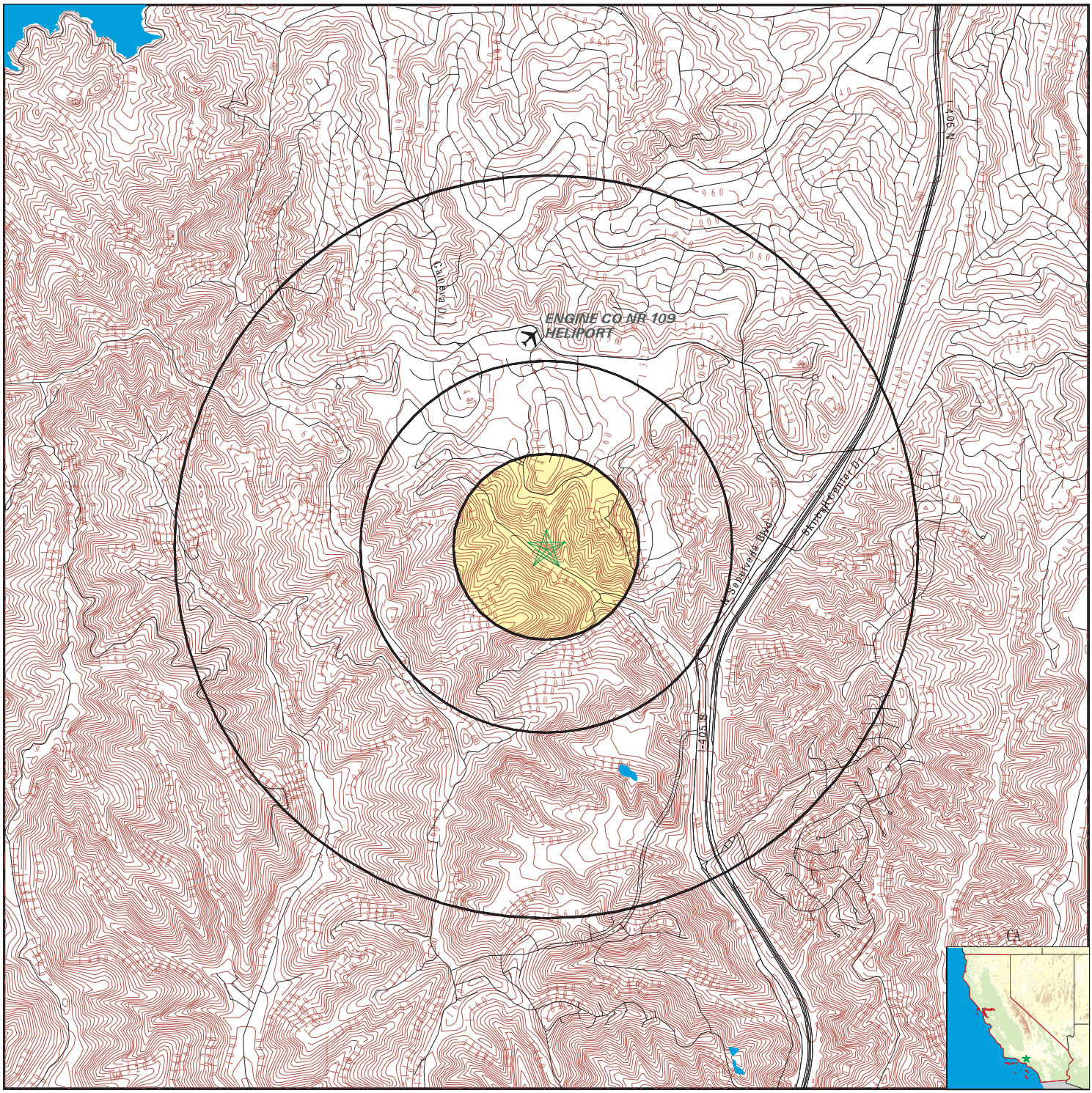
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 5036832.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Mission Canyon Trailhead Project	CLIENT:	IEC Group
ADDRESS:	2301 N Sepulveda Blvd Los Angeles CA 90049	CONTACT:	Eimon Raoof
		INQUIRY #:	5036832.2s
LAT/LONG:	34.122622 / 118.48971	DATE:	August 30, 2017 1:33 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
90049	167	14

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for LOS ANGELES COUNTY, CA

Number of sites tested: 63

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.711 pCi/L	98%	2%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.933 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

APPENDIX D

Noise Impact Analysis

Mission Canyon Park Project
Los Angeles, California

January 2018

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EXHIBITS

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1.0 PROJECT DESCRIPTION

The Project Applicant, proposes to develop the approximately 500-acre predominately vacant property in the City of Los Angeles; see Exhibit A, Project Location. The site is generally bound by residential property and Mulholland Drive to the north; undeveloped hillside to the west; the Interstate 405 Freeway (I-405) to the east; and open space and a golf course to the south. The proposed Mission Canyon Trailhead Project (Project) would entail improvements within the site to accommodate park and recreational uses. The proposed improvements are divided up into the northern Project area, accessed by Mulholland Drive, and the southern Project area accessed by Sepulveda Boulevard and I-405. Improvements to the northern area would be limited to improving the existing parking lot. The remaining improvements, including a set of fitness stairs (approximately 600 steps), would be constructed within the southern area. A sanitation building would be installed within the southern area and would be connected to the existing sewer line of Sepulveda Boulevard. Additional improvements at the site would include installation of trails to connect to the existing Canyonback Trail. The site may also include other optional and reversible improvements such as the addition of picnic areas; a dog park and canine agility course; ropes course; bike course; and improvements to improve and restore a riparian stream. The remaining open space areas of the site would be undisturbed by the Project.

The site would be designed to accommodate 160 parking spaces within the existing lots in the northern and southern Project areas. The parking areas would be improved within the existing parking areas on the site. The existing graded areas would be retained. Minor grading may be required to level out the paved areas, maintain drainage, and gravel would be added to parking areas.

In the southern Project area, a temporary sanitary building would be removed prior to construction. The other existing buildings would remain. The existing utilities (i.e., gas line valves, monitoring wells, irrigation heads, and seepage lines) may be removed or retained based upon their function and appurtenant uses (i.e., risers and truck scales) would be removed prior to initiation of the Project. Fences and signage would limit access to the remaining utilities and monitoring equipment.

Following the Project, the site would remain fenced and it would operate from sunrise to sunset with approximately three part-time employees and one full-time employee. The Sanitation District would continue monitoring and maintenance of the site in accordance with the existing monitoring and maintenance program for the site.

2.0 NOISE AND VIBRATION BASICS AND TERMINOLOGY

Noise

"Sound" is a vibratory disturbance created by a moving or vibrating source and is capable of being detected. "Noise" is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance; interference with speech communication; sleep disturbance; and, in the extreme, hearing impairment.[1]

Sound pressure levels are described in a unit called decibels (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A doubling of the energy of a noise source (such as doubling of traffic

[1] California Department of Transportation (Caltrans). 2013a (September) Technical Noise Supplement to the Traffic Noise Analysis Protocol. Sacramento, CA: Caltrans. http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013A.pdf.

volume) would increase the noise level by 3 dB. The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale was devised; the A-weighted decibel scale (dBA) approximates the frequency response of the average healthy ear when listening to most ordinary everyday sounds and is used in this analysis.

Human perception of noise has no simple correlation with acoustical energy. Due to subjective thresholds of tolerance, the annoyance of a given noise source is perceived very differently from person to person. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal speech at 3 feet is approximately 60 dBA, while loud jet engine noises at 1,000 feet equate to 100 dBA, which can cause serious discomfort. Table 1 shows the relationship of various noise levels in dBA to commonly experienced noise events.

TABLE 1
NOISE LEVEL FOR COMMON EVENTS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet fly-over at 300 m (1,000 ft)	100	
Gas lawn mower at 1 m (3 ft)	90	
Diesel truck at 15 m (50 ft) at 80 km/hr (50 mph)	80	Food blender at 3 ft; garbage disposal at 3 ft
Noisy urban area, daytime gas lawn mower at 30 m (100 ft)	70	Vacuum cleaner at 3 m (10 ft)
Commercial area, heavy traffic at 90 m (300 ft)	60	Normal speech at 1 m (3 ft)
Quiet urban daytime	50	Large business office, dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural nighttime	20	Bedroom at night, concert hall (background)
	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

dBA: A-weighted decibels; m: meter; ft: feet; km/hr: kilometers per hour; mph: miles per hour

Source: adopted from California Department of Transportation (Caltrans). 2013a (September) Technical Noise Supplement to the Traffic Noise Analysis Protocol. Sacramento, CA: Caltrans. http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013A.pdf.

Two noise sources do not "sound twice as loud" as one source. As stated above, a doubling of noise sources results in a noise level increase of 3 dBA. It is widely accepted that (1) the average healthy ear can barely perceive changes of a 3 dBA increase or decrease; (2) a change of 5 dBA is readily perceptible; and (3) an increase (decrease) of 10 dBA sounds twice (half) as loud.[2]

From the source to the receiver, noise changes both in the level and frequency spectrum. The most obvious change is the decrease in noise level as the distance from the source increases. Sound from a small localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern. For point sources, such as heating, ventilation, and air conditioning (HVAC) units or construction equipment, the sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance (i.e., if the noise level is 70 dBA at 25 feet, it is 64 dBA at 50 feet). Vehicle traffic on a road makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over some time interval. The sound level attenuates or drops off at a rate of 3 dBA per doubling of distance for line sources.

[2] ibid.

A large object in the path between a noise source and a receiver can significantly attenuate noise levels at that receiver location. The amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain or landform features as well as man-made features (e.g., buildings and walls) can significantly alter noise levels. For a noise barrier to work, it must be high enough and long enough to block the view from the receiver to a road or to the noise source. Effective noise barriers can reduce outdoor noise levels at the receptor by up to 15 dBA.

Several rating scales (or noise "metrics") exist to analyze effects of noise on a community. These scales include the equivalent noise level (L_{eq}) and the community noise equivalent level (CNEL). Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq}, which is the equivalent noise level for that period of time. The period of time averaging may be specified; for example, $L_{eq(3)}$ would be a three-hour average. When no period is specified, a one-hour average is assumed. Noise of short duration (i.e., substantially less than the averaging period) is averaged into ambient noise during the period of interest. Thus, a loud noise lasting many seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

To evaluate community noise impacts, CNEL was developed to account for human sensitivity to nighttime noise. CNEL represents the 24-hour average sound level with a penalty for noise occurring at night. The CNEL computation divides a 24-hour day into 3 periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM). The evening sound levels are assigned a 5 dBA penalty, and the nighttime sound levels are assigned a 10 dBA penalty prior to averaging with daytime hourly sound levels.

Vibration

Vibration amplitudes are commonly expressed in peak particle velocity (ppv) or root-mean square (RMS) vibration velocity. The maximum instantaneous positive or negative peak of a vibration signal is ppv. Vibration velocity (in ppv or RMS) is normally described in inches per second. The vibration levels at which potential damage to structures can occur is dependent on the construction material of the structures and are discussed later on in the Regulatory Section.

3.0 EXISTING CONDITIONS

Sensitive Receptors. Noise-sensitive receptors are generally considered to be humans who are engaged in activities that may be subject to the stress of significant interference from noise. Activities usually associated with sensitive receptors include, but are not limited to, talking, reading, and sleeping. The City of Los Angeles General Plan identifies noise-sensitive receptors as: single-family and multi-unit dwellings, long-term care facilities (including convalescent and retirement facilities), dormitories, motels, hotels, transient lodgings and other residential uses; houses of worship; hospitals; libraries; schools; auditoriums; concert halls; outdoor theaters; nature and wildlife preserves, and parks.[3] There are several noise-sensitive land uses in the vicinity of the northern Project area, including Westland School to the east on the south side of Mulholland Drive, a residential area to the west on the south side of Mulholland Drive, and Bel Air Presbyterian Church to the north on the north side of Mulholland Drive (see Exhibit B, Nearest Noise-Sensitive Receptors). There are no noise-sensitive receptor adjacent to the southern Project area.

Noise-sensitive receptors on the portion of Mulholland Drive that would be used to access the northern Project area include multiple single-family homes, schools, and Bel Air Presbyterian

[3] City of Los Angeles, "Noise Element of the City of Los Angeles General Plan," 1999. https://planning.lacity.org/cwd/gnlpln/noiseElt.pdf

Church on Mulholland Drive. The routes for accessing the southern Project area, where most of the proposed improvements would be taking place, would not be in the vicinity of noise-sensitive receptors.

Noise Sources and Noise Levels. There are two distinct Project areas, a northern Project area and a southern Project area. The primary source of noise in the northern Project area is traffic on Mulholland Drive. The primary sources of noise in the southern Project area is traffic on I-405 and Sepulveda Boulevard. In addition, overhead planes and helicopters can be heard in both Project areas. Mulholland Drive is a two-lane road with a posted speed limit of 35 miles per hour (mph) that runs along the northern boundary of the northern Project area. The portion of Mulholland Drive adjacent to the project site contains a school zone with a posted speed of 25 mph when children are present. I-405 is a major north-south freeway that runs along the east side of the southern Project area. Sepulveda Boulevard is a four-lane road that parallels I-405 and is also located east of the southern Project area. There is a traffic signal at the intersection of Sepulveda Boulevard and I-405 exit and entrance ramps east of the southern Project area.

The ambient noise levels at the project site and at the nearest sensitive receptors were measured on Saturday, January 20, 2018. Measurements were made on a Saturday, to characterize existing weekend noise levels, as, being a park, that is when it is expected that the Project will have the greatest number of users. Measurements were made with a Type 2 Noise Level Meter that was calibrated prior to measurements. The sound level meter was programmed in "slow" mode to record noise levels in "A" weighted form. Meteorological conditions during the measurement periods were favorable with mostly clear skies and light winds. The ambient noise levels are included in Table 2 below and the locations are shown on Exhibit C, Noise Measurement Locations.

Table 2 Ambient Noise Levels

Location ID	Location Description	Measurement Period	Measured L_{eq} Noise Level (dBA)	Major Noise Sources
1	Southern Portion - Proposed Staircase	2:25 PM - 2:45 PM	48.9	I-405
2	Southern Portion - Proposed Picnic Area	2:55 PM - 3:15 PM	46.8*	I-405 and Sepulveda Blvd.
3	Northern Portion - Nearest School	3:35 PM - 3:55 PM	46.6	Mulholland Dr.
4	Northern Portion - Nearest Residence	4:00 PM - 4:20 PM	45.5	Mulholland Dr.

*Despite being closer to I-405 and Sepulveda Boulevard, noise levels at Noise Monitoring Location 2 were quieter than at Noise Monitoring location 1. The reason for this, is that Noise Monitoring Location 1 was at a higher elevation and there was a direct line of site between the sound level meter and I-405, whereas at Noise Monitoring Location 2, the wall on the west side of the freeway acted as a noise barrier between the freeway and the sound level meter.

Relevant Policies and Regulations

City of Los Angeles General Plan

The Noise Element of the City's General Plan includes Guidelines for Noise Compatible Use shown in Table 3. The Guidelines for Noise Compatible Use were established to help guide determination of appropriate land use and mitigation measures visa-vis existing or anticipated ambient noise levels. The Normally Acceptable maximum noise exposure for neighborhood park land uses is 65 dBA CNEL, as shown in Table 3.

Table 3 City of Los Angeles Guidelines for Noise Compatible Land Use

Land Use Category	Day-Night Average Exterior Sound Level (CNEL dB)						
	50	55	60	65	70	75	80
Residential Single Family, Duplex, Mobile Home	A	C	C	C	N	U	U
Residential Multi-Family	A	A	C	C	N	U	U
Transient Lodging, Motel, Hotel	A	A	C	C	N	U	U
School, Library, Church, Hospital, Nursing Home	A	A	C	C	N	N	U
Auditorium, Concert Hall, Ampitheater	C	C	C	C/N	U	U	U
Sports Arena, Outdoor Spectator Sports	C	C	C	C	C/U	U	U
Playground, Neighborhood Park	A	A	A	A/N	N	N/U	U
Golf Course, Riding Stable, Water Recreation, Cemetery	A	A	A	A	N	A/N	U
Office Building, Business, Commercial, Professional	A	A	A	A/C	C	C/N	N
Agriculture, Industrial, Manufacturing, Utilities	A	A	A	A	A/C	C/N	N

A = Normally acceptable. Specified land use is satisfactory, based upon assumption buildings involved are conventional construction, without any special noise insulation.

C = Conditionally acceptable. New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning normally will suffice.

N = Normally unacceptable. New construction or development generally should be discouraged. A detailed analysis of noise reduction requirements must be made and noise insulation features included in the design of a project.

U = Clearly unacceptable. New construction or development generally should not be undertaken.

Source: City of Los Angeles, “Noise Element of the City of Los Angeles General Plan,” 1999. https://planning.lacity.org/cwd/gnlpln/noiseElt.pdf

City of Los Angeles Municipal Code

The City of Los Angeles Municipal Code (LAMC) establishes presumed ambient noise levels for the various City zoning designations, as shown below in Table 4. Where the ambient noise level is less than the presumed ambient noise level designated in the LAMC, the presumed ambient noise level in the LAMC, and included in Table 4, shall be deemed to be the minimum ambient noise level for the purposes of applying the regulations of the LAMC. Daytime levels are to be used from 7:00 a.m. to 10:00 p.m. and nighttime levels from 10:00 p.m. to 7:00 a.m. At the boundary line between two zones, the presumed ambient noise level of the quieter zone shall be used.[4]

Table 4 City of Los Angeles Presumed Ambient Noise Levels

ZONE	PRESUMED AMBIENT NOISE LEVEL (dB(A))	
	DAY	NIGHT
A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, and R5	50	40
P, PB, CR, C1, C1.5, C2, C4, C5, and CM	60	55
M1, MR1, and MR2	60	55
M2 and M3	65	65

Source: City of Los Angeles Municipal Code, *Section 111.03 Minimum Ambient Noise Level*, http://library.amlegal.com/nxt/gateway.dll/California/lamc/municipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:losangeles_ca_mc

The LAMC establishes policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise sensitive land uses. Section 41.40 of the LAMC states that no construction or repair work shall be performed between the hours of 9:00 p.m. and 7:00 a.m. when such activities would generate loud noises and disturb persons occupying sleeping quarters in any adjacent dwelling, hotel, apartment, or other place of residence. In addition, Section 41.40 of the LAMC states that no person, other than an individual homeowner engaged in the repair or construction of his/her single-family dwelling, shall perform any construction or repair work of any kind or perform such work within 500 feet of land so occupied before 8:00 a.m. or after 6:00 p.m. on any Saturday or on a federal holiday, or at any time on any Sunday. Under certain conditions, the City of Los Angeles may grant a waiver to allow limited construction activities to occur outside of the limits described above.[5]

Section 112.05 of the LAMC also specifies the maximum noise level of powered equipment or powered hand tools within 500 feet of a residential zone. Any powered equipment or powered hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet from construction and industrial machinery is prohibited. However, the above noise limitation does not apply where compliance is technically infeasible.[6]

[4] City of Los Angeles Municipal Code, *Section 111.03 Minimum Ambient Noise Level*, http://library.amlegal.com/nxt/gateway.dll/California/lamc/municipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:losangeles_ca_mc

[5] City of Los Angeles Municipal Code, *Section 41.40 Noise Due to Construction, Excavation Work – When Prohibited.*, http://library.amlegal.com/nxt/gateway.dll/California/lamc/municipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:losangeles_ca_mc

[6] City of Los Angeles Municipal Code, *Section 112.05 Maximum Noise Level of Powered Equipment or Powered Hand Tools*,

Vibration Standards

The City of Los Angeles does not specific thresholds for vibration impacts. The California Department of Transportation (Caltrans) vibration damage potential guideline thresholds shown in Table 5 will be used to assess vibration impacts from construction of the Project.

TABLE 5
VIBRATION DAMAGE THRESHOLD CRITERIA

Structure and Condition	Maximum ppv (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

ppv: peak particle velocity; in/sec: inch(es) per second

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: California Department of Transportation (Caltrans). 2013b (September) Transportation and Construction Vibration Guidance Manual. Sacramento, CA: Caltrans. http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.

Operational vibration impacts are generally associated with transit projects or the use of heavy-duty equipment. Given the nature of the Project as improving the site for non-motorized recreational use, no long-term operations vibration impacts would occur.

4.0 REGULATORY REQUIREMENTS

The following Regulatory Requirement (RR) are incorporated as part of the proposed Project.

RR Noi-1 Noise-generating construction activities shall comply with the LAMC as follows:

- Construction shall be limited to the hours of 7:00 AM to 9:00 PM Monday through Friday, 8:00 AM and 6:00 PM on any Saturday, and shall be prohibited on Sunday or on a federal holiday.

5.0 IMPACT ANALYSIS

The following questions correspond to the questions in the Noise section of the Initial Study Checklist in Appendix G of the State CEQA Guidelines.

Question Noise-1 Would the project result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan, local noise ordinance, or applicable standards of other agencies?

Noise-Land Use Compatibility - On-site

http://library.amlegal.com/nxt/gateway.dll/California/lamc/municipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:losangeles_ca_mc

As both the proposed improvements and the surrounding noise-sensitive receptors are different in the southern and northern Project areas, the discussion of the potential noise impacts of the southern and northern Project areas will be discussed separately.

The Project is expected to result in approximately 100 visitors per day, nine additional traffic trips in the peak AM hour and 43 additional vehicle trips in the peak PM hour.

As there are no noise-sensitive receptors near the Project area, the proposed improvements to the southern Project area would not result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan, local noise ordinance, or applicable standards of other agencies when considering neighboring land uses.

As described earlier in the Relevant Policies and Regulations Section, the City has noise compatibility guidelines shown in Table 3. These guidelines are used to evaluate if the ambient noise levels are compatible with the proposed use of the Project site as a parkland.

The L_{eq} noise levels measured in the southern portion Project site, ranged from 46.8 dBA to 48.9 dBA. The CNEL from freeway noise is generally 3 to 4 dBA higher than the average daytime noise level. Therefore, it is estimated that the existing CNEL in the southern portion of the Project site ranges from 50.8 to 52.9 dBA, well below the 65 dBA that is considered acceptable for parkland.

The L_{eq} noise levels measured in the northern portion Project site, ranged from 45.5 dBA to 46.6 dBA. For typical urban and suburban traffic, the CNEL is estimated at 2 dBA higher than the average daytime noise level. Therefore, it is estimated that the existing CNEL in the northen portion of the Project site ranges from 47.5 to 48.6 dBA, also well below the 65 dBA that is considered acceptable for parkland.

Therefore, the proposed use of the Project site as a park project would not result in exposure of persons to noise levels in excess of standards established in the local general plan.

Traffic Noise to Off-Site Receptors.

The southern Project area would predominantly be accessed by Sepulveda Boulevard from I-405 and would not pass by any noise-sensitive receptors. Therefore, additional traffic trips to the southern Project area would have no impact to sensitive receptors.

The northern Project area would be accessed by Mulholland Drive from either the east or the west. As previously discussed in the Existing Conditions Section, there are several noise-sensitive receptors along Mulholland Drive. A 3 dBA increase is considered a substantial permanent increase in ambient noise levels due to Project-generated traffic. A doubling of traffic volume is necessary to increase noise levels by 3 dBA, assuming no change in fleet mix or average speed. Based on the data included in the project traffic impact analysis, the proposed Project would generate an estimated 43 vehicle trips during the peak PM hour and 9 vehicle trips during the peak AM hour.[7] This estimate includes trips to the northern and southern Project areas. Assuming all the 43 PM trips were to the northern Project area, which is accessed by Mulholland Drive, the Project would not result in a significant increase above existing levels Mulholland Drive and far less than a doubling of traffic volumes.

Table 6, Project-Generated Traffic Noise Increases, shows the estimated traffic noise increase that would occur on Mulholland Drive from the increased traffic volumes that would occur as a result of the proposed Project. Table 6 uses the existing traffic volumes and the estimated project traffic volumes from the Project traffic impact analysis. As shown in Table 6, the project-

[7] Mission Canyon Trailhead Traffic Analysis, 2018.

generated traffic noise increase on Mulholland Drive is estimated at 0.12 dBA (see Appendix E), which is less than the 3 dBA threshold. The impact would be less than significant.

TABLE 6
PROJECT GENERATED TRAFFIC NOISE INCREASES

Road/Segment	Traffic Volume		Traffic Noise Increase (dBA CNEL)
	Existing (ADT)	Existing plus Project (ADT)	
Mulholland Drive	500	547	0.12

ADT: Average daily traffic volume; dBA: A-weighted decibels; CNEL: Community Noise Equivalent Level; Source: Appendix E.

Operational Noise from On-Site Sources

The Project, once constructed would not introduce any significant sources of on-site noise. Primary on-site noise sources during project operations would be limited to cars entering and exiting the parking lot and people conversing while using the site. In addition, the Project site would be closed to the public after sunset and, therefore, would not introduce any sources of noise after dark. The traffic analysis estimated that the proposed Project would result in an additional 9 traffic trips in the peak AM hours and 43 in the peak PM hours. In the southern Project area, there are no noise sensitive land uses nearby (the nearest residence is more than 1,500 feet from the southern portion of the site), so operational noise would not be a concern. Assuming the unlikely scenario that all 43 anticipated peak PM traffic trips utilized the northern Project area lot, the noise generated would result in an estimated 45 dB Leq at 50 feet from the lot. This is less than the City of LA's presumed daytime ambient level for residential use of 50 dB and comparable to the existing ambient noise level. Therefore, noise generated by vehicles entering and exiting the site would not result in a significant noise impact. While the volume of people's voices can vary, the noise level of normal conversations at three feet is 60 to 70 dBA.[8] Assuming the higher end of this range, the noise level of at 50 feet from the source of a conversation would be 45.6 dBA at 50 feet, less than presumed daytime ambient level for residential use and comparable to the existing ambient noise level; therefore, the noise produced by people conversing would not result in a significant noise impact. In conclusion, the operation of the proposed Project would be compatible with the applicable noise standards.

Question Noise-2 Would the project result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?

Construction

As previously discussed in the Relevant Policies and Regulations Section, City of Los Angeles does not have a vibration threshold and the California Department of Transportation (Caltrans) vibration damage potential guideline thresholds shown in Table 5 will be used to assess vibration impacts.

The nearest structures to the project construction areas are residences to the west of the northern Project area and school-related structures east of the northern Project area. In terms of the classifications in Table 4, these structures most likely meet the criteria for "new residential

[8] Caltrans, "Loudness Comparison Chart," *http://www.dot.ca.gov/dist2/projects/sixer/loud.pdf.*

structures;" however, to be conservative, the criterion for "older residential structures" will be used. Therefore, the criterion for a significant impact is 0.3 peak particle velocity (ppv) inch per second (in/sec) from continuous/frequent intermittent sources and 0.5 ppv in/sec from transient sources.

Pile driving and blasting are generally the sources of the most severe vibration during construction. Neither pile driving nor blasting would be required during project construction. Conventional heavy construction equipment would be used for mass grading and a vibratory roller may be used for for the road and parking lot improvements. Table 7 below summarizes typical vibration levels measured during construction activities for various vibration-inducing pieces of equipment at a distance of 25 feet.

TABLE 7
VIBRATION LEVELS DURING CONSTRUCTION

Equipment	ppv at 25 ft (in/sec)
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
ppv: peak particle velocity; ft: feet; in/sec: inch(es) per second. Source: California Department of Transportation (Caltrans). 2013b (September) Transportation and Construction Vibration Guidance Manual. Sacramento, CA: Caltrans. http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.	

The nearest residence northern Project area is approximately 90 to 100 feet from the construction area for the road and parking improvements. Therefore, the nearest the vibratory roller would to the residential structures would be 90 to 100 feet. At this distance the use of the vibratory roller will not exceed the structural damage criterion of 0.3 ppv in/sec from continuous/frequent intermittent sources.

The nearest school structures to the northern Project area are storage buildings located approximately 30 feet from the Project site's property boundary and the construction area for the road and parking improvements. At this distance the use of the vibratory roller will not exceed the structural damage criterion of 0.3 ppv in/sec from continuous/frequent intermittent sources.

The other equipment that may be used for construction of the Project would not result in significant sources of vibration at adjacent properties.

Therefore, construction of the proposed Project would not result in vibration related impacts.

Operational

Operational vibrational impacts are associated with industrial uses that involve heavy machinery or new railways. The proposed Project would not introduce significant vibration-generating sources and would not result in discernable vibration beyond the property line. The impact would be less than significant.

Question Noise-3 Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

A 3 dBA increase is considered a substantial permanent increase in ambient noise levels. As previously discussed in the response to question Noise-1, noise levels from users of the Project would be less than the presumed ambient noise levels and noise level increases from additional trips to the Project areas would be negligible. The Project would not result in a 3 dBA permanent increase in ambient noise levels and, therefore, would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Question Noi-4 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?

There would be a temporary increase in ambient noise levels in the Project vicinity due to Project construction. The noise limit for construction equipment in the City of LA is 75 dBA at 50 feet from the noise source. The noise increases in the southern Project area would not result in a significant impact since there are no noise-sensitive receptors in the vicinity of the southern Project area; therefore, the following discussion of construction related noise generated by the proposed Project is limited to the northern Project area.

Construction activities for the proposed Project would be limited to the hours specified in the City Municipal Code (refer to RR 1), so no nighttime noise would be generated.

Construction noise is related primarily to the use of heavy equipment. Typical maximum noise levels generated by representative pieces of construction equipment and their acoustic utilization factors are listed in Table 8. Acoustical utilization factors estimate the percentage of time each piece of construction equipment would be operating at full power (i.e., its loudest condition) during a construction operation.

TABLE 8
TYPICAL MAXIMUM CONSTRUCTION NOISE LEVELS

Equipment	Noise Level (dBA) at 50 ft	Acoustical Usage Factor
Backhoe	80	40%
Chain Saw	85	20%
Compactor (ground)	80	20%
Concrete Mixer Truck	85	40%
Concrete Pump	82	20%
Dump Truck	84	40%
Excavator	85	40%
Front End Loader	80	40%
Grader	85	40%
Jackhammer	85	20%
Roller	85	20%
Scraper	85	40%
dBA: A-weighted decibels; ft: feet; Source: Federal Highway Administration, "Construction Noise Handbook," *https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm.*		

As the northern Project area is a relatively small area and construction would be limited to grading and paving the roadway and parking lot, only one piece of equipment would be expected to be operating at a time. The construction activities that typically cause the highest noise levels of noise on a construction site (demolition, pile driving, blasting, and rock crushing) would not be required in the northern Project area.

Heavy construction equipment used in the northern Project area may include a grader, an excavator, and a roller or similar heavy equipment. These equipment would all produce a noise level of 85 dBA at 50 feet, but the paver would produce the highest average noise levels since it has the highest acoustical utilization factor. Since the equipment would be moving over the site, the distance from the center of the northern Project area to the property boundaries, approximately 170 feet, was used to estimate the average noise levels at the adjacent noise-sensitive receptors (Westland School and the nearest residence) to the northern Project area discussed below.

The estimated average (L_{eq}) construction noise levels at the property boundary of Westland school and the nearest residences to the northern Project area during operation of the paver, the loudest equipment expected to be used in the northern Project area, would be 71.4 dBA. If a paver and a roller were operating simultaneously, the average noise level at the adjacent noise-sensitive receptors would be 72.9 dBA. There will be instances, when heavy construction equipment is operating close to the nearest noise-sensitive properties, when the noise level would be expected to exceed 75 dBA at the boundaries of the noise-sensitive properties, but those instances would be short lived and the average expected noise level will be less than the City of LA's construction noise limit of 75 dBA at 50 feet from the noise source when within 500 feet of a residential property. In addition, the average noise levels on the nearest residential properties would be decreased by the dense shrubbery that is present along the border of the northern Project area and the nearest residential properties. If construction equipment is staged close to the residential properties or Westland School, the average noise levels at the noise-sensitive receptors would be increased. Therefore, Noise Mitigation Measure (MM)-1 is recommended to ensure that the average noise levels at the nearest noise-sensitive receptors are below 75 dBA.

MM Noise-1: If a construction staging area is used in the northern Project area, it shall be located towards the middle of the site to maximize distance between the staging area and the nearest noise-sensitive receptors.

With implementation of MM Noise-1 average noise levels would be less than the City of LA's thresholds for construction noise when within 500 feet of residences and noise impacts at the nearest residential properties would be less than significant.

The City of Los Angeles does not have specific noise thresholds for schools. The background noise level at which conversation starts to become difficult at 4 to 5 feet is 70 dBA.[9] Since the construction area in the northern Project area is immediately adjacent to Westland School's playground area, the noise level within the playground area during construction of the Project could make conversation difficult and disrupt recess activities and other outdoor activities at the school when heavy construction equipment is operating in close proximity to the school. Therefore, to ensure that construction noise impacts to the school are less than significant, MM Noise-2 is recommended.

MM Noise-2: To mitigate potential noise impacts at Westland School, one of the following two options will be implemented.

[9] California Department of Transportation (Caltrans). 2013b (September). Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol. Sacramento, CA: Caltrans. *http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf*

Option 1: One representative from the Project Applicant or the Contractor will coordinate with the school administration to limit the operation of heavy equipment in the northern Project area to times when the school's outdoor playground area is not in use. This could either be when school is not in session or, when school is in session, but when the outdoor playground area is not in use.

Option 2: When heavy construction equipment is in use, the Contractor shall install temporary noise attenuation barriers, such as sound blankets, along the property boundary between the northern Project area and the Westland school playground area. The sound blankets shall block the line of the site between the active construction area and the playground area. The Contractor shall ensure that there are no gaps along the barrier or between the barrier and the ground.

MM Noise-2 would avoid noise impacts at Westland School. MM Noise-2 would reduce average noise levels at Westland School to less than 70 dBA. Therefore, with implementation of MM Noise-1 and MM Noise-2, noise impacts to Westland School would be less than significant.

Off-Site Construction Noise

Temporary noise would be generated on local roadways by workers commuting to and from the Project areas; construction material deliveries; and the transport of materials generated during site clearing that would not be reused on the site. The additional trips per hour associated with construction activities would not double traffic volumes on local roadways and would result in a negligible noise increase.

Question Noi-5 For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in exposure of people residing or working in the project area to excessive noise levels?

The proposed Project is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest airports to the project site are the Van Nuys Airport, approximately 5 miles north of the site, Santa Monica Airport, approximately 7.0 miles southwest of the proposed Project, and the Hollywood Burbank Airport, approximately 7.7 miles northeast of the proposed Project. Therefore, there would be no impact related to exposure of people residing or working in the project area to excessive noise levels from a public airport.

Question Noi-6 For a project within the vicinity of a private airstrip, would the project result in exposure of people residing or working the project area to excessive noise levels?

The project site is not located in the vicinity of a private airstrip. No private airstrips were identified within 5 miles of the Project area. Therefore, there would be no impact related to exposure of people residing or working in the project area to excessive noise levels from a private airstrip.

6.0 REFERENCES

California Department of Transportation (Caltrans). 2013a (September) Technical Noise Supplement to the Traffic Noise Analysis Protocol. Sacramento, CA: Caltrans. http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013A.pdf.

California Department of Transportation (Caltrans). 2013b (September) Transportation and Construction Vibration Guidance Manual. Sacramento, CA: Caltrans. http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.

Caltrans, "Loudness Comparison Chart," http://www.dot.ca.gov/dist2/projects/sixer/loud.pdf.

City of Los Angeles Municipal Code, http://library.amlegal.com/nxt/gateway.dll/California/lamc/municipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:losangeles_ca_mc

City of Los Angeles, "Noise Element of the City of Los Angeles General Plan," 1999. https://planning.lacity.org/cwd/gnlpln/noiseElt.pdf

Federal Highway Administration, "Construction Noise Handbook," *https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm.*

U.S. Department of Transportation, Federal Transit Administration (FTA). 2006 (May). Transit Noise and Vibration Impact Assessment, FTA-VA-90-1003-06 (prepared by Harris Miller Miller & Hanson, Inc.). Washington, D.C.: FTA.

Exhibit A Project Location

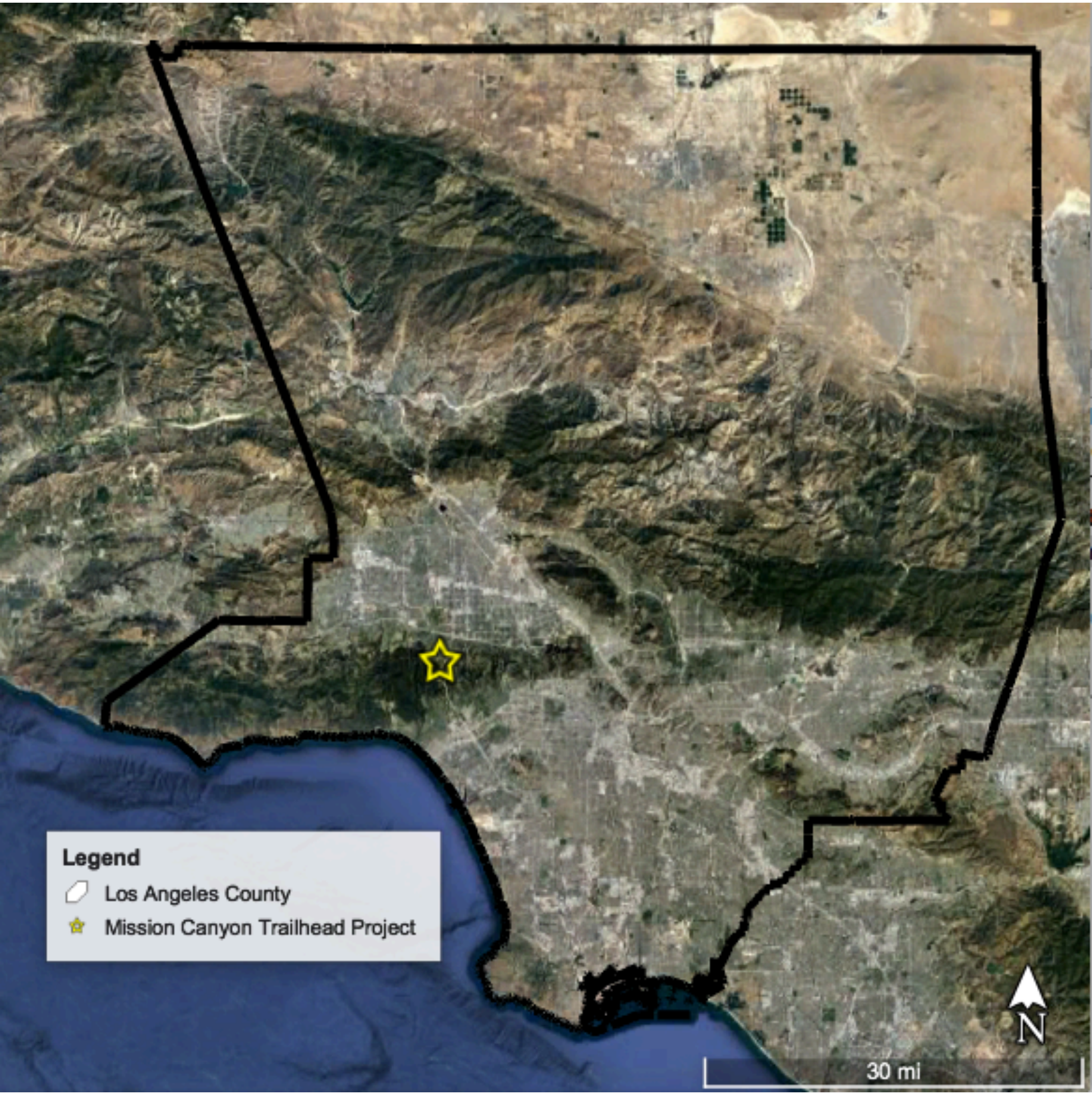


Exhibit B Noise Measurement Locations

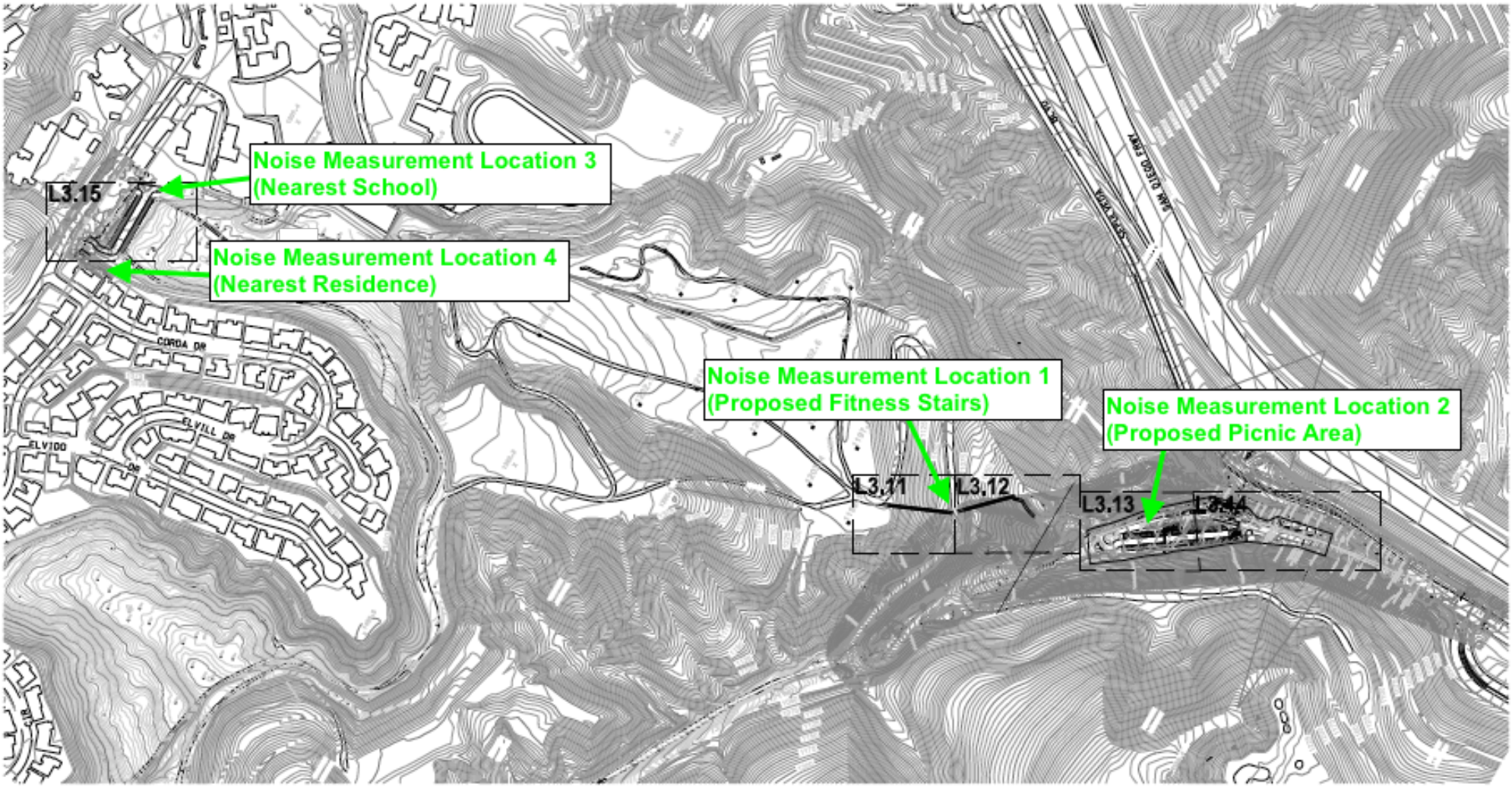
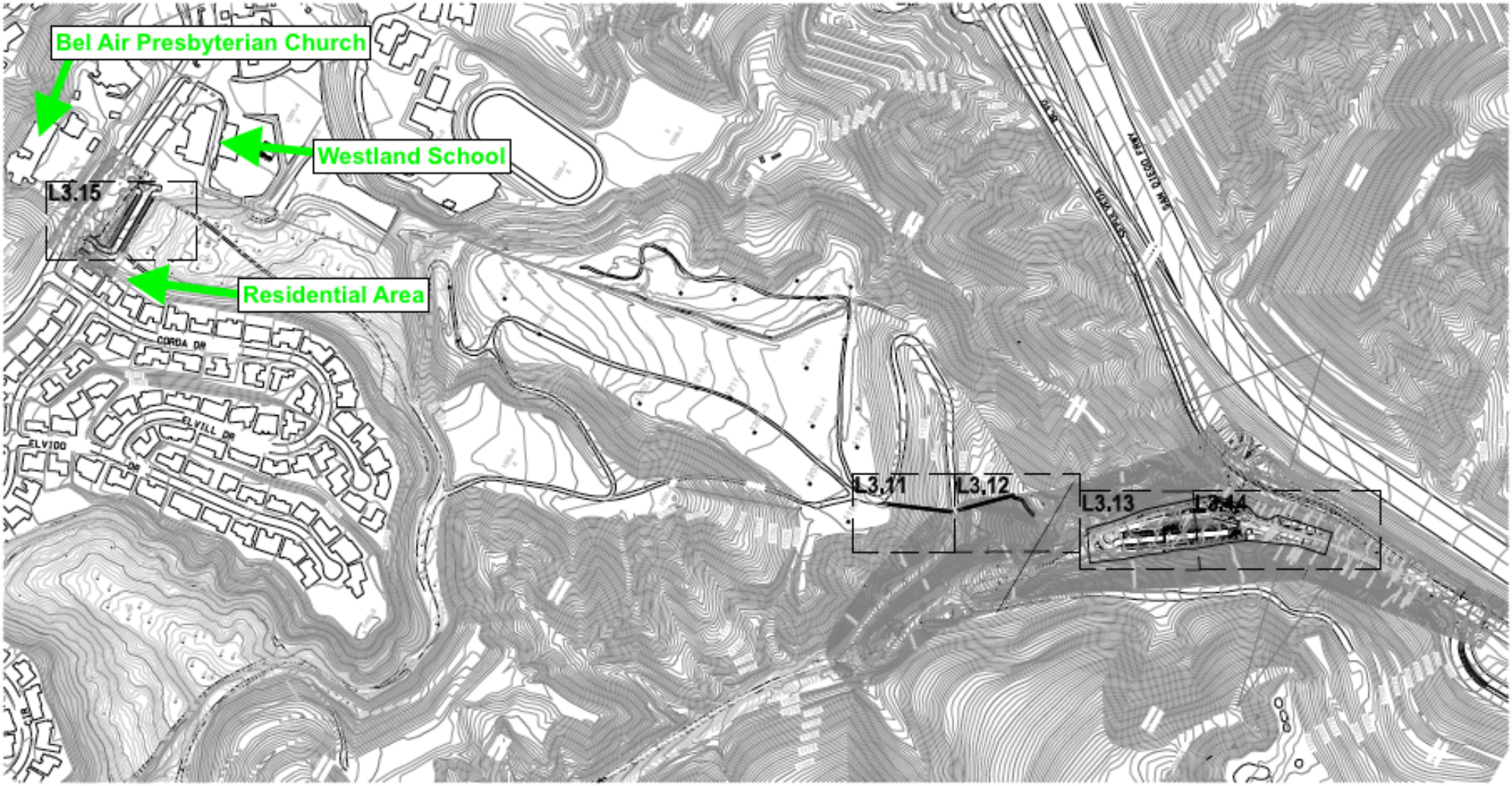


Exhibit C Nearest Noise-Sensitive Receptors



APPENDIX E

Mission Canyon Park Project

Transportation Assessment

Prepared for:
Mountains Recreation and Conservation Authority

August 2021

LA19-3103

FEHR PEERS

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1. Introduction

This report documents the assumptions, methodologies, and findings of a study conducted by Fehr & Peers to evaluate the potential transportation impacts of the proposed Mission Canyon Park project (the Project) located at 2301 N Sepulveda Boulevard, at the northwest corner of the Sepulveda Boulevard & Mission Canyon Road intersection in the Brentwood-Pacific Palisades Community Plan area. This study was conducted as part of a larger environmental clearance report being prepared for the Project.

1.1 Project Background and Project Description

The proposed Project would entail improvements to the former Mission Canyon Landfill to create an open space park on an approximately 500-acre site west of the San Diego Freeway in the Santa Monica Mountains. A new trailhead will be constructed in the existing parking area accessed from Sepulveda Boulevard. It will include parking, a restroom, visitor amenities, and a new ranger residence in the Sepulveda parking area. Specific improvements planned include restoration of native plant species, trail connection to the existing regional trail, trail steps, fencing, gates, and signage.

The site was formerly used as a landfill and was operated from approximately 1959 to 1980 by the Los Angeles County Sanitation Districts. From the landfill's inception, Mission Canyon was intended to be used for park and recreation purposes after the landfill ceased operations. The Mountains Recreation and Conservation Authority (MRCA) is the lead agency for this project and has been working with the Sanitation Districts, Los Angeles County, the City of Los Angeles, and Caltrans during the planning process for the project. Hours of operation would be from sunrise to sunset, similar to other parks maintained by the MRCA. All the proposed improvements would be completed within previously disturbed areas (i.e., former landfill driveways/trails) located throughout the site as well as within the existing footprint of the gravel yard located at the southern portion of the Project site.

The proposed Project, shown in **Figure 1**, would include the improvements described below. The design of these elements may be developed as the designs are completed.

- The Project would establish at least one connection at the northwestern portion of the site between the Project site and the Canyonback Road Trail. Advanced or secondary trails would be constructed alongside the existing loop trail based upon the topography. The Project would include a 2.5-mile multi-modal loop trail throughout the site. Picnic areas (consisting of picnic tables and seating areas) and maintenance storage (for onsite storage of maintenance equipment, tools, and other related materials) would also be developed at the site. A set of fitness trail steps (approximately 600 steps) would be constructed within the southeastern portion of the site.
- A residence for use by the ranger at the project site would be installed. This residence would consist of a single-story bungalow-style trailer that would be located near the Sepulveda Boulevard entry parking lot. A new single-story prefabricated restroom facility building, including drinking water stations, would be installed. The existing relocatable buildings that are located in

the existing parking area would be removed from the project site. Maintenance of the park would be managed in conjunction with other parks operate by the MRCA, and staff would be based in the existing maintenance yard in Franklin Canyon Park.

- Currently, parking for the site is provided at the southern end of the site with access from Sepulveda Boulevard. This use of the existing parking area by the Los Angeles Department of Water and Power would be discontinued. This area of the site would be covered with pavement and gravel to accommodate approximately 105 parking spaces. An electric vehicle (EV) charging station may be incorporated into the improved parking lot. Bike racks would be installed at the project site. The parking areas would be improved with new asphalt and/or road base within the existing parking areas on the site and the existing graded areas would be retained. Existing truck scales would be removed.
- Access to the site would be improved and signalized to allow project-related traffic to access the site off Sepulveda Boulevard. MRCA and its consultant evaluated the feasibility of various design options along with the County, Los Angeles Department of Transportation (LADOT), California Department of Transportation (Caltrans), and stakeholders. **Figure 2** shows the conceptual design of the intersection of the Project Access Driveway with Sepulveda Boulevard. The conceptual design has been discussed with LADOT District Operations, but final design will require LADOT Design approval. Mulholland Drive would continue to be used for authorized vehicles only. No additional improvements or public access from Mulholland Drive would be provided as a part of the proposed Project.
- A rolling mechanical vehicular gate would replace the gate that is currently located on the southern access to the site. The gate will be kept open during park hours of operations (sunrise to sunset) and closed to the public during overnight hours. Informational and safety signage would be posted throughout the project site. Standard MRCA signage would also be posted throughout the site to display important information, such as hours of operation, consistent with the requirements of the provisions of the MRCA Park Ordinance, and emergency contact information.
- Landscaping and trees would be provided throughout the parking area. Landscaping at the site would include native plants, limited lighting fixtures, bioswales, and water tanks at two locations for firefighting/prevention purposes. The project may expand and supplement the existing perimeter fencing to cover additional areas that are currently unfenced. The site contains informal but long-standing pedestrian access to the property off Mulholland Drive. The proposed new improvements would only allow maintenance and emergency access from Mulholland Drive.
- The Sanitation Districts will continue to perform maintenance and monitoring of the project site including maintenance of the road and landscape as well as the environmental control systems (methane dispersal, drainage structures, and seepage management).

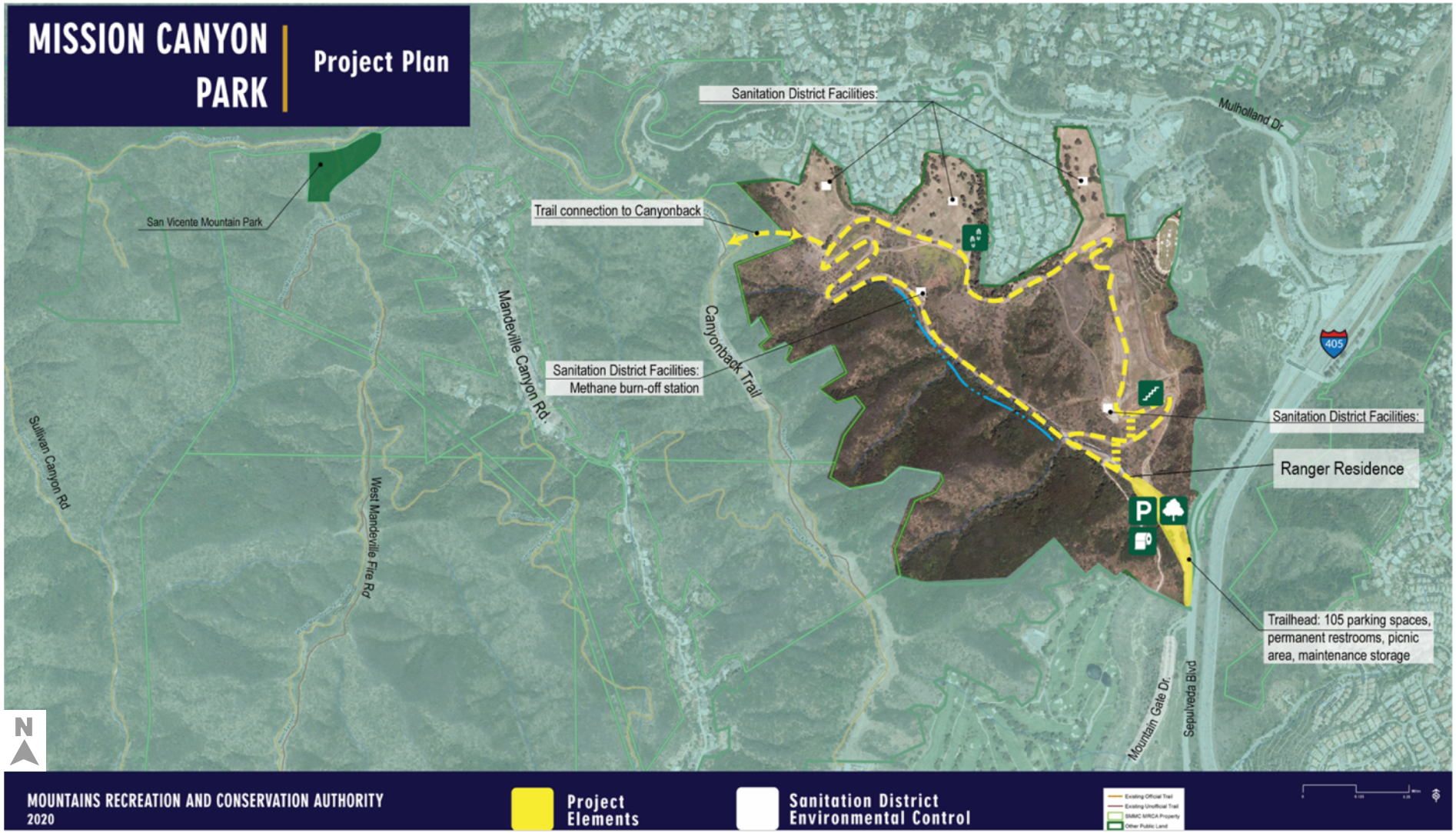
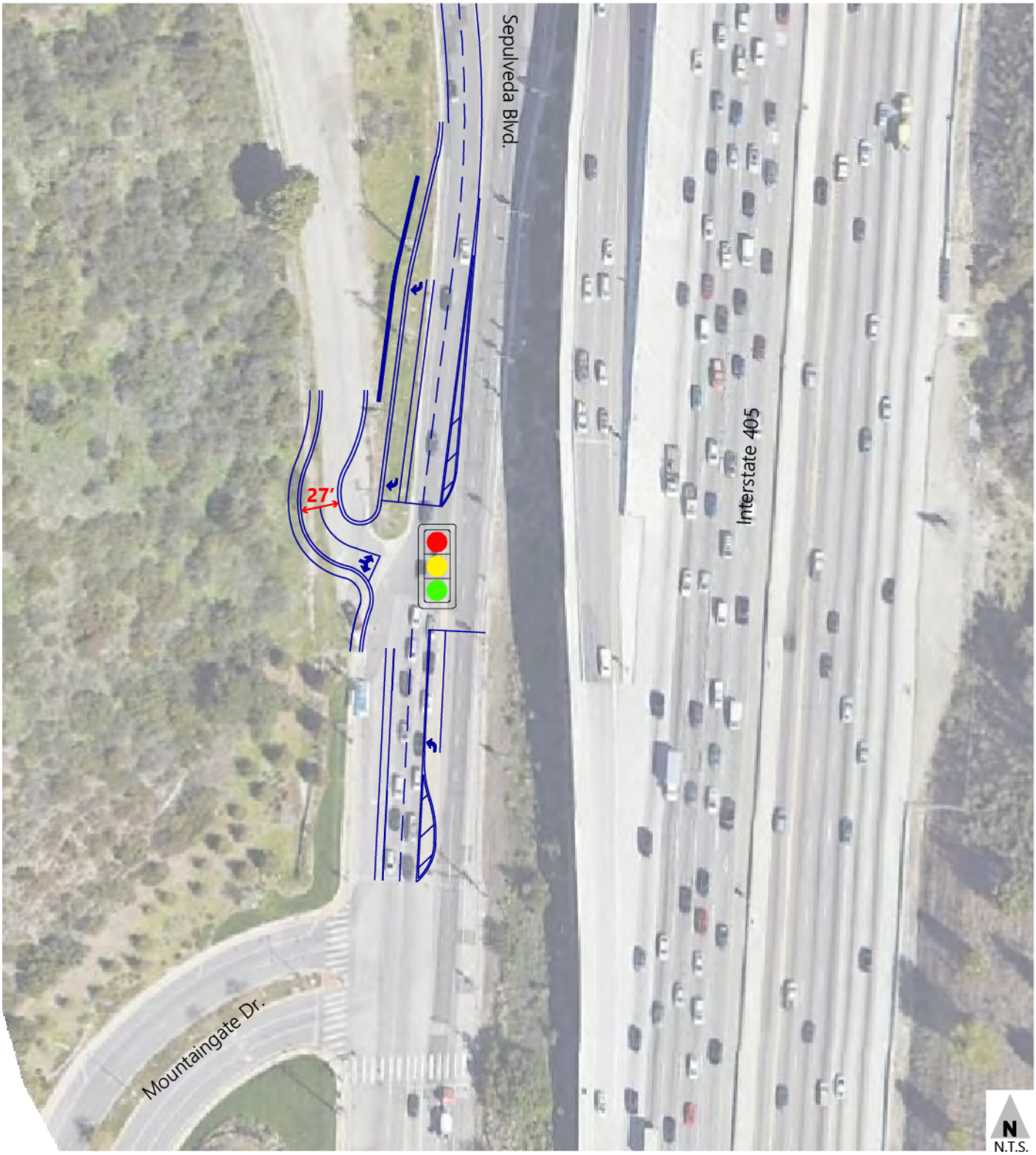


Figure 1

Project Site Plan



CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Figure 2

Conceptual Site Access Improvements

1.2 Study Scope

The scope of work for this study was determined in consultation with the Los Angeles Department of Transportation (LADOT) and is in accordance with the City's CEQA transportation thresholds of significance and LADOT's *Transportation Assessment Guidelines* (TAG) adopted in July 2019,[1] and updated in July 2020.[2] The base assumptions and technical methodologies were discussed with LADOT as part of the study approach and agreed to in a transportation assessment memorandum of understanding (MOU) dated March 2020. The MOU is included in **Appendix A** of this document.

The TAG establishes an updated set of guidelines, methods, and impact criteria for CEQA considerations that focus on vehicle miles traveled (VMT), geometric hazards, freeway safety analysis, and policy conflicts. The TAG also establishes a framework for various non-CEQA analyses including a pedestrian, bicycle, and transit access assessment, project access, safety, and circulation assessment, project construction, and residential street cut-through analysis. Each area of analysis is described in the TAG with a discussion of screening criteria, the methodology for analysis, impact criteria, and potential mitigation options. Based on the screening criteria outlined in the TAG, the following issue areas in **Table 1** – as described in the TAG – are evaluated in this report (the screening analysis is available in **Appendix B**.)

Table 1: TAG Screening Criteria Issue Areas

TAG Issue Area	Analysis Required?
CEQA Analyses:	
Conflicts with Plans, Programs, Ordinances, and Policies	Yes
Causing Substantial Additional Vehicle Miles Traveled	Yes
Substantially Inducing Additional Automobile Travel	No
Geometric Design Features	Yes
Freeway Safety Analysis	No
Non-CEQA Analyses:	
Pedestrian, Bicycle, and Transit Access	No
Project Access, Safety, and Circulation	Yes
Project Construction	Yes
Residential Street Cut-Through	No

[1] On July 30, 2019, the Los Angeles City Council adopted a resolution formally implementing the City's update transportation thresholds of significance for CEQA analyses. The TAG is the document providing the guidance for conducting both CEQA and non-CEQA transportation analyses.

[2] City of Los Angeles Department of Transportation, *Transportation Assessment Guidelines*, July 2020.

1.3 Organization of Report

This report is divided into five chapters, including this introduction. Chapter 2 describes the existing transportation system in the study area, including an inventory of the streets, highways, bicycle & pedestrian networks, and transit service. The required CEQA analyses are summarized in Chapter 3, and includes a review of the City's plans, programs, ordinances, and policies, a VMT analysis, and a geometric hazards evaluation. Chapter 4 includes the required non-CEQA transportation analyses and contains an assessment of Project access, safety and circulation, and a Project construction analysis. Chapter 5 contains the study summary and conclusions.

Appendices to this report include details of the technical analysis, as follows:

A. Appendix A includes a copy of the Memorandum of Understanding approved by LADOT that describes study parameters and assumptions.
B. Appendix B includes responses to the TAG Project screening criteria.
C. Appendix C provides a detailed review of the Project's consistency with relevant plans, programs, ordinances, and policies.
D. Appendix D includes the traffic counts used in this study.
E. Appendix E includes the LOS worksheets for the study intersections.

2. Environmental Setting

2.1 Existing Conditions

The Project Site is a former landfill that has been inactive for approximately 40 years. The site is owned by the Los Angeles County Sanitation Districts, the Districts will continue to perform maintenance and monitoring of the internal road and landscape as well as the environmental control systems such as methane dispersal, drainage structures, and seepage management. The southern area of the site includes a parking lot used by the Los Angeles Department of Water and Power, with access via an unsignalized driveway on Sepulveda Boulevard. This use would be discontinued. The project site lies in a canyon that rises west of Sepulveda Boulevard in a relatively remote, semi-rural area of the Pacific Palisades/ Brentwood Community Plan Area. The area south and west of the Project Site is lightly developed with a mix of single-family houses and a golf course. The area north of the Project site is developed with single-family houses and private schools. The surrounding uses are separated from the Project site by a substantial amount of undeveloped, steeply sloping open space.

Study Area

The project site is within the Brentwood-Pacific Palisades Community Plan area of the City of Los Angeles. The study area selected for analysis extends approximately one mile north to Mulholland Drive and over a mile south to the southbound I-405 Getty Center Drive ramps. All the streets in the study area are in the City of Los Angeles.

Existing Street System

Regional access to the Project Site is provided by the I-405. Local access to the Project Site is provided by several local streets, including Sepulveda Boulevard and Mulholland Drive. A brief description of these streets is provided, including their functional classification per the City's Mobility Element, *Mobility Plan 2035*.[3] In addition, the *Mobility Plan 2035* identifies corridors proposed to prioritize bicycle, pedestrian, transit, and vehicle infrastructure improvements. The networks are defined as the following:

- The Neighborhood-Enhanced Network (NEN) is a selection of streets that provide comfortable and safe routes for localized travel of slower-moving modes such as walking, bicycling, or other slow-speed motorized means of travel.
- The Bicycle Lane Network (BLN) consists of Tier 2 and Tier 3 Bicycle Lanes - Bicycle facilities on arterial roadways with striped separation.
- The Transit-Enhanced Network (TEN) is the network of arterial streets prioritized to improve existing and future bus service for transit riders. None of the streets in the vicinity of the Project site are part of the TEN.

[3] City of Los Angeles, *Mobility Plan 2035, An Element of the General Plan,* last amended September 7, 2016.

- The Vehicle-Enhanced Network (VEN) identifies streets that prioritize vehicular movement and offer safe, consistent travel speeds and reliable travel times. None of the streets in the vicinity of the Project site are part of the VEN.
- The Pedestrian-Enhanced Districts (PEDs) identify where pedestrian improvements on arterial streets could be prioritized to provide better walking connections to and from the major destinations within communities. There are no PEDs in the vicinity of the Project site.

Listed below are the primary roadways that provide regional and local access to the study area.

- **I-405 (San Diego Freeway)** runs in a north-south direction east of the Project site. In the vicinity of the study area, I-405 provides four to five lanes in each direction. Interchanges in the area are provided at Mulholland Drive/Skirball Center Drive, Getty Center Drive and Sunset Boulevard.
- **Sepulveda Boulevard** runs in a north-south direction immediately east of the Project site and is classified as a Boulevard II. In this area, Sepulveda Boulevard provides two travel lanes in each direction. It is located on the Bicycle Lane Network and currently provides Class II bicycle facilities (bike lanes) in each direction north of the I-405 southbound interchange near the Project site. Parking is not allowed on this street and the posted speed limit is 45 mph in the study area.
- **Mulholland Drive** is designated as a Scenic Parkway which lies approximately one mile north of the Project site. Mulholland Drive generally provides one lane in each direction, though in the vicinity of Skirball Center Drive two westbound lanes are provided. Mulholland Drive is part of the Neighborhood Enhanced Network in the *Mobility Plan 2035*. Parking is not allowed on this street in the study area. The posted speed limit is 35 mph.
- **Skirball Center Drive** is classified as a Local Street. It provides two lanes in each direction and connects Sepulveda Boulevard and Mulholland Drive with an interchange on the northbound I-405. Parking is not allowed on this street.
- **Mountaingate Drive** is designated as an Avenue II Divided that runs in an east-west direction to the south of the Project site. It provides two lanes in each direction with a raised center median and is not a through street. Parking is permitted on both sides of the street. It is part of the Neighborhood Enhanced Network in the *Mobility Plan 2035*. The posted speed limit is 40 mph.

Transit Lines[4]

There is one bus line which stops within a half-mile area of the perimeter of this Project site. Metro Line 761 is a new line which was introduced as part of Metro's NextGen plan, which is a comprehensive restructuring of Metro's transit service to improve service and accessibility. It runs between the Sylmar Metrolink station and the Sepulveda Boulevard LRT station on the Metro E Line (Expo) via San Fernando Boulevard, Van Nuys Boulevard, Ventura Boulevard and Sepulveda Boulevard. In the vicinity of the project site Line 761 replaces service previously provided by Line 234 and Line 734. It provides service throughout the day with weekday headways of approximately 20 minutes and weekend headways of approximately 30 minutes. The line runs immediately east of the Project site and the closest access to the Project site via a stop in each direction at the intersection of Sepulveda Boulevard & Mountaingate Drive.

Existing and Planned Bicycle and Pedestrian Facilities

The east boundary of the Project Site is Sepulveda Boulevard which, per the City's *Mobility Plan 2035*, is part of the bicycle lane network (BLN). Bicycle lanes are currently provided on Sepulveda Boulevard north of the I-405 southbound interchange near the Project site. The segment of Sepulveda Boulevard south of Skirball Center Drive is planned to provide a future bicycle lane. In the study area sidewalks are provided on Mountaingate Drive, on Skirball Center Drive, and on a portion of Sepulveda Boulevard north of Skirball Center Drive. Marked crosswalks are present at signalized intersections where sidewalks exist.

2.2 Cumulative Conditions

The study area selected for analysis extends approximately two and a half miles along Sepulveda Boulevard between Mulholland Drive and the Getty Center Drive I-405 interchange.

In 2020 LA Metro authorized a multi-year study of the potential to convert the existing HOV lanes on I-405 to high-occupancy toll (HOT) lanes. If found to be feasible and if approved, the I-405 Express Lanes would continue to allow motorists to use them if in carpools but would also allow single-occupant drivers to pay tolls to use them. In 2021 LA Metro authorized planning studies to begin for the Sepulveda Transit Corridor Project, which would provide a rail transit link between the Van Nuys Metrolink Station and West Los Angeles. In addition to these ongoing studies, the planned public-sector transportation improvements in the study area are limited to the addition of bicycle lanes on Sepulveda Boulevard, per the Bicycle Lane Network in the *Mobility Plan 2035*. While no specific improvements to existing transportation facilities in the study area were assumed to be in place in the analysis of future conditions, these planning studies are acknowledged.

[4] This section describes transit services shown on LA Metro schedule effective July 27, 2021

3. CEQA Transportation Assessment

3.1 Plans, Programs, Ordinances, and Policies Review

The purpose of this section is to determine whether the Project conflicts with a transportation-related City plan, program, ordinance, or policy that was adopted to protect the environment. A project would not be shown to result in an impact merely based on whether a project would not implement an adopted plan, program, ordinance, or policy. Rather, it is the intention of this threshold test to ensure that proposed development does not conflict with nor preclude the City from implementing adopted plans, programs, ordinances, or policies.[5] Furthermore, under CEQA, a project is considered consistent with an applicable plan if it is consistent with the overall intent of the plan and would not preclude the attainment of its primary goals. A project does not need to be in perfect conformity with each and every policy. Finally, any inconsistency with an applicable policy, plan, or regulation is only a significant impact under CEQA if the policy, plan, or regulation was adopted for the purpose of avoiding or mitigating an environmental effect and if the inconsistency itself would result in a direct physical impact on the environment.

This evaluation was conducted by reviewing City documents such as the Los Angeles *Mobility Plan 2035*, Brentwood-Pacific Palisades Community Plan, Vision Zero Los Angeles, and municipal code sections.

- **City of Los Angeles Mobility Plan 2035[6]** is the City's document to guide the operations and design of streets and other public rights of way. It lays out a vision for designing safer, more vibrant streets, that are accessible to people – no matter how they travel. The Project's proposed land use and operations design features were reviewed and compared to existing and future conditions resulting from the Project, including site access, high injury network identification, pedestrian, bicycle and transit accessibility, and loading. The Project is consistent with the reviewed policies of the *Mobility Plan 2035*. Please see **Appendix C**, adapted from Attachment D of the TAG, for a detailed review of consistency with relevant policies in *Mobility Plan 2035*.
  Brentwood-Pacific Palisades Community Plan[7] is one of 35 Community Plans in the City that establishes the policies and programs that inform the framework for local land use, circulation, and service systems within the selected community plan area. The *Brentwood-Pacific Palisades Community Plan* (BPPCP) identifies three issues related to transportation: preservation of the Sunset Boulevard scenic corridor, the need to encourage expansion and improvement of the public transportation system and the need to protect neighborhoods from spill-over of commercial parking. The BPPCP identifies several transportation-related measures to improve public transit service, make capital improvements related to freeway ramps and road widening, and to implement travel demand management (TDM) strategies and transportation system management (TSM). The Project is consistent with the transportation components of the

[5] City of Los Angeles Department of Transportation, *Transportation Assessment Guidelines*, page 2-2 (July 2020).
[6] City of Los Angeles, *Mobility Plan 2035, An Element of the General Plan*, adopted September 7, 2016.
[7] The Brentwood-Pacific Palisades Community Plan was adopted in 1998.

Community Plan. See **Appendix C** for a detailed review of consistency with relevant policies in the Brentwood-Pacific Palisades Community Plan.

The Project features, location, and design generally support active transportation and use of multimodal transportation options and would be consistent with policies, plans, and programs that support alternative transportation, including the *Mobility Plan 2035* and the *Brentwood-Pacific Palisades Community Plan*. The design of the improved site access on Sepulveda Boulevard is intended to minimize the disturbance to traffic flow. The Project would encourage bicycle use to and from the Project Site by providing bicycle parking on-site and due to its proximity to existing bicycle facilities along Sepulveda Boulevard. The proximity of the entry to the proposed Project to existing bus transit stops promotes access to a large open space park by transit. The Project design and features would not preclude City action to fulfill or implement programs and projects associated with the BPPCP.

The **Plan for A Healthy Los Angeles: a Health and Wellness Element of the General Plan** (LADCP, March 2015) includes policies directing several City departments to develop plans that promote active transportation and safety, encourage healthy design and equitable access, and increase awareness of equity and environmental issues. This plan has a policy on land use planning for public health and GHG emission reduction to "Promote land use policies that reduce per capita greenhouse gas emissions. …" The discussion of this topic focuses on land use patterns that promote shorter trips. The development of the proposed Project is consistent with that policy. This plan includes a policy from the Open Space Element of the General Plan to "encourage the use of alternative modes of transportation to access some open space and recreational areas especially in more remote areas. The need for public transportation from impacted areas is considered especially important." The proposed Project would be less than one-quarter mile from bus transit stops which provide service to areas of the city that have been found to have high or very high need for more access to parks, and would therefore be consistent with this objective. This is discussed further in Section 3.2 below.

The nearest related project to the Project Site is the proposed Berggruen Institute project, which would be located in the hills near the Mountaingate community. The buildings themselves would be over a mile southwest of the proposed entry to Mission Canyon Park while that project would take access via an improved fire road south of Mountaingate Drive and also via Canyonback Road. Because these access points would be three-quarters of a mile or more from the proposed driveway to the Mission Canyon Park, and are not on the same block, that project in combination with the proposed Project is not expected to have a cumulative impact. Other related projects located farther from the Project Site would not share adjacent street frontages with the Project Site. Accordingly, no significant cumulative impacts are anticipated to which both the Project and other nearby related projects would contribute in regard to City transportation policies or standards adopted to protect the environment and support multimodal transportation options.

Appendix C provides additional detail regarding the Project's plans, programs, ordinances, and policies conflict review conducted per the City's TAG.

3.2 Vehicle Miles Traveled Analysis

In July 2019, the City of Los Angeles formally adopted a new transportation impact methodology and thresholds of significance to comply with the requirements of State law that led to revisions of the CEQA guidelines. LADOT's Transportation Assessment Guidelines (TAG) were updated in July 2020. It provides guidance on how to analyze impacts related to Land Use (Development) projects.[8] Analysis of Land Use projects that are not screened out is required to assess whether they may result in a substantial impact on vehicle miles traveled. While the TAG does not directly provide a methodology for analyzing VMT related to public park projects, it does include a screening test for "public services" which is relevant to this project.

"Public Services. Public services (e.g., police, fire stations, public utilities) do not generally generate substantial VMT. Instead, these land uses are often built in response to development from other land uses (e.g., office and residential). Therefore, these land uses can be presumed to have less-than-significant impacts on VMT."[9]

While parks are not explicitly among the examples of public services listed in the TAG, the City's General Plan Framework includes a chapter on Infrastructure and Public Services which includes parks among 13 infrastructure and public service systems addressed in that chapter.[10] The Framework states that in addition to recreation services provided by the City's Recreation and Parks Department (RAP), recreational services are also available to City residents from sites and facilities owned and operated by other agencies. The Mountains Recreation and Conservation Authority (MRCA), the lead agency for the proposed project, was established "to acquire and improve open space and parkland, afford environmental education opportunities, and provide stewardship for a wide variety of public park and open space amenities."[11] Thus the proposed project can be considered to be a public service and, as such, could potentially be presumed to have a less than significant VMT impact. To support this conclusion, the following analysis was conducted.

Impact Methodology

The TAG provides specific methodologies for analyzing VMT impacts of certain project types, including residential, office, regional-serving retail, event centers, regional-serving schools and religious uses, and mixed-use projects. It recognizes that some unique land uses do not readily fit into these categories and allows for a customized approach to be developed in coordination with LADOT staff. The approach determined to be appropriate is to treat the proposed Mission Canyon Park project as a development project and to measure the VMT impacts using work VMT per employee, per the impact criteria for "other land use types" as specified in the TAG. In addition, GIS analysis was conducted of the location of the

[8] Page 2-5 provides this definition of Land Use projects "Land use projects include any discretionary action that changes development capacity (such as a zone change or re-designation of a general plan land use) or results in new construction, additions or change of use.
[9] Page 2-9 of the TAG
[10] *The Citywide General Plan Framework*, Chapter 9 (Envicom, adopted by City Council on December 11, 1996, re-adopted on August 8, 2001)
[11] https://mrca.ca.gov/about/faq/

proposed park in the context of similar parks, their location relative to the population in the surrounding area, and survey data on the travel patterns of current users of similar parks.

The City's VMT impact criteria for development projects is specified in the TAG. Per the criteria, other land use types should measure VMT impacts for the work trip element using the criteria for office projects. That criteria states that for office projects, a development project may have a potential significant impact if it generates work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located (see **Table 2** below). This criterion was used for the Project. The Project Site is located in the West APC, which has a daily work VMT per employee threshold of 11.1.

Table 2: City of Los Angeles VMT Impact Criteria (15% Below APC Average)

Area Planning Commission	Daily Household VMT per Capita	Daily Work VMT per Employee
Central	6.0	7.6
East Los Angeles	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South Los Angeles	6.0	11.6
South Valley	9.4	11.6
West Los Angeles	7.4	**11.1**

Source: LADOT TAG, 2020.

Per the TAG, a project could have a significant cumulative impact on VMT if the project has both a significant project-level impact as determined above and is not consistent with the Southern California Association of Governments' Regional Transportation Plan/Sustainable Communities Strategy (SCAG RTP/SCS) in terms of development location, density, and intensity.

VMT Impact Analysis

The VMT impact analysis was conducted separately for employees and visitors.

Daily Work VMT per Employee

Analysis of daily work VMT per employee was based on the specific elements of the proposed project. Due to the unique nature of the project, public parks are not among the land uses included in the LADOT VMT Calculator. It would have one full-time employee and would be serviced periodically by existing MRCA staff. The park would include one residence on-site for use by a ranger who would provide security at the park and give information to park visitors. Because this employee would reside on-site, zero daily work VMT would be generated by this employee. In addition, maintenance vehicles (light-duty trucks) would travel once or twice weekly from the existing facility in Franklin Canyon Park located approximately six miles to the east. Because the MRCA operates other parks in the vicinity of the proposed Mission Canyon Park, these maintenance trips would not be entirely new trips but rather would be additional

service stops for vehicles already circulating to other parks. These maintenance trips are not home-based trips and would not be considered part of daily work VMT per employee. The impact to daily work VMT per employee would be less than significant.

Visitor VMT

Analysis of visitor VMT employed a market study approach, similar to what is explicitly allowed in the TAG for schools, religious uses and large retail projects. This analysis uses recent comprehensive studies to demonstrate that the project would be located in an area that is underserved for parks and that the project would create new recreational opportunities closer to the more densely populated part of the region.

In 2016 the Los Angeles County Department of Parks and Recreation completed a large-scale study to document existing recreational facilities countywide and to use these data to determine the scope, scale, and location of park needs throughout Los Angeles County.[12] The assessment inventoried over 3,000 park and open space facilities and used a variety of demographic and physical factors to assign park need scores ranging from Very Low to Very High.

A subsequent study, described below, collected and analyzed extensive data on users of open space in the Santa Monica Mountains National Recreation Area (SMMNRA) to provide additional information to be used in planning future trails and parks. That study included a figure which overlaid existing trailheads in the SMMNRA with the results of the countywide parks needs assessment, which resulted in the figure presented here as **Figure 3**.[13] As can be seen, the proposed Mission Canyon Park is located in the Sepulveda Pass in an area of "moderate" need for increased access to parks. In the regional context, however, the proposed park is located between the largest areas which were identified as having a "high" or "very high" need for increased access to parks. Its location on an arterial street with nearby freeway access and a bus stop with frequent transit service would improve access to passive open space parks in the region.

The proposed Mission Canyon Park would be located in the eastern area of the Santa Monica Mountains National Recreation Area (SMMNRA). In 2018 a large-scale survey and count was conducted of visitors to trailheads in the SMMNRA. Its purposes were to inform the "strategic allocation of resources at park trailheads, evaluate changes in visitor use at park trailheads last surveyed in 2002, and to provide a benchmark for additional trailheads that may be constructed in the future."[14]

The Survey report tabulated average round-trip travel distances for 3,897 survey respondents at 45 trailheads, spanning the area from Point Mugu in the west to Runyon Canyon in the east. The travel distance for each respondent was calculated as the drivable roadway network distance from their residence (the centroid of their ZIP code) to the trailhead, which was then doubled to estimate round-trip

[12] *Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment* (May 9, 2016, PlaceWorks)
[13] *Report for the National Park Service on Results of the 2018 Visitor Survey and Visitor Count in the Santa Monica Mountains National Recreation Area* (UCLA Luskin Center for Innovation, 2020), Figure 1-2, page 12.
[14] Ibid. page 5.

travel distances. The analysis presented in this report halved these distances again to estimate the catchment radius for each trailhead. **Table 3** presents data on the one-way travel distance that is taken from that report and includes the name and number of survey respondents at each trailhead. The weighted average one-way trip of all trail users is 17.6 miles. In the western area of the SMMNRA, the one-way travel distance of 23.0 miles is more than three times what it is in the eastern area (6.6 miles) and almost double what it is in the central area (12.7 miles).

Figure 4 shows the western, central, and eastern trailheads and the SMMNRA boundaries, and other nearby parks under State, County, or City jurisdiction. The location of the trailhead of the proposed Mission Canyon Park is also shown. The trailheads are shown as points of three gradations of catchment radius based on this data: under 10 miles, 10-20 miles, and over 20 miles. The figure also plots population density around these trailheads as points, each of which represents 10 people, based on block-group level population data from the 2019 American Community Survey. As shown in the figure, the proposed Mission Canyon Park is between the eastern and central areas of surveyed trailheads, which have a one-way travel distance of 6.6 miles and 12.7 miles, respectively. The existing average one-way travel distance to all trailheads in the SMMNRA is 17.6 miles and a reduction of 15% equates to 15.0 miles. Therefore, the travel distance to the trailhead of the proposed Mission Canyon Park would be more than 15% below the existing average trip length to similar parks and park visitor VMT would have a less than significant impact.

Cumulative VMT

As shown above, the Project would not have a significant VMT impact. Furthermore, given its location in an area of the City that is served by public transit, and its provision of features to encourage active transportation, the Project would be consistent with the applicable goals and objectives of the SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG, April 2016) to develop infill locations served by public transportation and facilitating active transportation. Among the strategies described in the SCS which are part of the regional effort to reduce Green House Gas (GHG) emissions and achieve other goals is to identify ways "to improve access to public park space." Therefore, the Project's cumulative impact on VMT would not be significant.

Summary

The analysis conducted demonstrates that under the City's VMT methodology, the Project would result in less than significant impacts on VMT.

Table 3: Mean One-Way Travel Distance by Visitors to Existing SMMNRA Trailheads

ID	Trailhead Name`	Location	Radius (Miles)
FRAW	Franklin Canyon WODOC Parking Lot	Eastern	9.8
FRAR	Franklin Canyon Ranch Parking Lot	Eastern	6.9
RUN	Runyon Canyon	Eastern	6.0
WILA	Wilacre Park	Eastern	6.0
FRAH	Franklin Canyon Hastain Trailhead	Eastern	6.0
FRY	Fryman Canyon Nancy Pohl Overlook	Eastern	7.2
TEM	Temescal Gateway Park	Central	13.3
TOPT	Topanga State Park Trippet Ranch Parking Lot	Central	17.4
WILL	Will Rogers State Historic Park	Central	8.8
CAB	Caballero Canyon Trailhead	Central	6.7
SAN	San Vicente Park- Dirt Mulholland	Central	13.0
RES	Top of Reseda Blvd. Main Parking Lot	Central	9.6
TOPL	Topanga State Park Los Leones Trailhead	Central	15.2
TOPY	Topanga State Park Santa Ynez Trailhead	Central	15.5
TOPS	Topanga State Park Sullivan Ridge Fire Rd, gate at Casale Rd	Central	13.9
CHA	Charmlee Wilderness Park Main Parking Lot	Western	31.6
CHMI	Cheeseboro Canyon/Simi Hills Main Parking- Inner Lot	Western	9.3
LEON	Leo Carrillo State Park Nicholas Flat Trailhead	Western	47.6
MALM	Malibu Creek State Park Main Entrance	Western	34.2
PAM	Paramount Ranch Main Parking Lot (Western Town Entrance)	Western	24.6
PMB	Point Mugu State Park Big Sycamore Canyon Trailhead	Western	31.6
PML	Point Mugu State Park La Jolla Canyon Trailhead	Western	28.2
RSVM	Rancho Sierra Vista Main Parking Lot	Western	8.5
SC	Solstice Canyon	Western	27.0
CXG	Circle X Ranch Grotto Trail at Campground	Western	46.3
CXM	Circle X Ranch Mishe Mokwa Trailhead	Western	38.8
PD	Point Dume View Area at Top of Preserve	Western	27.1
ROM	Rocky Oaks Main Pkg	Western	21.8
UPPL	Upper Las Virgenes Canyon Las Virgenes Rd (North)	Western	9.2
UPPL	Upper Las Virgenes Canyon Victory Trailhead	Western	8.1
ZUK	Zuma/Trancas Canyons Kanan Rd Backbone Trail Trailhead	Western	23.2
BBT	BBT/Topanga Ridge Mtwy Lois Ewen Overlook	Western	18.6
CHC	Cheeseboro Canyon/Simi Hills China Flat Trailhead	Western	6.8
CXS	Circle X Ranch Sandstone Peak Trailhead	Western	38.8

Table 3: Mean One-Way Travel Distance by Visitors to Existing SMMNRA Trailheads

ID	Trailhead Name`	Location	Radius (Miles)
CC	Corral Canyon Sara Wan Trailhead	Western	24.3
EC	Escondido Canyon Winding Way Trailhead	Western	35.1
MALB	Malibu Creek SP Backbone Trail Pkg Lot at Top of Corral Canyon Rd	Western	22.7
MALL	Malibu Creek State Park Mulholland/Las Virgenes 4 Corners	Western	23.7
PMC	Point Mugu State Park Chumash Trailhead	Western	18.1
STU	Stunt Ranch Stunt High Trail at Stunt Rd: 1 Mile Marker	Western	11.9
ZUB	Zuma/Trancas Canyons Backbone Trail Encinal Canyon Trailhead	Western	17.4
ZUC	Zuma/Trancas Canyons Zuma Canyon (Bonsall) Trailhead	Western	24.8
ZUR	Zuma/Trancas Canyons Zuma Ridge (Busch) Trailhead	Western	15.5
Weighted Average - Eastern Area			6.6
Weighted Average - Central Area			12.7
Weighted Average - Western Area			23.0
Weighted Average - Total			17.6

Source: Report for the National Park Service on Results of the 2018 Visitor Survey and Visitor Count in the Santa Monica Mountains National Recreation Area (UCLA Luskin Center for Innovation, 2020), Table A5-2.

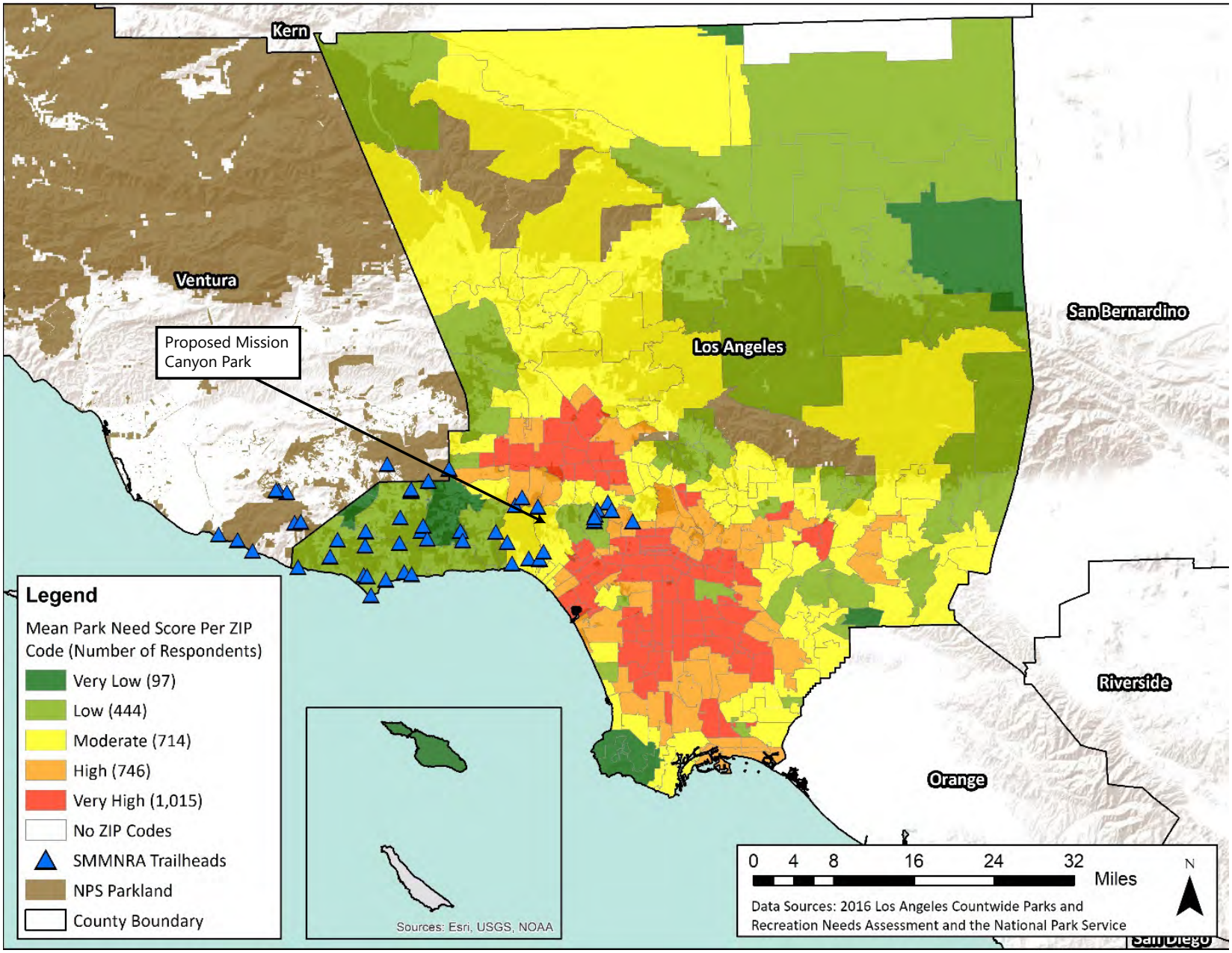
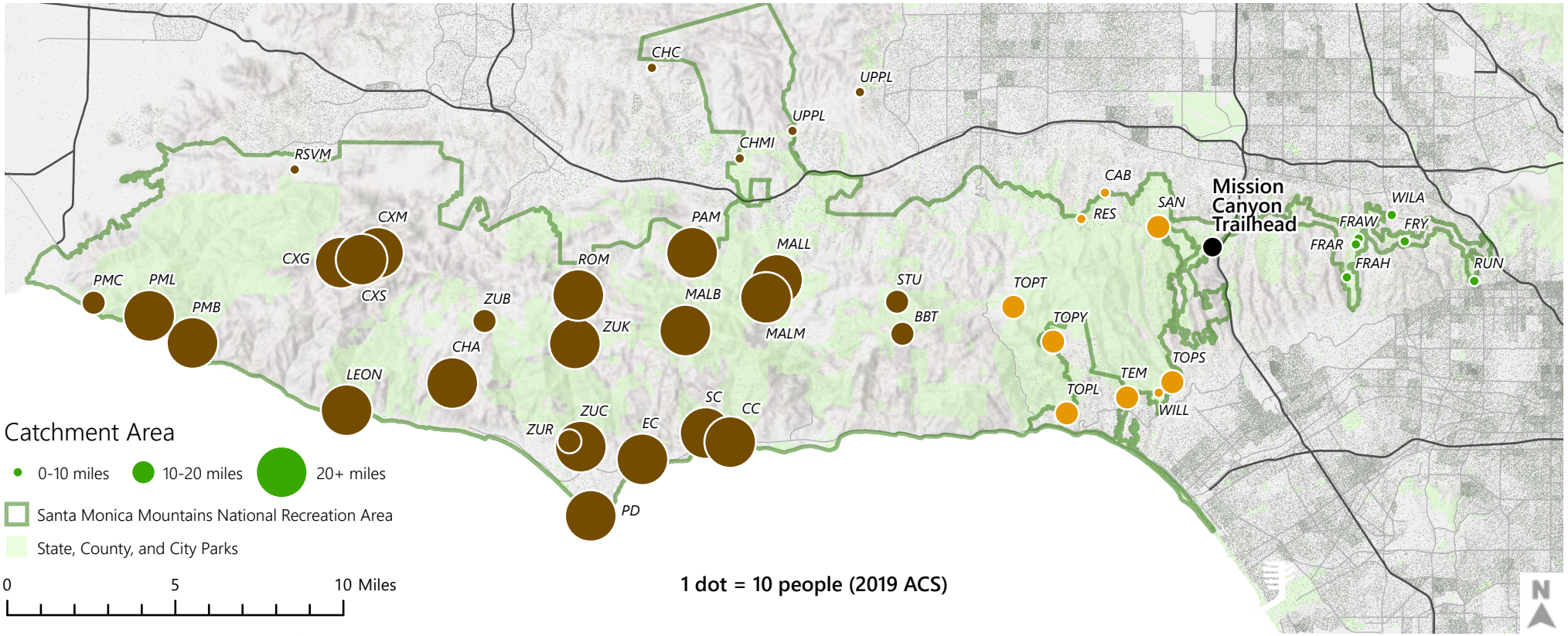


Figure 3

SMMNRA Trailheads and Los Angeles County Parks Needs Assessment

Source: Report for the National Park Service on Results of the 2018 Visitor Survey and Visitor Count in the SMMNRA (UCLA Luskin Center for Innovation, 2020) page 13



Western Trailheads

BBT	Backbone Trail/Topanga Ridge Mtwy Lois Ewen Overlook
CHA	Charmlee Wilderness Park Main Parking Lot
CHC	Cheeseboro Canyon/Simi Hills China Flat Trailhead
CHMI	Cheeseboro Canyon/Simi Hills Main Parking- Inner Lot
CHMO	Cheeseboro Canyon/Simi Hills Main Parking- Outer Lot
CXG	Circle X Ranch Grotto Trail at Campground
CXM	Circle X Ranch Mishe Mokwa Trailhead
CXS	Circle X Ranch Sandstone Peak Trailhead
CC	Corral Canyon Sara Wan Trailhead
EC	Escondido Canyon Winding Way Trailhead
LEON	Leo Carrillo State Park Nicholas Flat Trailhead
MALB	Malibu Creek State Park Backbone Trail Parking Lot at Top of Corral Canyon Rd
MALM	Malibu Creek State Park Main Entrance
MALL	Malibu Creek State Park Mulholland/Las Virgenes 4 Corners
PAM	Paramount Ranch Main Parking Lot (Western Town Entrance)
PD	Point Dume View Area at Top of Preserve
PMB	Point Mugu State Park Big Sycamore Canyon Trailhead
PMC	Point Mugu State Park Chumash Trailhead
PML	Point Mugu State Park La Jolla Canyon Trailhead
RSVM	Rancho Sierra Vista Main Parking Lot
RSVW	Rancho Sierra Vista Wendy Trailhead
ROM	Rocky Oaks Main Pkg
SC	Solstice Canyon
STU	Stunt Ranch Stunt High Trail at Stunt Rd: 1 Mile Marker
UPPL	Upper Las Virgenes Canyon Las Virgenes Rd (North)
UPPL	Upper Las Virgenes Canyon Victory Trailhead
ZUB	Zuma/Trancas Canyons Backbone Trail Encinal Canyon Trailhead
ZUK	Zuma/Trancas Canyons Kanan Rd Backbone Trail Trailhead
ZUC	Zuma/Trancas Canyons Zuma Canyon (Bonsall) Trailhead
ZUR	Zuma/Trancas Canyons Zuma Ridge (Busch) Trailhead

Central Trailheads

CAB	Caballero Canyon Trailhead
SAN	San Vicente Park- Dirt Mulholland
TEM	Temescal Gateway Park
RES	Top of Reseda Blvd. Main Parking Lot
TOPL	Topanga State Park Los Leones Trailhead
TOPY	Topanga State Park Santa Ynez Trailhead
TOPS	Topanga State Park Sullivan Ridge Fire Rd, gate at Casale Rd
TOPT	Topanga State Park Trippet Ranch Parking Lot
WILL	Will Rogers State Historic Park

Eastern Trailheads

FRAH	Franklin Canyon Hastain Trailhead
FRAR	Franklin Canyon Ranch Parking Lot
FRAW	Franklin Canyon WODOC Parking Lot
FRY	Fryman Canyon Nancy Pohl Overlook
RUN	Runyon Canyon
WILA	Wilacre Park

Figure 4

One-Way Travel Distance to Existing Trailheads (Western, Central, Eastern)

Source: Report for the NPS on Results of the 2018 Visitor Survey and Visitor Count in the SMMNRA (UCLA Luskin Center for Innovation, 2020), Table A5-2.

3.3 Geometric Design Hazards

This section discusses impacts regarding the potential for a project to substantially increase hazards due to a geometric design feature that generally relates to the geometric design of access points to and from the Project site and may include safety, operational, or capacity impacts.

The TAG includes two screening questions to determine the need for further analysis to assess whether the project would result in impacts due to geometric design hazards or incompatible uses. Because the answer is "yes" to one question, further analysis is required.

- Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way?
    - No. The Project would improve an existing driveway on Sepulveda Boulevard which has provided vehicular access to the site for many decades.
- Is the project proposing to, or required to make any voluntary or required, modifications to the public right-of-way (i.e., street dedications, reconfigurations of the curb line, etc.)?
    - Yes. The proposed project would widen, realign, repave and signalize the existing access to the site from Sepulveda Boulevard. A southbound right turn lane would be constructed on Sepulveda Boulevard.

The improved driveway would be designed to comply with LADOT standards regarding its width and geometry. These improvements would not require the removal or relocation of existing passenger transit stops. In reviewing project access plans to determine whether any deficiencies are apparent in the site access plans which would be considered significant, LADOT considers the factors listed below.

- The relative amount of pedestrian activity at project access points.
- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.
- The type of bicycle facilities the project driveway(s) crosses and the relative level of utilization.
- The physical conditions of the site and surrounding area, such as curves, slopes, walks, landscaping, or other barriers, that could result in vehicle/pedestrian, vehicle/bicycle, or vehicle/vehicle safety hazards.
- The project location, or project-related changes to the public right-of-way, relative to proximity to the High Injury Network or a Safe Routes to School program area.
- Any other conditions, including the approximate location of incompatible uses that would substantially increase a transportation hazard.

The driveway is located in an area with low pedestrian volumes. The existing driveway would be widened and realigned as shown in Figure 2. A southbound right-turn lane and a northbound left-turn lane would be constructed to facilitate vehicle entry to the park. Due to the speed of traffic on Sepulveda Boulevard,

LADOT advised that a traffic signal would be required to provide full access to the site and that a southbound right-turn lane must be provided. The improved driveway intersection would be signalized, and the new signal would be interconnected with the existing signal at Sepulveda Boulevard & Mountaingate Drive and the two would be operated in conjunction with each other. Due to their proximity to the improved site access, it is anticipated that the signal timing plans for the intersections of Sepulveda Boulevard & Mountaingate Drive and Sepulveda Boulevard & I-405 Southbound Ramps would be reviewed and optimized as part of the project.

The conceptual design shows the proposed southbound right-turn lane and depicts how the existing roadway on this segment of Sepulveda Boulevard can be reconfigured to provide a northbound left-turn lane into the site. It also retains the existing bicycle lane on southbound Sepulveda Boulevard. In early 2020 during project development meetings, intersection design options were presented to LADOT and Caltrans staff, and these agencies advised that this is the preferred site access option to carry forward as planning studies for the park continue. The final design of the improved driveway and traffic signal would be subject to review and approval by the City. LADOT has the responsibility for reviewing and approving these elements of the project. It maintains standards and follows a defined process for conducting these reviews. As a result, the Project would not substantially increase hazards or conflicts.

4. Non-CEQA Transportation Assessment

The purpose of the non-CEQA transportation assessment required in LADOT's TAG is to promote orderly development, evaluate and address transportation-system deficiencies, and promote public safety and the general welfare by ensuring that development projects are properly related to their sites, surrounding properties, and traffic circulation.

4.1 Project Access, Safety, and Circulation Evaluation

This section documents the peak hour intersection analysis conducted based on the screening criteria and trip threshold for intersection analyses provided in the TAG.

Study Analysis Locations

The scope and selection of study intersections were developed in conjunction with LADOT staff. Seven study intersections have been analyzed. The study locations were selected for analysis in part based on guidance from LADOT's TAG, which indicates that intersections immediately adjacent to the site and in proximity to the site through which 100 or more project-generated peak hour trips would travel should be analyzed. Except for the driveway that would project (N. Sepulveda Boulevard & Mission Canyon Road) during the weekend midday peak hour, the project would not add 100 peak hour trips to any study intersections. The applicant has voluntarily chosen to expand the scope of this analysis to include additional study intersections to provide information to the public and the decision-makers. The study intersections are illustrated in **Figure 5** and listed in **Table 4**.

Level of Service Methodology

Intersection Level of Service – Highway Capacity Manual

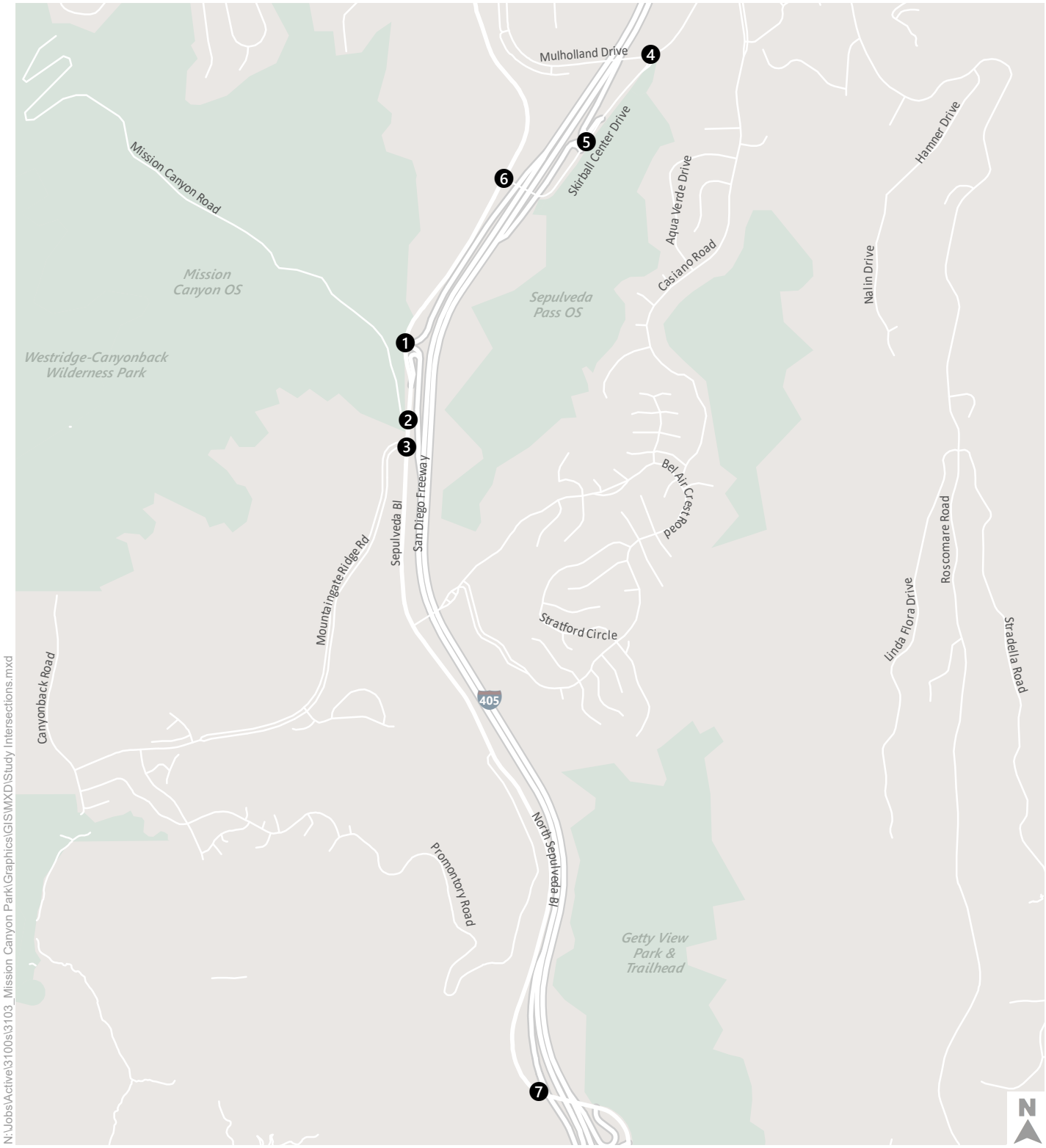
Per the direction of LADOT, this analysis uses the *Highway Capacity Manual* (HCM) methodology to evaluate the operation of the Project driveway and nearby intersections. This was performed using the Synchro 10.0 software program. Synchro calculates vehicle delay and level of service (LOS) based on procedures outlined in the HCM. This methodology was used to determine the intersection delay in seconds and corresponding level of service (LOS) at the signalized and unsignalized intersections. The calculation of delay represents the amount of delay experienced by vehicles passing through the intersection. The unsignalized intersection was analyzed using the two-way stop method from the HCM. Delay was calculated based on the worst-case approach (the minor approach to the two-way stop-controlled intersection) and used to assign the corresponding LOS, as presented in **Table 5**. Access is considered constrained if the addition of Project related trips contributes to unacceptable queueing at a Project driveway or nearby signalized intersections.

The City's Automated Traffic Surveillance and Control (ATSAC) system is a computer-based traffic signal control system that monitors traffic conditions and system performance to allow ATSAC operations to manage signal timing to improve traffic flow conditions. The Adaptive Traffic Control System (ATCS) is an enhancement to ATSAC and provides fully traffic-adaptive signal control based on real-time traffic conditions. All the study intersections located in the City are currently operating under the City's ATSAC system and ATCS control. ATSAC and ATCS provide improved operating conditions.

Table 4: Study Intersections

ID	North/South Street	East/West Street	Type
1	Sepulveda Boulevard	I-405 Freeway Southbound Ramps	Signalized
2	Sepulveda Boulevard	Mission Canyon Road	SSSC [a]
3	Sepulveda Boulevard	Mountaingate Drive	Signalized
4	Skirball Center Drive	Mulholland Drive	Signalized
5	Skirball Center Drive	I-405 Freeway Northbound Ramps	Signalized
6	Sepulveda Boulevard	Skirball Center Drive	Signalized
7	I-405 Freeway Southbound Ramps	Sepulveda Boulevard	Signalized

Note:
[a] Side-Street Stop Controlled.



● Study Intersections

Figure 5

Study Area and Analyzed Intersections

Table 5: LOS Thresholds for Signalized and Unsignalized Intersections

Level of Service (LOS)	Signalized Intersection Average Control Delay (sec/veh)	Unsignalized Intersection Average Control Delay (sec/veh)
A	≤ 10.0	≤ 10.0
B	> 10.1 to 20.0	> 10.1 to 15.0
C	> 20.1 to 35.0	> 15.1 to 25.0
D	> 35.1 to 55.0	> 25.1 to 35.0
E	> 55.1 to 80.0	> 35.1 to 50.0
F	> 80.0	> 50.0

Source: *Highway Capacity Manual*, Transportation Research Board.

Analysis Scenarios

The following three scenarios were analyzed:

- **Baseline Conditions** – Intersection turning movement counts were obtained for the study area and Level of Service (LOS) was calculated to determine baseline conditions. A combination of existing weekday peak hour traffic counts collected in 2018 and new weekday peak hour counts collected between 7:00 and 10:00 AM and 3:00 and 6:00 PM) in 2019 were used in this study. New weekend midday counts (between 10:00 AM and 2:00 PM) were collected in 2019. These traffic counts are provided in **Appendix D**. No traffic counts were collected during COVID-19 pandemic conditions.
- **Opening Year (2022) No Project** – With the concurrence of LADOT, it was established that an ambient growth factor of 1.0% per year should be applied to adjust the existing base year traffic volumes to reflect the effects of regional growth and development. This adjustment (3%) was applied to the baseline traffic volume data to reflect the effect of ambient growth by the year 2022. Additionally, Opening Year traffic forecasts include the effects of known specific projects, called related projects, expected to be implemented in the vicinity of the Project Site prior to the buildout date of the Project.
- **Opening Year (2022) Plus Project** – The trips estimated to be generated by the Project were added to the forecasts for the No Project scenario and represent estimated future conditions with the Project complete and open to the public.

Baseline Level of Service

The baseline traffic volumes shown in **Table 6** and **Figure 7** were analyzed to determine the delay and LOS for each study intersection. Table 6 summarizes the baseline LOS for the study intersections in the weekday AM and PM peak hours and in the weekend midday peak hour. The following signalized study intersections are estimated to operate at LOS E or LOS F under baseline conditions in the AM peak hour:

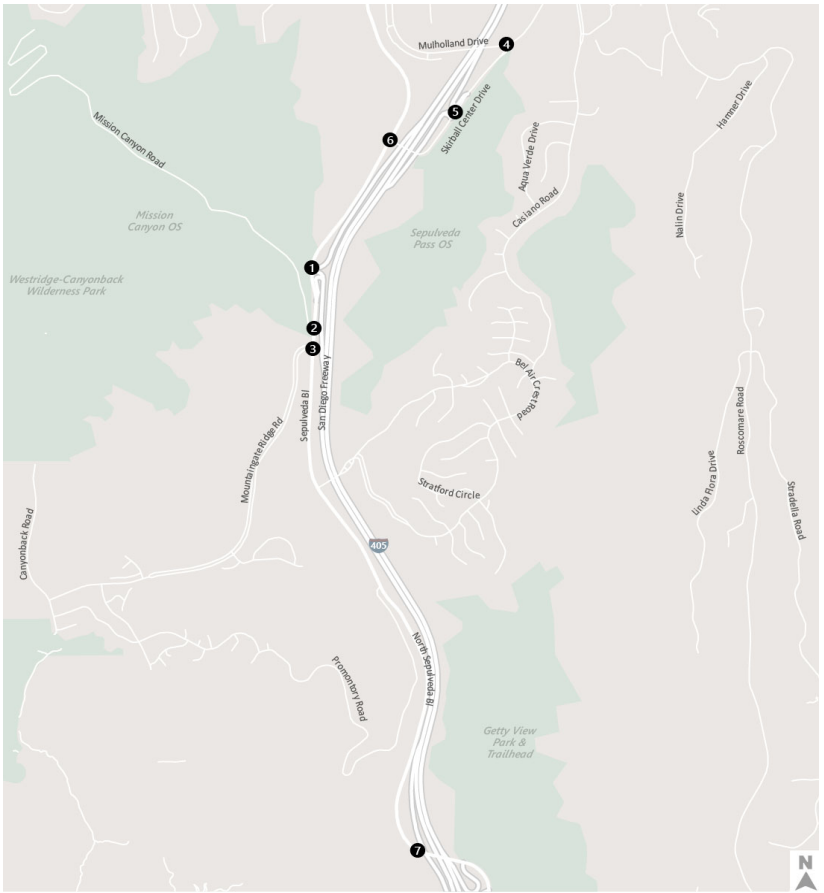
4. Skirball Center Drive & Mulholland Drive (LOS E)

6. Skirball Center Dr & N Sepulveda Blvd (LOS F)

Table 6: Mission Canyon Park Project Baseline Intersection Levels of Service

#	Study Intersection	Peak Hour	Existing	
			Delay	LOS
1	N Sepulveda Blvd & I-405 SB Off-Ramp	AM	24	C
		PM	22	C
		MD	22	C
2	N Sepulveda Blvd & Mission Canyon Road [a]	AM	14	B
		PM	32	D
		MD	0	A
3	N Sepulveda Blvd & Mountaingate Drive	AM	6	A
		PM	7	A
		MD	7	A
4	Skirball Center Dr & Mulholland Dr	AM	66	E
		PM	25	C
		MD	31	C
5	I-405 NB On/Off Ramps & Skirball Center Dr	AM	32	C
		PM	42	D
		MD	40	D
6	Skirball Center Dr & N Sepulveda Blvd	AM	109	F
		PM	33	C
		MD	28	C
7	I-405 SB On/Off Ramps & Sepulveda Blvd	AM	28	C
		PM	27	C
		MD	9	A

[a] Side street stop-controlled intersection.



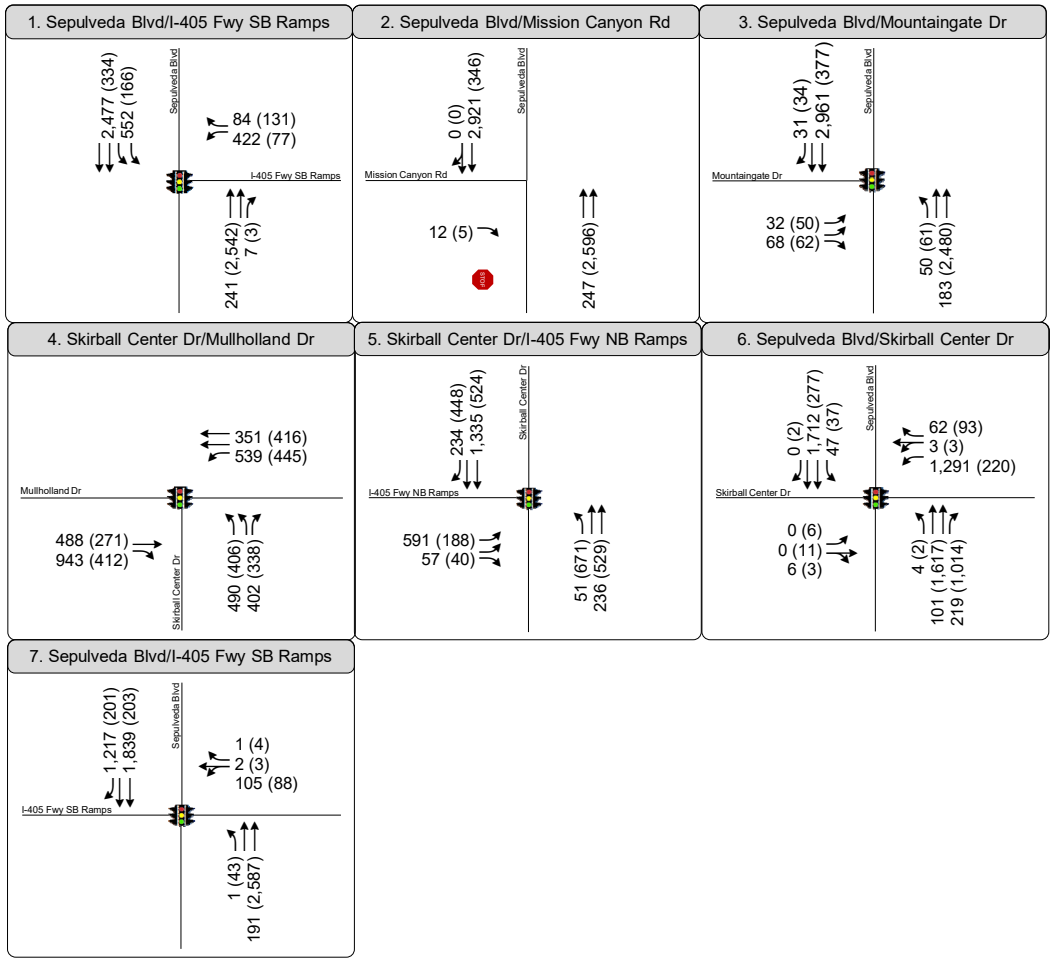
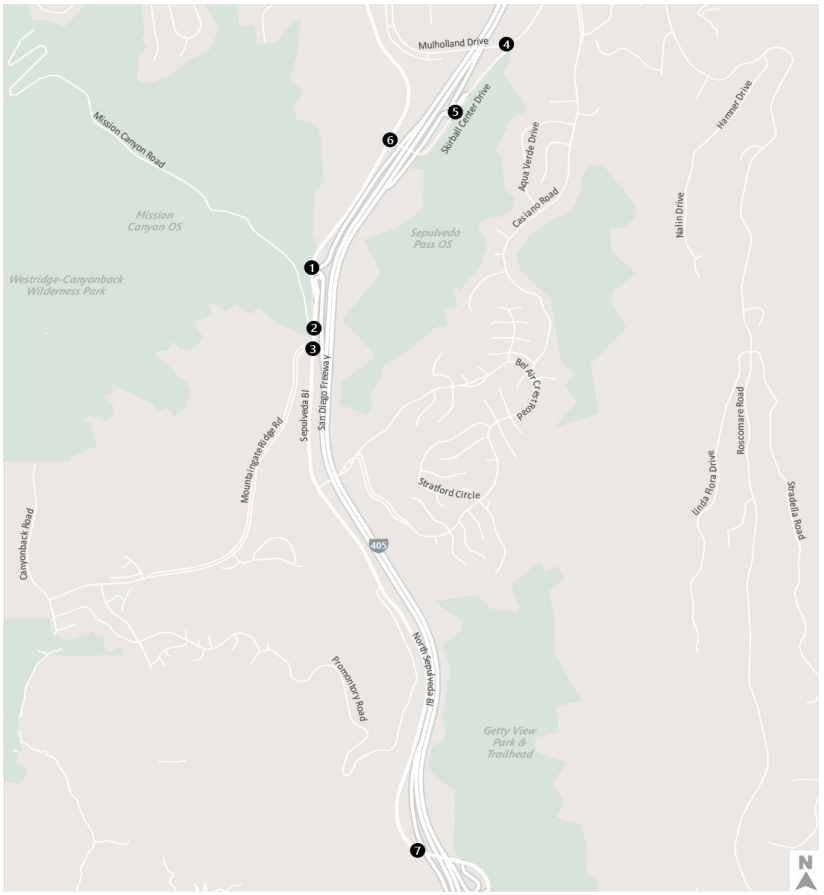


Figure 6

Weekday AM/PM Peak Hour Traffic Volumes and Lane Configurations
Baseline Conditions



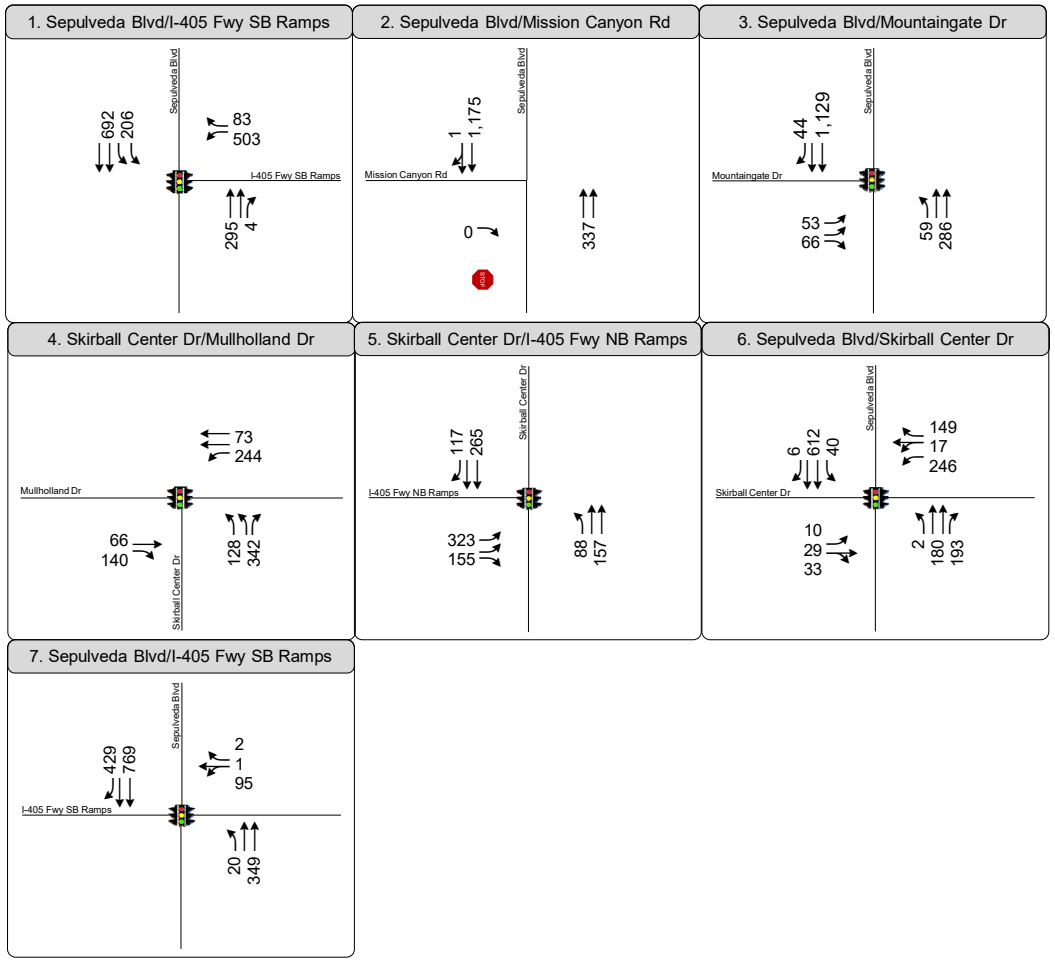


Figure 7

Weekend Midday Peak Hour Traffic Volumes and Lane Configurations
Baseline Conditions

Project Traffic

The development of peak hour vehicular traffic estimates for the Project involves the use of a three-step process: trip generation, trip distribution, and traffic assignment.

Project Trip Generation

The Project includes the development of an open space park of approximately 500 acres with a paved parking lot with approximately 103 parking spaces. Limited on-site amenities provided include picnic tables, restrooms, a 2.5-mile loop trail, a connection to existing hiking trails in the northwest area of the site, a stair climb, and landscaping. A ranger residence would be constructed near the Sepulveda Boulevard entry for use by the rangers at the project.

Trip generation rates from Trip Generation, 10th Edition (Institute of Transportation Engineers [ITE], 2017) were used to estimate the number of peak hour trips associated with the Project. In addition, counts were collected in May 2019 on the unpaved leg of the Encino Hills Drive & Mulholland Drive intersection which leads to San Vicente Mountain Park and the upper end of the Canyonback Trail. Because a trail connection would be made between the proposed Mission Canyon Park and this area, it was estimated that approximately 10% of the observed vehicle trips there would be related to two-car hikes and would begin or end in this area. This estimate is conservative because it was added to the trips estimated using ITE rates. As shown in **Table 7** and **Table 8**, the Project is expected to generate approximately 390 weekday trips, including 13 trips in the AM peak hour and 56 trips in the PM peak. On weekend days, 980 daily trips are estimated, including 146 trips in the midday peak hour. To provide conservative estimates, no reductions were made for trips made by transit or walking. Daily pedestrian trips from the surrounding communities are estimated at 5% of the daily trips, or 20 on a weekday and 49 on a weekend day.

The geographic distribution of trips generated by the Project is dependent on characteristics of the street system serving the Project site, the level of accessibility of routes to and from the proposed Project site, the availability of other large open space parks and locations of residential areas from which park visitors would be drawn. Based on these factors, it was estimated that 80% of visitors would be drawn from the south and 20% would draw from the north.

Project Traffic Assignment

The traffic to be generated by the Project was assigned to the street network using the distribution pattern described above. **Figure 8** shows the assignment of the proposed Project-generated peak hour traffic volumes to the analyzed intersections during the analyzed peak hours.

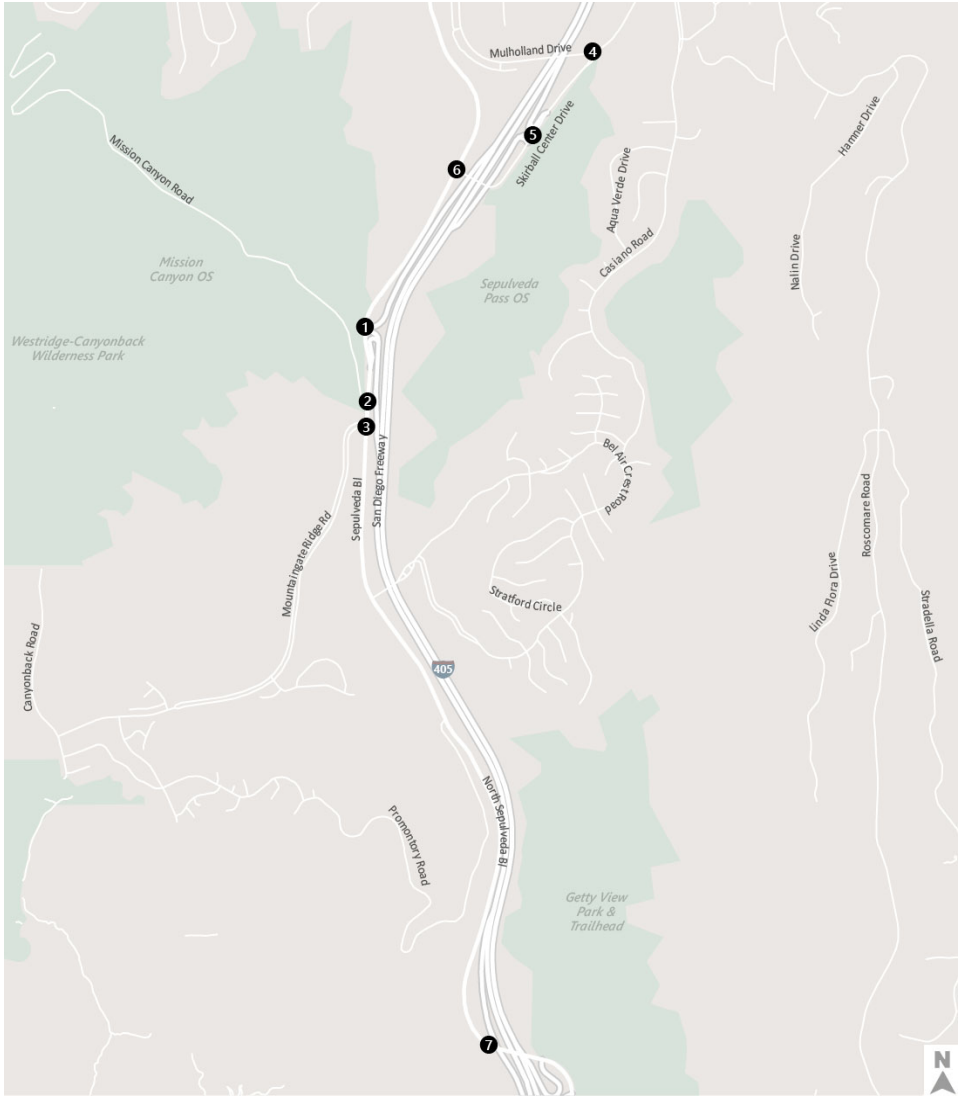
Table 7: Trip Generation Data Collection

	Location	Unit	Size	Time Period	Daily Total	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Weekday											
Counts*	Mulholland & Encino Hills			Weekday Peak Hour		**27**	19	8	**11**	8	3
ITE	LU 411	500	acres	Weekday Peak Hour (Adjacent Street)	**390**	**10**	6	4	**55**	30	25
	Location	**Unit**	**Size**	**Time Period**	**Daily Total**	**MD Total**	**MD In**	**MD Out**			
Weekend Day											
Counts*	Mulholland & Encino Hills			Saturday Peak Hour		**57**	39	18			
ITE	LU 411	500	acres	Saturday Peak Hour	**980**	**140**	77	63			

* Collected in May 2019. Assume that some of the total project-generated trips would be related to two-car hikes and would end near Mulholland & Encino Hills Drive, estimated here to be 10% of the existing recreational auto trips there.

Table 8: Project Trip Generation Estimates

Location	Unit	Size	Time Period	Daily Total	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Weekday										
Mission Canyon Park	500	acres	Weekday Peak Hour	390	**13**	8	5	**56**	31	25
Weekday Daily Pedestrian Trips (5% of daily trips)				**20**						
Location	**Unit**	**Size**	**Time Period**	**Daily Total**	**MD Total**	**MD In**	**MD Out**			
Weekend										
Mission Canyon Park	500	acres	Saturday Peak Hour	980	**146**	81	65			
Saturday Daily Pedestrian Trips (5% of daily trips)				**49**						



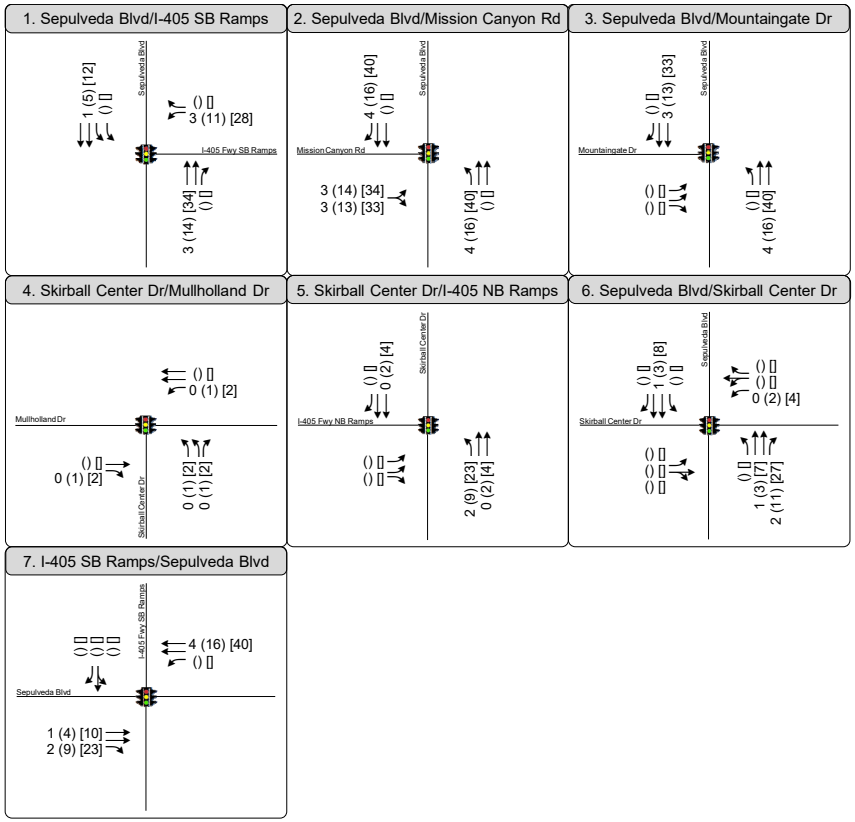


Figure 8

Project Only Peak Hour Volumes - Weekday AM (Weekday PM) [Weekday Midday]

Future Base and Future Base with Project Traffic Volumes

To evaluate the potential impacts of the Project on opening year (2022) conditions, it was necessary to develop estimates of future traffic conditions in the area both without and with Project traffic. First, estimates of traffic growth were developed for the study area to forecast future conditions without the Project. These forecasts included traffic increases as a result of both regional ambient traffic growth, estimated at 1% per year through 2022, and traffic generated by specific developments in the vicinity of the Project (related projects).

The list of related projects was prepared based on data from LADOT and verified by City Planning. A total of seven related projects were identified in the study area. Trip generation estimates provided by LADOT for the related projects are presented in **Table 9**. These projections are conservative in that they do not in every case account for either the existing uses to be removed or the possible use of non-motorized travel modes (transit, walking, etc.). The geographic distribution of the traffic generated by the related projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of the population from which employees and potential patrons may be drawn, and the location of the projects in relation to the surrounding street system and to the study intersections. Using the estimated trip generation and trip distribution patterns described above, traffic generated by the related projects was assigned to the street network. These projected traffic volumes, identified herein as the Future Base conditions and shown in **Figure 9** and **Figure 10**, represent estimated future conditions without the proposed Project.

Table 9: Related Projects Trip Generation Estimates

No.	Project ID	Project	Project Address	Land Use	Size	Unit	Daily Total	AM Total	AM In	AM Out	PM Total	PM In	PM Out
1	11877	Leo Baeck Temple	1300 N. Sepulveda	Religious	70	KSF							
				Child Care	168	Students	1,405	205	111	94	206	98	108
				Parking	539	Spaces							
2	45039	Mt St Mary's University Wellness Center	12001 Chalon Rd	University-Related Wellness	32.250	KSF	400	180	180	0	200	0	200
3	45107	Mirman School	16180 Mulholland Dr	School	395	Students	888	132	99	33	36	73	109
4	45188	Mixed-Use	16206 Ventura Bl	Mixed Use	12.880	KSF	726	72	34	38	47	28	19
5	22963	Valley Beth Shalom Preschool	115739 Ventura Bl	Preschool	259	Students	1,000	135	72	63	101	48	53
6	43389	Convenience Store	15739 Ventura Bl	Retail	2.770	KSF	721	78	38	40	48	26	22
7	n/a	Berggruen Institute	1901 N Sepulveda Bl	Mixed/Institute	322	KSF	n/a	97	82	15	57	20	37

Source: Related Projects trip generation from Los Angeles Department of Transportation (LADOT).

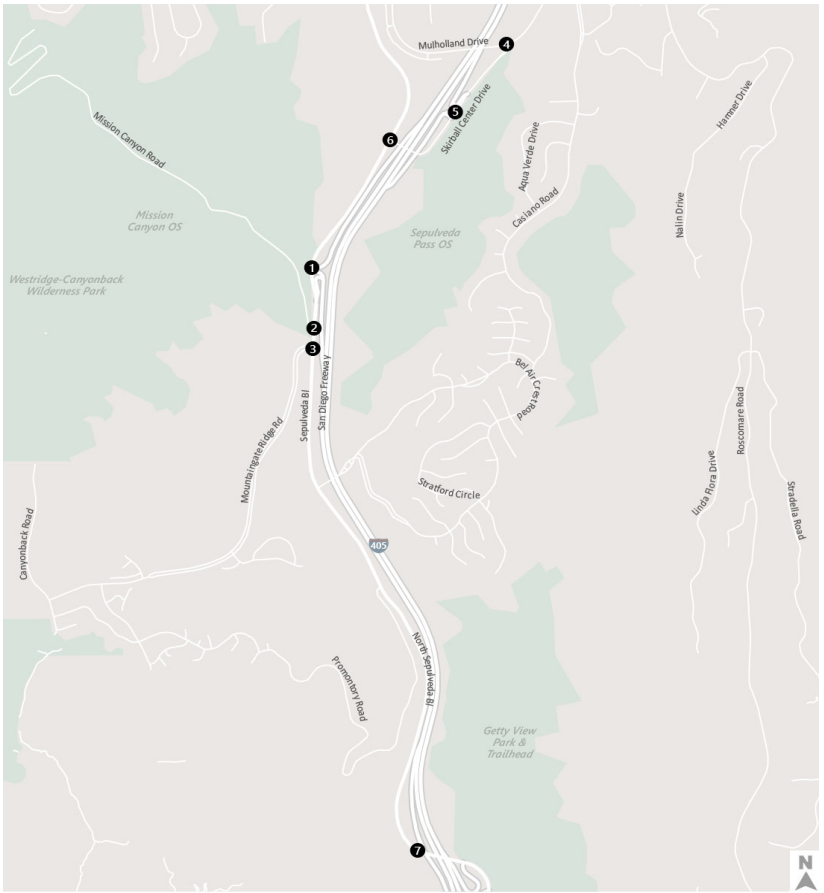
The traffic generated by the Project shown in Figure 8 was added to the Future Base No Project conditions to form the Future Base plus Project traffic volumes shown in **Figure 11** and **Figure 12**. These volumes were analyzed to determine the incremental traffic effect attributable to the Project itself.

Future Base Operational Analysis

The Future Base and Future Base plus Project peak hour traffic volumes were analyzed to determine the projected LOS and maximum queue lengths for the turn pockets and through movements for each of the analyzed intersections. Project access is considered constrained if the project's traffic would contribute to unacceptable queuing on a street classified as an Avenue or a Boulevard, at project driveway(s) or would cause or substantially extend queuing at nearby signalized intersections.

The project would be considered to contribute to unacceptable or extended queuing if the turn pocket capacity is exceeded after the addition of the project's traffic and:

1. the projected peak hour intersection LOS is D, and the turn lane queue increases by greater than 75 feet on any approach with the directional approach LOS at E or F, or
2. the projected peak hour intersection LOS is E or F, and the turn lane queue increases by greater than 50 feet on any approach with the directional approach LOS at E or F.



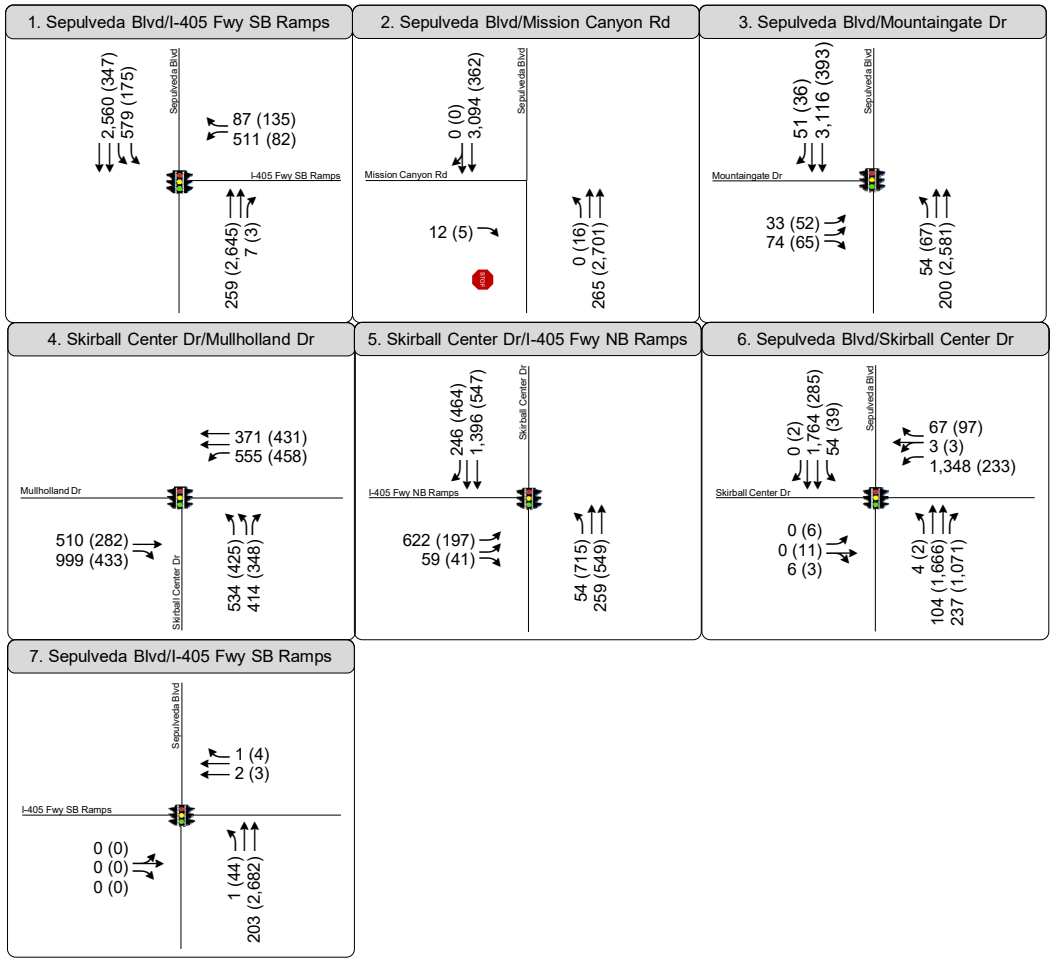
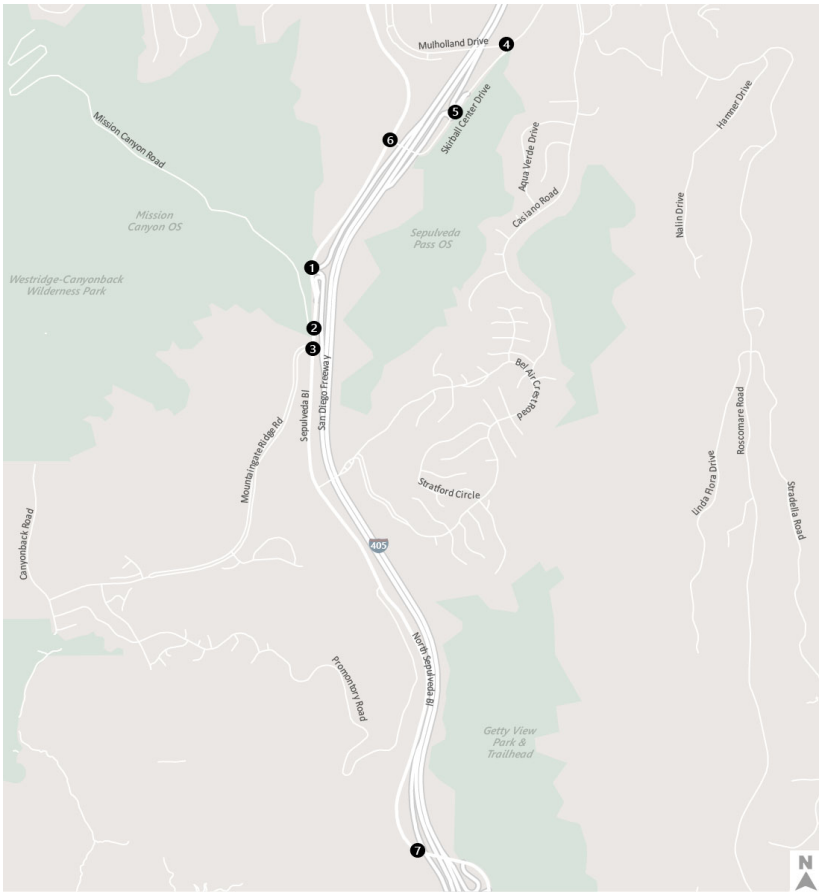


Figure 9

Weekday AM/PM Peak Hour Traffic Volumes and Lane Configurations
Future Base Conditions



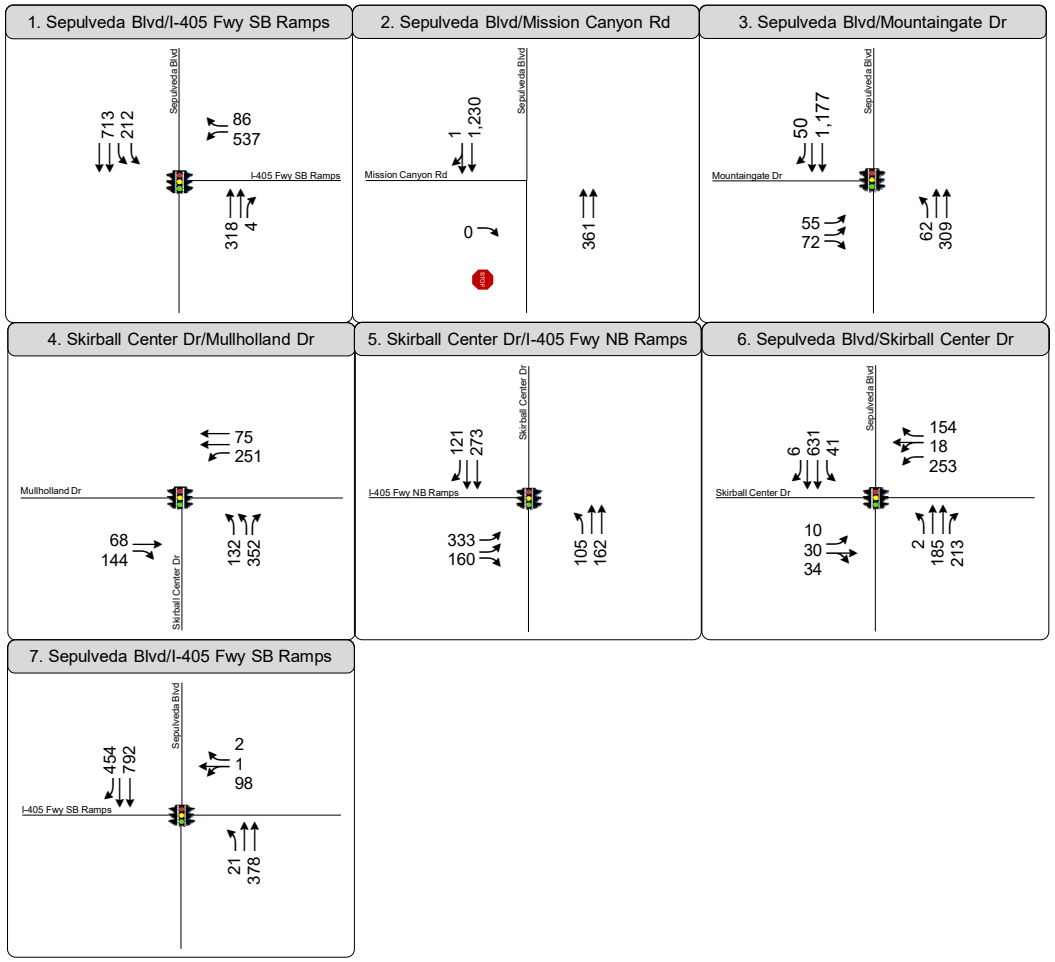
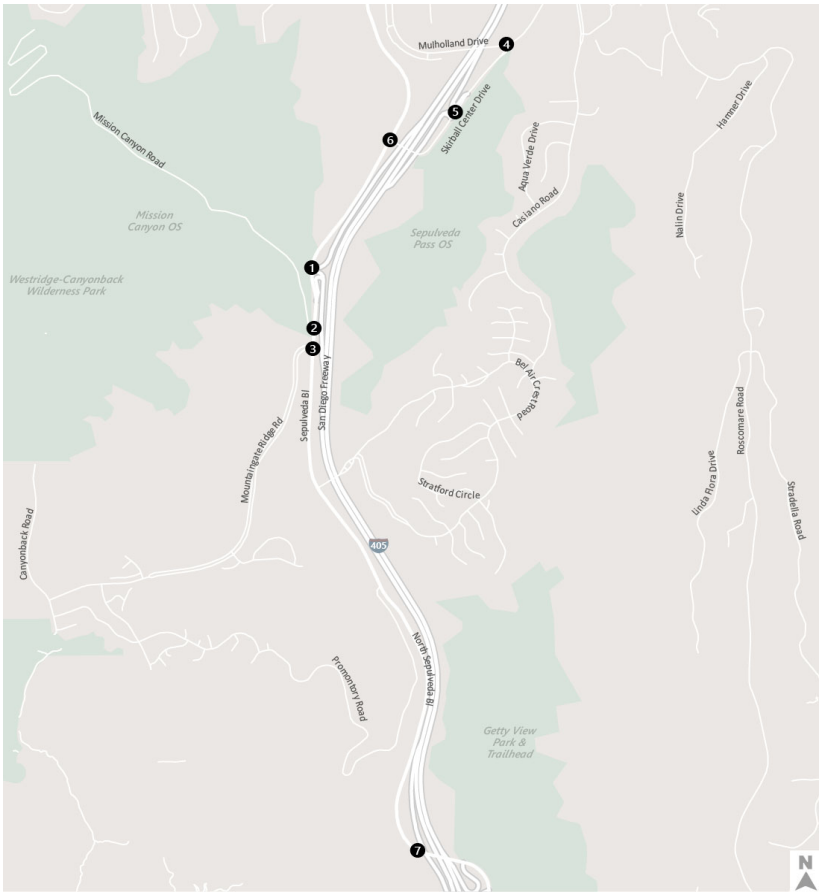


Figure 10
Weekend Midday Peak Hour Traffic Volumes and Lane Configurations
Future Base Conditions



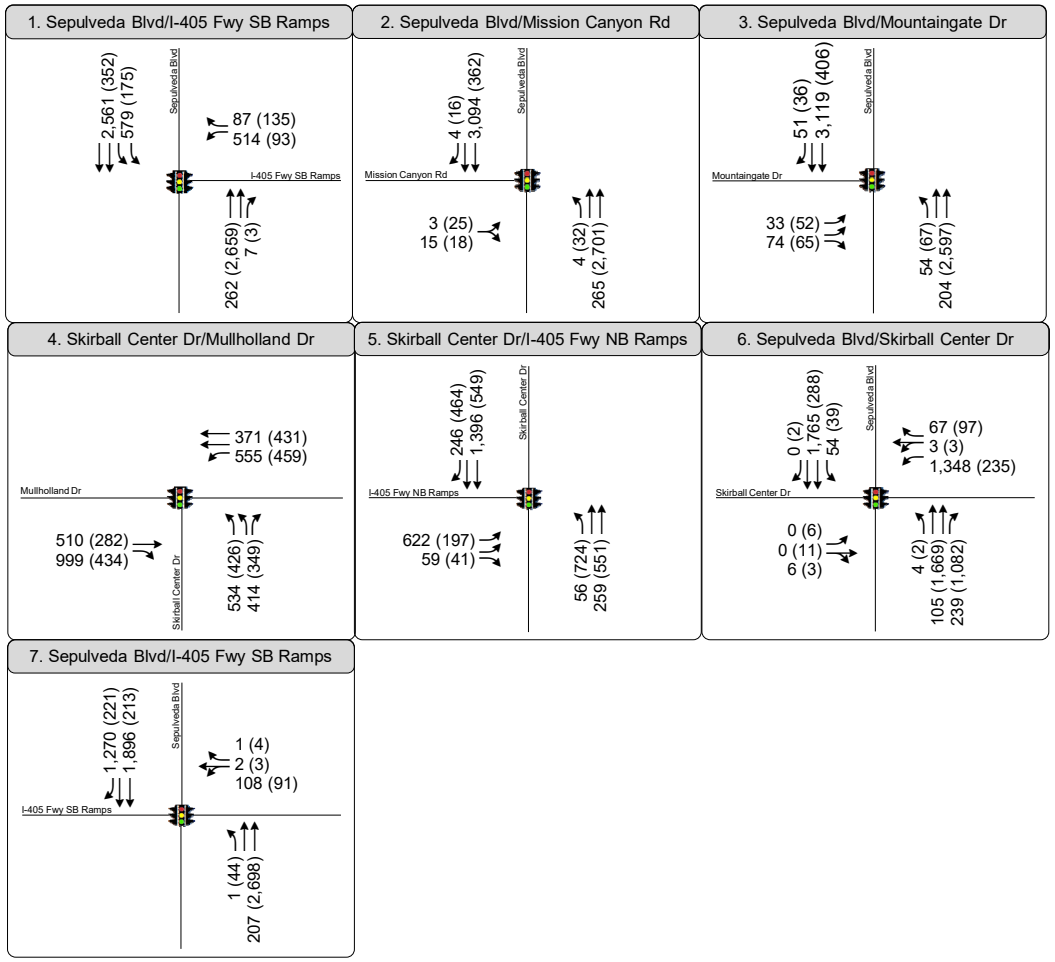
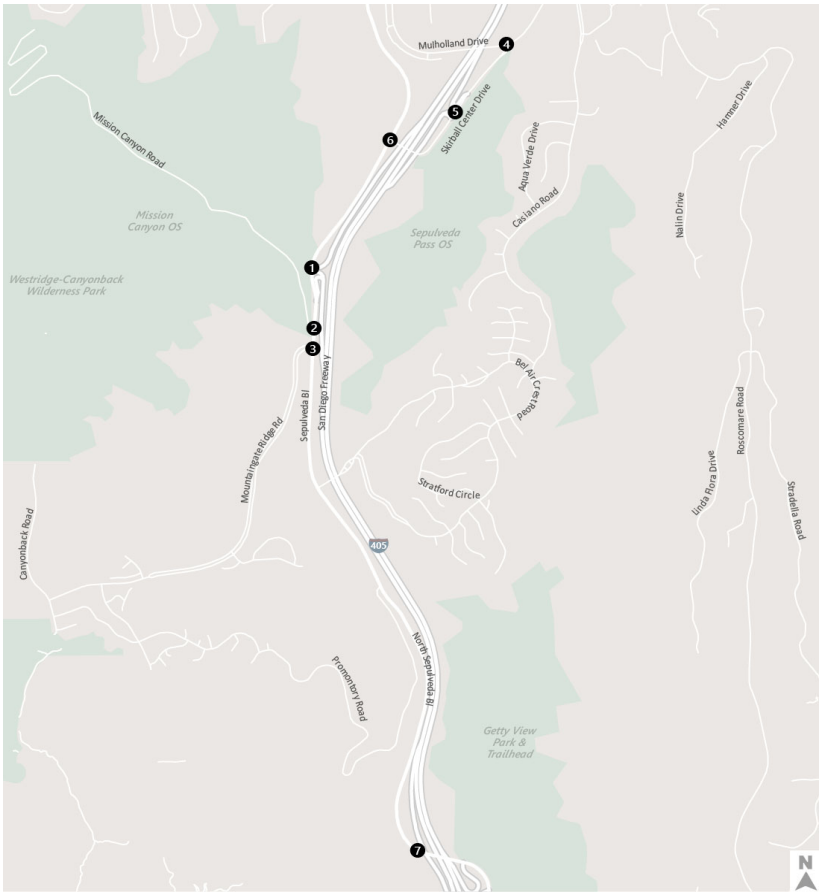


Figure 11
Weekday AM/PM Peak Hour Traffic Volumes and Lane Configurations
Future + Project Conditions



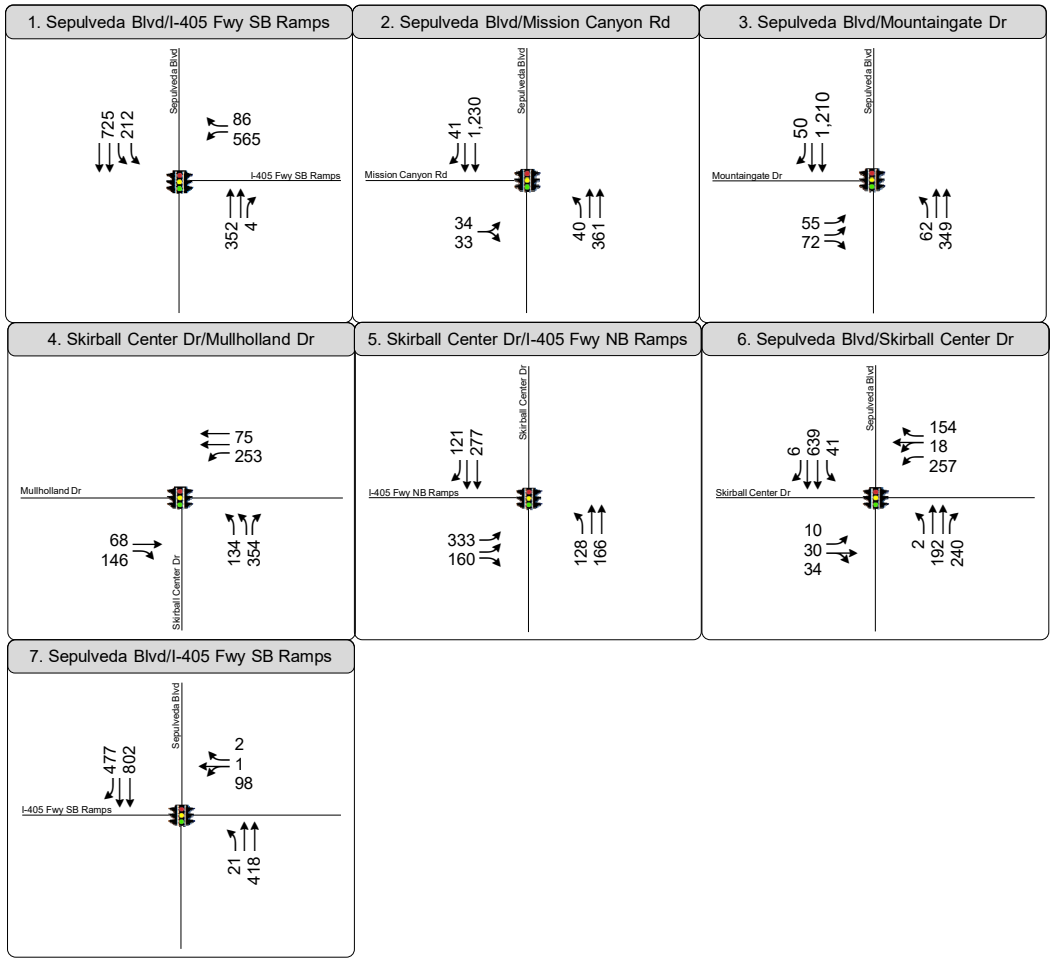


Figure 12
Weekend Midday Peak Hour Traffic Volumes and Lane Configurations
Future + Project Conditions

Table 10 summarizes the Future Base (2022) No Project and Plus Project LOS for the study intersections.

Five of the seven study intersections are projected to operate at LOS D or better during the analyzed peak hours under Future Year No Project conditions. The following signalized intersections are projected to operate at LOS E or F under both Future Base No Project conditions and Future Base plus Project conditions:

4. Skirball Center Drive & Mulholland Drive (LOS E in the AM peak hour)

6. Skirball Center Drive & Sepulveda Boulevard (LOS F in the AM peak hour)

The addition of project traffic would result in minor increases in delay at some study intersections but would not worsen the level of service, the maximum queue lengths, or approach LOS for the vehicular movements at the study intersections. Minor decreases in delay are also anticipated during certain time periods at some of the study locations. These minor improvements in delay would occur because, as part of installing a new traffic signal on the Sepulveda Boulevard at the project driveway midway between the I-405 southbound ramps intersection and the Mountaingate Drive intersection, the signal timing along Sepulveda Boulevard would be reoptimized.

As shown in **Table 11** and **Table 12**, per the City's criteria, no instances were found of the Project causing or substantially contributing to unacceptable queuing at nearby signalized intersections or at the project driveway. For this reason, no corrective conditions are proposed. Detailed intersection LOS worksheets for the study intersections are presented in **Appendix E**.

Table 10: Mission Canyon Park Project Future Base and Future Base + Project Intersection Levels of Service

#	Study Intersection	Peak Hour	Future Base		Future + Project	
			Delay	LOS	Delay	LOS
1	N Sepulveda Blvd & I-405 SB Off-Ramp	AM	27	C	24	C
		PM	29	C	32	C
		MD	26	C	21	C
2	N Sepulveda Blvd & Mission Canyon Road [a]	AM	14	B	8	A
		PM	32	D	5	A
		MD	0	A	7	A
3	N Sepulveda Blvd & Mountaingate Drive	AM	7	A	12	B
		PM	8	A	8	A
		MD	7	A	6	A
4	Skirball Center Dr & Mulholland Dr	AM	74	E	74	E
		PM	25	C	25	C
		MD	31	C	31	C
5	I-405 NB On/Off Ramps & Skirball Center Dr	AM	32	C	33	C
		PM	50	D	52	D
		MD	40	D	41	D
6	Skirball Center Dr & N Sepulveda Blvd	AM	119	F	119	F
		PM	50	D	54	D
		MD	28	C	28	C
7	I-405 SB On/Off Ramps & Sepulveda Blvd	AM	34	C	35	C
		PM	36	D	38	D
		MD	10	A	9	A

[a] Side street stop-controlled intersection under Future Base conditions and signalized with the Project. Delay reported for the future base unsignalized condition is for the stop-controlled movements only. Delay reported for the future plus project signalized condition is average across all movements.

Table 11: Opening Year (2022) No Project and Plus Project Intersection/Approach LOS and Queuing Analysis - Weekday AM and PM Peak Hours

#	Study Intersection	Future Baseline LOS				Future with Project LOS				Storage Length (feet)	Maximum Queue (feet)				Project Contributes to Unacceptable Queuing[2]	
		Intersection LOS (AM/PM)	Movement[1]	Directional LOS		Intersection LOS (AM/PM)	Movement[1]	Directional LOS			Future Baseline		Future with Project			
				AM Peak Hour	PM Peak Hour			AM Peak Hour	PM Peak Hour		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	N Sepulveda Blvd & I-405 SB Off-Ramp	C/C	WBL	D	D	C/C	WBL	D	E	1,850	425	125	475	125	-	-
			WBR	B	D		WBR	A	D	650	50	150	50	150	-	-
			NBT	B	C		NBT	C	C	700	100	1,325	125	1,325	-	-
			NBR	B	A		NBR	D	A	175	25	25	25	25	-	-
			SBL	D	D		SBL	C	D	450	200	125	200	125	-	-
			SBT	C	A		SBT	B	A	1,675	925	25	725	25	-	-
2	N Sepulveda Blvd & Mission Canyon Road	-	EBL	-	-	A/A	EBL	D	E	525	-	-	25	75	-	-
			EBR	-	-		EBR	0	0	0	-	-	0	0	-	-
			NBL	-	-		NBL	D	E	100	-	-	25	50	-	-
			NBT	-	-		NBT	A	A	225	-	-	25	75	-	-
			SBT	-	-		SBT	A	A	700	-	-	1,125	75	-	-
			SBR	-	-		SBR	A	A	150	-	-	25	25	-	-
3	N Sepulveda Blvd & Mountaingate Drive	A/A	EBL	D	E	B/A	EBL	D	E	1,125	25	50	25	50	-	-
			EBR	D	D		EBR	D	D	400	50	50	50	50	-	-
			NBL	E	E		NBL	E	E	150	75	100	75	100	-	-
			NBT	A	A		NBT	A	A	1,575	25	475	25	475	-	-
			SBT	A	A		SBT	B	A	225	1,125	75	1,150	25	-	-
			SBR	A	A		SBR	A	A	225	25	25	25	25	-	-
4	Skirball Center Dr & Mulholland Dr	E/C	EBT	D	D	E/C	EBT	D	D	850	500	275	500	275	-	-
			EBR	C	B		EBR	C	B	850	1,025	225	1,025	225	-	-
			WBL	F	C		WBL	F	C	450	850	625	850	625	-	-
			WBT	A	A		WBT	A	A	1,000	75	100	75	100	-	-
			NBL	D	D		NBL	D	D	1,075	250	200	250	200	-	-
			NBR	C	B		NBR	C	B	225	225	50	225	50	-	-
5	I-405 NB On/Off Ramps & Skirball Center Dr	C/D	EBL	E	E	C/D	EBL	E	E	325	425	175	425	175	-	-
			EBR	D	B		EBR	D	B	50	75	25	75	25	-	-
			NBL	F	F		NBL	F	F	375	125	1,425	125	1,450	-	-
			NBT	A	A		NBT	A	A	650	75	100	75	100	-	-
			SBT	C	D		SBT	C	D	1,075	775	275	775	300	-	-
			SBR	A	C		SBR	A	C	200	25	425	25	425	-	-

#	Study Intersection	Future Baseline LOS				Future with Project LOS				Storage Length (feet)	Maximum Queue (feet)				Project Contributes to Unacceptable Queuing[2]	
		Intersection LOS (AM/PM)	Movement[1]	Directional LOS		Intersection LOS (AM/PM)	Movement[1]	Directional LOS			Future Baseline		Future with Project			
				AM Peak Hour	PM Peak Hour			AM Peak Hour	PM Peak Hour		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
6	Skirball Center Dr & N Sepulveda Blvd	F/D	EBL	0	E	F/D	EBL	0	E	0	0	25	0	25	-	-
			EBT	E	E		EBT	E	E	375	25	50	25	50	-	-
			EBR	0	0		EBR	0	0	0	0	0	0	0	-	-
			WBL	F	D		WBL	F	D	400	1,050	150	1,050	150	-	-
			WBT	F	D		WBT	F	D	400	1,075	150	1,075	150	-	-
			WBR	C	C		WBR	C	C	275	25	25	25	25	-	-
			NBL	C	B		NBL	C	B	150	25	25	25	25	-	-
			NBT	B	F		NBT	B	F	200	75	1,150	75	1,150	-	-
			NBR	A	B		NBR	A	B	200	25	350	25	375	-	-
			SBL	E	D		SBL	E	D	225	100	75	100	75	-	-
			SBT	D	B		SBT	D	B	525	1,050	100	1,050	100	-	-
			SBR	0	0		SBR	0	0	0	0	0	0	0	-	-
7	I-405 SB On/Off Ramps & Sepulveda Blvd	C/D	WBT	D	D	C/D	WBT	D	D	725	150	150	150	150	-	-
			WBR	D	D		WBR	D	D	725	25	25	25	25	-	-
			NBL	E	E		NBL	E	E	200	25	75	25	75	-	-
			NBT	A	D		NBT	A	D	525	50	1,475	50	1,500	-	-
			SBT	B	A		SBT	B	A	1,075	775	75	775	75	-	-
			SBR	E	A		SBR	E	A	100	1,475	50	1,475	50	-	-

Notes:
1 Eastbound left, Eastbound through, Eastbound right, Westbound left, Westbound through, Westbound right, Northbound left, Northbound through, Northbound right, Southbound left, Southbound through, Southbound right.
2 Unacceptable queuing defined by the TAG as turning queues that extend out of the storage bay or a through queue that blocks a side street or alley along an Avenue or Boulevard at a signalized intersection.

Table 12: Opening Year (2022) No Project and Plus Project Intersection/Approach LOS and Queuing Analysis - Weekend Midday Peak Hour

#	Study Intersection	Future Baseline LOS			Future with Project LOS			Storage Length (feet)	Maximum Queue (feet)		Project Contributes to Unacceptable Queuing[2]
		Intersection LOS (WD)	Movement[1]	Directional LOS	Intersection LOS (WD)	Movement[1]	Directional LOS		Future Baseline	Future with Project	
				WD Peak Hour			WD Peak Hour		WD Peak Hour	WD Peak Hour	WD Peak Hour
1	N Sepulveda Blvd & I-405 SB Off-Ramp	C	WBL	D	C	WBL	D	1,850	525	425	-
			WBR	B		WBR	A	650	75	50	-
			NBT	B		NBT	B	700	100	100	-
			NBR	B		NBR	B	175	25	25	-
			SBL	D		SBL	C	450	100	100	-
			SBT	A		SBT	A	1,675	125	175	-
2	N Sepulveda Blvd & Mission Canyon Road	A	EBL	#N/A	A	EBL	D	525	#N/A	75	-
			EBR	#N/A		EBR	0	0	#N/A	0	-
			NBL	#N/A		NBL	D	100	#N/A	50	-
			NBT	#N/A		NBT	A	225	#N/A	25	-
			SBT	#N/A		SBT	A	700	#N/A	350	-
			SBR	#N/A		SBR	A	150	#N/A	25	-
3	N Sepulveda Blvd & Mountaingate Drive	A	EBL	D	A	EBL	D	1,125	50	50	-
			EBR	D		EBR	D	400	50	50	-
			NBL	D		NBL	D	150	75	75	-
			NBT	A		NBT	A	1,575	25	25	-
			SBT	A		SBT	A	225	150	50	-
			SBR	A		SBR	A	225	25	25	-
4	Skirball Center Dr & Mulholland Dr	C	EBT	B	C	EBT	B	850	75	75	-
			EBR	A		EBR	A	850	25	25	-
			WBL	D		WBL	D	450	275	275	-
			WBT	A		WBT	A	1,000	25	25	-
			NBL	D		NBL	D	1,075	100	100	-
			NBR	C		NBR	C	225	75	75	-
5	I-405 NB On/Off Ramps & Skirball Center Dr	D	EBL	E	D	EBL	E	325	275	275	-
			EBR	D		EBR	D	50	125	125	-
			NBL	F		NBL	F	375	200	225	-
			NBT	A		NBT	A	650	50	50	-
			SBT	A		SBT	A	1,075	100	100	-
			SBR	A		SBR	A	200	25	25	-

#	Study Intersection	Future Baseline LOS			Future with Project LOS			Storage Length (feet)	Maximum Queue (feet)		Project Contributes to Unacceptable Queuing[2]
		Intersection LOS (WD)	Movement[1]	Directional LOS	Intersection LOS (WD)	Movement[1]	Directional LOS		Future Baseline	Future with Project	
				WD Peak Hour			WD Peak Hour		WD Peak Hour	WD Peak Hour	WD Peak Hour
6	Skirball Center Dr & N Sepulveda Blvd	C	EBL	E	C	EBL	E	50	50	50	-
			EBT	E		EBT	E	375	100	100	-
			EBR	0		EBR	0	0	0	0	-
			WBL	E		WBL	E	400	225	225	-
			WBT	E		WBT	E	400	225	225	-
			WBR	D		WBR	D	275	50	50	-
			NBL	B		NBL	B	150	25	25	-
			NBT	B		NBT	B	200	100	100	-
			NBR	A		NBR	A	200	25	25	-
			SBL	E		SBL	E	225	100	100	-
			SBT	A		SBT	A	525	200	225	-
			SBR	0		SBR	0	0	0	0	-
7	I-405 SB On/Off Ramps & Sepulveda Blvd	A	WBT	E	A	WBT	E	725	150	150	-
			WBR	D		WBR	D	725	25	25	-
			NBL	E		NBL	E	200	50	50	-
			NBT	A		NBT	A	525	75	75	-
			SBT	A		SBT	A	1,075	200	200	-
			SBR	A		SBR	A	100	150	150	-

Notes:
1 Eastbound left, Eastbound through, Eastbound right, Westbound left, Westbound through, Westbound right, Northbound left, Northbound through, Northbound right, Southbound left, Southbound through, Southbound right.
2 Unacceptable queuing defined by the TAG as turning queues that extend out of the storage bay or a through queue that blocks a side street or alley along an Avenue or Boulevard at a signalized intersection.

4.2 Project Construction

This section assesses whether the construction of the Project would interfere with the pedestrian, bicycle, transit, or vehicle circulation and accessibility, considering three categories of construction impacts per the LADOT TAG: (1) temporary transportation constraints, (2) temporary loss of access, and (3) temporary loss of bus stops or rerouting of bus lines.

Construction of the Project would include site preparation, demolition, grading, construction, and landscaping. A laydown yard would be created on-site for all construction activities, including worker parking. The Project would require minor grading of the site and minor trenching for the installation of utilities. A majority of the soil that would be removed as a part of these activities would be replaced on-site however it is anticipated that a moderate amount of soil will be removed from the site, which would be disposed of at appropriate waste facilities.

The existing truck scales and relocatable buildings on the site would be removed, deteriorated asphalt paving in the existing parking lot would be removed and replaced with new asphalt and/or road base. Landscaping, trees, and limited lighting fixtures would be provided throughout the updated parking area. Water tanks would be installed at two locations within the park and the existing perimeter fencing may be supplemented and expanded. No additional improvements or public access from Mulholland Drive would be provided. A single-story bungalow style trailer would be installed near the parking lot for use as a ranger residence. A formal entrance gate would replace the gate that is currently located in the southern access to the site. The existing driveway would be improved and realigned, and a traffic signal would be installed where it intersects with Sepulveda Boulevard, as shown conceptually in Figure 2. Site access improvements are the only element of the project that would require in-street construction. The design of the driveway and signal are subject to refinement as the review process continues with LADOT. Construction is planned to be completed in 2022.

Construction vehicles would access the site via the existing driveway on Sepulveda Boulevard, which provides access to the regional freeway system via nearby interchanges with I-405. The Los Angeles County Municipal Code prohibits construction noise on Sundays, holidays, and between the hours of 7:00 PM and 7:00 AM Monday through Friday. The City of Los Angeles Municipal Code (LAMC Section 41.40) provides that construction activities are limited to the hours from 7:00 AM to 9:00 PM on weekdays and from 8:00 AM to 6:00 PM on Saturdays and holidays. No construction is permitted on Sundays.

Construction Period Evaluation Criteria

The LADOT TAG provides three categories to be considered in regard to in-street construction effects: temporary traffic constraints, temporary loss of access, and temporary loss of bus stops or rerouting of bus lines. The evaluation criteria to be considered in each of these categories are as follows:

- Temporary Traffic Constraints:
    - The length of time of temporary street closures or closures of two more traffic lanes;
    - The classification of the street (major arterial, state highway, substandard hillside local or collector, etc.) affected;
    - The existing congestion levels on the affected street segments and intersections;
    - The operational constraints of substandard hillside streets needing to access construction sites;
    - Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;
    - Potential safety issues involved with street or lane closures;
    - The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.
- Temporary Loss of Access:
    - The length of time of any loss of pedestrian or bicycle circulation past a construction area;
    - The length of time of any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area;
    - The length of time any loss or impedance of access by emergency vehicles or area residents to hillside properties;
    - The length of time of any loss of ADA pedestrian access to a transit station, stop, or facility;
    - The availability of nearby vehicular or pedestrian access within ¼ mile of the lost access;
    - The type of land uses affected, and related safety, convenience, and/or economic issues.
- Temporary Loss of Bus Stops or Rerouting of Bus Lines:
    - The length of time that an existing bus stop would be unavailable or that existing service would be interrupted;
    - The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated;
    - The existence of other bus stops or routes with similar routes/destinations within a ¼ mile radius of the affected stops or routes;
    - Whether the interruption would occur on a weekday, weekend, or holiday, and whether the existing bus route typically provides service that/those day(s).

Construction Analysis

The assessment of the Project against the evaluation factors described above is presented in **Table 13** and discussed below.

Temporary Traffic Constraints

Long-term closures to travel lanes are not anticipated to occur during the construction of the Project. Most of the construction activities would occur within the project site away from Sepulveda Boulevard. During construction of the improvements to the existing driveway to the site and the installation of the planned traffic signal, it will be necessary at times to close one of the two southbound lanes on Sepulveda Boulevard. Closure of northbound lanes is not anticipated. The existing controller for the traffic signal at Sepulveda Boulevard & Mountaingate Drive is located on the southwest corner of that intersection. Short-term lane closures would likely be necessary at that intersection to install conduit and connections to the proposed signal at the project driveway, but at least one lane would be maintained for traffic. While there are no sidewalks on this segment of Sepulveda Boulevard, the area where work would occur includes an unpaved path along the west side of the street that can be used by pedestrians. Sepulveda Boulevard is classified as an Avenue II.

The intersection south of the planned improvement, Sepulveda Boulevard & Mountaingate Drive, currently operates at LOS A during the analyzed peak hours and is projected to operate at LOS B during AM peak period in the Future Base and LOS A in other peak hours. The intersection to the north, Sepulveda Blvd & I-405 SB Off-Ramp, currently operates at LOS C in the analyzed peak hours and is projected to continue operating at LOS C. Worksite traffic control plans would be prepared for any temporary vehicle lane, bicycle lane, or sidewalk closures in accordance with applicable City and Manual of Uniform Traffic Control Devices (MUTCD) guidelines.

Temporary Loss of Access

No active land uses are located close to the construction site on Sepulveda Boulevard. Mountaingate Drive leads to a residential community and would remain open throughout construction. Prior to construction, the existing use of the site by the Los Angeles Department of Water and Power would be discontinued, and so would be unaffected. The worksite traffic control plans would accommodate pedestrian and bicycle trips through the construction zone. It is expected that one of two southbound travel lanes would remain open at all times during construction. No loss of ADA pedestrian access to a transit stop, station, or facilities is anticipated. On-street parking is not permitted on Sepulveda Boulevard in this area.

Temporary Loss of Bus Stops or Rerouting of Bus Lines

The closest bus stops to the location where in-street construction would occur are located immediately south of Sepulveda Boulevard & Mountaingate Drive. Construction will not affect these bus stops, due to their location. Buses and other traffic operating on Sepulveda Boulevard would be subject to temporary delays at times while improvements are made to the project driveway. The Project construction would not require relocation of bus stops or rerouting of bus lines.

Table 13: Mission Canyon Park Project Construction Evaluation

Evaluation Criteria	Assessment
Temporary Traffic Constraints:	
• The length of time of temporary street closures or closures of two or more traffic lanes;	• Temporary street closures or closures of two or more traffic lanes are not anticipated. During the construction of the improvements to the existing driveway to the site and the installation of the planned traffic signal, it will be necessary to close one of the two southbound lanes on Sepulveda Boulevard.
• The classification of the street (major arterial, state highway, substandard hillside local or collector, etc.) affected;	• Sepulveda Boulevard is classified as a Boulevard II.
• The existing congestion levels on the affected street segments and intersections;	• The intersection south of the planned improvement, Sepulveda Boulevard & Mountaingate Drive, currently operates at LOS A during the analyzed peak hours and is projected to operate at LOS B during AM peak period in the Future Base and LOS A in other peak hours. The intersection to the north, Sepulveda Blvd & I-405 SB Off-Ramp, currently operates at LOS C in the analyzed peak hours and is projected to continue operating at LOS C.
• The operational constraints of substandard hillside streets needing to access construction sites;	• The construction site is not located in a hillside area.
• Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;	• The affected street, Sepulveda Boulevard, leads directly to a freeway on- or off-ramp to southbound I-405, located less than 1,000 feet to the north of the location where driveway improvements would be made.
• Potential safety issues involved with street or lane closures;	• Worksite traffic control plans would be prepared for any temporary closures of travel lanes and bicycle lanes in accordance with applicable City and MUTCD guidelines and would allow for pedestrian and cyclist travel to be maintained.
• The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.	• There are no emergency services located within the immediate vicinity of the affected streets.

Evaluation Criteria	Assessment
Temporary Loss of Access:	
• The length of time of any loss of pedestrian or bicycle circulation past a construction area; • The length of time of any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area; • The length of time of any loss of ADA pedestrian access to a transit station, stop, or facility; • The availability of nearby vehicular or pedestrian access within ¼ mile of the lost access; • The length of time any loss or impedance of access by emergency vehicles or area residents to hillside properties; • The type of land uses affected, and related safety, convenience, and/or economic issues.	• One southbound lane of Sepulveda Boulevard would be closed at times during the construction of the proposed improvements to the site driveway and the installation of a traffic signal. The existing controller located on the southwest corner of Sepulveda Boulevard & Mountaingate Drive would be interconnected with the proposed signal at the site driveway. Short-term lane closures at that intersection would likely be necessary to install conduit and connections to the proposed signal at the project driveway. • There is no existing sidewalk where the in-street work is proposed, so there would be no loss of ADA pedestrian access to a transit station, stop, or facility. Pedestrian travel along the west side of Sepulveda Boulevard occurs on an unpaved area outside the roadway, and the ability of pedestrians to pass there would be maintained during construction as an element of the worksite traffic control plan. • There is no anticipated loss of access for emergency vehicles.
Temporary Loss of Bus Stops or Rerouting of Bus Lines:	
• The length of time that an existing bus stop would be unavailable or that existing service would be interrupted; • The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated; • The existence of other bus stops or routes with similar routes/ destinations within a ¼mile radius of the affected stops or routes; • Whether the interruption would occur on a weekday, weekend, or holiday, and whether the existing bus route typically provides service that/those day(s).	• The closest bus stops to the location where in-street construction would occur are located immediately south of Sepulveda Boulevard & Mountaingate Drive. Construction will not affect these bus stops, due to their location. Buses and other traffic operating on Sepulveda Boulevard would be subject to temporary delays at times while improvements are made to the project driveway. The Project construction would not require relocation of bus stops or rerouting of bus lines.

Construction Traffic Management Plan

A Construction Traffic Management Plan will be developed by the contractor and approved by the City of Los Angeles to alleviate construction period impacts. Due to the proximity of a freeway interchange on southbound I-405, coordination with Caltrans will also be necessary, but no work within the State right-of-way is anticipated. The Construction Traffic Management Plan may include but would not be limited to the following measures:

- Define the on-site construction laydown area. All vehicular access to the Project site will be from Sepulveda Boulevard.
- Identify suitable locations for worker parking within the project site or at approved off-site locations. Prohibit parking by construction worker personal vehicles on Mountaingate Drive.
- Actively promote carpooling and transit use among workers.
- Schedule deliveries and pick-ups of construction materials during non-peak travel periods to the extent possible.
- Identify appropriate haul routes for delivery trucks.
- Provide flagmen or temporarily control pedestrian and vehicular traffic adjacent to properties during departure and arrival of trucks, and during periods of equipment movement.
- Leave equipment on-site overnight to the extent feasible.
- Because temporary closure of one southbound travel lane on Sepulveda Boulevard adjacent to the project site and at the intersection of Sepulveda Boulevard & Mountaingate Drive is anticipated, a Worksite Traffic Control Plan, approved by the City, should be implemented to route vehicular traffic, bicyclists, and pedestrians around and through any such closures. Maintain at least one travel lane at all times.
- To the extent possible, limit any lane closures to occur outside of the AM peak travel period when the predominant flow of traffic is southbound.
- Coordinate with Metro and emergency service providers in advance of any lane closures to ensure.

5. Summary and Conclusions

This study was undertaken to analyze the potential transportation impacts of the Mission Canyon Park Project. The following summarizes the results of this analysis:

- The Project as analyzed in this study involves the development of an open space park of approximately 500 acres. The park would include a loop trail, a trail connection to the Canyonback Trail, picnic areas, a stair climb, a restroom, a paved parking lot, and a residence for use by a park ranger. Landscaping and perimeter fencing would also be installed.
- The project location is on the west side of the Sepulveda Pass approximately one mile south of Mulholland Drive. The existing driveway serving the site would be widened, realigned, repaved, and signalized to allow all turns into and out of the site. A northbound left-turn lane and a southbound right-turn lane would be provided on Sepulveda Boulevard. The existing gated maintenance road on Mulholland Drive would continue to be used only by authorized vehicles.
- The Project features, location, and design would be consistent with all of the reviewed City plans, programs, ordinances, and policies that support alternative transportation and have been adopted to protect the environment.
- Based on the Project's land use and location, the Project is projected to have a less than significant VMT impact.
- The Project is not projected to substantially increase hazards, conflicts, or preclude City action to fulfill or implement projects associated with surrounding transportation networks and will contribute to overall walkability through enhancements to the Project Site and streetscape. Therefore, the Project is expected to have a less than significant impact.
- The Project is not expected to have a direct or indirect effect that would lead to removal, modification, or degradation of pedestrian, bicycle, or transit facilities.
- The site circulation and access assessment includes analysis of seven intersections. Six of the intersections currently operate under signal control. The remaining stop-controlled intersection is proposed to be signalized to provide improved access to the site. The HCM methodology was used for signalized and unsignalized intersections.
- The Project is projected to generate an estimated net increase of approximately 390 vehicle trips on a weekday, including 13 in the AM peak hour and 55 in the PM peak hour. Weekend daily trip generation is estimated to be 980 trips, including 146 in the midday during the PM peak hour.
- Per the City's criteria, no instances were found of the Project causing or substantially contributing to unacceptable queuing at nearby signalized intersections or on key movements accessing the Project driveway on Sepulveda Boulevard.
- A construction traffic management plan will be prepared, and a discussion of construction considerations did not identify substantial interference of Project construction activity on the surrounding circulation system.

References

Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis, Transportation Research Board, 2010

2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, Southern California Association of Governments, April 2016

City of Los Angeles Municipal Code

Transportation Assessment Guidelines, Los Angeles Department of Transportation,2020

Trip Generation, 10th Edition, Institute of Transportation Engineers, 2017

City of Los Angeles, Mobility Plan 2035, An Element of the General Plan, last amended September 7, 2016

The Citywide General Plan Framework (Envicom, adopted by City Council on December 11, 1996, re-adopted on August 8, 2001)

Brentwood-Pacific Palisades Community Plan, 1998

Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment (May 9, 2016, PlaceWorks)

Report for the National Park Service on Results of the 2018 Visitor Survey and Visitor Count in the Santa Monica Mountains National Recreation Area (UCLA Luskin Center for Innovation, 2020)

Plan for a Healthy Los Angeles: A Health and Wellness Element of the General Plan (Los Angeles Department of City Planning, 2015)

Appendix A:
Memorandum of Understanding

Transportation Assessment Memorandum of Understanding (MOU)

This MOU acknowledges that the Transportation Assessment for the following Project will be prepared in accordance with the latest version of LADOT's Transportation Assessment Guidelines:

I. Project Information

Project Name: Mission Canyon Park Project

Project Address: 2301 N. Sepulveda Boulevard, Los Angeles, CA 90049

Project Description: See Attachment 1

See Attachment 1

Other

LADOT Project Case Number: WLA17-106507 Project Site Plan attached? *(Required)* ☑ Yes ☐ No

II. Transportation Demand Management (TDM) Measures

Provide any transportation demand management measures that are being considered where the eligibility needs to be verified in advance (e.g. bike share kiosks, unbundled parking, microstransit service, etc.). Note that LADOT staff will make the final determination if TDM measures eligibility for a particular project. Please confirm eligibility with the LADOT Planning and Bureau staff assigned to your project.

1 _____ 3 _____

2 _____ 4 _____

Select any TDM measures that are currently being considered that may be eligible as a Project Design Feature[1]:

☐	Reduced Parking Supply[2]
☐	Bicycle Parking and Amenities
☐	Parking Cash Out

III. Trip Generation

Trip Generation Rate(s) Source: ITE 10th Edition / Other LU 411 & Counts Data

Trip Generation Adjustment *(Exact amount of credit subject to approval by LADOT)*	**Yes**	**No**
Transit Usage	☐	☑
Existing Active or Previous Land Use	☐	☑
Internal Trip	☐	☑
Pass-By Trip	☐	☑
Transportation Demand Management (See above)	☐	☑

Trip generation table including a description of the existing and proposed land uses, rates, estimated morning and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc. attached? *(Required)* ☑ Yes ☐ No

See Attachment 3

	IN	OUT	TOTAL
AM Trips			
PM Trips			

NET Daily Vehicle Trips (DVT)
____ DVT (ITE __ ed.)
____ DVT (VMT Calculator ver. __)

[1] At this time Project Design Features are only those measures that are also shown to be needed to comply with a local ordinance, affordable housing incentive program, or state law.

[2] Select if reduced parking supply is pursued as a result of a parking incentive as permitted by the City's Bicycle Parking Ordinance, State Density Bonus Law, or a the City/s Transit Oriented ted Community Guidelines.

IV. Study Area and Assumptions

Project Buildout Year: 2022 Ambient Growth Rate: 1% % Per Yr. See Attachment 4

Related Projects List, researched by the consultant and approved by LADOT, attached? *(Required)* ☑ Yes ☐ No

STUDY INTERSECTIONS and/or STREET SEGMENTS *(May be subject to LADOT revision after access, safety and circulation evaluation)*

1 See Attachment 5 3 _____

2 _____ 4 _____

Is this Project located on a street within the High Injury Network? ☐ Yes ☑ No

V. ACCESS ASSESSMENT

a. Does the project exceed 1,000 total DVT? ☐ Yes ☑ No
b. Is the project's frontage 250 linear feet or more along an Avenue or Boulevard as classified by the City's General Plan? ☑ Yes ☐ No
c. Is the project's building frontage encompassing an entire block along an Avenue or Boulevard as classified by the City's General Plan? ☐ Yes ☑ No

If questions a., b., or c. is Yes then complete **Attachment C.1: Access Assessment Criteria**.

VI. SITE PLAN and map of Study Area

Does the attached site plan or map of study area show	Yes	No	Not Applicable	
Each study intersection and/or street segment	☐	☑	☐	Attachment 5
Project Vehicle Peak Hour trips at each study intersection	☐	☑	☐	Attachment 6
Project Vehicle Peak Hour trips at each project access point	☐	☑	☐	Attachment 6
Project driveways (show widths and directions or lane assignment)	☐	☑	☐	Attachment 7
Pedestrian access points and any pedestrian paths	☐	☑	☐	Attachment 8A
Pedestrian loading zones	☐	☑	☐	
Delivery loading zone or area	☐	☐	☑	
Bicycle parking onsite	☑	☐	☐	Attachment 2
Bicycle parking offsite (in public right-of-way)	☐	☐	☑	

VII. Contact Information

	CONSULTANT	DEVELOPER
Name:	Fehr & Peers (Netai Basu)	Mtns Conservancy & Recreation Authority
Address:	600 Wilshire Bl, Los Angeles CA 90017	570 W. Avenue 26, Suite 100 Los Angeles, CA 90065
Phone Number:	213-261-3050	323-221-9944
E-Mail:	n.basu@fehrandpeers.com	publicaffairs@mrca.ca.gov

Approved by:	x Netai Basu	1/14/21	x Robert Sanchez (Mar 19, 2021 15:46 PDT)	
	Consultant's Representative	Date	LADOT Representative	*Date

*MOUs are generally valid for two years after signing. If after two years a transportation assessment has not been submitted to LADOT, the developer's representative shall check with the appropriate LADOT office to determine if the terms of this MOU are still valid or if a new MOU is needed.

LADOT

Access Assessment Criteria

This Criteria acknowledges that the Transportation Assessment for the following Project will be prepared in accordance with the latest version of LADOT's Transportation Assessment Guidelines:

I. PROJECT INFORMATION

Project Name: Mission Canyon Park Project

Project Address: 2301 N. Sepulveda Boulevard, Los Angeles, CA 90049

Project Description: See Attachment 1

Other

LADOT Project Case Number: WLA17-106507

II. PEDESTRIAN/ PERSON TRIP GENERATION

Source of Pedestrian/Person Trip Generation Rate(s)? ☐ VMT Calculator ☐ ITE 10th Edition ☑ Other:

	Land Use	Size/Unit	Daily Person Trips
Proposed	See Attachment 3B		
	Total new trips:		

Pedestrian/Person trip generation table including a description of the proposed land uses, trip credits, person trip assumptions, comparison studies used for reference, etc. attached? ☑ Yes ☐ No **Attachment 3B**

III. PEDESTRIAN ATTRACTORS INVENTORY

Attach Pedestrian Map for the area (1,320 foot radius from edge of the project site) depicting:

- site pedestrian entrance(s) **See Attachment 8A**
- Existing or proposed passenger loading zones
- pedestrian generation/distribution values
  - Geographic Distribution: N 20 % S 80 % E ____ % W _____ %
- transit boarding and alighting of transit stops (should include Metro rail stations; Metro, DASH, and

other municipal bus stops)

- Key pedestrian destinations with hours of operation:
  - schools (school times)
  - government offices with a public counter or meeting room
  - senior citizen centers
  - recreation centers or playgrounds
  - public libraries
  - medical centers or clinics
  - child care facilities
  - post offices
  - places of worship
  - grocery stores
  - other facilities that attract pedestrian trips
- pedestrian walking routes to key destinations from project site

Note: Pedestrian Count Summary, Bicycle Count Summary, Manual Traffic Count Summary will need to be attached to the Transportation Assessment

IV. FACILITIES INVENTORY

Is a High Injury Network street located within 1,320 foot radius from the edge of the project site? ☐ Yes ☑ No

If yes, list streets and include distance from the project:

_____ at _____(feet)

_____ at _____(feet)

_____ at _____(feet)

_____ at _____(feet)

Attach Radius Map for the area (1,320 foot radius from edge of the project site) depicting the following existing and proposed facilities:

- transit stops **See Attachment 8B**
- bike facilities
- traffic control devices for controlled crossings
- uncontrolled crosswalks
- location of any missing, damaged or substandard sidewalks

For a reference of planned facilities, see the Transportation Assessment Support Map

Crossing Distances

Does the project property have frontage along an arterial street (designated as either an Avenue or Boulevard?)

☑ Yes ☐ No See Attachment 8B

If yes, provide the distance between the crossing control devices (e.g. signalized crosswalk, or controlled mid-block crossing) along any arterial within 1,320 feet of the property.

_____(feet) at _____ _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

V. Project Construction

Will the project require any construction activity within the city right-of-way? ☑ Yes ☐ No

If yes, will the project require temporary closure of any of the following city facilities?

- sidewalk
- bike lane
- parking lane
- travel lane
- bus stop
- bicycle parking (racks or corrals)
- bike share or other micro-mobility station
- car share station
- parklet
- other: _____

FEHR PEERS

November 2020

Attachment 1: Mission Canyon Park Project MOU Supporting Document

LA19-3103

Mission Canyon Park

Project Address: 2301 N. Sepulveda Boulevard, Los Angeles, CA 90049
APNs: 4490-002-906 and 4490-002-800
Project Partners – Los Angeles County and Los Angeles County Sanitation District
Project Designation – Listed by County as open space after Mission Canyon Dump closure

Jurisdictions

County Supervisor: Sheila Kuehl
City Council District: 11 Mike Bonin

Project Description

Background

The Mission Canyon Landfill is an approximately 500-acre property west of the San Diego Freeway in the Santa Monica Mountains. The landfill was operated from approximately 1959 to 1980 by the Los Angeles County Sanitation District. From the landfill's inception, Mission Canyon was intended to be used for park and recreation purposes after the landfill ceased operations. The Sanitation District's original operational agreement (as restated in 1966) specified that all areas were to be covered with a three-foot layer of clean earth, and suitably compacted to accommodate park and recreational use. Drainage systems were put into in place to prevent erosion, and filled areas are irrigated to maintain a vegetative cover.

In 2005 the operational agreement was amended to terminate the District's rights to areas of Mission Canyon no longer in use and set aside funding for the purpose of improving the property for park and recreational purposes. In November 2014, Los Angeles County granted funds to MRCA in the amount of $1,200,000 to create a public access trailhead at Mission Canyon. Additional funding was obtained through Caltrans 405 mitigation and will be used for tree restoration plantings at the site. The new trailhead will include parking, a restroom, and visitor amenities located in the existing parking area accessed from Sepulveda Boulevard. Additionally, proposed new ranger residence will be accessed from the Sepulveda parking area. Improvements will include restoration of native plant species, trail connection to the existing regional trail, trail steps, picnic tables, fencing, gates and signage. There is informal but long-standing pedestrian access to the property off Mulholland Drive, and proposed new improvements here are limited only allowing maintenance and emergency access at that location.

Detailed Project Scope

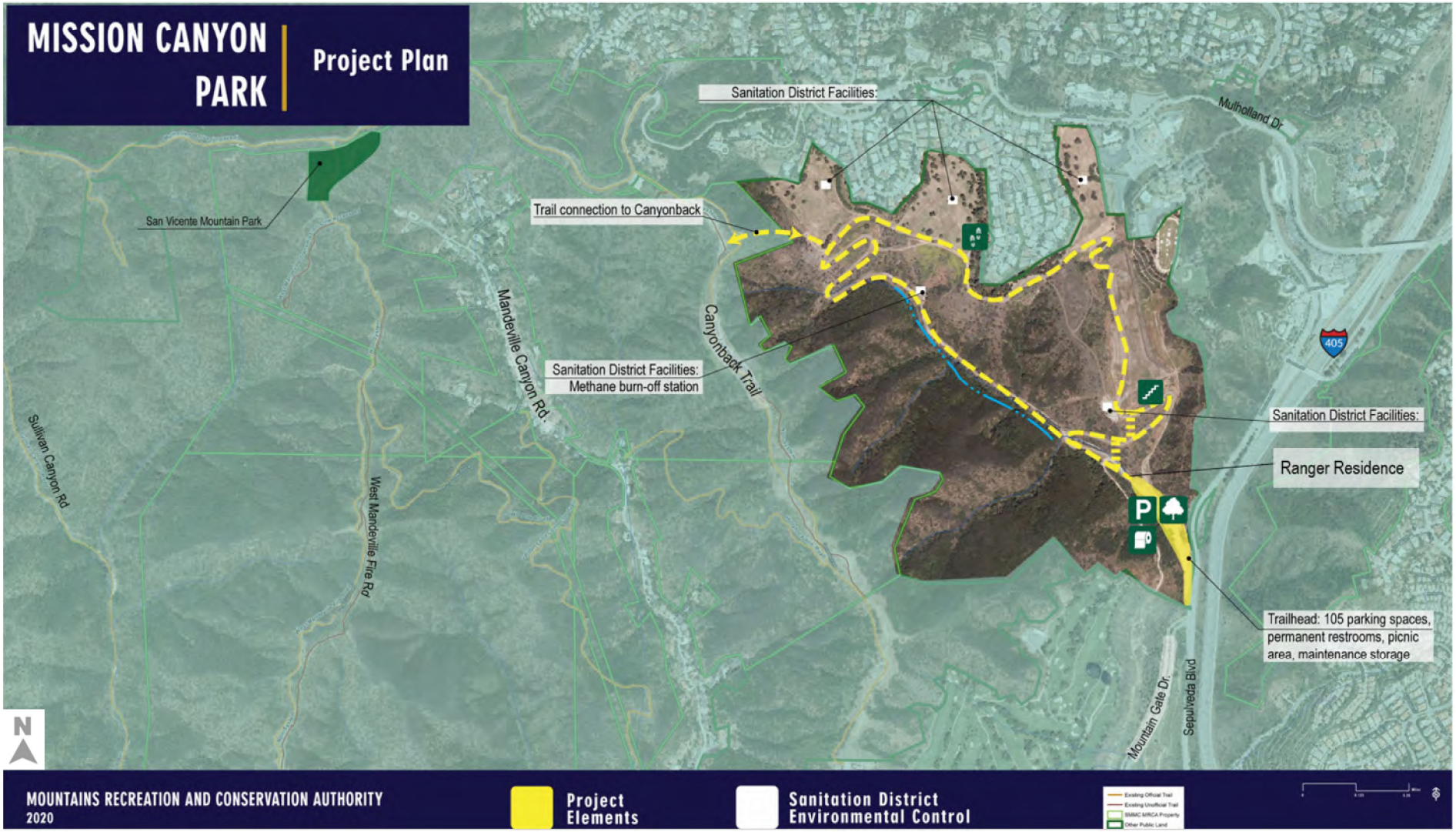
The proposed Project would entail improvements within the site to accommodate park and recreational uses. All the proposed improvements would be completed within previously disturbed areas (i.e., former landfill driveways/trails) located throughout the site as well as within the existing footprint of the gravel yard located at the southern portion of the Project site. The design of improvement elements may be refined as the designs are complete.

The proposed Project may include the following improvements:

- Loop Trail: The Project would include a 2.5-mile multi-modal loop trail throughout the site.
- Improved Trailhead/Connector Trail: The Project would establish at least one connection at the northwestern portion of the site between the Project site and the Canyonback Road Trail. Advanced or secondary trails would be constructed alongside the existing loop trail based upon the topography.
- Infiltration: New infiltration areas for stormwater or bioswales would be installed on the site.
- Buildings and Structures: The existing relocatable buildings that are located in the existing parking area would be removed from the project site.
- Restroom Facilities: A portion of this space would be used to install new single-story prefabricated restroom facilities (the sanitation building would be connected to the existing sewer and water lines off Sepulveda Boulevard and a temporary sanitary building that is onsite would be removed.). The new restroom facilities would be approximately 1,000 square feet and will contain drinking water stations.
- Ranger Residence: A residence that is used by the rangers at the project site would be installed at the site. This residence would consist of a single-story bungalow style trailer that would be located near the Sepulveda Boulevard entry parking lot.
- Picnic areas (consisting of picnic tables and seating areas) and maintenance storage (for onsite storage of maintenance equipment, tools, and other related materials) would also be developed at the site.
- Parking: Currently, parking for the site is provided at the southern end of the site (off of Sepulveda Boulevard). This existing parking area would be covered with pavement and gravel for approximately 105 parking spaces. The parking areas would be improved within the existing parking areas on the site and the existing graded areas would be retained. Existing truck scales would be removed.
- Site access off Sepulveda Boulevard: Access to the site would be improved and signalized to ensure that all project-related traffic would access the site off Sepulveda Boulevard. MRCA and its consultant evaluated the feasibility of various design options along with the County, Los Angeles Department of Transportation (LADOT), California Department of

Transportation (Caltrans), and key public stakeholders. Attachment 7 to this draft MOU shows the conceptual design of the intersection of the Project Access Driveway with Sepulveda Boulevard. The final design is subject to refinement as the design is finalized with LADOT. Mulholland Drive would continue to be used for authorized vehicles only. No additional improvements or public access from Mulholland Drive would be provided as a part of the proposed Project.

- Asphalt Paving: Deteriorated asphalt parking paving in the existing parking areas would be removed and replaced with new asphalt and/or road base (where necessary).
- Landscaping and Trees: Landscaping and trees would be provided throughout the updated parking area. Landscaping at the site would include native plants (and limited lighting fixtures that are designed to reduce glare, light trespass, and sky glow lighting).
- Updated Gate: A formal entrance gate would replace the gate that is currently located the southern access to the site
- Best Management/Practices Fire Avoidance: The Project would include the implementation of construction and operational best management practices including the use of bioswales. Also, water tanks would be provided at two locations for firefighting/prevention purposes. Additional security fencing: The site currently contains perimeter fencing along most borders to restrict access to the site. The project may expand and supplement the existing fencing to cover additional areas along the perimeter of the site that are currently unfenced.
- Fitness trail: A set of fitness trail steps (approximately 600 steps) would be constructed within the southeastern portion of the site.
- Riparian Stream Restoration: The restoration (i.e. vegetation planting for natural riparian habitat) of a riparian stream that stream is located onsite would be completed.
- Signage: Informational and safety signage would be posted throughout the project site. Standard MRCA signage would also be posted throughout the site to display important information, such as, hours of operation, consistent with the requirements of the provisions of the MRCA Park Ordinance, and emergency contact information.
- EV Charging Station: AN electric vehicle (EV) charging station may be incorporated into the improved parking lot.
- Bike Racks: Bike racks would be installed at the project site.
- Utility Improvements: The project would include upgrades to the existing utilities at the site to accommodate the proposed recreational facilities. These upgrades would include connecting a water line from the project site to the existing connections amongst other improvements (e.g., safety lighting) that would be necessary for the proposed project. The Sanitation Districts will continue to perform maintenance and monitoring of the project site including maintenance of the road and landscape as well as the environmental control systems (including methane dispersal, drainage structures, and seepage management) located.



Attachment 2

Project Site Plan

Attachment 3A: Trip Generation Data Collection

	Location	Unit	Size	Time Period	Daily Total	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Weekday											
Counts*	Mulholland & Encino Hills			Weekday Peak Hour		**27**	19	8	**11**	8	3
ITE	LU 411	500	acres	Weekday Peak Hour (Adjacent Street)	**390**	**10**	6	4	**55**	30	25
ITE	LU 411	500	acres	Weekday Peak Hour		**75**	50	25	**55**	22	33
	Location	**Unit**	**Size**	**Time Period**	**Daily Total**	**MD Total**	**MD In**	**MD Out**			
Weekend											
Counts*	Mulholland & Encino Hills			Saturday Peak Hour		**57**	39	18			
ITE	LU 411	500	acres	Saturday Peak Hour	**980**	**140**	77	63			

* May 18, 2019 Assume that some of the total project-generated trips would be related to two-car hikes and would end near Mulholland & Encino Hills Drive, estimated here to be 10% of the existing recreational auto trips there.

Attachment 3B: Project Trip Generation

	Location	Unit	Size	Time Period	Daily Total	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Weekday											
Mission Canyon Park		500	acres	Weekday Peak Hour	390	**13**	8	5	**56**	31	25
	Weekday Daily Pedestrian Trips (5% of daily trips)				**20**						
	Location	**Unit**	**Size**	**Time Period**	**Daily Total**	**MD Total**	**MD In**	**MD Out**			
Weekend											
Mission Canyon Park		500	acres	Saturday Peak Hour	980	**146**	81	65			
	Saturday Daily Pedestrian Trips (5% of daily trips)				**49**						

VMT impacts of this Development Project will be measured using work VMT per employee, per the impact criteria for "other land use types" as specified on page 2-6 of TAG. In addition, GIS analysis of the location of proposed park in the context of similar parks in the vicinity and their location relative to the poplulation in surrounding area and to areas of greatest "Park Needs" as shown in studies undertaken for LA Metro and the National Park Service. In addition, survey data in studies for the NPS showing visitors' travel times to various trailheads will be presented. This is similar to the market-study approach described on page 2-9 of the TAG.

Attachment 4: Related Projects

No.	Project ID	Project	Project Address	Land Use	Size	Unit	Daily Total	AM Total	AM In	AM Out	PM Total	PM In	PM Out
City of Los Angeles													
				Religious	70	KSF							
1	11877	Leo Baeck Temple	1300 N. Sepulveda	Child Care	168	Students	1,405	205	111	94	206	98	108
				Parking	539	Spaces							
2	45039	Mt St Mary's University Wellness	12001 Chalon Rd	University-Related Wellness	32.250	KSF	400	180	180	0	200	0	200
3	45107	Mirman School	16180 Mulholland Dr	School	395	Students	888	132	99	33	36	73	109
4	45188	Mixed-Use	16206 Ventura Bl	Mixed Use	12.880	KSF	726	72	34	38	47	28	19
5	22963	Valley Beth Shalom Preschool	115739 Ventura Bl	Preschool	259	Students	1,000	135	72	63	101	48	53
6	43389	Convenience Store	15739 Ventura Bl	Retail	2.770	KSF	721	78	38	40	48	26	22
7	n/a	Berggruen Institute	1901 N Sepulveda Bl	Mixed/Institute	322	KSF	n/a	97	82	15	57	20	37

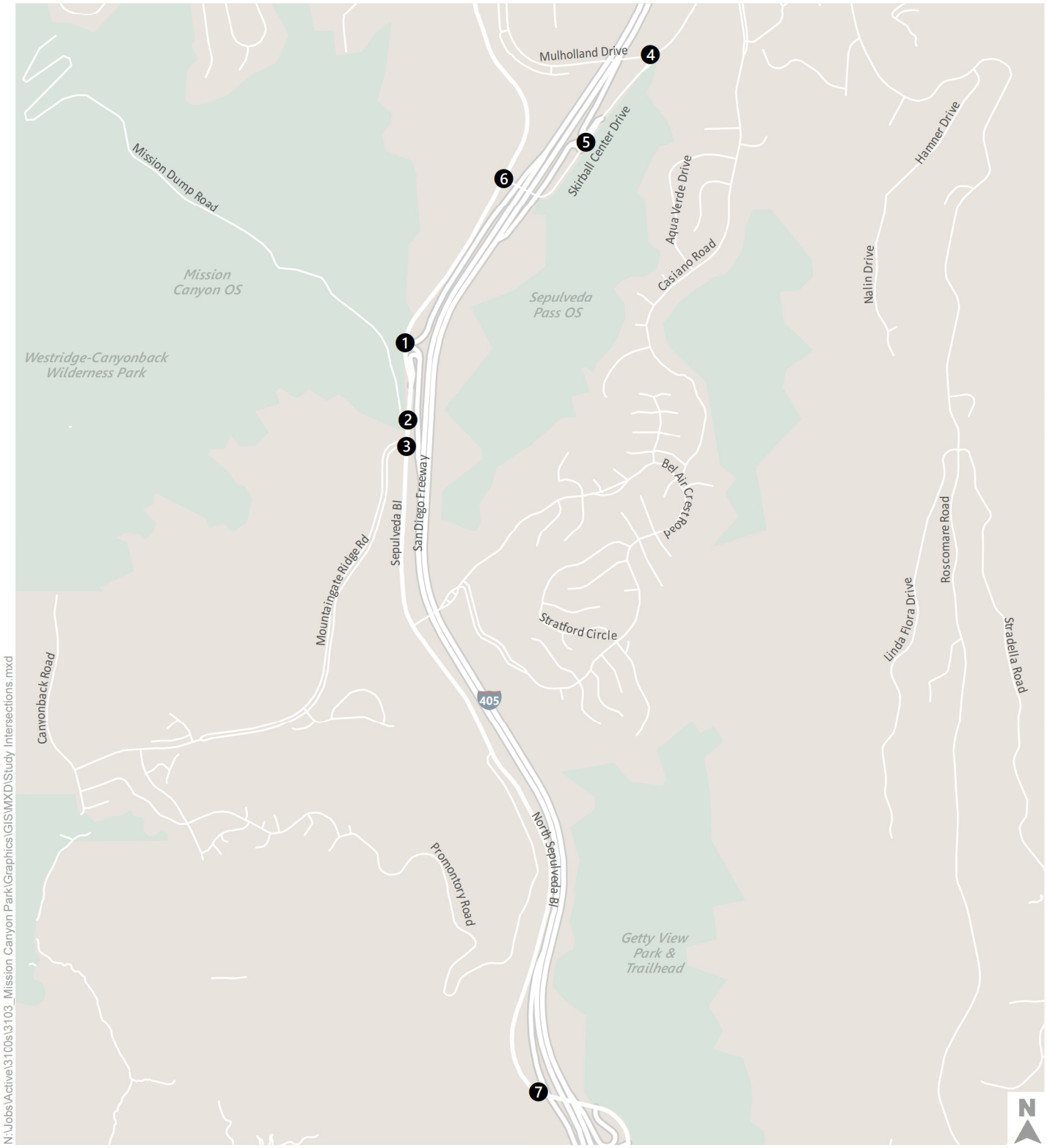
Source : Related Project trip generation from Los Angeles Department of Transportation (LADOT)

Attachment 5: Study Intersections

Id	North/South Street	East/West Street	Type
1	Sepulveda Boulevard	I-405 Freeway Southbound Ramps	Signalized
2	Sepulveda Boulevard	Mission Dump Road	SSSC [a]
3	Sepulveda Boulevard	Mountaingate Drive	Signalized
4	Skirball Center Drive	Mullholland Drive	Signalized
5	Skirball Center Drive	I-405 Freeway Northbound Ramps	Signalized
6	Sepulveda Boulevard	Skirball Center Drive	Signalized
7	I-405 Freeway Southbound Ramps	Sepulveda Boulevard	Signalized

Note :

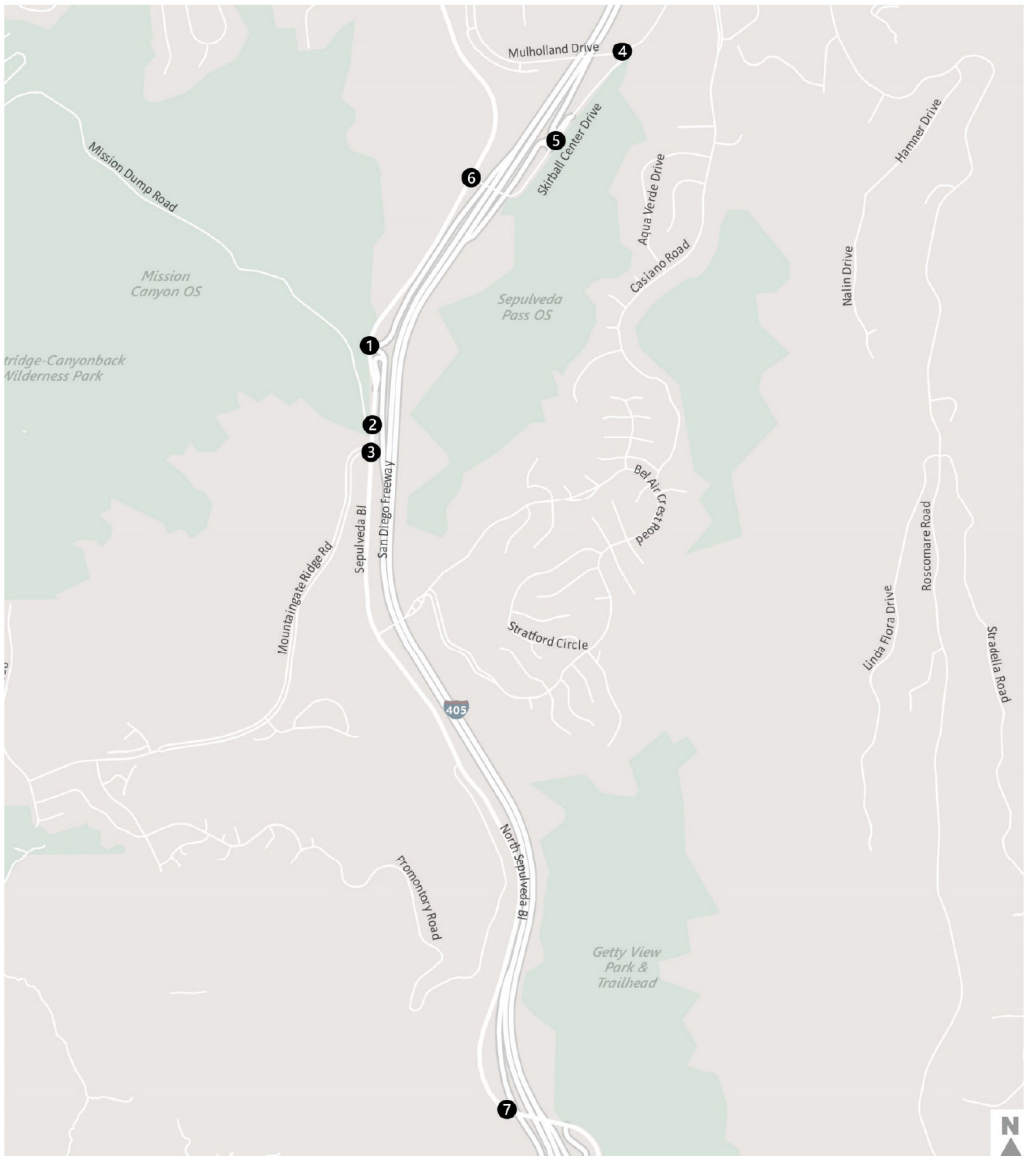
[a] Side-Street Stop Controlled

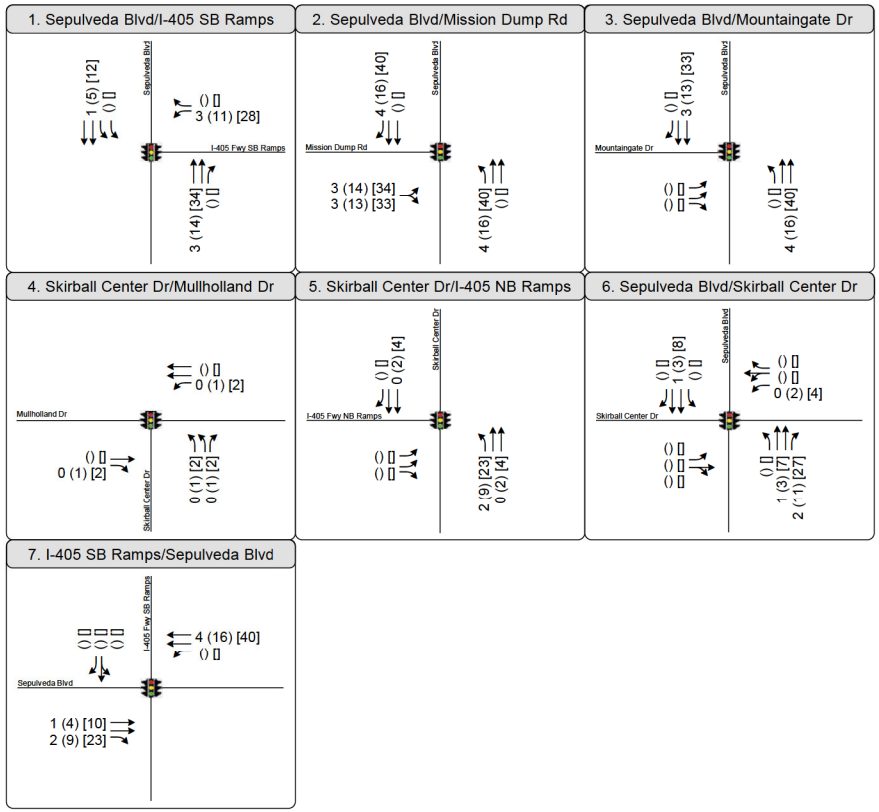


● Study Intersections

Attachment 5A

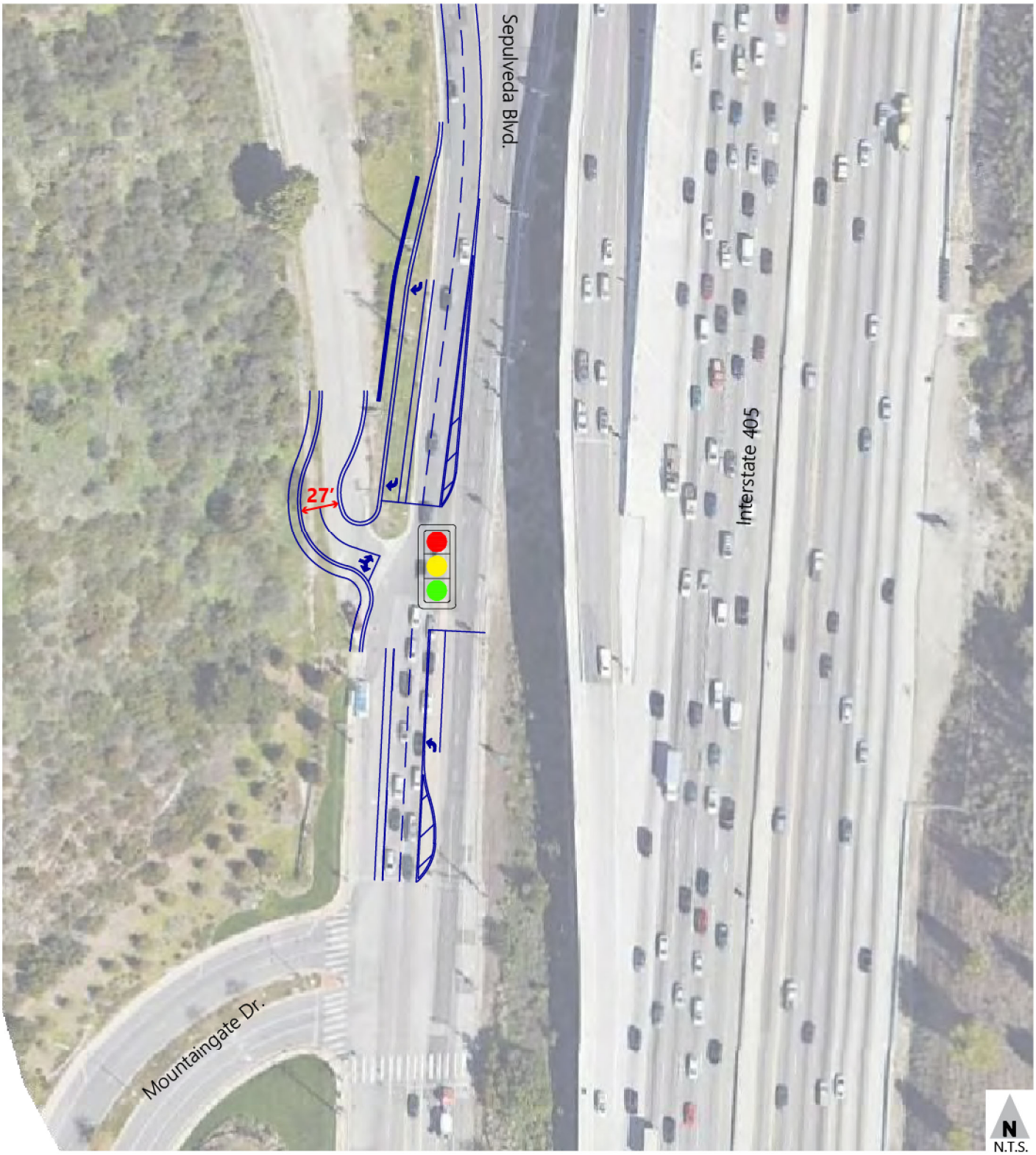
Study Intersections





Attachment 6

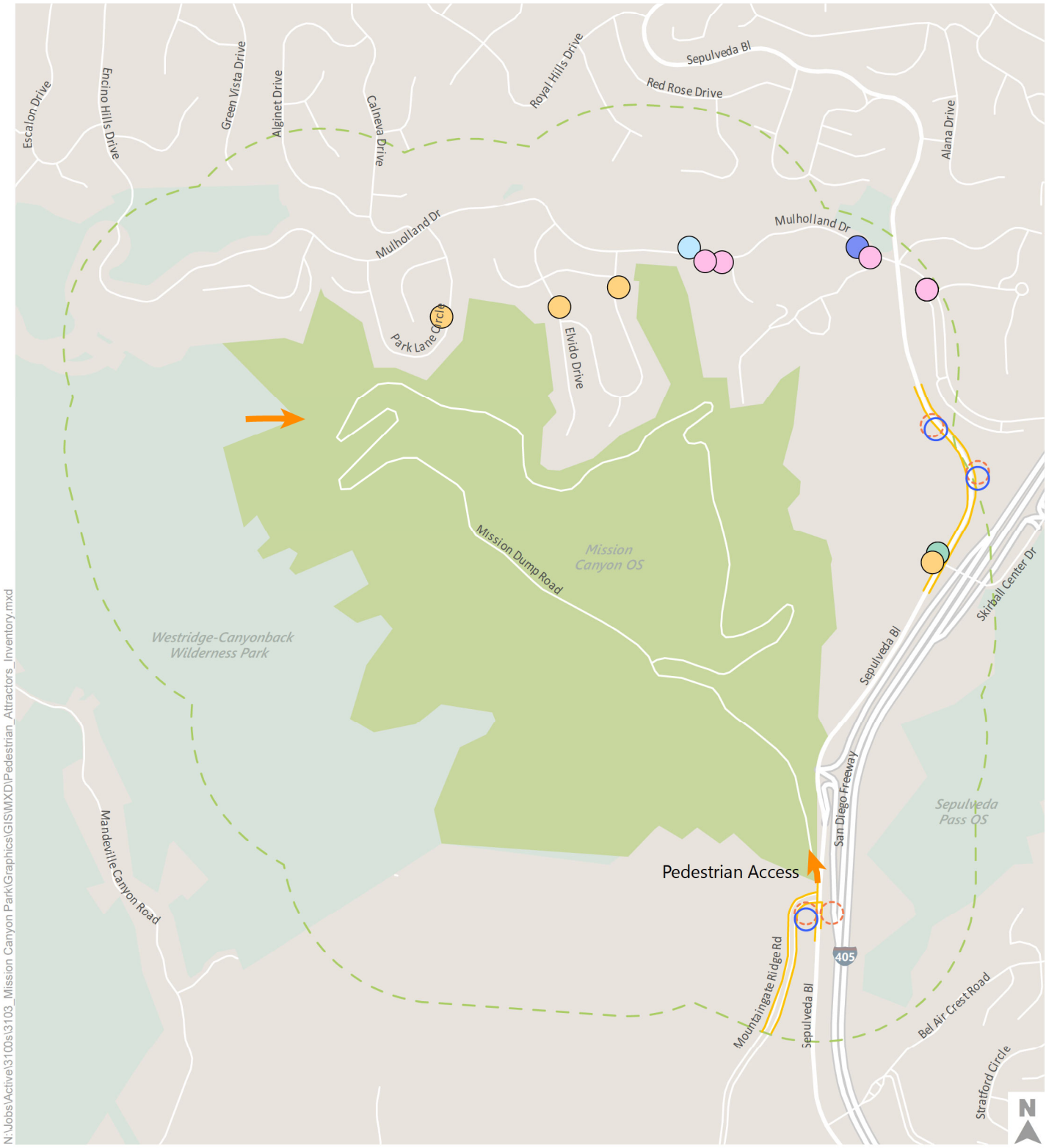
Mission Canyon Park Project Only Peak Hour Volumes - Weekday_AM(Weekday_PM)[Saturday_MD]



Attachment 7

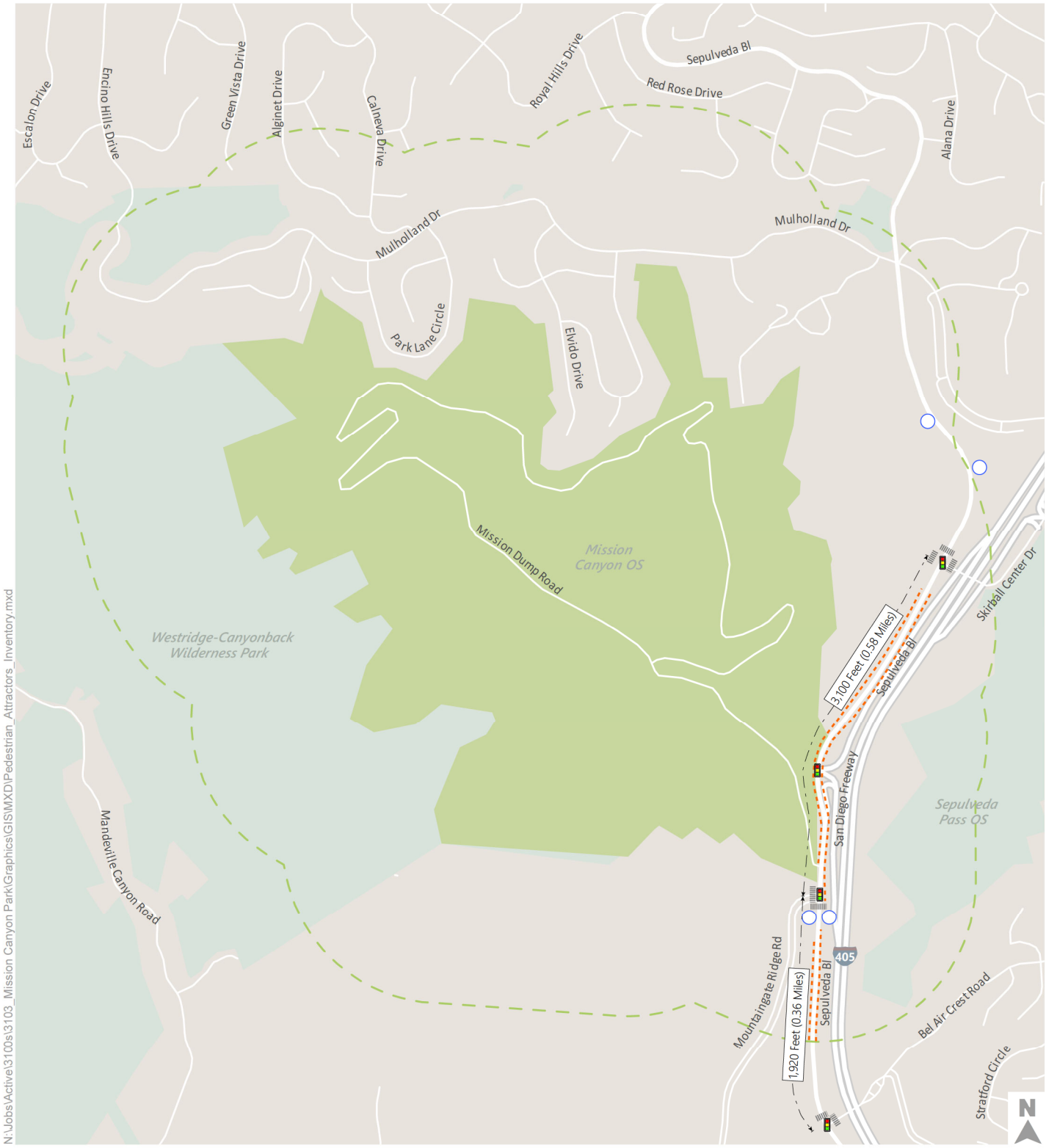
CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Project Access Driveway



Attachment 8A

Pedestrian Attractors Inventory



Project Site 1320 Feet Buffer

Transit Stops

Controlled Crosswalk

Distance between Controlled Crosswalks

Missing Sidewalks

Attachment 8B

Facilities Inventory

Appendix B: Transportation Analysis Guidelines Screening Responses and Supporting Analysis

Appendix B: Transportation Analysis Guidelines Screening Responses and Supporting Analysis

(Based on LADOT TAG, July 2020)

Screening Criteria	Screening Evaluation	Analysis Required?
2.1 CONFLICTING WITH PLANS, PROGRAMS, ORDINANCES, OR POLICIES		
If the project requires a discretionary action, and the answer is yes to any of the following questions, further analysis will be required to assess whether the proposed project would negatively affect existing pedestrian, bicycle, or transit facilities: 1. Does the project require a discretionary action that requires the decision maker to find that the decision substantially conforms to the purpose, intent and provisions of the General Plan? 2. Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety? 3. Is the project proposing to, or required to make any voluntary or required, modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?	1. No 2. No 3. Yes	Yes, see Section 3.1
2.2 CAUSING SUBSTANTIAL VEHICLE MILES TRAVELED		
If the project requires a discretionary action, and the answer is no to either T-2.1-1 or T-2.1-2, further analysis will not be required for Threshold T-2.1, and a "no impact" determination can be made for that threshold: 1. T-2.1-1: Would the land use project generate a net increase of 250 or more daily vehicle trips? 2. T-2.1-2: Would the project generate a net increase in daily VMT? In addition to the above screening criteria, the portion of, or the entirety of a project that contains small-scale or local serving retail uses are assumed to have less than significant VMT impacts. If the answer to the following question is no, then that portion of the project meets the screening criteria and a no impact determination can be made for the portion of the project that contains retail uses. However, if the retail project is part of a larger mixed-use project, then the remaining portion of the project may be subject to further analysis in	1. Yes 2. Yes 3. No 4. No	Yes, see Section 3.2

accordance with the above screening criteria. Projects that include retail uses in excess of the screening criteria would need to evaluate the entirety of the project's vehicle miles traveled, as specified in Section 2.2.4. 3. If the project includes retail uses, does the portion of the project that contain retail uses exceed a net 50,000 square feet? Independent of the above screening criteria, and the project requires a discretionary action, further analysis will be required if the following statement is true: 4. Would the Project or Plan located within a one-half mile of a fixed-rail or fixed-guideway transit station replace an existing number of residential units with a smaller number of residential units?		
2.3 SUBSTANTIALLY INDUCING ADDITIONAL AUTOMOBILE TRAVEL		
If the answer is no to the following question, further analysis will not be required for Threshold T-2.2, and a no impact determination can be made for that threshold: 1. T-2.2: Would the project include the addition of through traffic lanes on existing or new highways, including general purpose lanes, high-occupancy vehicle (HOV) lanes, peak period lanes, auxiliary lanes, and lanes through grade-separated interchanges (except managed lanes, transit lanes, and auxiliary lanes of less than one mile in length designed to improve roadway safety)?	1. No	No
2.4 SUBSTANTIALLY INCREASING HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE OR INCOMPATIBLE USE		
If the project requires a discretionary action, and the answer is "yes" to either of the following questions, further analysis will be required to assess whether the project would result in impacts due to geometric design hazards or incompatible uses: 1. Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way? 2. Is the project proposing to, or required to make any voluntary or required, modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?	1. No 2. Yes	Yes, see Section 3.3
3.2 PEDESTRIAN, BICYCLE, AND TRANSIT ACCESS ASSESSMENT		
If the answer is yes to all of the following questions, further analysis will be required to assess whether the project would negatively affect existing pedestrian, bicycle, or transit facilities: 1. Does the land use project involve a discretionary action that would be under review by the Department of City Planning? 2. Does the land use project include the construction, or addition of:	1. No 2. No 3. No	No

a. 50 dwelling units or guest rooms or combination thereof, or b. 50,000 square feet of non-residential space? 3. Would the project generate a net increase of 1,000 or more daily vehicle trips, or is the project's frontage along an Avenue or Boulevard (as designated in the City's General Plan), 250 linear feet or more, or is the project's building frontage encompassing an entire block along an Avenue or Boulevard (as designated in the City's General Plan)?		
3.3 PROJECT ACCESS, SAFETY, AND CIRCULATION EVALUATION		
Land Use Development Projects: For land use projects, if the answer is yes to all of the following questions, further analysis will be required to assess whether the project would negatively affect project access and circulation: 1. Does the land use project involve a discretionary action that would be under review by the Department of City Planning? 2. Would the land use project generate a net increase of 250 or more daily vehicle trips?	1. No 2. Yes	Yes, see Section 4.1
3.4 PROJECT CONSTRUCTION		
If the answer is yes to any of the following questions, further analysis will be required to assess if the project could negatively affect existing pedestrian, bicycle, transit, or vehicle circulation: 1. Would a project that requires construction activities to take place within the right-of-way of a Boulevard or Avenue (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than one day (including day and evening hours, and overnight closures if on a residential street?) 2. Would a project require construction activities to take place within the right-of-way of a Collector or Local Street (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than seven days (including day and evening hours, and including overnight closures if on a residential street)? 3. Would in-street construction activities result in the loss of regular vehicle, bicycle, or pedestrian access, including loss of existing bicycle parking to an existing land use for more than one day, including day and evening hours and overnight closures if access is lost to residential units? 4. Would in-street construction activities result in the loss of regular ADA pedestrian access to an existing transit station, stop, or facility (e.g., layover zone) during revenue hours?	1. Yes 2. No 3. No 4. No 5. No 6. No 7. No	Yes, see Section 4.2

5. Would in-street construction activities result in the temporary loss for more than one day of an existing bus stop or rerouting of a bus route that serves the project site? 6. Would construction activities result in the temporary removal and/or loss of on-street metered parking for more than 30 days? 7. Would the project involve a discretionary action to construct new buildings or additions of more than 1,000 square feet that require access for hauling construction materials and equipment from streets of less than 24-feet wide in a hillside area?		
3.5 RESIDENTIAL STREET CUT-THROUGH ANALYSIS		
Land Use Development Projects: If the answer is yes to all of the following questions, further analysis may be required to assess whether the project would negatively affect residential streets: 1. Would the project generate a net increase of 250 or more daily vehicle trips? 2. Does the land use project include a discretionary action that would be under review by the Department of City Planning? In addition, for development projects, when selecting residential street segments for analyses during the transportation assessment scoping process, all of the following conditions must be present: 3. The project is located along a currently congested Boulevard or Avenue and adds trips that may lead to trip diversion to parallel routes along residential Local Streets. The congestion level of the Boulevard or Avenue can be determined based on the estimated peak hour LOS under project conditions of the study intersection(s) (as determined in Section 3.3). LOS E and F are considered to represent congested conditions; 4. The project is projected to add a substantial amount of automobile traffic to the congested Boulevard(s), Avenue(s), or Collector(s) that could potentially cause a shift to alternative route(s); and 5. Nearby local residential street(s) (defined as Local streets as designated in the City's General Plan passing through a residential neighborhood) provide motorists with a viable alternative route. A viable alternative route is defined as one which is parallel and reasonably adjacent to the primary route as to make it attractive as an alternative to the primary route. LADOT has discretion to define which routes are viable alternative routes, based on, but not limited to, features such as geography and presence of existing traffic control devices, etc.	1. Yes 2. No 3. No 4. No 5. No	No

Appendix C:
Plans, Programs, Ordinances, and Policies Review

Appendix C

Detailed Responses in Support of Determining Plans, Programs, Ordinances, or Policies Applicability

Adapted from Attachment D: Plan Consistency Workshop in Transportation Analysis Guidelines, LADOT, July 2020

Plan Consistency Analysis

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
A. Mobility Plan 2035 PROW Classification Standards for Dedications and Improvements			
A.1	Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone?	MP 2.1, 2.3, 3.2, and Mobility Plan 2035 Street Designations and Standard Roadway Dimensions	Yes. The existing access road leading to the site (Mission Canyon Road) is proposed to be widened, repaved, and realigned. The improved intersection of Mission Canyon Park Road & Sepulveda Boulevard will be signalized and interconnected with the existing traffic signal at Mountaingate Drive. A southbound right turn lane on Sepulveda Boulevard is proposed, which would physically widen the roadway into the project site. The land use designation is OS-1XL.
A.2	If A.1 is yes, is the project required to make additional dedications or improvements to the Public Right of Way as demonstrated by the street designation?		No. Per NavigateLA the segment of Sepulveda Boulevard adjacent to the project site is classified as a Boulevard II. Streets with that designation have an 80-foot wide roadway within a standard right of way of 110-wide right of way. The proposed park project was the subject of a draft Initial Study/Mitigated Negative Declaration that was circulated for public comment in 2018 and the City of Los Angeles did not request right of way dedication at that time. Therefore it is believed that no dedication requirements apply.

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
A.3	If A.2 is yes, is the project making the dedications and improvements as necessary to meet the designated dimensions of the fronting street (Boulevard I, and II, or Avenue I, II, or III)?		Not applicable.
A.4	If the answer to A.3. is NO, is the project applicant asking to waive from the dedication standards?		Not applicable.
B. Mobility Plan 2035 PROW Policy Alignment with Project-Initiated Changes			
B.1	Does the project physically modify the curb placement or turning radius and/or physically alter the sidewalk and parkways space that changes how people access a property?	MP 2.1, 2.3, 3.2, 2.10, and Street Designations and Standard Roadway Dimensions	Yes, the project would improve the existing driveway on Sepulveda Boulevard, known as Mission Canyon Road, by widening, realigning and repaving it. In its existing configuration the driveway is restricted to only right turns in and right turns out. In order to provide full access, including left turns in and left turns out, a traffic signal would be installed where the driveway intersects with Sepulveda Boulevard. Sepulveda Boulevard would be widened to accommodate a southbound right turn into the project site. The existing sidewalk on the west side of Sepulveda Boulevard south of Mountaingate Drive which ends at Mission Canyon Road would be extended into the project site. Thus, the project would not preclude or conflict with *Mobility Plan 2035* policies: 2.1 Adaptive Reuse of Streets: Urban streets serve multiple purposes that not only include travel but also play a role in providing other roles such as landscaping and drainage. The southern portion of the project frontage adjacent to the driveway would be improved with a sidewalk and curb and gutter. The project would not make improvements to the remainder of the project frontage, which would not preclude or conflict with future changes by various City Departments. 2.3 Pedestrian Infrastructure: This policy recognizes walking as a component of every trip and ensures high quality pedestrian access is considered in all site planning and public right-of-way

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
			modifications to provide a safe and comfortable walking environment. The project would extend the existing sidewalk on the west side of Sepulveda Boulevard into the site, which would facilitate pedestrian trips from the bus stops at Mountaingate Drive and from the nearby residential neighborhood. This would represent an improvement to the existing pedestrian infrastructure. 3.2 People with Disabilities: When designing developments, it is important to accommodate the needs of all people with varying levels of mobility. The sidewalk leading into the project site from Sepulveda Boulevard would accommodate pedestrians, including people with disabilities. 2.10 Loading Areas: When designing developments, it is important to consider a loading area that minimally impacts other travelers such as people driving or walking. The proposed project would not construct permanent loading areas. During construction, traffic within and around the park would be managed in compliance with a Traffic Management Plan designed to minimize the temporary impact of construction activities. The proposed project is a passive open space park, a land use for which no loading zone is required.
B.2	Does the project add new driveways along a street designated as an Avenue or a Boulevard that conflict with LADOT's Driveway Design Guidelines?	MP 2.10, PL.1, CDG 2, MPP 321	No. The Project will not add new driveways along a street designated as an Avenue or a Boulevard.
-	If the answer to either B.1 or B.2 are YES, City plans and policies should be reviewed in light of the proposed physical changes to determine if the City would be obstructed from carrying out the plans and policies. The streets that need special consideration are those that are included on the following networks	Mobility Plan 2035: Transit Enhanced Network, Bicycle Enhanced Network, Bicycle Lane Network, Pedestrian Enhanced District, Neighborhood	Sepulveda Boulevard (Boulevard II) is the primary street on the Project frontage. The project site includes frontage on Mulholland Drive (Scenic Parkway), where a gated service road is available to authorized vehicles. ● Transit Enhanced Network: Mobility Plan 2035 identifies specific streets as part of the Transit Enhanced Network (TEN) to receive improvements that enhance the performance and reliability of existing and future bus service. The Project frontages are not along streets which are part of the TEN. ● Bicycle Enhanced Network: The Bicycle Enhanced Network (BEN) is a network of streets that will receive treatments that prioritize bicyclists. This network is a subset of the 2010 Bicycle Plan

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
	identified in the Mobility Plan 2035, or the HIN: ● Transit Enhanced Network ● Bicycle Enhanced Network ● Bicycle Lane Network ● Pedestrian Enhanced District ● Neighborhood Enhanced Network ● High Injury Network	Enhanced Network, High Injury Network, TOC Guidelines	and will supplement the system. The Project frontages are not along streets which are part of the BEN. ● Bicycle Lane Network: The Bicycle Lane Network (BLN) consists of: Tier 2 and Tier 3 Bicycle Lanes – Bicycle facilities on arterial roadways with striped separation. Sepulveda Boulevard is on the Bicycle Lane Network. ● Pedestrian Enhanced District: Mobility Plan 2035 identifies Pedestrian Enhanced Districts (PED) where initial analysis suggests arterials can be improved and further analysis and prioritization will occur as funding and projects become available. The Project frontages are not along streets which are part of the PED. ● Neighborhood Enhanced Network: The Neighborhood Enhanced Network (NEN) is a selection of local streets to provide comfortable and safe routes for localized travel of slower-moving modes, such as walking or biking. Mulholland Drive is part of the NEN. ● High Injury Network: The High Injury Network (HIN) represents 6% of city streets (over 450 miles) that account for 70% of deaths and severe injuries for people walking[1]. The project frontages are not along streets that are part of the HIN. Information above are retrieved from LADOT Transportation Assessment Support Map https://arcg.is/fubbD
B.2.1	Would the physical changes in the public right of way or new driveways that conflict with LADOT's Driveway Design Guidelines, degrade the experience of vulnerable roadway users such as modify, remove, or otherwise negatively impact existing bicycle, transit, and/or pedestrian infrastructure?		No. The proposed improvements to the existing driveway on Sepulveda Boulevard would be made in close consultation with LADOT and other relevant City departments and would be subject to their ultimate review and approval. The proposed realignment of the driveway would increase the distance between it and the nearby signalized intersection to over 150 feet. The improvements would accommodate the existing bicycle lane on southbound Sepulveda Boulevard and would extend the existing sidewalk into the project site. North of the driveway into the site the existing bicycle, transit and pedestrian infrastructure would not be affected.

[1] https://ladotlivablestreets.org/programs/vision-zero/maps

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
B.2.2	Would the physical modifications or new driveways that conflict with LADOT's Driveway Design Guidelines preclude the City from advancing the safety of vulnerable roadway users?		No. the final design of the proposed improvements to the site access on Sepulveda Boulevard would be subject to review and approval by LADOT.
C. Network Access			
C1.1	Does the project propose to vacate or otherwise restrict public access to a street, alley, or public stairway?	MP 3.9	No.
C.1.2	If the answer to C.1.1 is Yes, will the project provide or maintain public access to people walking and biking on the street, alley or stairway?		Not applicable.
C.2.1	Does the project create a cul-de-sac or is the project located adjacent to an existing cul-de-sac?	MP 3.10	No. The Project is not located adjacent to an existing cul-de-sac, and it would not create a cul-de-sac.
C.2.2	If yes, will the cul-de-sac maintain convenient and direct public access to people walking and biking to the adjoining street network?		Not applicable.
D. Parking Supply and Transportation Demand Management			
D.1	Would the project propose a supply of onsite parking that exceeds the baseline amount as required in the Los	MP 3.8, 4.8, 4.13	No, proposed Project is a passive public park. Section 12.21 A.4 of the Los Angeles Municipal Code (LAMC) does not specify parking requirements applicable to this project.

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
	Angeles Municipal Code or a Specific plan, whichever requirement prevails?		
D.2	If the answer to D.1. is YES, would the project propose to actively manage the demand of parking by independently pricing the supply to all users (e.g. parking cash-out), or for residential properties, unbundle the supply from the lease or sale of residential units?		Not applicable.
D.3	Would the project provide the minimum on and off-site bicycle parking spaces as required by Section 12.21 A.16 of the LAMC?		Not applicable. Although there is no bicycle parking requirement in the LAMC for this project, bicycle racks would be installed in the park.
D.4	Does the Project include more than 25,000 square feet of gross floor area construction of new non-residential gross floor?		No, other than a restroom building, the project does not include construction of new non-residential gross floor area.
D.5	If the answer to D.4. is YES, does the project comply with the City's TDM Ordinance in Section 12.26 J of the LAMC?		Not applicable.
E. Consistency with Regional Plans			
E.1	Does the Project or Plan apply one the City's efficiency-based impact thresholds (i.e. VMT per capita, VMT per employee, or VMT per service		Yes. Although Section 2.2.4 of the TAG states that public services do not generally generate substantial VMT but are often built in response to development from other land uses (e.g., office and residential), analysis was conducted to show that the project would have a less than significant impact on employee VMT and on visitor VMT.

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
	population) as discussed in Section 2.2.3 of the TAG?		
E.2	E.2 If the Answer to E.1 is YES, does the Project or Plan result in a significant VMT impact?		No.
E.3	If the Answer to E.1 is NO, does the Project result in a net increase in VMT?		Not applicable.
E.4	4 If the Answer to E.2 or E.3 is YES, then further evaluation would be necessary to determine whether such a project or land use plan would be shown to be consistent with VMT and GHG reduction goals of the SCAG RTP/SCS		Not applicable.

Review of Consistency with Brentwood-Pacific Palisades Community Plan

The Brentwood-Pacific Palisades Community Plan (BPPCP) was adopted in 1998 and forms the basis for this review of conflicts relating to the transportation system.

The BPPCP is one of 35 in the City of Los Angeles that establishes the policies and programs that inform the framework for local land use, circulation, and service systems within the selected community plan area. Per the City's new TAG, a review of the BPPCP was conducted to evaluate whether the project conflicts with or precludes the implementation of the community plan framework.

Among the opportunities identified in the BPPCP is "potential for reasonable access to scenic areas" related to transportation and "provision of recreational facilities not usually found in urban areas; wilderness and beach" related to service systems. The Open Space section of the BPPCP

states that "When feasible, County sanitation District property in Mission/Sullivan/Rustic Canyons should be utilized for park activities" and identifies an action item to "Target Park and Recreation projects in areas with the greatest deficiencies."

The BPPCP includes one transportation policy directly related to the proposed project (13-1.1): New development projects shall be designed to minimize disturbance to existing traffic flow with proper ingress and egress to parking. The implementing program is to require that new development projects incorporate adequate driveway access to prevent auto queuing.

- The proposed site access improvements proposed on Sepulveda Boulevard were developed to be consistent with this policy. Coordination will continue with LADOT as the conceptual design is refined through the City's review and approval process.

The BPPCP identifies several transportation-related measures to improve public transit service, make capital improvements related to freeway ramps and road widening, and to implement travel demand management (TDM) strategies and transportation system management (TSM). Specific objectives related to public transit are to "encourage improved local and express bus service through the community, and encourage park and ride facilities to interface with freeways, transit routes and HOV lanes" and to "increase work trips and non-work trips made by transit."

- The Project does not conflict with or prevent the City from pursuing these programs.

Appendix D:
Traffic Counts

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sepulveda Blvd & I-405 Freeway SB Ramps
City: Los Angeles
Control: Signalized

Project ID: 19-05328-004
Date: 2019-05-18

Total

NS/EW Streets:	Sepulveda Blvd				Sepulveda Blvd				I-405 Freeway SB Ramps				I-405 Freeway SB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	2	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	0	48	1	0	45	116	0	0	0	0	0	0	48	0	16	1	275
10:15 AM	0	38	5	0	74	132	0	0	0	0	0	0	69	0	20	0	338
10:30 AM	0	57	0	0	71	181	0	0	0	0	0	0	77	0	20	1	407
10:45 AM	0	52	0	0	63	158	0	0	0	0	0	0	71	0	15	1	360
11:00 AM	0	68	6	0	70	151	0	0	0	0	0	0	69	0	14	0	378
11:15 AM	0	62	2	0	40	141	0	0	0	0	0	0	57	0	10	1	313
11:30 AM	0	48	2	0	61	172	0	0	0	0	0	0	75	0	18	0	376
11:45 AM	0	68	1	0	56	165	0	0	0	0	0	0	75	0	16	0	381
12:00 PM	0	61	0	0	58	170	0	0	0	0	0	0	99	0	20	0	408
12:15 PM	0	81	2	0	46	187	0	0	0	0	0	0	130	0	16	0	462
12:30 PM	0	75	0	0	63	176	0	0	0	0	0	0	135	0	19	0	468
12:45 PM	0	78	2	0	39	159	0	0	0	0	0	0	139	0	28	0	445
1:00 PM	0	99	0	0	34	129	0	0	0	0	0	0	115	0	15	0	392
1:15 PM	0	126	0	0	58	109	0	0	0	0	0	0	108	0	20	0	421
1:30 PM	0	125	0	0	57	132	0	0	0	0	0	0	133	0	18	0	465
1:45 PM	0	109	0	0	57	134	0	0	0	0	0	0	105	0	21	0	426
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1195	21	0	892	2412	0	0	0	0	0	0	1505	0	286	4	6315
APPROACH %'s :	0.00%	98.27%	1.73%	0.00%	27.00%	73.00%	0.00%	0.00%					83.84%	0.00%	15.93%	0.22%	
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	0	295	4	0	206	692	0	0	0	0	0	0	503	0	83	0	1783
PEAK HR FACTOR :	0.000	0.910	0.500	0.000	0.817	0.925	0.000	0.000	0.000	0.000	0.000	0.000	0.905	0.000	0.741	0.000	0.952
		0.901				0.939								0.877			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sepulveda Blvd & Mission Dump Rd
City: Los Angeles
Control: 1-Way Stop(EB)

Project ID: 19-05328-105
Date: 2019-05-18

Total

NS/EW Streets:	Sepulveda Blvd				Sepulveda Blvd				Mission Dump Rd				Mission Dump Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	0	51	0	0	0	169	0	0	0	0	1	0	0	0	0	0	221
10:15 AM	0	41	0	0	0	194	0	0	0	0	0	0	0	0	0	0	235
10:30 AM	0	57	0	0	0	260	0	0	0	0	0	0	0	0	0	0	317
10:45 AM	0	52	0	0	0	228	1	0	0	0	0	0	0	0	0	0	281
11:00 AM	0	74	0	0	0	219	0	0	0	0	0	0	0	0	0	0	293
11:15 AM	0	64	0	0	0	199	0	0	0	0	0	0	0	0	0	0	263
11:30 AM	0	50	0	0	0	245	0	0	0	0	0	0	0	0	0	0	295
11:45 AM	0	60	0	0	0	242	0	0	0	0	0	0	0	0	0	0	302
12:00 PM	0	70	0	0	0	263	0	0	0	0	0	0	0	0	0	0	333
12:15 PM	0	82	0	0	0	327	0	0	0	0	0	0	0	0	0	0	409
12:30 PM	0	77	0	0	0	294	0	0	0	0	0	0	0	0	0	0	371
12:45 PM	0	79	0	0	0	311	0	0	0	0	0	0	0	0	0	0	390
1:00 PM	0	99	0	0	0	243	1	0	0	0	0	0	0	0	0	0	343
1:15 PM	1	126	0	0	0	225	0	0	0	0	0	0	0	0	0	0	352
1:30 PM	1	112	0	0	0	255	0	0	0	0	1	0	0	0	0	0	369
1:45 PM	0	115	0	0	0	234	0	0	0	0	0	0	0	0	0	0	349
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	1209	0	0	0	3908	2	0	0	0	2	0	0	0	0	0	5123
APPROACH %'s :	0.17%	99.83%	0.00%	0.00%	0.00%	99.95%	0.05%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	0	337	0	0	0	1175	1	0	0	0	0	0	0	0	0	0	1513
PEAK HR FACTOR :	0.000	0.851	0.000	0.000	0.000	0.898	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.925
		0.851				0.899											

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Sepulveda Blvd & Mission Dump Rd
City: Los Angeles
Control: 1-Way Stop(EB)

Project ID: 19-05409-005
Date: 6/18/2019

Total

NS/EW Streets:	N Sepulveda Blvd				N Sepulveda Blvd				Mission Dump Rd				Mission Dump Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	26	0	1	0	774	1	0	0	0	0	0	0	0	0	0	802
7:15 AM	0	30	0	0	0	760	0	0	0	0	1	0	0	0	0	0	791
7:30 AM	0	49	0	0	0	714	0	0	0	0	6	0	0	0	0	0	769
7:45 AM	0	51	0	0	0	736	0	0	0	0	7	0	0	0	0	0	794
8:00 AM	0	58	0	0	0	742	0	0	0	0	3	0	0	0	0	0	803
8:15 AM	0	73	0	0	0	716	0	0	0	0	0	0	0	0	0	0	789
8:30 AM	0	65	0	0	0	727	0	0	0	0	2	0	0	0	0	0	794
8:45 AM	0	69	0	0	0	688	1	0	0	0	0	0	0	0	0	0	758
9:00 AM	0	69	0	0	0	722	0	0	0	0	0	0	0	0	0	0	791
9:15 AM	0	66	0	0	0	733	0	0	0	0	0	0	0	0	0	0	799
9:30 AM	0	62	0	0	0	727	0	0	0	0	0	0	0	0	0	0	789
9:45 AM	0	65	0	0	0	670	0	0	0	0	0	0	0	0	0	0	735
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	683	0	1	0	8709	2	0	0	0	19	0	0	0	0	0	9414
APPROACH %'s :	0.00%	99.85%	0.00%	0.15%	0.00%	99.98%	0.02%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	**07:45 AM - 08:45 AM**																TOTAL
PEAK HR VOL :	0	247	0	0	0	2921	0	0	0	0	12	0	0	0	0	0	3180
PEAK HR FACTOR :	0.000	0.846	0.000	0.000	0.000	0.984	0.000	0.000	0.000	0.000	0.429	0.000	0.000	0.000	0.000	0.000	0.990
		0.846				0.984					0.429						

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	365	0	0	0	98	0	0	0	0	0	0	0	0	0	0	463
3:15 PM	0	388	0	0	0	104	0	0	0	0	0	0	0	0	0	0	492
3:30 PM	0	465	0	0	0	99	0	0	0	0	0	0	0	0	0	0	564
3:45 PM	0	491	0	0	0	87	0	0	0	0	0	0	0	0	0	0	578
4:00 PM	0	565	0	0	0	75	0	0	0	0	0	0	0	0	0	0	640
4:15 PM	0	649	0	0	0	77	1	0	0	0	1	0	0	0	0	0	728
4:30 PM	0	631	0	0	0	94	0	0	0	0	0	0	0	0	0	0	725
4:45 PM	0	612	0	0	0	93	0	0	0	0	0	0	0	0	0	0	705
5:00 PM	1	668	0	0	0	85	0	0	0	0	0	0	0	0	0	0	754
5:15 PM	6	631	0	0	0	92	0	0	0	0	0	0	0	0	0	0	729
5:30 PM	9	637	0	0	0	80	0	0	8	0	2	0	0	0	0	0	736
5:45 PM	0	660	0	0	0	89	0	0	3	0	3	0	0	0	0	0	755
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	16	6762	0	0	0	1073	1	0	11	0	6	0	0	0	0	0	7869
APPROACH %'s :	0.24%	99.76%	0.00%	0.00%	0.00%	99.91%	0.09%	0.00%	64.71%	0.00%	35.29%	0.00%					
PEAK HR :	**05:00 PM - 06:00 PM**																TOTAL
PEAK HR VOL :	16	2596	0	0	0	346	0	0	11	0	5	0	0	0	0	0	2974
PEAK HR FACTOR :	0.444	0.972	0.000	0.000	0.000	0.940	0.000	0.000	0.344	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.985
		0.976				0.940					0.400						

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Sepulveda Blvd & Mission Dump Rd
City: Los Angeles
Control: 1-Way Stop(EB)

Project ID: 19-05409-005
Date: 6/18/2019

Bikes

NS/EW Streets:	N Sepulveda Blvd				N Sepulveda Blvd				Mission Dump Rd				Mission Dump Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
9:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	9
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
		0.250															

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Sepulveda Blvd & Mission Dump Rd
City: Los Angeles

Project ID: 19-05409-005
Date: 6/18/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Sepulveda Blvd		N Sepulveda Blvd		Mission Dump Rd		Mission Dump Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	1	1	2
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	1	2
APPROACH %'s :							50.00%	50.00%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sepulveda Blvd & Mountaingate Dr
City: Los Angeles
Control: Signalized

Project ID: 19-05328-005
Date: 2019-05-18

Total

NS/EW Streets:	Sepulveda Blvd				Sepulveda Blvd				Mountaingate Dr				Mountaingate Dr				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	1	0	2	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	11	39	0	0	0	162	6	0	10	0	19	0	0	0	0	0	247
10:15 AM	14	36	0	0	0	185	12	0	8	0	18	0	0	0	0	0	273
10:30 AM	10	41	0	0	0	246	11	0	14	0	13	0	0	0	0	0	335
10:45 AM	16	42	0	0	0	220	10	0	11	0	20	0	0	0	0	0	319
11:00 AM	13	49	0	0	0	208	13	0	19	0	19	0	0	0	0	0	321
11:15 AM	11	52	0	0	0	186	12	0	14	0	20	0	0	0	0	0	295
11:30 AM	15	36	0	0	0	232	9	0	14	0	21	1	0	0	0	0	328
11:45 AM	18	62	0	0	0	234	11	0	10	0	26	0	0	0	0	0	361
12:00 PM	11	53	0	0	0	256	9	0	9	0	17	0	0	0	0	0	355
12:15 PM	16	62	0	1	0	311	12	0	18	0	16	0	0	0	0	0	436
12:30 PM	13	62	0	1	0	291	5	0	14	0	13	0	0	0	0	0	399
12:45 PM	19	69	0	0	0	295	13	0	8	0	18	0	0	0	0	0	422
1:00 PM	11	93	0	0	0	232	14	0	13	0	19	0	0	0	0	0	382
1:15 PM	21	111	0	0	0	215	8	0	20	0	18	0	0	0	0	0	393
1:30 PM	16	104	0	0	0	257	14	0	12	0	13	0	0	0	0	0	416
1:45 PM	18	100	0	1	0	218	9	0	8	0	14	0	0	0	0	0	368
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	233	1011	0	3	0	3748	168	0	202	0	284	1	0	0	0	0	5650
APPROACH %'s :	18.68%	81.07%	0.00%	0.24%	0.00%	95.71%	4.29%	0.00%	41.48%	0.00%	58.32%	0.21%					
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	59	286	0	2	0	1129	44	0	53	0	66	0	0	0	0	0	1639
PEAK HR FACTOR :	0.776	0.769	0.000	0.500	0.000	0.908	0.786	0.000	0.736	0.000	0.868	0.000	0.000	0.000	0.000	0.000	0.940
		0.834				0.908				0.875							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Skirball Center Dr & Mulholland Dr
City: Los Angeles
Control: Signalized

Project ID: 19-05328-001
Date: 2019-05-18

Total

NS/EW Streets:	Skirball Center Dr				Skirball Center Dr				Mulholland Dr				Mulholland Dr				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	0	1	0	0	0	0	0	0	1	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	23	0	59	0	0	0	0	0	0	20	18	0	75	11	0	0	206
10:15 AM	34	0	60	0	0	0	0	0	0	18	39	0	66	19	0	0	236
10:30 AM	30	0	66	0	0	0	0	0	0	15	42	0	77	15	0	0	245
10:45 AM	29	0	62	0	0	0	0	0	0	9	36	0	88	8	0	0	232
11:00 AM	37	0	66	0	0	0	0	0	0	21	36	0	80	19	0	0	259
11:15 AM	35	0	47	0	0	0	0	0	0	16	40	0	58	14	0	0	210
11:30 AM	31	0	64	0	0	0	0	0	0	19	45	0	71	22	0	0	252
11:45 AM	27	0	58	0	0	0	0	0	0	19	41	0	69	9	0	0	223
12:00 PM	25	0	81	0	0	0	0	0	0	14	26	0	59	23	0	0	228
12:15 PM	21	0	89	0	0	0	0	0	0	23	37	0	73	16	0	0	259
12:30 PM	33	0	91	0	0	0	0	0	0	18	46	0	54	19	0	0	261
12:45 PM	49	0	81	0	0	0	0	0	0	11	31	0	58	15	0	0	245
1:00 PM	39	0	69	0	0	0	0	0	0	17	33	0	49	14	0	0	221
1:15 PM	45	0	83	0	0	0	0	0	0	18	27	0	65	25	0	0	263
1:30 PM	37	0	73	0	0	0	0	0	0	14	26	0	57	20	0	0	227
1:45 PM	34	0	79	0	0	0	0	0	0	18	22	0	72	29	0	0	254
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	529	0	1128	0	0	0	0	0	0	270	545	0	1071	278	0	0	3821
APPROACH %'s :	31.93%	0.00%	68.07%	0.00%					0.00%	33.13%	66.87%	0.00%	79.39%	20.61%	0.00%	0.00%	
PEAK HR :	**12:00 PM - 01:00 PM**																TOTAL
PEAK HR VOL :	128	0	342	0	0	0	0	0	0	66	140	0	244	73	0	0	993
PEAK HR FACTOR :	0.653	0.000	0.940	0.000	0.000	0.000	0.000	0.000	0.000	0.717	0.761	0.000	0.836	0.793	0.000	0.000	0.951
			0.904							0.805				0.890			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Skirball Center Dr & Mulholland Dr
City: Los Angeles
Control: Signalized

Project ID: 19-05334-001
Date: 5/22/2019

Total

NS/EW Streets:	Skirball Center Dr				Skirball Center Dr				Mulholland Dr				Mulholland Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	59	0	72	0	0	0	0	0	0	91	230	0	131	49	0	0	632
7:15 AM	143	0	107	0	0	0	0	0	0	117	234	0	119	101	0	0	821
7:30 AM	91	0	90	0	0	0	0	0	0	139	244	0	141	79	0	0	784
7:45 AM	144	0	127	0	0	0	0	0	0	134	201	0	132	74	0	0	812
8:00 AM	112	0	78	0	0	0	0	0	0	98	264	0	147	97	0	0	796
8:15 AM	70	0	78	0	0	0	0	0	0	138	241	0	161	83	0	0	771
8:30 AM	56	0	77	0	0	0	0	0	0	130	258	0	135	41	0	0	697
8:45 AM	59	0	88	0	0	0	0	0	0	111	240	0	144	33	0	0	675
9:00 AM	30	0	87	0	0	0	0	0	0	100	243	0	152	40	0	0	652
9:15 AM	29	0	71	0	0	0	0	0	0	87	200	0	178	39	0	0	604
9:30 AM	30	0	61	0	0	0	0	0	0	103	207	0	165	37	0	0	603
9:45 AM	26	0	65	0	0	0	0	0	0	85	143	0	119	26	0	0	464
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	849	0	1001	0	0	0	0	0	0	1333	2705	0	1724	699	0	0	8311
APPROACH %'s :	45.89%	0.00%	54.11%	0.00%					0.00%	33.01%	66.99%	0.00%	71.15%	28.85%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	490	0	402	0	0	0	0	0	0	488	943	0	539	351	0	0	3213
PEAK HR FACTOR :	0.851	0.000	0.791	0.000	0.000	0.000	0.000	0.000	0.000	0.878	0.893	0.000	0.917	0.869	0.000	0.000	0.978
	0.823									0.934				0.912			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	129	0	62	0	0	0	0	0	0	45	85	0	108	114	0	0	543
3:15 PM	95	0	84	0	0	0	0	0	0	101	109	0	98	99	0	0	586
3:30 PM	89	0	102	0	0	0	0	0	0	79	117	0	131	105	0	0	623
3:45 PM	93	0	90	0	0	0	0	0	0	46	101	0	108	98	0	0	536
4:00 PM	91	0	73	0	0	0	0	0	0	48	93	0	61	86	0	0	452
4:15 PM	104	0	95	0	0	0	0	0	0	35	45	0	62	81	0	0	422
4:30 PM	116	0	87	0	0	0	0	0	0	24	38	0	64	82	0	0	411
4:45 PM	134	0	75	0	0	0	0	0	0	26	36	0	86	97	0	0	454
5:00 PM	120	0	85	0	0	0	0	0	0	30	60	0	63	103	0	0	461
5:15 PM	110	0	77	0	0	0	0	0	0	21	28	0	39	95	0	0	370
5:30 PM	136	0	100	0	0	0	0	0	0	26	28	0	66	115	0	0	471
5:45 PM	129	0	95	0	0	0	0	0	0	30	27	0	53	121	0	0	455
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1346	0	1025	0	0	0	0	0	0	511	767	0	939	1196	0	0	5784
APPROACH %'s :	56.77%	0.00%	43.23%	0.00%					0.00%	39.98%	60.02%	0.00%	43.98%	56.02%	0.00%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	406	0	338	0	0	0	0	0	0	271	412	0	445	416	0	0	2288
PEAK HR FACTOR :	0.787	0.000	0.828	0.000	0.000	0.000	0.000	0.000	0.000	0.671	0.880	0.000	0.849	0.912	0.000	0.000	0.918
	0.974									0.813				0.912			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Skirball Center Dr & Mulholland Dr
City: Los Angeles
Control: Signalized

Project ID: 19-05334-001
Date: 5/22/2019

Bikes

NS/EW Streets:	Skirball Center Dr				Skirball Center Dr				Mulholland Dr				Mulholland Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	5
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.375
	0.250								0.250				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
APPROACH %'s :									0.00%	0.00%	100.00%	0.00%					
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Skirball Center Dr & Mulholland Dr
City: Los Angeles

Project: 19-05334-001
Date: 5/22/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Skirball Center Dr		Skirball Center Dr		Mulholland Dr		Mulholland Dr		Skirball Center Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		SOUTH LEG 2 CUT OUT		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
7:00 AM	0	0	4	7	0	0	0	0	4	7	22
7:15 AM	0	0	1	7	0	0	0	0	1	7	16
7:30 AM	0	0	2	2	0	0	0	0	2	3	9
7:45 AM	0	0	1	2	0	0	0	0	1	1	5
8:00 AM	0	0	0	1	0	0	0	0	0	1	2
8:15 AM	0	0	0	2	0	0	0	0	0	2	4
8:30 AM	0	0	1	1	0	0	0	0	1	1	4
8:45 AM	0	0	1	5	0	0	0	0	1	5	12
9:00 AM	0	0	2	0	0	0	0	0	2	0	4
9:15 AM	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
TOTAL VOLUMES :	0	0	12	27	0	0	0	0	12	27	78
APPROACH %'s :			30.77%	69.23%					30.77%	69.23%	
PEAK HR :	**07:15 AM - 08:15 AM**										TOTAL
PEAK HR VOL :	0	0	5	14	0	0	0	0	5	14	38
PEAK HR FACTOR :			0.313	0.500					0.313	0.500	0.432
			0.432						0.432		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		SOUTH LEG 2 CUT OUT		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
TOTAL VOLUMES :	0	0	0	1	0	0	0	0	0	0	1
APPROACH %'s :			0.00%	100.00%							
PEAK HR :	**03:00 PM - 04:00 PM**										TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Skirball Center Dr & I-405 Freeway NB Ramps
City: Los Angeles
Control: Signalized

Project ID: 19-05328-002
Date: 2019-05-18

Total

NS/EW Streets:	Skirball Center Dr				Skirball Center Dr				I-405 Freeway NB Ramps				I-405 Freeway NB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	1	0	2	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	22	24	0	0	0	59	35	0	58	0	25	0	0	0	0	0	223
10:15 AM	11	24	0	0	0	68	36	0	63	0	23	0	0	0	0	0	225
10:30 AM	17	31	0	0	0	87	33	0	72	0	41	0	0	0	0	0	281
10:45 AM	15	16	0	0	0	78	45	0	71	0	46	0	0	0	0	0	271
11:00 AM	28	36	0	0	0	82	34	0	71	0	36	0	0	0	0	0	287
11:15 AM	20	15	0	0	0	71	27	0	67	0	20	0	0	0	0	0	220
11:30 AM	15	39	0	0	0	76	42	0	54	0	38	0	0	0	0	0	264
11:45 AM	17	28	0	0	0	72	31	0	64	0	26	0	0	0	0	0	238
12:00 PM	36	39	0	0	0	65	25	0	54	0	32	0	0	0	0	0	251
12:15 PM	26	48	0	0	0	77	34	0	70	0	27	0	0	0	0	0	282
12:30 PM	25	37	0	0	0	72	27	0	86	0	43	0	0	0	0	0	290
12:45 PM	14	36	0	0	0	57	32	0	95	0	43	0	0	0	0	0	277
1:00 PM	23	36	0	0	0	59	24	0	72	0	42	0	0	0	0	0	256
1:15 PM	34	56	0	0	0	62	29	0	72	0	28	0	0	0	0	0	281
1:30 PM	25	39	0	0	0	63	20	0	64	0	33	0	0	0	0	0	244
1:45 PM	15	43	0	0	0	65	33	0	75	0	33	0	0	0	0	0	264
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	343	547	0	0	0	1113	507	0	1108	0	536	0	0	0	0	0	4154
APPROACH %'s :	38.54%	61.46%	0.00%	0.00%	0.00%	68.70%	31.30%	0.00%	67.40%	0.00%	32.60%	0.00%					
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	88	157	0	0	0	265	117	0	323	0	155	0	0	0	0	0	1105
PEAK HR FACTOR :	0.846	0.818	0.000	0.000	0.000	0.860	0.860	0.000	0.850	0.000	0.901	0.000	0.000	0.000	0.000	0.000	0.953
		0.828				0.860				0.866							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sepulveda Blvd & Skirball Center Dr
City: Los Angeles
Control: Signalized

Project ID: 19-05328-003
Date: 2019-05-18

Total

NS/EW Streets:	Sepulveda Blvd				Sepulveda Blvd				Skirball Center Dr				Skirball Center Dr				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	0.5	0.5	0	1.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	1	26	37	0	4	99	6	0	0	1	1	0	58	6	19	0	258
10:15 AM	3	25	30	0	7	146	6	0	0	2	0	0	66	13	13	0	311
10:30 AM	4	38	41	0	4	161	3	0	0	1	1	0	86	21	17	0	377
10:45 AM	2	30	29	0	4	139	8	0	0	0	0	0	80	29	19	0	340
11:00 AM	0	38	47	0	9	142	5	0	3	2	3	0	78	11	29	0	367
11:15 AM	0	31	38	0	3	122	2	0	0	0	0	0	63	11	17	0	287
11:30 AM	4	29	36	0	18	157	2	0	3	0	1	0	72	9	33	0	364
11:45 AM	4	44	33	0	10	140	1	0	2	1	7	0	74	1	29	0	346
12:00 PM	0	30	51	0	11	162	0	0	5	14	16	0	50	5	36	0	380
12:15 PM	0	39	58	0	12	143	1	0	2	7	8	0	77	0	23	0	370
12:30 PM	1	53	42	0	8	172	2	0	1	7	5	0	67	9	43	0	410
12:45 PM	1	58	42	0	9	135	3	0	2	1	4	0	52	3	47	0	357
1:00 PM	2	65	50	0	7	109	2	0	0	2	5	0	51	4	43	0	340
1:15 PM	2	73	69	0	10	85	2	0	1	11	17	0	57	3	31	0	361
1:30 PM	3	86	56	0	5	120	1	0	1	3	20	0	65	3	29	0	392
1:45 PM	2	93	39	0	9	120	1	0	2	5	10	0	56	1	36	0	374
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	29	758	698	0	130	2152	45	0	22	57	98	0	1052	129	464	0	5634
APPROACH %'s :	1.95%	51.04%	47.00%	0.00%	5.59%	92.48%	1.93%	0.00%	12.43%	32.20%	55.37%	0.00%	63.95%	7.84%	28.21%	0.00%	
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	2	180	193	0	40	612	6	0	10	29	33	0	246	17	149	0	1517
PEAK HR FACTOR :	0.500	0.776	0.832	0.000	0.833	0.890	0.500	0.000	0.500	0.518	0.516	0.000	0.799	0.472	0.793	0.000	0.925
		0.928				0.904				0.514				0.866			

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-405 Freeway SB Ramps & Sepulveda Blvd
City: Los Angeles
Control: Signalized

Project ID: 19-05328-006
Date: 5/18/2019

Total

NS/EW Streets:	I-405 Freeway SB Ramps				I-405 Freeway SB Ramps				Sepulveda Blvd				Sepulveda Blvd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.5	0.5	1	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	0	0	0	0	33	0	0	0	0	76	99	0	2	39	0	0	249
10:15 AM	0	0	0	0	36	1	0	0	0	97	96	0	1	48	0	0	279
10:30 AM	0	0	0	0	22	1	0	0	0	133	136	0	1	52	0	0	345
10:45 AM	0	0	0	0	21	0	0	0	0	116	137	0	2	53	0	0	329
11:00 AM	0	0	0	0	22	0	1	0	0	126	109	0	1	62	0	0	321
11:15 AM	0	0	0	0	18	0	2	0	0	105	101	0	3	55	0	0	284
11:30 AM	0	0	0	0	19	0	3	0	0	136	121	0	0	47	0	0	326
11:45 AM	0	0	0	0	29	0	2	0	0	153	101	0	5	79	0	0	369
12:00 PM	0	0	0	0	35	0	1	0	0	188	81	0	2	60	0	0	367
12:15 PM	0	0	0	0	23	1	0	0	0	200	138	0	5	76	0	0	443
12:30 PM	0	0	0	0	28	0	0	0	0	210	84	0	5	76	0	0	403
12:45 PM	0	0	0	0	24	0	1	0	0	191	119	0	4	90	0	0	429
1:00 PM	0	0	0	0	20	0	1	0	0	168	88	0	6	107	0	0	390
1:15 PM	0	0	0	0	29	0	1	0	0	173	62	0	8	123	0	0	396
1:30 PM	0	0	0	0	28	0	0	0	0	173	108	0	9	119	0	0	437
1:45 PM	0	0	0	0	29	0	1	0	0	165	71	0	9	129	0	0	404
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	416	3	13	0	0	2410	1651	0	63	1215	0	0	5771
APPROACH %'s :					96.30%	0.69%	3.01%	0.00%	0.00%	59.34%	40.66%	0.00%	4.93%	95.07%	0.00%	0.00%	
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	95	1	2	0	0	769	429	0	20	349	0	0	1665
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.848	0.250	0.500	0.000	0.000	0.915	0.777	0.000	0.833	0.815	0.000	0.000	0.940
						0.875				0.886				0.816			

City of Los Angeles
Department of Transportation

MANUAL TRAFFIC COUNT SUMMARY

Street:

North/South Skirball Center Drive

East/West I-405 NB Ramps

Day: Wednesday Date: 1/10/2018 Weather: Sunny

Hours: 7-10AM 3-6PM

School Day: Yes

	N/B	S/B	E/B	W/B
Dual-Wheel:	42	52	18	0
Bikes:				
Buses:	23	36	17	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	83	7:45	425	7:30	186	7:45	0	7:00
PM PK 15 MIN	331	3:45	277	3:30	96	4:45	0	3:00
AM PK HOUR	287	7:15	1621	8:00	648	7:15	0	7:00
PM PK HOUR	1200	3:00	972	3:00	362	4:30	0	3:00

NORTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	0	230	49	279
8-9	0	158	56	214
9-10	0	114	58	172
3-4	0	529	671	1200
4-5	0	397	618	1015
5-6	0	567	544	1111
Total	0	1995	1996	3991

SOUTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	227	1300	1	1528
8-9	196	1425	0	1621
9-10	124	1285	0	1409
3-4	448	524	0	972
4-5	305	318	0	623
5-6	168	237	0	405
Total	1468	5089	1	6558

Total

N/S
1807
1835
1581
2172
1638
1516
10549

EASTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	60	0	562	622
8-9	78	0	401	479
9-10	73	0	300	373
3-4	40	0	188	228
4-5	67	0	251	318
5-6	71	0	247	318
Total	389	0	1949	2338

WESTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
Total	0	0	0	0

Total

E/W
622
479
373
228
318
318
2338

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:
North/South : **Skirball Center Drive**
East/West : **I-405 NB Ramps**

Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	YES	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

AM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00 - 7:15	0	0	0	13	**13**
7:15 - 7:30	0	0	0	3	**3**
7:30 - 7:45	0	0	0	0	**0**
7:45 - 8:00	0	0	0	0	**0**
8:00 - 8:15	0	0	0	0	**0**
8:15 - 8:30	0	0	0	1	**1**
8:30 - 8:45	0	0	0	2	**2**
8:45 - 9:00	0	0	0	0	**0**
9:00 - 9:15	0	0	0	0	**0**
9:15 - 9:30	0	0	0	0	**0**
9:30 - 9:45	0	0	0	3	**3**
9:45 -10:00	0	0	0	1	**1**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7 - 8	0	0	0	16	**16**
8 - 9	0	0	0	3	**3**
9 - 10	0	0	0	4	**4**
TOTAL	**0**	**0**	**0**	**23**	**23**

PM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00 - 3:15	0	0	0	2	**2**
3:15 - 3:30	0	0	0	0	**0**
3:30 - 3:45	0	0	0	1	**1**
3:45 - 4:00	0	0	0	0	**0**
4:00 - 4:15	0	0	0	0	**0**
4:15 - 4:30	0	0	0	2	**2**
4:30 - 4:45	0	0	0	0	**0**
4:45 - 5:00	0	0	0	1	**1**
5:00 - 5:15	0	0	0	1	**1**
5:15 - 5:30	0	0	0	1	**1**
5:30 - 5:45	0	0	0	0	**0**
5:45 - 6:00	0	0	0	0	**0**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3 - 4	0	0	0	3	**3**
4 - 5	0	0	0	3	**3**
5 - 6	0	0	0	2	**2**
TOTAL	**0**	**0**	**0**	**8**	**8**

REMARKS (6 hour total):

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	0	0	0	0	0
- Skateboard/scooter	0	0	0	0	0

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2017 CMP

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:

North/South :	**Skirball Center Drive**				
East/West :	**I-405 NB Ramps**				
Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	Yes	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

N-S
0
0
0
0
0
0
0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

E-W
0
0
0
0
0
0
0

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female riders	0	0	0	0	0
- No helmet riders	0	0	0	0	0
- Sidewalk riding	0	0	0	0	0
- Wrong way riding	0	0	0	0	0

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: LADOT 2017 CMP

Turning Movement Count Report

North/South: Skirball Center Drive
East/West: I-405 NB Ramps

Date: 01/10/18
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
0700-0715	47	333	0	0	0	0	0	47	12	17	0	99	555
0715-0730	52	315	0	0	0	0	0	60	9	10	0	161	607
0730-0745	56	369	0	0	0	0	0	50	18	15	0	134	1116
0745-0800	72	283	1	0	0	0	0	73	10	18	0	168	1050
0800-0815	54	367	0	0	0	0	0	53	14	14	0	128	1049
0815-0830	54	361	0	0	0	0	0	44	10	16	0	101	1023
0830-0845	47	358	0	0	0	0	0	28	12	24	0	94	999
0845-0900	41	339	0	0	0	0	0	33	20	24	0	78	949
0900-0915	46	335	0	0	0	0	0	37	12	21	0	82	898
0915-0930	36	388	0	0	0	0	0	17	19	17	0	75	850
0930-0945	21	332	0	0	0	0	0	34	9	17	0	71	804
0945-1000	21	230	0	0	0	0	0	26	18	18	0	72	797
1500-1515	116	114	0	0	0	0	0	157	135	10	0	72	531
1515-1530	102	136	0	0	0	0	0	118	145	8	0	45	560
1530-1545	117	160	0	0	0	0	0	138	176	10	0	40	582
1545-1600	113	114	0	0	0	0	0	116	215	12	0	31	594
1600-1615	91	84	0	0	0	0	0	93	191	8	0	48	588
1615-1630	80	76	0	0	0	0	0	73	178	16	0	58	678
1630-1645	77	87	0	0	0	0	0	112	132	22	0	70	660
1645-1700	57	71	0	0	0	0	0	119	117	21	0	75	698
1700-1715	51	68	0	0	0	0	0	102	156	20	0	70	742
1715-1730	42	55	0	0	0	0	0	141	128	14	0	70	788
1730-1745	36	60	0	0	0	0	0	173	132	19	0	45	733
1745-1800	39	54	0	0	0	0	0	151	128	18	0	62	716

Trucks/Buses

	Trucks			
Approach:	North	East	South	West
0700-0715	2	2	2	0
0715-0730	3	1	0	0
0730-0745	4	1	2	0
0745-0800	3	2	1	0
0800-0815	4	1	1	0
0815-0830	1	2	0	0
0830-0845	3	0	6	0
0845-0900	3	1	2	0
0900-0915	1	4	2	0
0915-0930	0	0	9	0
0930-0945	2	0	2	0
0945-1000	0	4	5	0
1500-1515	0	0	3	0
1515-1530	3	0	3	0
1530-1545	3	0	3	0
1545-1600	1	0	1	0
1600-1615	2	0	0	0
1615-1630	3	0	2	0
1630-1645	1	0	1	0
1645-1700	1	0	0	0
1700-1715	0	0	1	0
1715-1730	2	0	2	0
1730-1745	0	0	3	0
1745-1800	0	0	1	0

	Buses			
Approach:	North	East	South	West
0700-0715	4	3	2	0
0715-0730	0	0	4	0
0730-0745	0	2	1	0
0745-0800	0	4	4	0
0800-0815	0	3	6	0
0815-0830	0	0	1	0
0830-0845	1	0	2	0
0845-0900	0	0	1	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	2	0	0
0945-1000	0	0	0	0
1500-1515	1	0	0	0
1515-1530	0	0	4	0
1530-1545	0	0	1	0
1545-1600	2	0	4	0
1600-1615	0	0	0	0
1615-1630	1	0	0	0
1630-1645	2	1	0	0
1645-1700	4	0	1	0
1700-1715	4	0	0	0
1715-1730	2	0	2	0
1730-1745	1	2	1	0
1745-1800	1	0	2	0

Pedestrian/Bicycle

	Pedestrians			
Leg:	North	East	South	West
0700-0715	0	0	0	13
0715-0730	0	0	0	3
0730-0745	0	0	0	0
0745-0800	0	0	0	0
0800-0815	0	0	0	0
0815-0830	0	0	0	1
0830-0845	0	0	0	2
0845-0900	0	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	0	0	3
0945-1000	0	0	0	1
1500-1515	0	0	0	2
1515-1530	0	0	0	0
1530-1545	0	0	0	1
1545-1600	0	0	0	0
1600-1615	0	0	0	0
1615-1630	0	0	0	2
1630-1645	0	0	0	0
1645-1700	0	0	0	1
1700-1715	0	0	0	1
1715-1730	0	0	0	1
1730-1745	0	0	0	0
1745-1800	0	0	0	0

	Bicycle			
Approach:	North	East	South	West
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	0
0745-0800	0	0	0	0
0800-0815	0	0	0	0
0815-0830	0	0	0	0
0830-0845	0	0	0	0
0845-0900	0	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	0	0	0
0945-1000	0	0	0	0
1500-1515	0	0	0	0
1515-1530	0	0	0	0
1530-1545	0	0	0	0
1545-1600	0	0	0	0
1600-1615	0	0	0	0
1615-1630	0	0	0	0
1630-1645	0	0	0	0
1645-1700	0	0	0	0
1700-1715	0	0	0	0
1715-1730	0	0	0	0
1730-1745	0	0	0	0
1745-1800	0	0	0	0

City of Los Angeles
Departmant of Transportation

MANUAL TRAFFIC COUNT SUMMARY

Street:

North/South Sepulveda Blvd

East/West Skirball Center Drive

Day: Wednesday Date: 1/10/2018 Weather: Sunny

Hours: 7-10AM 3-6PM

School Day: Yes

	N/B	S/B	E/B	W/B
Dual-Wheel:	40	28	5	22
Bikes:				
Buses:	50	24	2	27

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	93	7:45	447	7:45	4	9:30	392	9:15
PM PK 15 MIN	692	5:30	86	5:00	12	5:00	181	3:30
AM PK HOUR	324	7:30	1759	7:30	9	8:15	1481	8:30
PM PK HOUR	2633	5:00	316	5:00	32	4:30	552	3:00

NORTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	229	76	2	307
8-9	169	93	6	268
9-10	135	93	3	231
3-4	1142	1138	6	2286
4-5	959	1448	1	2408
5-6	1014	1617	2	2633
Total	3648	4465	20	8133

SOUTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	0	1715	43	1758
8-9	0	1495	41	1536
9-10	4	1544	38	1586
3-4	1	212	47	260
4-5	0	225	29	254
5-6	2	277	37	316
Total	7	5468	235	5710

Total

N/S
2065
1804
1817
2546
2662
2949
13843

EASTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	3	0	0	3
8-9	7	1	0	8
9-10	2	3	3	8
3-4	7	12	4	23
4-5	10	8	2	20
5-6	3	11	6	20
Total	32	35	15	82

WESTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	62	1	1261	1324
8-9	83	7	1319	1409
9-10	72	12	1288	1372
3-4	68	2	482	552
4-5	81	0	308	389
5-6	93	3	220	316
Total	459	25	4878	5362

Total

E/W
1327
1417
1380
575
409
336
5444

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:
North/South : **Sepulveda Blvd**
East/West : **Skirball Center Drive**

Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	YES	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

AM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00 - 7:15	0	0	0	0	**0**
7:15 - 7:30	0	0	0	0	**0**
7:30 - 7:45	0	0	0	0	**0**
7:45 - 8:00	0	0	0	0	**0**
8:00 - 8:15	0	0	0	0	**0**
8:15 - 8:30	0	0	0	0	**0**
8:30 - 8:45	0	0	0	0	**0**
8:45 - 9:00	0	0	0	0	**0**
9:00 - 9:15	0	0	0	0	**0**
9:15 - 9:30	0	0	0	0	**0**
9:30 - 9:45	0	0	0	0	**0**
9:45 -10:00	0	0	0	0	**0**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7 - 8	0	0	0	0	**0**
8 - 9	0	0	0	0	**0**
9 - 10	0	0	0	0	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**

PM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00 - 3:15	0	0	0	0	**0**
3:15 - 3:30	0	0	0	0	**0**
3:30 - 3:45	0	0	0	0	**0**
3:45 - 4:00	0	0	0	0	**0**
4:00 - 4:15	0	0	0	0	**0**
4:15 - 4:30	0	0	0	0	**0**
4:30 - 4:45	0	0	0	0	**0**
4:45 - 5:00	0	0	0	0	**0**
5:00 - 5:15	0	0	1	0	**1**
5:15 - 5:30	0	0	0	0	**0**
5:30 - 5:45	0	0	0	0	**0**
5:45 - 6:00	0	0	0	0	**0**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3 - 4	0	0	0	0	**0**
4 - 5	0	0	0	0	**0**
5 - 6	0	0	1	0	**1**
TOTAL	**0**	**0**	**1**	**0**	**1**

REMARKS (6 hour total):

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	0	0	0	0	0
- Skateboard/scooter	0	0	0	0	0

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2017 CMP

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:

North/South :	**Sepulveda Blvd**				
East/West :	**Skirball Center Drive**				
Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	Yes	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

N-S
0
0
0
0
0
0
0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	1	0	0	1
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	1	0	0	1

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

E-W
0
1
0
0
0
0
1

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female riders	0	0	0	0	0
- No helmet riders	0	0	0	0	0
- Sidewalk riding	0	0	0	0	0
- Wrong way riding	0	0	0	0	0

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: LADOT 2017 CMP

Turning Movement Count Report

North/South: Sepulveda Blvd
East/West: Skirball Center Drive

Date: 01/10/18
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
0700-0715	0	432	8	13	0	321	48	18	0	0	0	0	840
0715-0730	0	415	13	15	0	310	56	11	1	1	0	0	822
0730-0745	0	436	7	12	0	309	60	20	0	1	0	0	845
0745-0800	0	432	15	22	1	321	65	27	1	1	0	0	885
0800-0815	0	429	10	12	0	310	54	24	1	2	0	0	842
0815-0830	0	415	15	16	2	351	40	30	2	2	0	0	873
0830-0845	0	401	9	29	2	326	34	24	3	2	0	0	830
0845-0900	0	250	7	26	3	332	41	15	0	1	1	0	676
0900-0915	0	394	12	22	1	348	38	23	1	1	1	1	842
0915-0930	1	426	5	20	4	368	29	24	0	0	0	0	877
0930-0945	1	391	14	17	2	322	33	27	0	1	1	2	811
0945-1000	2	333	7	13	5	250	35	19	2	0	1	0	667
1500-1515	1	55	14	19	1	99	259	208	0	2	6	1	665
1515-1530	0	58	10	9	1	108	270	266	3	2	2	0	729
1530-1545	0	50	9	21	0	160	299	327	0	1	2	1	870
1545-1600	0	49	14	19	0	115	314	337	3	2	2	2	857
1600-1615	0	43	7	12	0	79	278	322	1	1	1	0	744
1615-1630	0	58	7	23	0	69	223	329	0	2	0	0	711
1630-1645	0	66	8	24	0	83	229	383	0	3	4	0	800
1645-1700	0	58	7	22	0	77	229	414	0	4	3	2	816
1700-1715	0	78	8	32	0	64	226	397	0	2	6	4	817
1715-1730	0	66	6	15	0	48	257	395	0	1	2	1	791
1730-1745	1	66	13	24	0	52	276	415	1	0	0	0	848
1745-1800	1	67	10	22	3	56	255	410	1	0	3	1	829

Trucks/Buses

	Trucks			
Approach:	North	East	South	West
0700-0715	2	0	1	1
0715-0730	1	0	4	1
0730-0745	2	0	1	1
0745-0800	2	0	2	0
0800-0815	5	0	1	0
0815-0830	1	2	3	0
0830-0845	1	0	2	1
0845-0900	0	2	1	0
0900-0915	2	0	2	2
0915-0930	1	0	3	3
0930-0945	3	1	2	4
0945-1000	0	0	2	3
1500-1515	0	0	0	0
1515-1530	3	0	0	0
1530-1545	3	0	0	2
1545-1600	2	0	0	0
1600-1615	1	0	0	0
1615-1630	3	0	0	0
1630-1645	1	0	0	0
1645-1700	3	0	1	0
1700-1715	0	0	0	1
1715-1730	3	0	0	1
1730-1745	0	0	3	1
1745-1800	1	0	0	1

	Buses			
Approach:	North	East	South	West
0700-0715	6	0	3	1
0715-0730	0	0	1	1
0730-0745	1	0	0	2
0745-0800	1	0	2	2
0800-0815	0	0	2	5
0815-0830	1	0	1	0
0830-0845	2	0	0	1
0845-0900	1	0	0	0
0900-0915	0	0	1	0
0915-0930	0	0	2	0
0930-0945	2	2	0	3
0945-1000	1	0	1	0
1500-1515	2	0	1	0
1515-1530	1	0	1	4
1530-1545	1	0	2	3
1545-1600	3	0	1	3
1600-1615	2	0	1	0
1615-1630	1	0	0	0
1630-1645	3	0	1	0
1645-1700	6	0	0	0
1700-1715	5	0	2	0
1715-1730	4	0	1	1
1730-1745	4	0	1	0
1745-1800	3	0	0	1

Pedestrian/Bicycle

	Pedestrians			
Leg:	North	East	South	West
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	0
0745-0800	0	0	0	0
0800-0815	0	0	0	0
0815-0830	0	0	0	0
0830-0845	0	0	0	0
0845-0900	0	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	0	0	0
0945-1000	0	0	0	0
1500-1515	0	0	0	0
1515-1530	0	0	0	0
1530-1545	0	0	0	0
1545-1600	0	0	0	0
1600-1615	0	0	0	0
1615-1630	0	0	0	0
1630-1645	0	0	0	0
1645-1700	0	0	0	0
1700-1715	0	1	0	0
1715-1730	0	0	0	0
1730-1745	0	0	0	0
1745-1800	0	0	0	0

	Bicycle			
Approach:	North	East	South	West
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	0
0745-0800	0	0	0	0
0800-0815	0	1	0	0
0815-0830	0	0	0	0
0830-0845	0	0	0	0
0845-0900	0	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	0	0	0
0945-1000	0	0	0	0
1500-1515	0	0	0	0
1515-1530	0	0	0	0
1530-1545	0	0	0	0
1545-1600	0	0	0	0
1600-1615	0	0	0	0
1615-1630	0	0	0	0
1630-1645	0	0	0	0
1645-1700	0	0	0	0
1700-1715	0	0	0	0
1715-1730	0	0	0	0
1730-1745	0	0	0	0
1745-1800	0	0	0	0

City of Los Angeles
Departmant of Transportation

MANUAL TRAFFIC COUNT SUMMARY

Street:

North/South Sepulveda Blvd

East/West I-405 Southbound Ramps

Day: Wednesday Date: 1/10/2018 Weather: Sunny

Hours: 7-10AM 3-6PM

School Day: Yes

	N/B	S/B	E/B	W/B
Dual-Wheel:	27	52	0	30
Bikes:				
Buses:	34	44	0	14

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	72	7:45	818	9:15	0	7:00	148	7:15
PM PK 15 MIN	664	5:30	194	3:30	0	3:00	88	3:00
AM PK HOUR	248	7:30	3029	7:30	0	7:00	537	7:15
PM PK HOUR	2549	4:45	697	3:00	0	3:00	275	3:00

NORTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	9	215	0	224
8-9	9	222	0	231
9-10	17	189	0	206
3-4	4	2102	0	2106
4-5	6	2304	0	2310
5-6	3	2542	0	2545
Total	48	7574	0	7622

SOUTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	0	2532	432	2964
8-9	0	2116	724	2840
9-10	0	2040	805	2845
3-4	0	366	331	697
4-5	0	325	219	544
5-6	0	334	166	500
Total	0	7713	2677	10390

Total

N/S
3188
3071
3051
2803
2854
3045
18012

EASTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
Total	0	0	0	0

WESTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	93	0	436	529
8-9	52	0	444	496
9-10	43	0	184	227
3-4	198	0	77	275
4-5	116	0	91	207
5-6	131	0	77	208
Total	633	0	1309	1942

Total

E/W
529
496
227
275
207
208
1942

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:

North/South :	**Sepulveda Blvd**				
East/West :	**I-405 Southbound Ramps**				
Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	YES	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

AM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00 - 7:15	0	0	0	0	**0**
7:15 - 7:30	0	0	0	0	**0**
7:30 - 7:45	0	0	0	0	**0**
7:45 - 8:00	0	0	0	0	**0**
8:00 - 8:15	0	0	0	0	**0**
8:15 - 8:30	0	0	0	0	**0**
8:30 - 8:45	0	0	0	0	**0**
8:45 - 9:00	0	0	0	0	**0**
9:00 - 9:15	0	0	0	0	**0**
9:15 - 9:30	0	0	0	0	**0**
9:30 - 9:45	0	0	0	0	**0**
9:45 -10:00	0	0	0	0	**0**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7 - 8	0	0	0	0	**0**
8 - 9	0	0	0	0	**0**
9 - 10	0	0	0	0	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**

PM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00 - 3:15	0	0	0	0	**0**
3:15 - 3:30	0	0	0	0	**0**
3:30 - 3:45	0	0	0	0	**0**
3:45 - 4:00	0	0	0	0	**0**
4:00 - 4:15	0	0	0	0	**0**
4:15 - 4:30	0	0	0	0	**0**
4:30 - 4:45	0	0	0	0	**0**
4:45 - 5:00	0	0	0	0	**0**
5:00 - 5:15	1	0	0	0	**1**
5:15 - 5:30	0	0	0	0	**0**
5:30 - 5:45	0	0	0	0	**0**
5:45 - 6:00	0	0	0	0	**0**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3 - 4	0	0	0	0	**0**
4 - 5	0	0	0	0	**0**
5 - 6	1	0	0	0	**1**
TOTAL	**1**	**0**	**0**	**0**	**1**

REMARKS (6 hour total):

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	0	0	0	0	0
- Skateboard/scooter	0	0	0	0	0

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2017 CMP

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:

North/South :	**Sepulveda Blvd**				
East/West :	**I-405 Southbound Ramps**				
Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	Yes	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

N-S
0
0
0
0
0
0
0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

E-W
0
0
0
0
0
0
0

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female riders	0	0	0	0	0
- No helmet riders	0	0	0	0	0
- Sidewalk riding	0	0	0	0	0
- Wrong way riding	0	0	0	0	0

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: LADOT 2017 CMP

Turning Movement Count Report

North/South: Sepulveda Blvd
East/West: I-405 Southbound Ramps

Date: 01/10/18
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
0700-0715	0	658	81	22	0	118	2	47	0	0	0	0	984
0715-0730	0	598	126	19	0	129	1	49	0	0	0	0	1018
0730-0745	0	648	109	26	0	99	3	50	0	0	0	0	1116
0745-0800	0	628	116	26	0	90	3	69	0	0	0	0	1050
0800-0815	0	585	161	22	0	126	0	61	0	0	0	0	1049
0815-0830	0	616	166	10	0	107	1	61	0	0	0	0	1023
0830-0845	0	570	169	10	0	114	4	48	0	0	0	0	999
0845-0900	0	345	228	10	0	97	4	52	0	0	0	0	949
0900-0915	0	560	231	12	0	66	3	50	0	0	0	0	898
0915-0930	0	583	235	3	0	25	3	50	0	0	0	0	850
0930-0945	0	499	148	17	0	49	5	43	0	0	0	0	804
0945-1000	0	398	191	11	0	44	6	46	0	0	0	0	797
1500-1515	0	78	63	72	0	16	0	404	0	0	0	0	531
1515-1530	0	100	81	42	0	22	2	515	0	0	0	0	560
1530-1545	0	96	98	45	0	20	1	583	0	0	0	0	582
1545-1600	0	92	89	39	0	19	1	600	0	0	0	0	594
1600-1615	0	66	57	29	0	24	2	590	0	0	0	0	588
1615-1630	0	79	48	24	0	20	0	522	0	0	0	0	678
1630-1645	0	88	64	31	0	29	1	576	0	0	0	0	660
1645-1700	0	92	50	32	0	18	3	616	0	0	0	0	698
1700-1715	0	94	44	28	0	17	0	640	0	0	0	0	742
1715-1730	0	77	38	32	0	13	1	625	0	0	0	0	788
1730-1745	0	77	35	35	0	19	1	663	0	0	0	0	733
1745-1800	0	86	49	36	0	28	1	614	0	0	0	0	716

Trucks/Buses

	Trucks			
Approach:	North	East	South	West
0700-0715	0	0	2	4
0715-0730	0	0	3	2
0730-0745	0	0	4	2
0745-0800	3	0	3	1
0800-0815	0	0	1	4
0815-0830	0	0	6	3
0830-0845	0	0	3	1
0845-0900	0	0	2	1
0900-0915	1	0	2	1
0915-0930	1	0	9	1
0930-0945	1	0	5	0
0945-1000	0	0	2	0
1500-1515	0	0	0	0
1515-1530	2	0	0	0
1530-1545	3	0	2	0
1545-1600	1	0	0	1
1600-1615	1	0	0	0
1615-1630	3	0	0	0
1630-1645	0	0	0	1
1645-1700	5	0	1	3
1700-1715	0	0	1	3
1715-1730	4	0	2	1
1730-1745	0	0	1	1
1745-1800	2	0	3	0

	Buses			
Approach:	North	East	South	West
0700-0715	4	0	4	2
0715-0730	0	0	0	0
0730-0745	1	0	2	1
0745-0800	1	0	4	1
0800-0815	0	0	8	0
0815-0830	1	0	1	0
0830-0845	1	0	1	1
0845-0900	1	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	2	0
0930-0945	2	0	1	0
0945-1000	1	0	1	0
1500-1515	2	0	1	0
1515-1530	0	0	4	0
1530-1545	1	0	5	0
1545-1600	3	0	4	0
1600-1615	2	0	1	0
1615-1630	2	0	0	0
1630-1645	2	0	1	1
1645-1700	2	0	0	3
1700-1715	3	0	2	3
1715-1730	1	0	0	1
1730-1745	2	0	2	1
1745-1800	2	0	0	0

Pedestrian/Bicycle

	Pedestrians			
Leg:	North	East	South	West
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	0
0745-0800	0	0	0	0
0800-0815	0	0	0	0
0815-0830	0	0	0	0
0830-0845	0	0	0	0
0845-0900	0	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	0	0	0
0945-1000	0	0	0	0
1500-1515	0	0	0	0
1515-1530	0	0	0	0
1530-1545	0	0	0	0
1545-1600	0	0	0	0
1600-1615	0	0	0	0
1615-1630	0	0	0	0
1630-1645	0	0	0	0
1645-1700	0	0	0	0
1700-1715	1	0	0	0
1715-1730	0	0	0	0
1730-1745	0	0	0	0
1745-1800	0	0	0	0

	Bicycle			
Approach:	North	East	South	West
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	1
0745-0800	0	0	0	0
0800-0815	0	0	0	0
0815-0830	0	0	0	0
0830-0845	0	0	0	0
0845-0900	0	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	0	0	0
0945-1000	0	0	0	0
1500-1515	0	0	0	0
1515-1530	0	0	0	0
1530-1545	0	0	0	0
1545-1600	0	0	0	0
1600-1615	0	0	0	0
1615-1630	0	0	0	0
1630-1645	0	0	0	0
1645-1700	0	0	0	0
1700-1715	0	0	0	0
1715-1730	0	0	0	0
1730-1745	0	0	0	0
1745-1800	0	0	0	0

City of Los Angeles
Departmant of Transportation

MANUAL TRAFFIC COUNT SUMMARY

Street:

North/South Sepulveda Blvd

East/West Mountaingate Drive

Day: Wednesday Date: 1/10/2018 Weather: Sunny

Hours: 7-10AM 3-6PM

School Day: Yes

	N/B	S/B	E/B	W/B
Dual-Wheel:	23	36	1	0
Bikes:				
Buses:	36	45	2	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	72	8:45	778	7:00	38	7:45	0	7:00
PM PK 15 MIN	657	5:30	118	3:15	34	3:45	0	3:00
AM PK HOUR	266	8:00	2992	7:00	100	7:00	0	7:00
PM PK HOUR	2543	5:00	449	3:00	112	4:15	0	3:00

NORTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	0	183	50	233
8-9	0	203	63	266
9-10	0	160	61	221
3-4	0	2042	55	2097
4-5	0	2250	70	2320
5-6	0	2489	54	2543
Total	0	7327	353	7680

SOUTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	31	2961	0	2992
8-9	39	2462	0	2501
9-10	33	2224	0	2257
3-4	52	397	0	449
4-5	50	369	0	419
5-6	41	359	0	400
Total	246	8772	0	9018

Total

N/S
3225
2767
2478
2546
2739
2943
16698

EASTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	68	0	32	100
8-9	44	0	33	77
9-10	50	0	47	97
3-4	61	0	47	108
4-5	58	0	49	107
5-6	51	0	46	97
Total	332	0	254	586

WESTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
Total	0	0	0	0

Total

E/W
100
77
97
108
107
97
586

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:

North/South :	**Sepulveda Blvd**				
East/West :	**Mountaingate Drive**				
Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	YES	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

AM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00 - 7:15	0	0	0	0	**0**
7:15 - 7:30	0	0	0	0	**0**
7:30 - 7:45	0	0	0	0	**0**
7:45 - 8:00	0	1	0	0	**1**
8:00 - 8:15	0	0	0	0	**0**
8:15 - 8:30	0	0	0	0	**0**
8:30 - 8:45	0	0	0	0	**0**
8:45 - 9:00	0	2	0	2	**4**
9:00 - 9:15	0	0	0	0	**0**
9:15 - 9:30	0	1	0	1	**2**
9:30 - 9:45	0	1	0	0	**1**
9:45 -10:00	0	0	0	0	**0**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7 - 8	0	1	0	0	**1**
8 - 9	0	2	0	2	**4**
9 - 10	0	2	0	1	**3**
TOTAL	**0**	**5**	**0**	**3**	**8**

PM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00 - 3:15	0	0	0	0	**0**
3:15 - 3:30	0	0	0	0	**0**
3:30 - 3:45	0	0	0	0	**0**
3:45 - 4:00	0	0	0	0	**0**
4:00 - 4:15	0	1	0	0	**1**
4:15 - 4:30	0	0	0	0	**0**
4:30 - 4:45	0	0	0	0	**0**
4:45 - 5:00	0	0	0	0	**0**
5:00 - 5:15	0	1	0	0	**1**
5:15 - 5:30	0	0	0	0	**0**
5:30 - 5:45	0	0	0	0	**0**
5:45 - 6:00	0	0	0	0	**0**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3 - 4	0	0	0	0	**0**
4 - 5	0	1	0	0	**1**
5 - 6	0	1	0	0	**1**
TOTAL	**0**	**2**	**0**	**0**	**2**

REMARKS (6 hour total):

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	0	0	0	0	0
- Skateboard/scooter	0	0	0	0	0

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2017 CMP

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:

North/South :	**Sepulveda Blvd**				
East/West :	**Mountaingate Drive**				
Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	Yes	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

N-S
0
0
0
0
0
0
0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

E-W
0
0
0
0
0
0
0

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female riders	0	0	0	0	0
- No helmet riders	0	0	0	0	0
- Sidewalk riding	0	0	0	0	0
- Wrong way riding	0	0	0	0	0

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: LADOT 2017 CMP

Turning Movement Count Report

North/South: Sepulveda Blvd
East/West: Mountaingate Drive

Date: 01/10/18
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
0700-0715	6	772	0	0	0	0	0	40	11	15	0	6	984
0715-0730	3	740	0	0	0	0	0	44	11	18	0	5	1018
0730-0745	6	737	0	0	0	0	0	46	15	11	0	7	1116
0745-0800	16	712	0	0	0	0	0	53	13	24	0	14	1050
0800-0815	7	692	0	0	0	0	0	53	12	9	0	8	1049
0815-0830	13	712	0	0	0	0	0	53	9	10	0	12	1023
0830-0845	11	629	0	0	0	0	0	50	17	15	0	1	999
0845-0900	8	429	0	0	0	0	0	47	25	10	0	12	949
0900-0915	9	650	0	0	0	0	0	41	18	17	0	13	898
0915-0930	8	595	0	0	0	0	0	42	13	11	0	10	850
0930-0945	9	537	0	0	0	0	0	37	16	7	0	12	804
0945-1000	7	442	0	0	0	0	0	40	14	15	0	12	797
1500-1515	9	90	0	0	0	0	0	369	16	12	0	16	531
1515-1530	16	102	0	0	0	0	0	493	12	17	0	9	560
1530-1545	14	102	0	0	0	0	0	597	16	10	0	10	582
1545-1600	13	103	0	0	0	0	0	583	11	22	0	12	594
1600-1615	18	73	0	0	0	0	0	550	17	12	0	16	588
1615-1630	11	88	0	0	0	0	0	515	12	12	0	10	678
1630-1645	12	99	0	0	0	0	0	566	19	16	0	11	660
1645-1700	9	109	0	0	0	0	0	619	22	18	0	12	698
1700-1715	11	95	0	0	0	0	0	610	9	15	0	18	742
1715-1730	4	89	0	0	0	0	0	606	18	12	0	7	788
1730-1745	10	84	0	0	0	0	0	645	12	17	0	13	733
1745-1800	16	91	0	0	0	0	0	628	15	7	0	8	716

Trucks/Buses

	Trucks			
Approach:	North	East	South	West
0700-0715	0	0	3	0
0715-0730	0	0	2	0
0730-0745	0	0	3	0
0745-0800	3	0	3	0
0800-0815	0	0	4	0
0815-0830	0	0	3	0
0830-0845	0	0	2	0
0845-0900	0	0	0	0
0900-0915	0	0	3	0
0915-0930	0	0	6	0
0930-0945	0	0	1	0
0945-1000	0	0	3	0
1500-1515	1	0	0	0
1515-1530	1	1	0	0
1530-1545	0	0	0	0
1545-1600	1	0	1	0
1600-1615	1	0	0	0
1615-1630	4	0	0	0
1630-1645	1	0	0	0
1645-1700	3	0	0	0
1700-1715	1	0	0	0
1715-1730	3	0	0	0
1730-1745	2	0	0	0
1745-1800	2	0	2	0

	Buses			
Approach:	North	East	South	West
0700-0715	4	0	4	0
0715-0730	0	0	2	0
0730-0745	1	0	1	0
0745-0800	1	1	5	0
0800-0815	0	0	6	0
0815-0830	1	0	1	0
0830-0845	1	0	1	0
0845-0900	1	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	2	0
0930-0945	2	0	1	0
0945-1000	1	0	1	0
1500-1515	3	0	1	0
1515-1530	0	0	5	0
1530-1545	1	0	5	0
1545-1600	3	0	4	0
1600-1615	2	0	1	0
1615-1630	2	0	0	0
1630-1645	2	1	1	0
1645-1700	3	0	0	0
1700-1715	3	0	1	0
1715-1730	1	0	1	0
1730-1745	2	0	2	0
1745-1800	2	0	0	0

Pedestrian/Bicycle

	Pedestrians			
Leg:	North	East	South	West
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	0
0745-0800	0	0	1	0
0800-0815	0	0	0	0
0815-0830	0	0	0	0
0830-0845	0	0	0	0
0845-0900	0	0	2	2
0900-0915	0	0	0	0
0915-0930	0	0	1	1
0930-0945	0	0	1	0
0945-1000	0	0	0	0
1500-1515	0	0	0	0
1515-1530	0	0	0	0
1530-1545	0	0	0	0
1545-1600	0	0	0	0
1600-1615	0	0	1	0
1615-1630	0	0	0	0
1630-1645	0	0	0	0
1645-1700	0	0	0	0
1700-1715	0	0	1	0
1715-1730	0	0	0	0
1730-1745	0	0	0	0
1745-1800	0	0	0	0

	Bicycle			
Approach:	North	East	South	West
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	0
0745-0800	0	0	0	0
0800-0815	0	0	0	0
0815-0830	0	0	0	0
0830-0845	0	0	0	0
0845-0900	0	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	0	0	0
0945-1000	0	0	0	0
1500-1515	0	0	0	0
1515-1530	0	0	0	0
1530-1545	0	0	0	0
1545-1600	0	0	0	0
1600-1615	0	0	0	0
1615-1630	0	0	0	0
1630-1645	0	0	0	0
1645-1700	0	0	0	0
1700-1715	0	0	0	0
1715-1730	0	0	0	0
1730-1745	0	0	0	0
1745-1800	0	0	0	0

City of Los Angeles
Departmant of Transportation

MANUAL TRAFFIC COUNT SUMMARY

Street:

North/South Sepulveda Blvd

East/West I-405 Southbound Ramps (South of Promontory Road)

Day: Wednesday Date: 1/10/2018 Weather: Sunny

Hours: 7-10AM 3-6PM

School Day: Yes

	N/B	S/B	E/B	W/B
Dual-Wheel:	0	2	35	31
Bikes:				
Buses:	0	7	46	34

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	7:00	31	7:00	796	7:00	69	8:30
PM PK 15 MIN	0	3:00	29	5:15	117	3:30	664	5:00
AM PK HOUR	0	7:00	111	8:15	3056	7:00	263	7:45
PM PK HOUR	0	3:00	98	5:00	450	3:00	2638	5:00

NORTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
Total	0	0	0	0

SOUTHBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	1	2	105	108
8-9	1	1	103	105
9-10	0	2	89	91
3-4	3	2	72	77
4-5	3	2	63	68
5-6	4	2	92	98
Total	12	11	524	547

Total

N/S
108
105
91
77
68
98
547

EASTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	1217	1839	0	3056
8-9	1041	1561	0	2602
9-10	1132	1263	0	2395
3-4	228	222	0	450
4-5	187	202	0	389
5-6	187	205	0	392
Total	3992	5292	0	9284

WESTBOUND Approach

Hours	Rt	Th	Lt	Total
7-8	0	191	1	192
8-9	0	245	2	247
9-10	0	214	3	217
3-4	0	2093	62	2155
4-5	0	2348	48	2396
5-6	0	2601	37	2638
Total	0	7692	153	7845

Total

E/W
3248
2849
2612
2605
2785
3030
17129

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:
North/South : **Sepulveda Blvd**
East/West : **I-405 Southbound Ramps (South of Promontory Road)**

Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	YES	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

AM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00 - 7:15	0	0	0	0	**0**
7:15 - 7:30	0	0	0	0	**0**
7:30 - 7:45	0	0	0	0	**0**
7:45 - 8:00	0	0	0	0	**0**
8:00 - 8:15	0	0	0	0	**0**
8:15 - 8:30	0	0	0	0	**0**
8:30 - 8:45	0	0	0	0	**0**
8:45 - 9:00	0	0	0	0	**0**
9:00 - 9:15	0	0	0	0	**0**
9:15 - 9:30	0	0	0	0	**0**
9:30 - 9:45	0	0	0	0	**0**
9:45 -10:00	0	0	0	0	**0**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7 - 8	0	0	0	0	**0**
8 - 9	0	0	0	0	**0**
9 - 10	0	0	0	0	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**

PM PEAK PERIOD

15 Min. interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00 - 3:15	0	0	0	0	**0**
3:15 - 3:30	0	0	0	0	**0**
3:30 - 3:45	0	0	0	0	**0**
3:45 - 4:00	0	0	0	0	**0**
4:00 - 4:15	0	0	0	0	**0**
4:15 - 4:30	0	0	0	0	**0**
4:30 - 4:45	0	0	0	0	**0**
4:45 - 5:00	0	0	0	0	**0**
5:00 - 5:15	0	0	0	0	**0**
5:15 - 5:30	0	0	0	0	**0**
5:30 - 5:45	0	0	0	0	**0**
5:45 - 6:00	0	0	0	0	**0**

Hours	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3 - 4	0	0	0	0	**0**
4 - 5	0	0	0	0	**0**
5 - 6	0	0	0	0	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**

REMARKS (6 hour total):

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	0	0	0	0	0
- Skateboard/scooter	0	0	0	0	0

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2017 CMP

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:

North/South :	**Sepulveda Blvd**				
East/West :	**I-405 Southbound Ramps (South of Promontory Road)**				
Day:	Wednesday	**Date:**	1/10/2018	**Weather:**	Sunny
School Day:	Yes	**District:**		I/S CODE:	
Hours:	7-10AM 3-6PM	**Staff:**			

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

N-S
0
0
0
0
0
0
0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

E-W
0
0
0
0
0
0
0

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female riders	0	0	0	0	0
- No helmet riders	0	0	0	0	0
- Sidewalk riding	0	0	0	0	0
- Wrong way riding	0	0	0	0	0

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: LADOT 2017 CMP

Turning Movement Count Report

North/South: Sepulveda Blvd
East/West: I-405 Southbound Ramps (South of Promontory Road)

Date: 01/10/18
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
0700-0715	0	2	29	0	39	0	0	0	0	303	493	0	984
0715-0730	0	0	28	0	43	0	0	0	0	293	484	0	1018
0730-0745	0	0	18	0	45	0	0	0	0	316	444	0	1116
0745-0800	1	0	30	0	64	1	0	0	0	305	418	0	1050
0800-0815	0	1	19	0	65	1	0	0	0	282	468	0	1049
0815-0830	1	0	26	0	62	1	0	0	0	295	443	0	1023
0830-0845	0	0	27	0	69	0	0	0	0	270	395	0	999
0845-0900	0	0	31	0	49	0	0	0	0	194	255	0	949
0900-0915	0	0	26	0	59	2	0	0	0	289	374	0	898
0915-0930	0	1	19	0	51	0	0	0	0	306	314	0	850
0930-0945	0	1	26	0	53	1	0	0	0	281	306	0	804
0945-1000	0	0	18	0	51	0	0	0	0	256	269	0	797
1500-1515	1	2	13	0	400	17	0	0	0	50	53	0	531
1515-1530	0	0	22	0	548	10	0	0	0	55	59	0	560
1530-1545	1	0	18	0	589	19	0	0	0	63	54	0	582
1545-1600	1	0	19	0	556	16	0	0	0	60	56	0	594
1600-1615	1	0	16	0	596	16	0	0	0	35	44	0	588
1615-1630	0	1	22	0	540	7	0	0	0	36	58	0	678
1630-1645	1	0	11	0	583	10	0	0	0	54	53	0	660
1645-1700	1	1	14	0	629	15	0	0	0	62	47	0	698
1700-1715	1	0	24	0	653	11	0	0	0	51	52	0	742
1715-1730	1	1	27	0	655	7	0	0	0	43	58	0	788
1730-1745	1	1	23	0	650	10	0	0	0	45	46	0	733
1745-1800	1	0	18	0	643	9	0	0	0	48	49	0	716

Trucks/Buses

	Trucks			
Approach:	North	East	South	West
0700-0715	0	3	0	0
0715-0730	0	3	0	1
0730-0745	0	4	0	0
0745-0800	0	3	0	0
0800-0815	0	2	0	1
0815-0830	0	2	0	0
0830-0845	0	5	0	2
0845-0900	0	1	0	1
0900-0915	0	2	0	2
0915-0930	0	6	0	3
0930-0945	0	0	1	0
0945-1000	0	3	0	2
1500-1515	0	1	0	0
1515-1530	0	0	0	1
1530-1545	0	0	0	1
1545-1600	0	0	0	0
1600-1615	0	0	0	1
1615-1630	0	0	1	2
1630-1645	0	0	0	2
1645-1700	0	0	0	3
1700-1715	0	0	0	1
1715-1730	0	0	0	3
1730-1745	0	0	0	1
1745-1800	0	0	0	4

	Buses			
Approach:	North	East	South	West
0700-0715	0	3	0	3
0715-0730	0	2	1	1
0730-0745	0	1	0	0
0745-0800	0	5	0	1
0800-0815	0	8	0	1
0815-0830	0	1	0	0
0830-0845	0	1	0	1
0845-0900	0	0	0	1
0900-0915	0	0	0	0
0915-0930	0	2	2	0
0930-0945	0	1	1	2
0945-1000	0	0	1	1
1500-1515	0	1	0	2
1515-1530	0	0	0	0
1530-1545	0	8	0	2
1545-1600	0	5	0	2
1600-1615	0	1	1	2
1615-1630	0	0	0	4
1630-1645	0	3	0	2
1645-1700	0	0	0	2
1700-1715	0	1	0	3
1715-1730	0	1	1	1
1730-1745	0	2	0	2
1745-1800	0	0	0	1

Pedestrian/Bicycle

	Pedestrians			
Leg:	North	East	South	West
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	0
0745-0800	0	0	0	0
0800-0815	0	0	0	0
0815-0830	0	0	0	0
0830-0845	0	0	0	0
0845-0900	0	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	0	0	0
0945-1000	0	0	0	0
1500-1515	0	0	0	0
1515-1530	0	0	0	0
1530-1545	0	0	0	0
1545-1600	0	0	0	0
1600-1615	0	0	0	0
1615-1630	0	0	0	0
1630-1645	0	0	0	0
1645-1700	0	0	0	0
1700-1715	0	0	0	0
1715-1730	0	0	0	0
1730-1745	0	0	0	0
1745-1800	0	0	0	0

	Bicycle			
Approach:	North	East	South	West
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	0
0745-0800	0	0	0	0
0800-0815	0	0	0	0
0815-0830	0	0	0	0
0830-0845	0	0	0	0
0845-0900	0	0	0	0
0900-0915	0	0	0	0
0915-0930	0	0	0	0
0930-0945	0	0	0	0
0945-1000	0	0	0	0
1500-1515	0	0	0	0
1515-1530	0	0	0	0
1530-1545	0	0	0	0
1545-1600	0	0	0	0
1600-1615	0	0	0	0
1615-1630	0	0	0	0
1630-1645	0	0	0	0
1645-1700	0	0	0	0
1700-1715	0	0	0	0
1715-1730	0	0	0	0
1730-1745	0	0	0	0
1745-1800	0	0	0	0

Prepared by National Data & Surveying Services

In & Out

Location: Encino Hills Dr & Mulholland Dr
City: Los Angeles

Date: 06/18/2019
Day: Tuesday

TIME	Cars		Peds		Bikes		Totals
	IN	OUT	IN	OUT	IN	OUT	
7:00 AM	1	0	0	0	0	0	**1**
7:15 AM	1	0	1	0	0	0	**2**
7:30 AM	2	1	0	1	0	0	**4**
7:45 AM	0	1	0	0	0	0	**1**
8:00 AM	2	1	0	1	0	0	**4**
8:15 AM	0	3	1	0	0	0	**4**
8:30 AM	1	0	0	0	0	0	**1**
8:45 AM	6	0	1	0	0	0	**7**
9:00 AM	3	0	0	0	0	0	**3**
9:15 AM	5	1	1	0	0	0	**7**
9:30 AM	3	3	0	0	0	0	**6**
9:45 AM	1	0	0	1	0	0	**2**
Totals	**25**	**10**	**4**	**3**	**0**	**0**	**42**
3:00 PM	2	2	0	0	0	0	**4**
3:15 PM	2	2	0	1	0	0	**5**
3:30 PM	2	3	0	1	0	0	**6**
3:45 PM	3	2	0	1	0	0	**6**
4:00 PM	1	1	1	0	0	0	**3**
4:15 PM	0	1	0	0	0	0	**1**
4:30 PM	0	1	0	1	0	0	**2**
4:45 PM	0	1	0	0	0	0	**1**
5:00 PM	0	2	2	0	0	0	**4**
5:15 PM	5	1	0	0	0	0	**6**
5:30 PM	1	0	1	2	0	0	**4**
5:45 PM	2	3	1	0	0	0	**6**
Totals	**18**	**19**	**5**	**6**	**0**	**0**	**48**
Grand Totals	**43**	**29**	**9**	**9**	**0**	**0**	**90**

Prepared by National Data & Surveying Services

In & Out

Location: Encino Hills Dr & Mulholland Dr
City: Los Angeles

Date: 05/11/2019
Day: Saturday

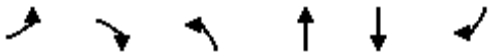
TIME	Cars		Peds		Bikes		Cars			Peds			Bikes		
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total
8:00 AM	1	0	7	0	0	0									
8:15 AM	2	1	3	1	0	0									
8:30 AM	3	2	4	0	0	1									
8:45 AM	8	2	1	1	0	0	14	5	19	15	2	17	0	1	1
9:00 AM	6	5	2	0	2	0	19	10	29	10	2	12	2	1	3
9:15 AM	8	3	2	1	0	0	25	12	37	9	2	11	2	1	3
9:30 AM	13	5	2	4	3	0	35	15	50	7	6	13	5	0	5
9:45 AM	8	6	2	2	2	0	35	19	54	8	7	15	7	0	7
10:00 AM	10	4	4	0	0	0	39	18	57	10	7	17	5	0	5
10:15 AM	7	2	2	2	0	0	38	17	55	10	8	18	5	0	5
10:30 AM	4	7	0	2	0	0	29	19	48	8	6	14	2	0	2
10:45 AM	4	9	3	1	0	0	25	22	47	9	5	14	0	0	0
11:00 AM	9	11	0	2	2	0	24	29	53	5	7	12	2	0	2
11:15 AM	4	3	2	1	0	2	21	30	51	5	6	11	2	2	4
11:30 AM	5	9	0	0	0	0	22	32	54	5	4	9	2	2	4
11:45 AM	2	7	2	6	1	2	20	30	50	4	9	13	3	4	7
12:00 PM	4	5	0	1	0	2	15	24	39	4	8	12	1	6	7
12:15 PM	9	3	0	0	0	0	20	24	44	2	7	9	1	4	5
12:30 PM	9	7	0	4	1	1	24	22	46	2	11	13	2	5	7
12:45 PM	5	6	0	5	0	1	27	21	48	0	10	10	1	4	5
Totals	***121***	***97***	***36***	***33***	***11***	***9***			218			69			20

Appendix E:
Intersection and Project Driveway LOS Analysis Sheets

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	422	84	241	7	552	2477
Future Volume (vph)	422	84	241	7	552	2477
Ideal Flow (vphpl)	2300	2300	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2142	1917	3539	1583	4156	4284
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	2142	1917	3539	1583	4156	4284
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	426	85	243	7	558	2502
RTOR Reduction (vph)	0	0	0	4	0	0
Lane Group Flow (vph)	426	85	243	3	558	2502
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	4	5 4	6		5	2
Permitted Phases				6		
Actuated Green, G (s)	27.0	47.5	36.5	36.5	17.5	57.0
Effective Green, g (s)	27.0	47.5	36.5	36.5	17.5	57.0
Actuated g/C Ratio	0.30	0.53	0.41	0.41	0.19	0.63
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		5.0	5.0	3.0	5.1
Lane Grp Cap (vph)	642	1011	1435	641	808	2713
v/s Ratio Prot	c0.20	0.04	0.07		0.13	c0.58
v/s Ratio Perm				0.00		
v/c Ratio	0.66	0.08	0.17	0.00	0.69	0.92
Uniform Delay, d1	27.5	10.5	17.1	15.9	33.7	14.5
Progression Factor	1.00	1.00	1.06	1.14	1.00	1.00
Incremental Delay, d2	5.3	0.0	0.3	0.0	2.6	6.6
Delay (s)	32.9	10.5	18.3	18.2	36.3	21.2
Level of Service	C	B	B	B	D	C
Approach Delay (s)	29.2		18.3			23.9
Approach LOS	C		B			C

Intersection Summary			
HCM 2000 Control Delay	24.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

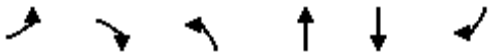
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	12	0	247	2921	0
Future Volume (Veh/h)	0	12	0	247	2921	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	0	12	0	249	2951	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				287	756	
pX, platoon unblocked	0.38	0.38	0.38			
vC, conflicting volume	3076	1476	2951			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3200	0	2871			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	100			
cM capacity (veh/h)	3	410	48			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	12	124	124	1967	984
Volume Left	0	0	0	0	0
Volume Right	12	0	0	0	0
cSH	410	1700	1700	1700	1700
Volume to Capacity	0.03	0.07	0.07	1.16	0.58
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	14.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	14.0	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	76.7%	ICU Level of Service	D	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	32	68	50	183	2961	31
Future Volume (vph)	32	68	50	183	2961	31
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	4284	1917
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	32	69	51	185	2991	31
RTOR Reduction (vph)	0	65	0	0	0	6
Lane Group Flow (vph)	32	4	51	185	2991	25
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Actuated Green, G (s)	5.7	5.7	4.2	78.3	71.1	71.1
Effective Green, g (s)	5.7	5.7	4.2	78.3	71.1	71.1
Actuated g/C Ratio	0.06	0.06	0.05	0.87	0.79	0.79
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	217	100	82	3078	3384	1514
v/s Ratio Prot	c0.01		c0.03	0.05	c0.70	
v/s Ratio Perm		0.00				0.01
v/c Ratio	0.15	0.04	0.62	0.06	0.88	0.02
Uniform Delay, d1	39.9	39.6	42.1	0.8	6.6	2.0
Progression Factor	1.00	1.00	1.00	1.00	0.32	0.30
Incremental Delay, d2	0.3	0.2	13.8	0.0	1.9	0.0
Delay (s)	40.2	39.8	55.9	0.8	4.0	0.6
Level of Service	D	D	E	A	A	A
Approach Delay (s)	39.9			12.7	4.0	
Approach LOS	D			B	A	

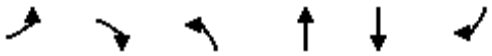
Intersection Summary			
HCM 2000 Control Delay	5.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	488	943	539	351	490	402
Future Volume (vph)	488	943	539	351	490	402
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	4.0	5.2	4.9	4.9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	3539	3433	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	3539	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	530	1025	586	382	533	437
RTOR Reduction (vph)	0	9	0	0	0	96
Lane Group Flow (vph)	530	1016	586	382	533	341
Turn Type	NA	pt+ov	Prot	NA	Prot	custom
Protected Phases	6	6 4	5	2	4	4 5 8
Permitted Phases						
Actuated Green, G (s)	45.0	78.9	26.3	75.3	28.7	59.9
Effective Green, g (s)	45.0	78.9	26.3	75.3	28.7	55.4
Actuated g/C Ratio	0.39	0.69	0.23	0.66	0.25	0.49
Clearance Time (s)	5.2		4.0	5.2	4.9	
Vehicle Extension (s)	4.5		3.0	1.2	5.0	
Lane Grp Cap (vph)	734	1094	407	2335	863	768
v/s Ratio Prot	0.28	c0.64	c0.33	0.11	0.16	0.22
v/s Ratio Perm						
v/c Ratio	0.72	0.93	1.44	0.16	0.62	0.44
Uniform Delay, d1	29.3	15.2	43.9	7.4	37.8	19.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	13.8	211.5	0.2	1.9	0.9
Delay (s)	35.3	29.0	255.4	7.5	39.7	20.1
Level of Service	D	C	F	A	D	C
Approach Delay (s)	31.1			157.6	30.9	
Approach LOS	C			F	C	

Intersection Summary			
HCM 2000 Control Delay	66.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	14.1
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		

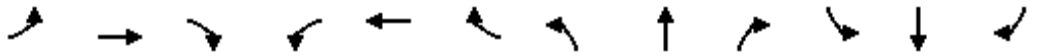
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	591	57	51	236	1335	234
Future Volume (vph)	591	57	51	236	1335	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	642	62	55	257	1451	254
RTOR Reduction (vph)	0	10	0	0	0	28
Lane Group Flow (vph)	642	52	55	257	1451	226
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	4	4 1	1	6	2	2 4
Permitted Phases						
Actuated Green, G (s)	39.0	54.4	10.8	125.0	110.2	154.2
Effective Green, g (s)	39.0	54.4	10.8	125.0	110.2	154.2
Actuated g/C Ratio	0.22	0.31	0.06	0.72	0.63	0.89
Clearance Time (s)	4.6		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	5.0	4.0	
Lane Grp Cap (vph)	771	496	110	2548	2246	1406
v/s Ratio Prot	c0.19	0.03	c0.03	0.07	c0.41	0.14
v/s Ratio Perm						
v/c Ratio	0.83	0.10	0.50	0.10	0.65	0.16
Uniform Delay, d1	64.2	42.3	78.8	7.3	19.6	1.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.7	0.1	3.5	0.1	1.4	0.1
Delay (s)	71.9	42.4	82.3	7.4	21.1	1.3
Level of Service	E	D	F	A	C	A
Approach Delay (s)	69.3			20.6	18.1	
Approach LOS	E			C	B	

Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	173.6	Sum of lost time (s)	13.6
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

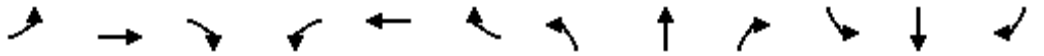
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	6	1291	3	62	4	101	219	47	1712	0
Future Volume (vph)	0	0	6	1291	3	62	4	101	219	47	1712	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.85		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00		0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1583		1681	1686	1583	1770	3539	1583	1770	3539	
Flt Permitted		1.00		0.95	0.95	1.00	0.07	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1583		1681	1686	1583	137	3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	7	1403	3	67	4	110	238	51	1861	0
RTOR Reduction (vph)	0	7	0	0	0	43	0	0	60	0	0	0
Lane Group Flow (vph)	0	0	0	701	705	24	4	110	179	51	1861	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3	5		6	3	5	2	
Permitted Phases						3	6		6			
Actuated Green, G (s)		1.8		35.8	35.8	43.6	54.2	54.2	90.0	7.8	66.0	
Effective Green, g (s)		1.8		35.8	35.8	43.6	54.2	54.2	90.0	7.8	66.0	
Actuated g/C Ratio		0.02		0.30	0.30	0.36	0.45	0.45	0.75	0.06	0.55	
Clearance Time (s)		5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	4.4	4.4	3.0	3.0	4.5	
Lane Grp Cap (vph)		23		501	502	575	61	1598	1187	115	1946	
v/s Ratio Prot		c0.00		0.42	c0.42	0.00		0.03	0.04	0.03	c0.53	
v/s Ratio Perm						0.01	0.03		0.07			
v/c Ratio		0.00		1.40	1.40	0.04	0.07	0.07	0.15	0.44	0.96	
Uniform Delay, d1		58.2		42.1	42.1	24.7	18.6	18.6	4.2	54.0	25.6	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1		191.5	193.7	0.0	2.1	0.1	0.1	2.7	12.4	
Delay (s)		58.3		233.6	235.8	24.7	20.7	18.7	4.3	56.7	38.0	
Level of Service		E		F	F	C	C	B	A	E	D	
Approach Delay (s)		58.3			225.1			9.0			38.5	
Approach LOS		E			F			A			D	

Intersection Summary			
HCM 2000 Control Delay	109.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	99.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	105	2	1	1	191	0	0	1839	1217
Future Volume (vph)	0	0	0	105	2	1	1	191	0	0	1839	1217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1776	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1776	1583	1770	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	114	2	1	1	208	0	0	1999	1323
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	0	0	0	91
Lane Group Flow (vph)	0	0	0	0	116	0	1	208	0	0	1999	1232
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)					14.1	14.1	1.2	94.5			89.3	89.3
Effective Green, g (s)					14.1	14.1	1.2	94.5			89.3	89.3
Actuated g/C Ratio					0.12	0.12	0.01	0.79			0.74	0.74
Clearance Time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Vehicle Extension (s)					4.0	4.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)					208	186	17	2786			2633	1178
v/s Ratio Prot							0.00	c0.06			0.56	
v/s Ratio Perm					0.07	0.00						c0.78
v/c Ratio					0.56	0.00	0.06	0.07			0.76	1.05
Uniform Delay, d1					50.0	46.7	58.8	2.9			9.0	15.4
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					4.0	0.0	1.5	0.1			2.1	39.0
Delay (s)					54.0	46.7	60.3	2.9			11.1	54.4
Level of Service					D	D	E	A			B	D
Approach Delay (s)		0.0			53.9			3.2			28.4	
Approach LOS		A			D			A			C	

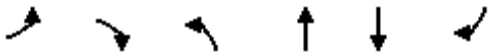
Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.4
Intersection Capacity Utilization	98.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	77	131	2542	3	166	334
Future Volume (vph)	77	131	2542	3	166	334
Ideal Flow (vphpl)	2300	2300	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2142	1917	3539	1583	4156	4284
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	2142	1917	3539	1583	4156	4284
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	78	132	2568	3	168	337
RTOR Reduction (vph)	0	0	0	1	0	0
Lane Group Flow (vph)	78	132	2568	3	168	337
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	4	5 4	6		5	2
Permitted Phases				6		
Actuated Green, G (s)	11.0	24.0	90.0	90.0	10.0	103.0
Effective Green, g (s)	11.0	24.0	90.0	90.0	10.0	103.0
Actuated g/C Ratio	0.09	0.20	0.75	0.75	0.08	0.86
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		5.0	5.0	3.0	5.1
Lane Grp Cap (vph)	196	383	2654	1187	346	3677
v/s Ratio Prot	c0.04	0.07	c0.73		c0.04	0.08
v/s Ratio Perm				0.00		
v/c Ratio	0.40	0.34	0.97	0.00	0.49	0.09
Uniform Delay, d1	51.4	41.2	13.7	3.8	52.5	1.3
Progression Factor	1.00	1.00	0.86	0.69	1.00	1.00
Incremental Delay, d2	1.3	0.5	8.4	0.0	1.1	0.0
Delay (s)	52.7	41.8	20.2	2.6	53.6	1.4
Level of Service	D	D	C	A	D	A
Approach Delay (s)	45.8		20.2			18.7
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

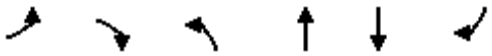
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	5	16	2596	346	0
Future Volume (Veh/h)	11	5	16	2596	346	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	11	5	16	2622	349	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				287	756	
pX, platoon unblocked	0.11					
vC, conflicting volume	1692	174	349			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	174	349			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	90	99	99			
cM capacity (veh/h)	110	839	1207			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	16	890	1748	233	116
Volume Left	11	16	0	0	0
Volume Right	5	0	0	0	0
cSH	151	1207	1700	1700	1700
Volume to Capacity	0.11	0.01	1.03	0.14	0.07
Queue Length 95th (ft)	9	1	0	0	0
Control Delay (s)	31.6	0.4	0.0	0.0	0.0
Lane LOS	D	A			
Approach Delay (s)	31.6	0.1		0.0	
Approach LOS	D				

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	62	61	2480	377	34
Future Volume (vph)	50	62	61	2480	377	34
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	4284	1917
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	51	63	62	2505	381	34
RTOR Reduction (vph)	0	60	0	0	0	6
Lane Group Flow (vph)	51	3	62	2505	381	28
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Actuated Green, G (s)	6.3	6.3	7.0	107.7	97.7	97.7
Effective Green, g (s)	6.3	6.3	7.0	107.7	97.7	97.7
Actuated g/C Ratio	0.05	0.05	0.06	0.90	0.81	0.81
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	180	83	103	3176	3487	1560
v/s Ratio Prot	c0.01		0.04	c0.71	0.09	
v/s Ratio Perm		0.00				0.01
v/c Ratio	0.28	0.04	0.60	0.79	0.11	0.02
Uniform Delay, d1	54.7	54.0	55.1	2.2	2.3	2.1
Progression Factor	1.00	1.00	1.00	1.00	1.14	1.39
Incremental Delay, d2	0.9	0.2	9.5	2.1	0.1	0.0
Delay (s)	55.5	54.2	64.7	4.2	2.7	2.9
Level of Service	E	D	E	A	A	A
Approach Delay (s)	54.8			5.7	2.7	
Approach LOS	D			A	A	

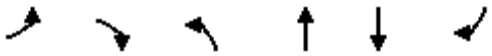
Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	271	412	445	416	406	338
Future Volume (vph)	271	412	445	416	406	338
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	4.0	5.2	4.9	4.9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	3539	3433	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	3539	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	295	448	484	452	441	367
RTOR Reduction (vph)	0	26	0	0	0	147
Lane Group Flow (vph)	295	422	484	452	441	220
Turn Type	NA	pt+ov	Prot	NA	Prot	custom
Protected Phases	6	6 4	5	2	4	4 5 8
Permitted Phases						
Actuated Green, G (s)	31.9	61.2	44.0	79.9	24.1	73.0
Effective Green, g (s)	31.9	61.2	44.0	79.9	24.1	68.5
Actuated g/C Ratio	0.28	0.54	0.39	0.70	0.21	0.60
Clearance Time (s)	5.2		4.0	5.2	4.9	
Vehicle Extension (s)	4.5		3.0	1.2	5.0	
Lane Grp Cap (vph)	520	849	682	2478	725	950
v/s Ratio Prot	c0.16	0.27	c0.27	0.13	c0.13	0.14
v/s Ratio Perm						
v/c Ratio	0.57	0.50	0.71	0.18	0.61	0.23
Uniform Delay, d1	35.2	16.7	29.6	5.9	40.7	10.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.4	1.0	3.4	0.2	2.1	0.3
Delay (s)	39.6	17.7	33.0	6.0	42.9	10.8
Level of Service	D	B	C	A	D	B
Approach Delay (s)	26.4			20.0	28.3	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	14.1
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		

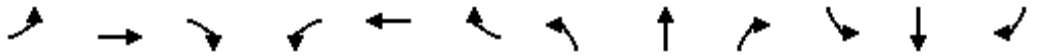
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	188	40	671	529	524	448
Future Volume (vph)	188	40	671	529	524	448
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	204	43	729	575	570	487
RTOR Reduction (vph)	0	20	0	0	0	1
Lane Group Flow (vph)	204	23	729	575	570	486
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	4	4 1	1	6	2	2 4
Permitted Phases						
Actuated Green, G (s)	16.5	94.7	73.6	147.5	69.9	91.4
Effective Green, g (s)	16.5	94.7	73.6	147.5	69.9	91.4
Actuated g/C Ratio	0.10	0.55	0.42	0.85	0.40	0.53
Clearance Time (s)	4.6		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	5.0	4.0	
Lane Grp Cap (vph)	326	863	750	3006	1424	833
v/s Ratio Prot	0.06	0.01	c0.41	0.16	0.16	c0.31
v/s Ratio Perm						
v/c Ratio	0.63	0.03	0.97	0.19	0.40	0.58
Uniform Delay, d1	75.6	18.2	49.0	2.3	36.9	28.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.7	0.0	25.9	0.1	0.8	1.0
Delay (s)	79.3	18.2	74.9	2.5	37.8	29.1
Level of Service	E	B	E	A	D	C
Approach Delay (s)	68.7			43.0	33.8	
Approach LOS	E			D	C	

Intersection Summary			
HCM 2000 Control Delay	41.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	173.6	Sum of lost time (s)	13.6
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		

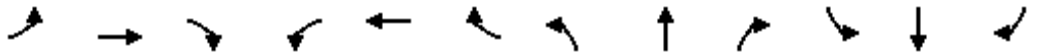
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	11	3	220	3	93	2	1617	1014	37	277	2
Future Volume (vph)	6	11	3	220	3	93	2	1617	1014	37	277	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1807		1681	1687	1583	1770	3539	1583	1770	3536	
Flt Permitted	0.95	1.00		0.95	0.95	1.00	0.57	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1807		1681	1687	1583	1056	3539	1583	1770	3536	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	12	3	239	3	101	2	1758	1102	40	301	2
RTOR Reduction (vph)	0	3	0	0	0	73	0	0	254	0	0	0
Lane Group Flow (vph)	7	12	0	122	120	28	2	1758	848	40	303	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3	5		6	3	5	2	
Permitted Phases						3	6		6			
Actuated Green, G (s)	5.4	5.4		24.9	24.9	33.8	60.4	60.4	85.3	8.9	73.3	
Effective Green, g (s)	5.4	5.4		24.9	24.9	33.8	60.4	60.4	85.3	8.9	73.3	
Actuated g/C Ratio	0.05	0.05		0.21	0.21	0.28	0.50	0.50	0.71	0.07	0.61	
Clearance Time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	4.4	4.4	3.0	3.0	4.5	
Lane Grp Cap (vph)	79	81		348	350	445	531	1781	1125	131	2159	
v/s Ratio Prot	0.00	c0.01		0.07	0.07	0.00		c0.50	c0.16	c0.02	0.09	
v/s Ratio Perm						0.01	0.00		0.38			
v/c Ratio	0.09	0.15		0.35	0.34	0.06	0.00	0.99	0.75	0.31	0.14	
Uniform Delay, d1	54.9	55.1		40.6	40.6	31.5	14.8	29.4	10.8	52.6	9.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.9		0.6	0.6	0.1	0.0	18.5	2.9	1.3	0.1	
Delay (s)	55.4	56.0		41.3	41.2	31.6	14.8	47.9	13.7	53.9	10.1	
Level of Service	E	E		D	D	C	B	D	B	D	B	
Approach Delay (s)		55.8			38.4			34.7			15.2	
Approach LOS		E			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	88	3	4	43	2587	0	0	203	201
Future Volume (vph)	0	0	0	88	3	4	43	2587	0	0	203	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1777	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1777	1583	1770	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	96	3	4	47	2812	0	0	221	218
RTOR Reduction (vph)	0	0	0	0	0	4	0	0	0	0	0	65
Lane Group Flow (vph)	0	0	0	0	99	0	47	2812	0	0	221	153
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)					13.0	13.0	7.5	95.6			84.1	84.1
Effective Green, g (s)					13.0	13.0	7.5	95.6			84.1	84.1
Actuated g/C Ratio					0.11	0.11	0.06	0.80			0.70	0.70
Clearance Time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Vehicle Extension (s)					4.0	4.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)					192	171	110	2819			2480	1109
v/s Ratio Prot							0.03	c0.79			0.06	
v/s Ratio Perm					0.06	0.00						0.10
v/c Ratio					0.52	0.00	0.43	1.00			0.09	0.14
Uniform Delay, d1					50.5	47.7	54.2	12.1			5.7	5.9
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					3.1	0.0	2.7	16.4			0.1	0.3
Delay (s)					53.6	47.7	56.8	28.5			5.8	6.2
Level of Service					D	D	E	C			A	A
Approach Delay (s)		0.0			53.4			28.9			6.0	
Approach LOS		A			D			C			A	

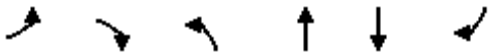
Intersection Summary			
HCM 2000 Control Delay	26.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.4
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	503	83	295	4	206	692
Future Volume (vph)	503	83	295	4	206	692
Ideal Flow (vphpl)	2300	2300	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2142	1917	3539	1583	4156	4284
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	2142	1917	3539	1583	4156	4284
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	508	84	298	4	208	699
RTOR Reduction (vph)	0	0	0	2	0	0
Lane Group Flow (vph)	508	84	298	2	208	699
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	4	5 4	6		5	2
Permitted Phases				6		
Actuated Green, G (s)	24.8	37.7	46.3	46.3	9.9	59.2
Effective Green, g (s)	24.8	37.7	46.3	46.3	9.9	59.2
Actuated g/C Ratio	0.28	0.42	0.51	0.51	0.11	0.66
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		5.0	5.0	3.0	5.1
Lane Grp Cap (vph)	590	803	1820	814	457	2817
v/s Ratio Prot	c0.24	0.04	0.08		c0.05	c0.16
v/s Ratio Perm				0.00		
v/c Ratio	0.86	0.10	0.16	0.00	0.46	0.25
Uniform Delay, d1	31.0	15.9	11.6	10.6	37.5	6.3
Progression Factor	1.00	1.00	1.16	1.31	1.00	1.00
Incremental Delay, d2	12.3	0.1	0.2	0.0	0.7	0.2
Delay (s)	43.2	16.0	13.6	13.9	38.2	6.5
Level of Service	D	B	B	B	D	A
Approach Delay (s)	39.4		13.6			13.8
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

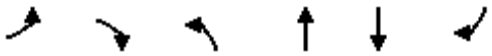
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	337	1175	1
Future Volume (Veh/h)	0	0	0	337	1175	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	0	0	0	340	1187	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				287	756	
pX, platoon unblocked	0.93	0.93	0.93			
vC, conflicting volume	1358	594	1188			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1228	405	1045			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	158	552	613			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	0	170	170	791	397
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	1
cSH	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.10	0.10	0.47	0.23
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.0	0.0		0.0	
Approach LOS	A				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	53	66	59	286	1129	44
Future Volume (vph)	53	66	59	286	1129	44
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	4284	1917
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	54	67	60	289	1140	44
RTOR Reduction (vph)	0	63	0	0	0	10
Lane Group Flow (vph)	54	4	60	289	1140	34
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Actuated Green, G (s)	5.9	5.9	5.6	78.1	69.5	69.5
Effective Green, g (s)	5.9	5.9	5.6	78.1	69.5	69.5
Actuated g/C Ratio	0.07	0.07	0.06	0.87	0.77	0.77
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	225	103	110	3071	3308	1480
v/s Ratio Prot	c0.02		c0.03	0.08	c0.27	
v/s Ratio Perm		0.00				0.02
v/c Ratio	0.24	0.04	0.55	0.09	0.34	0.02
Uniform Delay, d1	39.9	39.4	41.0	0.9	3.2	2.4
Progression Factor	1.00	1.00	1.00	1.00	0.77	0.42
Incremental Delay, d2	0.6	0.2	5.4	0.0	0.3	0.0
Delay (s)	40.5	39.6	46.4	0.9	2.7	1.0
Level of Service	D	D	D	A	A	A
Approach Delay (s)	40.0			8.7	2.7	
Approach LOS	D			A	A	

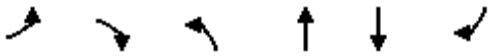
Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	66	140	244	73	128	342
Future Volume (vph)	66	140	244	73	128	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	4.0	5.2	4.9	4.9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	3539	3433	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	3539	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	72	152	265	79	139	372
RTOR Reduction (vph)	0	42	0	0	0	257
Lane Group Flow (vph)	72	110	265	79	139	115
Turn Type	NA	pt+ov	Prot	NA	Prot	custom
Protected Phases	6	6 4	5	2	4	4 5 8
Permitted Phases						
Actuated Green, G (s)	65.1	82.8	22.4	91.5	12.5	39.8
Effective Green, g (s)	65.1	82.8	22.4	91.5	12.5	35.3
Actuated g/C Ratio	0.57	0.73	0.20	0.80	0.11	0.31
Clearance Time (s)	5.2		4.0	5.2	4.9	
Vehicle Extension (s)	4.5		3.0	1.2	5.0	
Lane Grp Cap (vph)	1062	1148	347	2838	376	489
v/s Ratio Prot	0.04	c0.07	c0.15	0.02	c0.04	0.07
v/s Ratio Perm						
v/c Ratio	0.07	0.10	0.76	0.03	0.37	0.24
Uniform Delay, d1	10.9	4.6	43.3	2.3	47.1	29.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1	9.6	0.0	1.3	0.5
Delay (s)	11.1	4.7	52.9	2.3	48.4	29.9
Level of Service	B	A	D	A	D	C
Approach Delay (s)	6.7			41.3	34.9	
Approach LOS	A			D	C	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	14.1
Intersection Capacity Utilization	37.9%	ICU Level of Service	A
Analysis Period (min)	15		

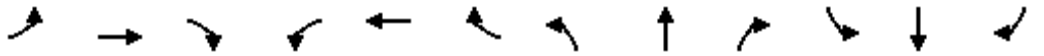
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	323	155	88	157	265	117
Future Volume (vph)	323	155	88	157	265	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	351	168	96	171	288	127
RTOR Reduction (vph)	0	84	0	0	0	17
Lane Group Flow (vph)	351	84	96	171	288	110
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	4	4 1	1	6	2	2 4
Permitted Phases						
Actuated Green, G (s)	23.6	43.0	14.8	140.4	121.6	150.2
Effective Green, g (s)	23.6	43.0	14.8	140.4	121.6	150.2
Actuated g/C Ratio	0.14	0.25	0.09	0.81	0.70	0.87
Clearance Time (s)	4.6		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	5.0	4.0	
Lane Grp Cap (vph)	466	392	150	2862	2478	1369
v/s Ratio Prot	c0.10	0.05	c0.05	0.05	c0.08	0.07
v/s Ratio Perm						
v/c Ratio	0.75	0.21	0.64	0.06	0.12	0.08
Uniform Delay, d1	72.2	51.9	76.8	3.3	8.5	1.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	0.3	9.0	0.0	0.1	0.0
Delay (s)	79.0	52.1	85.8	3.4	8.6	1.7
Level of Service	E	D	F	A	A	A
Approach Delay (s)	70.3			33.0	6.5	
Approach LOS	E			C	A	

Intersection Summary			
HCM 2000 Control Delay	40.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	173.6	Sum of lost time (s)	13.6
Intersection Capacity Utilization	33.8%	ICU Level of Service	A
Analysis Period (min)	15		

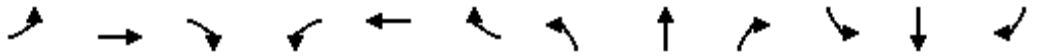
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	29	33	246	17	149	2	180	193	40	612	6
Future Volume (vph)	10	29	33	246	17	149	2	180	193	40	612	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1715		1681	1696	1583	1770	3539	1583	1770	3534	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.40	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1715		1681	1696	1583	738	3539	1583	1770	3534	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	32	36	267	18	162	2	196	210	43	665	7
RTOR Reduction (vph)	0	29	0	0	0	131	0	0	54	0	0	0
Lane Group Flow (vph)	11	39	0	142	143	31	2	196	156	43	672	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3	5		6	3	5	2	
Permitted Phases						3	6		6			
Actuated Green, G (s)	8.4	8.4		18.8	18.8	28.4	93.2	93.2	112.0	9.6	106.8	
Effective Green, g (s)	8.4	8.4		18.8	18.8	28.4	93.2	93.2	112.0	9.6	106.8	
Actuated g/C Ratio	0.06	0.06		0.12	0.12	0.19	0.62	0.62	0.74	0.06	0.71	
Clearance Time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	4.4	4.4	3.0	3.0	4.5	
Lane Grp Cap (vph)	98	95		210	212	298	457	2193	1178	112	2509	
v/s Ratio Prot	0.01	c0.02		c0.08	0.08	0.01		0.06	0.02	c0.02	c0.19	
v/s Ratio Perm						0.01	0.00		0.08			
v/c Ratio	0.11	0.41		0.68	0.67	0.10	0.00	0.09	0.13	0.38	0.27	
Uniform Delay, d1	67.5	68.6		62.9	62.9	50.5	10.9	11.5	5.4	67.6	7.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	2.8		8.3	8.2	0.2	0.0	0.1	0.1	2.2	0.3	
Delay (s)	68.0	71.4		71.2	71.1	50.6	10.9	11.6	5.5	69.7	8.1	
Level of Service	E	E		E	E	D	B	B	A	E	A	
Approach Delay (s)		71.0			63.7			8.5			11.8	
Approach LOS		E			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	150.4	Sum of lost time (s)	20.4
Intersection Capacity Utilization	53.7%	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												
Traffic Volume (vph)	0	0	0	95	1	2	20	349	0	0	769	429
Future Volume (vph)	0	0	0	95	1	2	20	349	0	0	769	429
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1775	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1775	1583	1770	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	103	1	2	22	379	0	0	836	466
RTOR Reduction (vph)	0	0	0	0	0	2	0	0	0	0	0	68
Lane Group Flow (vph)	0	0	0	0	104	0	22	379	0	0	836	398
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)					13.7	13.7	4.8	100.3			91.5	91.5
Effective Green, g (s)					13.7	13.7	4.8	100.3			91.5	91.5
Actuated g/C Ratio					0.11	0.11	0.04	0.80			0.73	0.73
Clearance Time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Vehicle Extension (s)					4.0	4.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)					193	172	67	2830			2582	1155
v/s Ratio Prot							c0.01	0.11			0.24	
v/s Ratio Perm					0.06	0.00						c0.25
v/c Ratio					0.54	0.00	0.33	0.13			0.32	0.34
Uniform Delay, d1					52.9	49.8	58.7	2.8			6.0	6.1
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					3.7	0.0	2.9	0.1			0.3	0.8
Delay (s)					56.5	49.8	61.6	2.9			6.3	6.9
Level of Service					E	D	E	A			A	A
Approach Delay (s)		0.0			56.4			6.1			6.5	
Approach LOS		A			E			A			A	

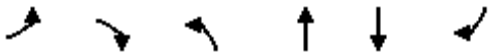
Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	125.4	Sum of lost time (s)	15.4
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	511	87	249	7	569	2552
Future Volume (vph)	511	87	249	7	569	2552
Ideal Flow (vphpl)	2300	2300	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2142	1917	3539	1583	4156	4284
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	2142	1917	3539	1583	4156	4284
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	516	88	252	7	575	2578
RTOR Reduction (vph)	0	0	0	4	0	0
Lane Group Flow (vph)	516	88	252	3	575	2578
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	4	5 4	6		5	2
Permitted Phases				6		
Actuated Green, G (s)	27.0	48.0	36.0	36.0	18.0	57.0
Effective Green, g (s)	27.0	48.0	36.0	36.0	18.0	57.0
Actuated g/C Ratio	0.30	0.53	0.40	0.40	0.20	0.63
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		5.0	5.0	3.0	5.1
Lane Grp Cap (vph)	642	1022	1415	633	831	2713
v/s Ratio Prot	c0.24	0.05	0.07		0.14	c0.60
v/s Ratio Perm				0.00		
v/c Ratio	0.80	0.09	0.18	0.00	0.69	0.95
Uniform Delay, d1	29.1	10.3	17.4	16.2	33.4	15.2
Progression Factor	1.00	1.00	1.06	1.17	1.00	1.00
Incremental Delay, d2	10.3	0.0	0.3	0.0	2.5	9.0
Delay (s)	39.3	10.3	18.7	19.0	35.9	24.2
Level of Service	D	B	B	B	D	C
Approach Delay (s)	35.1		18.7			26.4
Approach LOS	D		B			C

Intersection Summary			
HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		

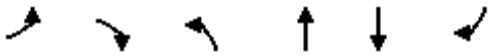
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	12	0	255	3086	0
Future Volume (Veh/h)	0	12	0	255	3086	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	0	12	0	258	3117	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				287	756	
pX, platoon unblocked	0.38	0.38	0.38			
vC, conflicting volume	3246	1558	3117			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3653	0	3311			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	100			
cM capacity (veh/h)	1	408	32			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	12	129	129	2078	1039
Volume Left	0	0	0	0	0
Volume Right	12	0	0	0	0
cSH	408	1700	1700	1700	1700
Volume to Capacity	0.03	0.08	0.08	1.22	0.61
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	14.1	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	14.1	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	80.5%	ICU Level of Service	D	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	33	70	52	190	3127	32
Future Volume (vph)	33	70	52	190	3127	32
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	4284	1917
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	33	71	53	192	3159	32
RTOR Reduction (vph)	0	67	0	0	0	6
Lane Group Flow (vph)	33	4	53	192	3159	26
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Actuated Green, G (s)	5.7	5.7	4.2	78.3	71.1	71.1
Effective Green, g (s)	5.7	5.7	4.2	78.3	71.1	71.1
Actuated g/C Ratio	0.06	0.06	0.05	0.87	0.79	0.79
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	217	100	82	3078	3384	1514
v/s Ratio Prot	c0.01		c0.03	0.05	c0.74	
v/s Ratio Perm		0.00				0.01
v/c Ratio	0.15	0.04	0.65	0.06	0.93	0.02
Uniform Delay, d1	39.9	39.6	42.2	0.8	7.6	2.0
Progression Factor	1.00	1.00	1.00	1.00	0.35	0.35
Incremental Delay, d2	0.3	0.2	16.2	0.0	2.9	0.0
Delay (s)	40.2	39.8	58.3	0.8	5.5	0.7
Level of Service	D	D	E	A	A	A
Approach Delay (s)	39.9			13.3	5.5	
Approach LOS	D			B	A	

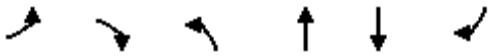
Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	503	972	555	362	505	414
Future Volume (vph)	503	972	555	362	505	414
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	4.0	5.2	4.9	4.9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	3539	3433	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	3539	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	547	1057	603	393	549	450
RTOR Reduction (vph)	0	8	0	0	0	91
Lane Group Flow (vph)	547	1049	603	393	549	359
Turn Type	NA	pt+ov	Prot	NA	Prot	custom
Protected Phases	6	6 4	5	2	4	4 5 8
Permitted Phases						
Actuated Green, G (s)	45.0	79.9	25.3	74.3	29.7	59.9
Effective Green, g (s)	45.0	79.9	25.3	74.3	29.7	55.4
Actuated g/C Ratio	0.39	0.70	0.22	0.65	0.26	0.49
Clearance Time (s)	5.2		4.0	5.2	4.9	
Vehicle Extension (s)	4.5		3.0	1.2	5.0	
Lane Grp Cap (vph)	734	1108	392	2304	893	768
v/s Ratio Prot	0.29	c0.66	c0.34	0.11	0.16	0.23
v/s Ratio Perm						
v/c Ratio	0.75	0.95	1.54	0.17	0.61	0.47
Uniform Delay, d1	29.6	15.2	44.4	7.8	37.2	19.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	16.2	254.7	0.2	1.8	0.9
Delay (s)	36.4	31.4	299.1	8.0	39.0	20.5
Level of Service	D	C	F	A	D	C
Approach Delay (s)	33.1			184.2	30.6	
Approach LOS	C			F	C	

Intersection Summary			
HCM 2000 Control Delay	74.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	14.1
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		

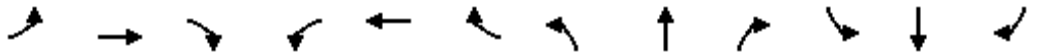
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	609	59	54	243	1375	241
Future Volume (vph)	609	59	54	243	1375	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	662	64	59	264	1495	262
RTOR Reduction (vph)	0	9	0	0	0	30
Lane Group Flow (vph)	662	55	59	264	1495	232
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	4	4 1	1	6	2	2 4
Permitted Phases						
Actuated Green, G (s)	40.1	55.9	11.2	123.9	108.7	153.8
Effective Green, g (s)	40.1	55.9	11.2	123.9	108.7	153.8
Actuated g/C Ratio	0.23	0.32	0.06	0.71	0.63	0.89
Clearance Time (s)	4.6		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	5.0	4.0	
Lane Grp Cap (vph)	792	509	114	2525	2215	1402
v/s Ratio Prot	c0.19	0.03	c0.03	0.07	c0.42	0.15
v/s Ratio Perm						
v/c Ratio	0.84	0.11	0.52	0.10	0.67	0.17
Uniform Delay, d1	63.6	41.3	78.6	7.7	21.0	1.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6	0.1	3.9	0.1	1.7	0.1
Delay (s)	71.2	41.4	82.5	7.8	22.7	1.4
Level of Service	E	D	F	A	C	A
Approach Delay (s)	68.6			21.4	19.5	
Approach LOS	E			C	B	

Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	173.6	Sum of lost time (s)	13.6
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

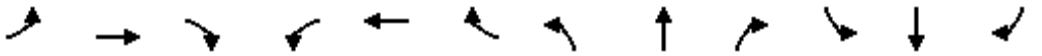
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	6	1330	3	64	4	104	227	48	1764	0
Future Volume (vph)	0	0	6	1330	3	64	4	104	227	48	1764	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.85		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00		0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1583		1681	1686	1583	1770	3539	1583	1770	3539	
Flt Permitted		1.00		0.95	0.95	1.00	0.07	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1583		1681	1686	1583	138	3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	7	1446	3	70	4	113	247	52	1917	0
RTOR Reduction (vph)	0	7	0	0	0	45	0	0	62	0	0	0
Lane Group Flow (vph)	0	0	0	723	726	25	4	113	185	52	1917	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3	5		6	3	5	2	
Permitted Phases						3	6		6			
Actuated Green, G (s)		1.8		35.8	35.8	43.7	54.1	54.1	89.9	7.9	66.0	
Effective Green, g (s)		1.8		35.8	35.8	43.7	54.1	54.1	89.9	7.9	66.0	
Actuated g/C Ratio		0.02		0.30	0.30	0.36	0.45	0.45	0.75	0.07	0.55	
Clearance Time (s)		5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	4.4	4.4	3.0	3.0	4.5	
Lane Grp Cap (vph)		23		501	502	576	62	1595	1185	116	1946	
v/s Ratio Prot		c0.00		0.43	c0.43	0.00		0.03	0.05	0.03	c0.54	
v/s Ratio Perm						0.01	0.03		0.07			
v/c Ratio		0.00		1.44	1.45	0.04	0.06	0.07	0.16	0.45	0.99	
Uniform Delay, d1		58.2		42.1	42.1	24.7	18.6	18.7	4.3	54.0	26.5	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1		210.5	211.8	0.0	2.0	0.1	0.1	2.7	17.2	
Delay (s)		58.3		252.6	253.9	24.7	20.6	18.8	4.3	56.7	43.7	
Level of Service		E		F	F	C	C	B	A	E	D	
Approach Delay (s)		58.3			242.7			9.0			44.0	
Approach LOS		E			F			A			D	

Intersection Summary			
HCM 2000 Control Delay	119.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	108	2	1	1	203	0	0	1895	1268
Future Volume (vph)	0	0	0	108	2	1	1	203	0	0	1895	1268
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1775	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1775	1583	1770	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	117	2	1	1	221	0	0	2060	1378
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	0	0	0	93
Lane Group Flow (vph)	0	0	0	0	119	0	1	221	0	0	2060	1285
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)					14.3	14.3	1.2	94.3			89.1	89.1
Effective Green, g (s)					14.3	14.3	1.2	94.3			89.1	89.1
Actuated g/C Ratio					0.12	0.12	0.01	0.79			0.74	0.74
Clearance Time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Vehicle Extension (s)					4.0	4.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)					211	188	17	2781			2627	1175
v/s Ratio Prot							0.00	c0.06			0.58	
v/s Ratio Perm					0.07	0.00						c0.81
v/c Ratio					0.56	0.00	0.06	0.08			0.78	1.09
Uniform Delay, d1					49.9	46.6	58.8	2.9			9.5	15.5
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					4.1	0.0	1.5	0.1			2.4	55.8
Delay (s)					54.1	46.6	60.3	3.0			12.0	71.2
Level of Service					D	D	E	A			B	E
Approach Delay (s)		0.0			54.0			3.2			35.7	
Approach LOS		A			D			A			D	

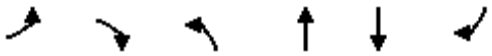
Intersection Summary			
HCM 2000 Control Delay	34.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.4
Intersection Capacity Utilization	101.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	82	135	2651	3	171	344
Future Volume (vph)	82	135	2651	3	171	344
Ideal Flow (vphpl)	2300	2300	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2142	1917	3539	1583	4156	4284
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	2142	1917	3539	1583	4156	4284
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	83	136	2678	3	173	347
RTOR Reduction (vph)	0	0	0	1	0	0
Lane Group Flow (vph)	83	136	2678	2	173	347
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	4	5 4	6		5	2
Permitted Phases				6		
Actuated Green, G (s)	11.1	24.2	89.8	89.8	10.1	102.9
Effective Green, g (s)	11.1	24.2	89.8	89.8	10.1	102.9
Actuated g/C Ratio	0.09	0.20	0.75	0.75	0.08	0.86
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		5.0	5.0	3.0	5.1
Lane Grp Cap (vph)	198	386	2648	1184	349	3673
v/s Ratio Prot	c0.04	0.07	c0.76		c0.04	0.08
v/s Ratio Perm				0.00		
v/c Ratio	0.42	0.35	1.01	0.00	0.50	0.09
Uniform Delay, d1	51.4	41.2	15.1	3.8	52.5	1.3
Progression Factor	1.00	1.00	0.84	0.64	1.00	1.00
Incremental Delay, d2	1.4	0.6	16.5	0.0	1.1	0.1
Delay (s)	52.8	41.7	29.2	2.4	53.6	1.4
Level of Service	D	D	C	A	D	A
Approach Delay (s)	45.9		29.1			18.8
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		

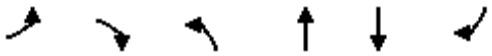
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	5	16	2707	359	0
Future Volume (Veh/h)	11	5	16	2707	359	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	11	5	16	2734	363	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				287	756	
pX, platoon unblocked	0.11					
vC, conflicting volume	1762	182	363			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	182	363			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	90	99	99			
cM capacity (veh/h)	110	830	1192			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	16	927	1823	242	121
Volume Left	11	16	0	0	0
Volume Right	5	0	0	0	0
cSH	150	1192	1700	1700	1700
Volume to Capacity	0.11	0.01	1.07	0.14	0.07
Queue Length 95th (ft)	9	1	0	0	0
Control Delay (s)	31.8	0.4	0.0	0.0	0.0
Lane LOS	D	A			
Approach Delay (s)	31.8	0.1		0.0	
Approach LOS	D				

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	52	64	63	2587	391	35
Future Volume (vph)	52	64	63	2587	391	35
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	4284	1917
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	53	65	64	2613	395	35
RTOR Reduction (vph)	0	62	0	0	0	7
Lane Group Flow (vph)	53	3	64	2613	395	28
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Actuated Green, G (s)	6.3	6.3	7.0	107.7	97.7	97.7
Effective Green, g (s)	6.3	6.3	7.0	107.7	97.7	97.7
Actuated g/C Ratio	0.05	0.05	0.06	0.90	0.81	0.81
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	180	83	103	3176	3487	1560
v/s Ratio Prot	c0.02		0.04	c0.74	0.09	
v/s Ratio Perm		0.00				0.01
v/c Ratio	0.29	0.04	0.62	0.82	0.11	0.02
Uniform Delay, d1	54.7	54.0	55.2	2.4	2.3	2.1
Progression Factor	1.00	1.00	1.00	1.00	1.15	1.42
Incremental Delay, d2	0.9	0.2	11.1	2.5	0.1	0.0
Delay (s)	55.6	54.2	66.3	5.0	2.7	3.0
Level of Service	E	D	E	A	A	A
Approach Delay (s)	54.8			6.4	2.7	
Approach LOS	D			A	A	

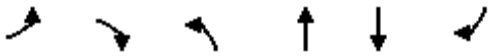
Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	279	424	458	429	418	348
Future Volume (vph)	279	424	458	429	418	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	4.0	5.2	4.9	4.9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	3539	3433	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	3539	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	461	498	466	454	378
RTOR Reduction (vph)	0	24	0	0	0	149
Lane Group Flow (vph)	303	437	498	466	454	229
Turn Type	NA	pt+ov	Prot	NA	Prot	custom
Protected Phases	6	6 4	5	2	4	4 5 8
Permitted Phases						
Actuated Green, G (s)	31.3	61.2	44.0	79.3	24.7	73.6
Effective Green, g (s)	31.3	61.2	44.0	79.3	24.7	69.1
Actuated g/C Ratio	0.27	0.54	0.39	0.70	0.22	0.61
Clearance Time (s)	5.2		4.0	5.2	4.9	
Vehicle Extension (s)	4.5		3.0	1.2	5.0	
Lane Grp Cap (vph)	511	849	682	2459	743	958
v/s Ratio Prot	c0.16	0.28	c0.28	0.13	c0.13	0.14
v/s Ratio Perm						
v/c Ratio	0.59	0.52	0.73	0.19	0.61	0.24
Uniform Delay, d1	35.9	16.9	30.0	6.1	40.4	10.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	1.1	4.0	0.2	2.2	0.3
Delay (s)	40.9	18.0	34.0	6.3	42.5	10.6
Level of Service	D	B	C	A	D	B
Approach Delay (s)	27.1			20.6	28.0	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	14.1
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		

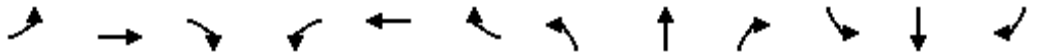
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	194	41	723	545	540	462
Future Volume (vph)	194	41	723	545	540	462
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	45	786	592	587	502
RTOR Reduction (vph)	0	21	0	0	0	1
Lane Group Flow (vph)	211	24	786	592	587	501
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	4	4 1	1	6	2	2 4
Permitted Phases						
Actuated Green, G (s)	16.8	93.7	72.3	147.2	70.9	92.7
Effective Green, g (s)	16.8	93.7	72.3	147.2	70.9	92.7
Actuated g/C Ratio	0.10	0.54	0.42	0.85	0.41	0.53
Clearance Time (s)	4.6		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	5.0	4.0	
Lane Grp Cap (vph)	332	854	737	3000	1445	845
v/s Ratio Prot	0.06	0.02	c0.44	0.17	0.17	c0.32
v/s Ratio Perm						
v/c Ratio	0.64	0.03	1.07	0.20	0.41	0.59
Uniform Delay, d1	75.5	18.7	50.6	2.4	36.4	27.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.0	52.3	0.1	0.8	1.1
Delay (s)	79.4	18.7	103.0	2.6	37.3	28.7
Level of Service	E	B	F	A	D	C
Approach Delay (s)	68.7			59.8	33.3	
Approach LOS	E			E	C	

Intersection Summary			
HCM 2000 Control Delay	50.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	173.6	Sum of lost time (s)	13.6
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

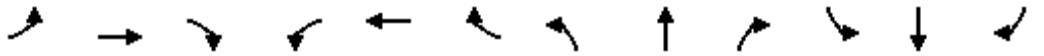
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	11	3	227	3	96	2	1666	1077	38	285	2
Future Volume (vph)	6	11	3	227	3	96	2	1666	1077	38	285	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1807		1681	1687	1583	1770	3539	1583	1770	3536	
Flt Permitted	0.95	1.00		0.95	0.95	1.00	0.56	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1807		1681	1687	1583	1047	3539	1583	1770	3536	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	12	3	247	3	104	2	1811	1171	41	310	2
RTOR Reduction (vph)	0	3	0	0	0	71	0	0	254	0	0	0
Lane Group Flow (vph)	7	12	0	126	124	33	2	1811	917	41	312	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3	5		6	3	5	2	
Permitted Phases						3	6		6			
Actuated Green, G (s)	5.4	5.4		28.7	28.7	37.6	56.6	56.6	85.3	8.9	69.5	
Effective Green, g (s)	5.4	5.4		28.7	28.7	37.6	56.6	56.6	85.3	8.9	69.5	
Actuated g/C Ratio	0.05	0.05		0.24	0.24	0.31	0.47	0.47	0.71	0.07	0.58	
Clearance Time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	4.4	4.4	3.0	3.0	4.5	
Lane Grp Cap (vph)	79	81		402	403	496	493	1669	1125	131	2047	
v/s Ratio Prot	0.00	c0.01		0.07	0.07	0.00		c0.51	c0.19	c0.02	0.09	
v/s Ratio Perm						0.02	0.00		0.38			
v/c Ratio	0.09	0.15		0.31	0.31	0.07	0.00	1.09	0.82	0.31	0.15	
Uniform Delay, d1	54.9	55.1		37.5	37.5	28.9	16.8	31.7	11.9	52.7	11.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.9		0.4	0.4	0.1	0.0	49.0	4.7	1.4	0.2	
Delay (s)	55.4	56.0		38.0	37.9	28.9	16.8	80.7	16.6	54.0	11.8	
Level of Service	E	E		D	D	C	B	F	B	D	B	
Approach Delay (s)		55.8			35.3			55.5			16.7	
Approach LOS		E			D			E			B	

Intersection Summary			
HCM 2000 Control Delay	49.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	92.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	91	3	4	44	2682	0	0	209	212
Future Volume (vph)	0	0	0	91	3	4	44	2682	0	0	209	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1777	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1777	1583	1770	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	99	3	4	48	2915	0	0	227	230
RTOR Reduction (vph)	0	0	0	0	0	4	0	0	0	0	0	69
Lane Group Flow (vph)	0	0	0	0	102	0	48	2915	0	0	227	161
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)					13.2	13.2	7.6	95.4			83.8	83.8
Effective Green, g (s)					13.2	13.2	7.6	95.4			83.8	83.8
Actuated g/C Ratio					0.11	0.11	0.06	0.80			0.70	0.70
Clearance Time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Vehicle Extension (s)					4.0	4.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)					195	174	112	2813			2471	1105
v/s Ratio Prot							0.03	c0.82			0.06	
v/s Ratio Perm					0.06	0.00						0.10
v/c Ratio					0.52	0.00	0.43	1.04			0.09	0.15
Uniform Delay, d1					50.4	47.5	54.1	12.3			5.8	6.1
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					3.3	0.0	2.6	27.3			0.1	0.3
Delay (s)					53.7	47.5	56.7	39.6			5.9	6.4
Level of Service					D	D	E	D			A	A
Approach Delay (s)		0.0			53.5			39.8			6.1	
Approach LOS		A			D			D			A	

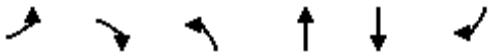
Intersection Summary			
HCM 2000 Control Delay	35.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.4
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	582	86	307	4	212	713
Future Volume (vph)	582	86	307	4	212	713
Ideal Flow (vphpl)	2300	2300	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2142	1917	3539	1583	4156	4284
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	2142	1917	3539	1583	4156	4284
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	588	87	310	4	214	720
RTOR Reduction (vph)	0	0	0	2	0	0
Lane Group Flow (vph)	588	87	310	2	214	720
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	4	5 4	6		5	2
Permitted Phases				6		
Actuated Green, G (s)	26.4	39.4	44.6	44.6	10.0	57.6
Effective Green, g (s)	26.4	39.4	44.6	44.6	10.0	57.6
Actuated g/C Ratio	0.29	0.44	0.50	0.50	0.11	0.64
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		5.0	5.0	3.0	5.1
Lane Grp Cap (vph)	628	839	1753	784	461	2741
v/s Ratio Prot	c0.27	0.05	0.09		c0.05	c0.17
v/s Ratio Perm				0.00		
v/c Ratio	0.94	0.10	0.18	0.00	0.46	0.26
Uniform Delay, d1	31.0	14.9	12.6	11.5	37.5	7.0
Progression Factor	1.00	1.00	1.15	1.31	1.00	1.00
Incremental Delay, d2	21.4	0.1	0.2	0.0	0.7	0.2
Delay (s)	52.4	15.0	14.7	15.0	38.2	7.2
Level of Service	D	B	B	B	D	A
Approach Delay (s)	47.6		14.7			14.3
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	26.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		

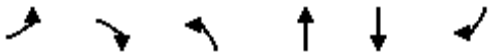
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	350	1275	1
Future Volume (Veh/h)	0	0	0	350	1275	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	0	0	0	354	1288	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				287	756	
pX, platoon unblocked	0.92	0.92	0.92			
vC, conflicting volume	1466	644	1289			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1330	439	1140			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	134	520	560			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	0	177	177	859	430
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	1
cSH	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.10	0.10	0.51	0.25
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.0	0.0		0.0	
Approach LOS	A				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	32.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	55	68	61	298	1227	45
Future Volume (vph)	55	68	61	298	1227	45
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	4284	1917
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	56	69	62	301	1239	45
RTOR Reduction (vph)	0	64	0	0	0	10
Lane Group Flow (vph)	56	5	62	301	1239	35
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Actuated Green, G (s)	6.0	6.0	5.6	78.0	69.4	69.4
Effective Green, g (s)	6.0	6.0	5.6	78.0	69.4	69.4
Actuated g/C Ratio	0.07	0.07	0.06	0.87	0.77	0.77
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	228	105	110	3067	3303	1478
v/s Ratio Prot	c0.02		c0.04	0.09	c0.29	
v/s Ratio Perm		0.00				0.02
v/c Ratio	0.25	0.04	0.56	0.10	0.38	0.02
Uniform Delay, d1	39.9	39.3	41.0	0.9	3.3	2.4
Progression Factor	1.00	1.00	1.00	1.00	0.76	0.41
Incremental Delay, d2	0.6	0.2	6.5	0.0	0.3	0.0
Delay (s)	40.4	39.5	47.5	0.9	2.8	1.0
Level of Service	D	D	D	A	A	A
Approach Delay (s)	39.9			8.9	2.7	
Approach LOS	D			A	A	

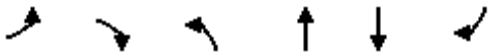
Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	68	144	251	75	132	352
Future Volume (vph)	68	144	251	75	132	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	4.0	5.2	4.9	4.9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	3539	3433	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	3539	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	157	273	82	143	383
RTOR Reduction (vph)	0	44	0	0	0	262
Lane Group Flow (vph)	74	113	273	82	143	121
Turn Type	NA	pt+ov	Prot	NA	Prot	custom
Protected Phases	6	6 4	5	2	4	4 5 8
Permitted Phases						
Actuated Green, G (s)	64.3	82.3	22.9	91.2	12.8	40.6
Effective Green, g (s)	64.3	82.3	22.9	91.2	12.8	36.1
Actuated g/C Ratio	0.56	0.72	0.20	0.80	0.11	0.32
Clearance Time (s)	5.2		4.0	5.2	4.9	
Vehicle Extension (s)	4.5		3.0	1.2	5.0	
Lane Grp Cap (vph)	1049	1141	355	2828	385	500
v/s Ratio Prot	0.04	c0.07	c0.15	0.02	c0.04	0.08
v/s Ratio Perm						
v/c Ratio	0.07	0.10	0.77	0.03	0.37	0.24
Uniform Delay, d1	11.3	4.8	43.1	2.4	46.9	28.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1	9.6	0.0	1.3	0.5
Delay (s)	11.4	4.9	52.7	2.4	48.2	29.4
Level of Service	B	A	D	A	D	C
Approach Delay (s)	7.0			41.1	34.5	
Approach LOS	A			D	C	

Intersection Summary			
HCM 2000 Control Delay	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	14.1
Intersection Capacity Utilization	38.5%	ICU Level of Service	A
Analysis Period (min)	15		

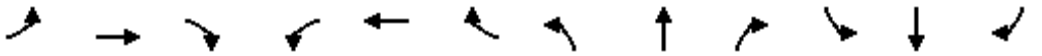
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	333	160	94	162	273	121
Future Volume (vph)	333	160	94	162	273	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	362	174	102	176	297	132
RTOR Reduction (vph)	0	84	0	0	0	18
Lane Group Flow (vph)	362	90	102	176	297	114
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	4	4 1	1	6	2	2 4
Permitted Phases						
Actuated Green, G (s)	24.1	44.0	15.3	139.9	120.6	149.7
Effective Green, g (s)	24.1	44.0	15.3	139.9	120.6	149.7
Actuated g/C Ratio	0.14	0.25	0.09	0.81	0.69	0.86
Clearance Time (s)	4.6		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	5.0	4.0	
Lane Grp Cap (vph)	476	401	155	2851	2458	1365
v/s Ratio Prot	c0.11	0.06	c0.06	0.05	c0.08	0.07
v/s Ratio Perm						
v/c Ratio	0.76	0.23	0.66	0.06	0.12	0.08
Uniform Delay, d1	72.0	51.3	76.6	3.4	8.8	1.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.0	0.3	9.7	0.0	0.1	0.0
Delay (s)	79.0	51.6	86.3	3.5	8.9	1.8
Level of Service	E	D	F	A	A	A
Approach Delay (s)	70.1			33.9	6.7	
Approach LOS	E			C	A	

Intersection Summary			
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	173.6	Sum of lost time (s)	13.6
Intersection Capacity Utilization	34.4%	ICU Level of Service	A
Analysis Period (min)	15		

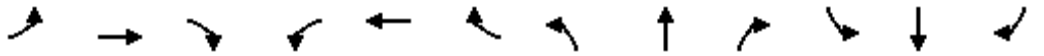
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	30	34	253	18	154	2	185	202	41	631	6
Future Volume (vph)	10	30	34	253	18	154	2	185	202	41	631	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1715		1681	1696	1583	1770	3539	1583	1770	3534	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.39	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1715		1681	1696	1583	723	3539	1583	1770	3534	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	33	37	275	20	167	2	201	220	45	686	7
RTOR Reduction (vph)	0	29	0	0	0	135	0	0	59	0	0	0
Lane Group Flow (vph)	11	41	0	146	149	32	2	201	161	45	693	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3	5		6	3	5	2	
Permitted Phases						3	6		6			
Actuated Green, G (s)	10.2	10.2		19.3	19.3	29.0	90.8	90.8	110.1	9.7	104.5	
Effective Green, g (s)	10.2	10.2		19.3	19.3	29.0	90.8	90.8	110.1	9.7	104.5	
Actuated g/C Ratio	0.07	0.07		0.13	0.13	0.19	0.60	0.60	0.73	0.06	0.69	
Clearance Time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	4.4	4.4	3.0	3.0	4.5	
Lane Grp Cap (vph)	120	116		215	217	305	436	2136	1158	114	2455	
v/s Ratio Prot	0.01	c0.02		0.09	c0.09	0.01		0.06	0.02	c0.03	c0.20	
v/s Ratio Perm						0.01	0.00		0.08			
v/c Ratio	0.09	0.35		0.68	0.69	0.11	0.00	0.09	0.14	0.39	0.28	
Uniform Delay, d1	65.8	67.0		62.6	62.7	50.0	11.8	12.5	6.0	67.5	8.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	1.9		8.2	8.7	0.2	0.0	0.1	0.1	2.2	0.3	
Delay (s)	66.1	68.8		70.8	71.4	50.2	11.9	12.6	6.1	69.8	9.0	
Level of Service	E	E		E	E	D	B	B	A	E	A	
Approach Delay (s)		68.4			63.5			9.2			12.7	
Approach LOS		E			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	150.4	Sum of lost time (s)	20.4
Intersection Capacity Utilization	54.4%	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												
Traffic Volume (vph)	0	0	0	98	1	2	21	378	0	0	792	454
Future Volume (vph)	0	0	0	98	1	2	21	378	0	0	792	454
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1775	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1775	1583	1770	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	107	1	2	23	411	0	0	861	493
RTOR Reduction (vph)	0	0	0	0	0	2	0	0	0	0	0	71
Lane Group Flow (vph)	0	0	0	0	108	0	23	411	0	0	861	422
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)					13.9	13.9	4.8	100.1			91.3	91.3
Effective Green, g (s)					13.9	13.9	4.8	100.1			91.3	91.3
Actuated g/C Ratio					0.11	0.11	0.04	0.80			0.73	0.73
Clearance Time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Vehicle Extension (s)					4.0	4.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)					196	175	67	2824			2576	1152
v/s Ratio Prot							c0.01	0.12			0.24	
v/s Ratio Perm					0.06	0.00						c0.27
v/c Ratio					0.55	0.00	0.34	0.15			0.33	0.37
Uniform Delay, d1					52.8	49.6	58.8	2.9			6.1	6.3
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					4.1	0.0	3.1	0.1			0.4	0.9
Delay (s)					56.9	49.6	61.8	3.0			6.5	7.2
Level of Service					E	D	E	A			A	A
Approach Delay (s)		0.0			56.7			6.1			6.8	
Approach LOS		A			E			A			A	

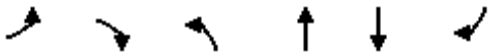
Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	125.4	Sum of lost time (s)	15.4
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	514	87	252	7	569	2553
Future Volume (vph)	514	87	252	7	569	2553
Ideal Flow (vphpl)	2300	2300	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2142	1917	3539	1583	4156	4284
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	2142	1917	3539	1583	4156	4284
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	519	88	255	7	575	2579
RTOR Reduction (vph)	0	0	0	5	0	0
Lane Group Flow (vph)	519	88	255	2	575	2579
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	4	5 4	6		5	2
Permitted Phases				6		
Actuated Green, G (s)	24.5	54.5	29.5	29.5	27.0	59.5
Effective Green, g (s)	24.5	54.5	29.5	29.5	27.0	59.5
Actuated g/C Ratio	0.27	0.61	0.33	0.33	0.30	0.66
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		5.0	5.0	3.0	5.1
Lane Grp Cap (vph)	583	1160	1160	518	1246	2832
v/s Ratio Prot	c0.24	0.05	0.07		0.14	c0.60
v/s Ratio Perm				0.00		
v/c Ratio	0.89	0.08	0.22	0.00	0.46	0.91
Uniform Delay, d1	31.5	7.3	21.9	20.4	25.6	13.0
Progression Factor	1.00	1.00	1.28	1.84	1.00	1.00
Incremental Delay, d2	18.3	0.0	0.4	0.0	0.3	5.7
Delay (s)	49.7	7.4	28.5	37.4	25.9	18.7
Level of Service	D	A	C	D	C	B
Approach Delay (s)	43.6		28.7			20.0
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		

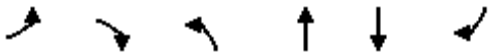
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	3	15	4	255	3086	4
Future Volume (vph)	3	15	4	255	3086	4
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0		3.0	3.0	3.0	3.0
Lane Util. Factor	1.00		1.00	0.95	0.95	1.00
Frt	0.89		1.00	1.00	1.00	0.85
Flt Protected	0.99		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1640		1770	3539	4284	1917
Flt Permitted	0.99		0.95	1.00	1.00	1.00
Satd. Flow (perm)	1640		1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	3	15	4	258	3117	4
RTOR Reduction (vph)	15	0	0	0	0	0
Lane Group Flow (vph)	3	0	4	258	3117	4
Turn Type	Prot		Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases						2
Actuated Green, G (s)	2.8		1.3	81.2	76.9	76.9
Effective Green, g (s)	2.8		1.3	81.2	76.9	76.9
Actuated g/C Ratio	0.03		0.01	0.90	0.85	0.85
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	51		25	3192	3660	1637
v/s Ratio Prot	c0.00		c0.00	0.07	c0.73	
v/s Ratio Perm						0.00
v/c Ratio	0.07		0.16	0.08	0.85	0.00
Uniform Delay, d1	42.3		43.8	0.5	3.5	1.0
Progression Factor	1.00		0.93	1.27	1.94	1.40
Incremental Delay, d2	0.6		3.0	0.0	1.1	0.0
Delay (s)	42.9		43.9	0.6	7.9	1.3
Level of Service	D		D	A	A	A
Approach Delay (s)	42.9			1.3	7.9	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	33	70	52	194	3130	32
Future Volume (vph)	33	70	52	194	3130	32
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	4284	1917
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	33	71	53	196	3162	32
RTOR Reduction (vph)	0	67	0	0	0	6
Lane Group Flow (vph)	33	4	53	196	3162	26
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Actuated Green, G (s)	5.7	5.7	4.2	78.3	71.1	71.1
Effective Green, g (s)	5.7	5.7	4.2	78.3	71.1	71.1
Actuated g/C Ratio	0.06	0.06	0.05	0.87	0.79	0.79
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	217	100	82	3078	3384	1514
v/s Ratio Prot	c0.01		c0.03	0.06	c0.74	
v/s Ratio Perm		0.00				0.01
v/c Ratio	0.15	0.04	0.65	0.06	0.93	0.02
Uniform Delay, d1	39.9	39.6	42.2	0.8	7.6	2.0
Progression Factor	1.00	1.00	1.00	1.00	0.89	0.33
Incremental Delay, d2	0.3	0.2	16.2	0.0	4.1	0.0
Delay (s)	40.2	39.8	58.3	0.8	10.8	0.7
Level of Service	D	D	E	A	B	A
Approach Delay (s)	39.9			13.1	10.7	
Approach LOS	D			B	B	

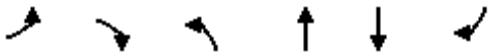
Intersection Summary			
HCM 2000 Control Delay	11.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	503	972	555	362	505	414
Future Volume (vph)	503	972	555	362	505	414
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	4.0	5.2	4.9	4.9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	3539	3433	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	3539	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	547	1057	603	393	549	450
RTOR Reduction (vph)	0	8	0	0	0	91
Lane Group Flow (vph)	547	1049	603	393	549	359
Turn Type	NA	pt+ov	Prot	NA	Prot	custom
Protected Phases	6	6 4	5	2	4	4 5 8
Permitted Phases						
Actuated Green, G (s)	45.0	79.9	25.3	74.3	29.7	59.9
Effective Green, g (s)	45.0	79.9	25.3	74.3	29.7	55.4
Actuated g/C Ratio	0.39	0.70	0.22	0.65	0.26	0.49
Clearance Time (s)	5.2		4.0	5.2	4.9	
Vehicle Extension (s)	4.5		3.0	1.2	5.0	
Lane Grp Cap (vph)	734	1108	392	2304	893	768
v/s Ratio Prot	0.29	c0.66	c0.34	0.11	0.16	0.23
v/s Ratio Perm						
v/c Ratio	0.75	0.95	1.54	0.17	0.61	0.47
Uniform Delay, d1	29.6	15.2	44.4	7.8	37.2	19.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	16.2	254.7	0.2	1.8	0.9
Delay (s)	36.4	31.4	299.1	8.0	39.0	20.5
Level of Service	D	C	F	A	D	C
Approach Delay (s)	33.1			184.2	30.6	
Approach LOS	C			F	C	

Intersection Summary			
HCM 2000 Control Delay	74.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	14.1
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		

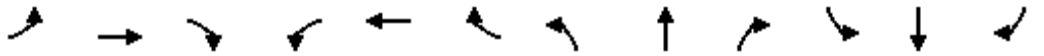
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	609	59	56	243	1375	241
Future Volume (vph)	609	59	56	243	1375	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	662	64	61	264	1495	262
RTOR Reduction (vph)	0	9	0	0	0	30
Lane Group Flow (vph)	662	55	61	264	1495	232
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	4	4 1	1	6	2	2 4
Permitted Phases						
Actuated Green, G (s)	40.1	56.1	11.4	123.9	108.5	153.6
Effective Green, g (s)	40.1	56.1	11.4	123.9	108.5	153.6
Actuated g/C Ratio	0.23	0.32	0.07	0.71	0.63	0.88
Clearance Time (s)	4.6		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	5.0	4.0	
Lane Grp Cap (vph)	792	511	116	2525	2211	1400
v/s Ratio Prot	c0.19	0.03	c0.03	0.07	c0.42	0.15
v/s Ratio Perm						
v/c Ratio	0.84	0.11	0.53	0.10	0.68	0.17
Uniform Delay, d1	63.6	41.2	78.5	7.7	21.1	1.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6	0.1	4.3	0.1	1.7	0.1
Delay (s)	71.2	41.3	82.7	7.8	22.8	1.4
Level of Service	E	D	F	A	C	A
Approach Delay (s)	68.6			21.8	19.6	
Approach LOS	E			C	B	

Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	173.6	Sum of lost time (s)	13.6
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

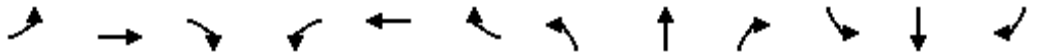
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	6	1330	3	64	4	105	229	48	1765	0
Future Volume (vph)	0	0	6	1330	3	64	4	105	229	48	1765	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.85		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00		0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1583		1681	1686	1583	1770	3539	1583	1770	3539	
Flt Permitted		1.00		0.95	0.95	1.00	0.07	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1583		1681	1686	1583	138	3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	7	1446	3	70	4	114	249	52	1918	0
RTOR Reduction (vph)	0	7	0	0	0	45	0	0	62	0	0	0
Lane Group Flow (vph)	0	0	0	723	726	25	4	114	187	52	1918	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3	5		6	3	5	2	
Permitted Phases						3	6		6			
Actuated Green, G (s)		1.8		35.8	35.8	43.7	54.1	54.1	89.9	7.9	66.0	
Effective Green, g (s)		1.8		35.8	35.8	43.7	54.1	54.1	89.9	7.9	66.0	
Actuated g/C Ratio		0.02		0.30	0.30	0.36	0.45	0.45	0.75	0.07	0.55	
Clearance Time (s)		5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	4.4	4.4	3.0	3.0	4.5	
Lane Grp Cap (vph)		23		501	502	576	62	1595	1185	116	1946	
v/s Ratio Prot		c0.00		0.43	c0.43	0.00		0.03	0.05	0.03	c0.54	
v/s Ratio Perm						0.01	0.03		0.07			
v/c Ratio		0.00		1.44	1.45	0.04	0.06	0.07	0.16	0.45	0.99	
Uniform Delay, d1		58.2		42.1	42.1	24.7	18.6	18.7	4.3	54.0	26.5	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1		210.5	211.8	0.0	2.0	0.1	0.1	2.7	17.3	
Delay (s)		58.3		252.6	253.9	24.7	20.6	18.8	4.3	56.7	43.8	
Level of Service		E		F	F	C	C	B	A	E	D	
Approach Delay (s)		58.3			242.7			9.0			44.1	
Approach LOS		E			F			A			D	

Intersection Summary			
HCM 2000 Control Delay	118.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	108	2	1	1	207	0	0	1896	1270
Future Volume (vph)	0	0	0	108	2	1	1	207	0	0	1896	1270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1775	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1775	1583	1770	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	117	2	1	1	225	0	0	2061	1380
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	0	0	0	93
Lane Group Flow (vph)	0	0	0	0	119	0	1	225	0	0	2061	1287
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)					14.3	14.3	1.2	94.3			89.1	89.1
Effective Green, g (s)					14.3	14.3	1.2	94.3			89.1	89.1
Actuated g/C Ratio					0.12	0.12	0.01	0.79			0.74	0.74
Clearance Time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Vehicle Extension (s)					4.0	4.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)					211	188	17	2781			2627	1175
v/s Ratio Prot							0.00	c0.06			0.58	
v/s Ratio Perm					0.07	0.00						c0.81
v/c Ratio					0.56	0.00	0.06	0.08			0.78	1.10
Uniform Delay, d1					49.9	46.6	58.8	2.9			9.5	15.5
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					4.1	0.0	1.5	0.1			2.4	56.4
Delay (s)					54.1	46.6	60.3	3.0			12.0	71.8
Level of Service					D	D	E	A			B	E
Approach Delay (s)		0.0			54.0			3.2			36.0	
Approach LOS		A			D			A			D	

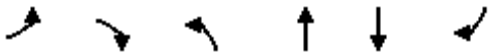
Intersection Summary			
HCM 2000 Control Delay	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.4
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	93	135	2665	3	171	349
Future Volume (vph)	93	135	2665	3	171	349
Ideal Flow (vphpl)	2300	2300	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2142	1917	3539	1583	4156	4284
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	2142	1917	3539	1583	4156	4284
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	94	136	2692	3	173	353
RTOR Reduction (vph)	0	0	0	1	0	0
Lane Group Flow (vph)	94	136	2692	2	173	353
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	4	5 4	6		5	2
Permitted Phases				6		
Actuated Green, G (s)	10.1	25.1	88.9	88.9	12.0	103.9
Effective Green, g (s)	10.1	25.1	88.9	88.9	12.0	103.9
Actuated g/C Ratio	0.08	0.21	0.74	0.74	0.10	0.87
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		5.0	5.0	3.0	5.1
Lane Grp Cap (vph)	180	400	2621	1172	415	3709
v/s Ratio Prot	c0.04	0.07	c0.76		c0.04	0.08
v/s Ratio Perm				0.00		
v/c Ratio	0.52	0.34	1.03	0.00	0.42	0.10
Uniform Delay, d1	52.6	40.4	15.5	4.0	50.7	1.2
Progression Factor	1.00	1.00	0.86	1.21	1.00	1.00
Incremental Delay, d2	2.7	0.5	20.2	0.0	0.7	0.1
Delay (s)	55.4	40.9	33.5	4.9	51.4	1.2
Level of Service	E	D	C	A	D	A
Approach Delay (s)	46.8		33.5			17.7
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		

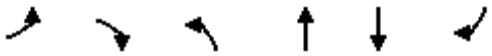
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	25	18	32	2707	359	16
Future Volume (vph)	25	18	32	2707	359	16
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0		3.0	3.0	3.0	3.0
Lane Util. Factor	1.00		1.00	0.95	0.95	1.00
Frt	0.94		1.00	1.00	1.00	0.85
Flt Protected	0.97		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1708		1770	3539	4284	1917
Flt Permitted	0.97		0.95	1.00	1.00	1.00
Satd. Flow (perm)	1708		1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	25	18	32	2734	363	16
RTOR Reduction (vph)	17	0	0	0	0	3
Lane Group Flow (vph)	26	0	32	2734	363	13
Turn Type	Prot		Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases						2
Actuated Green, G (s)	6.4		5.3	107.6	99.3	99.3
Effective Green, g (s)	6.4		5.3	107.6	99.3	99.3
Actuated g/C Ratio	0.05		0.04	0.90	0.83	0.83
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	91		78	3173	3545	1586
v/s Ratio Prot	c0.02		0.02	c0.77	0.08	
v/s Ratio Perm						0.01
v/c Ratio	0.29		0.41	0.86	0.10	0.01
Uniform Delay, d1	54.6		55.8	2.8	2.0	1.8
Progression Factor	1.00		1.15	0.37	1.59	2.38
Incremental Delay, d2	1.7		2.1	2.1	0.1	0.0
Delay (s)	56.3		66.2	3.1	3.2	4.3
Level of Service	E		E	A	A	A
Approach Delay (s)	56.3			3.8	3.2	
Approach LOS	E			A	A	

Intersection Summary			
HCM 2000 Control Delay	4.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	52	64	63	2603	404	35
Future Volume (vph)	52	64	63	2603	404	35
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	4284	1917
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	53	65	64	2629	408	35
RTOR Reduction (vph)	0	62	0	0	0	7
Lane Group Flow (vph)	53	3	64	2629	408	28
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Actuated Green, G (s)	6.3	6.3	7.0	107.7	97.7	97.7
Effective Green, g (s)	6.3	6.3	7.0	107.7	97.7	97.7
Actuated g/C Ratio	0.05	0.05	0.06	0.90	0.81	0.81
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	180	83	103	3176	3487	1560
v/s Ratio Prot	c0.02		0.04	c0.74	0.10	
v/s Ratio Perm		0.00				0.01
v/c Ratio	0.29	0.04	0.62	0.83	0.12	0.02
Uniform Delay, d1	54.7	54.0	55.2	2.5	2.3	2.1
Progression Factor	1.00	1.00	1.00	1.00	0.45	0.11
Incremental Delay, d2	0.9	0.2	11.1	2.6	0.1	0.0
Delay (s)	55.6	54.2	66.3	5.1	1.1	0.3
Level of Service	E	D	E	A	A	A
Approach Delay (s)	54.8			6.5	1.0	
Approach LOS	D			A	A	

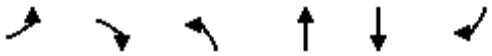
Intersection Summary			
HCM 2000 Control Delay	7.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	279	425	459	429	419	349
Future Volume (vph)	279	425	459	429	419	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	4.0	5.2	4.9	4.9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	3539	3433	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	3539	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	462	499	466	455	379
RTOR Reduction (vph)	0	24	0	0	0	150
Lane Group Flow (vph)	303	438	499	466	455	229
Turn Type	NA	pt+ov	Prot	NA	Prot	custom
Protected Phases	6	6 4	5	2	4	4 5 8
Permitted Phases						
Actuated Green, G (s)	31.4	61.3	43.9	79.3	24.7	73.5
Effective Green, g (s)	31.4	61.3	43.9	79.3	24.7	69.0
Actuated g/C Ratio	0.28	0.54	0.38	0.70	0.22	0.60
Clearance Time (s)	5.2		4.0	5.2	4.9	
Vehicle Extension (s)	4.5		3.0	1.2	5.0	
Lane Grp Cap (vph)	512	850	681	2459	743	957
v/s Ratio Prot	c0.16	0.28	c0.28	0.13	c0.13	0.14
v/s Ratio Perm						
v/c Ratio	0.59	0.52	0.73	0.19	0.61	0.24
Uniform Delay, d1	35.8	16.9	30.1	6.1	40.4	10.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	1.1	4.1	0.2	2.2	0.3
Delay (s)	40.8	18.0	34.2	6.3	42.5	10.7
Level of Service	D	B	C	A	D	B
Approach Delay (s)	27.0			20.7	28.1	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	14.1
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

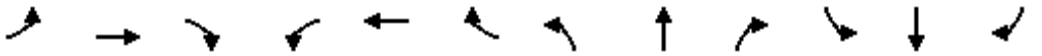
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	194	41	732	547	542	462
Future Volume (vph)	194	41	732	547	542	462
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	45	796	595	589	502
RTOR Reduction (vph)	0	21	0	0	0	1
Lane Group Flow (vph)	211	24	796	595	589	501
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	4	4 1	1	6	2	2 4
Permitted Phases						
Actuated Green, G (s)	16.8	93.7	72.3	147.2	70.9	92.7
Effective Green, g (s)	16.8	93.7	72.3	147.2	70.9	92.7
Actuated g/C Ratio	0.10	0.54	0.42	0.85	0.41	0.53
Clearance Time (s)	4.6		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	5.0	4.0	
Lane Grp Cap (vph)	332	854	737	3000	1445	845
v/s Ratio Prot	0.06	0.02	c0.45	0.17	0.17	c0.32
v/s Ratio Perm						
v/c Ratio	0.64	0.03	1.08	0.20	0.41	0.59
Uniform Delay, d1	75.5	18.7	50.6	2.4	36.4	27.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.0	56.9	0.1	0.9	1.1
Delay (s)	79.4	18.7	107.5	2.6	37.3	28.7
Level of Service	E	B	F	A	D	C
Approach Delay (s)	68.7			62.6	33.3	
Approach LOS	E			E	C	

Intersection Summary			
HCM 2000 Control Delay	51.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	173.6	Sum of lost time (s)	13.6
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

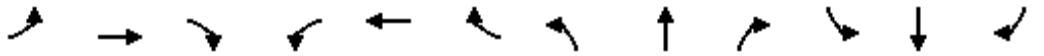
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	11	3	229	3	96	2	1669	1088	38	288	2
Future Volume (vph)	6	11	3	229	3	96	2	1669	1088	38	288	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1807		1681	1687	1583	1770	3539	1583	1770	3536	
Flt Permitted	0.95	1.00		0.95	0.95	1.00	0.56	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1807		1681	1687	1583	1044	3539	1583	1770	3536	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	12	3	249	3	104	2	1814	1183	41	313	2
RTOR Reduction (vph)	0	3	0	0	0	71	0	0	254	0	0	0
Lane Group Flow (vph)	7	12	0	127	125	33	2	1814	929	41	315	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3	5		6	3	5	2	
Permitted Phases						3	6		6			
Actuated Green, G (s)	5.4	5.4		29.6	29.6	38.5	55.7	55.7	85.3	8.9	68.6	
Effective Green, g (s)	5.4	5.4		29.6	29.6	38.5	55.7	55.7	85.3	8.9	68.6	
Actuated g/C Ratio	0.05	0.05		0.25	0.25	0.32	0.46	0.46	0.71	0.07	0.57	
Clearance Time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	4.4	4.4	3.0	3.0	4.5	
Lane Grp Cap (vph)	79	81		414	416	507	484	1642	1125	131	2021	
v/s Ratio Prot	0.00	c0.01		0.08	0.07	0.00		c0.51	c0.20	c0.02	0.09	
v/s Ratio Perm						0.02	0.00		0.38			
v/c Ratio	0.09	0.15		0.31	0.30	0.07	0.00	1.10	0.83	0.31	0.16	
Uniform Delay, d1	54.9	55.1		36.8	36.8	28.3	17.3	32.1	12.2	52.7	12.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.9		0.4	0.4	0.1	0.0	56.7	5.1	1.4	0.2	
Delay (s)	55.4	56.0		37.3	37.2	28.3	17.3	88.9	17.2	54.0	12.2	
Level of Service	E	E		D	D	C	B	F	B	D	B	
Approach Delay (s)		55.8			34.6			60.6			17.1	
Approach LOS		E			C			E			B	

Intersection Summary			
HCM 2000 Control Delay	53.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	91	3	4	44	2698	0	0	213	221
Future Volume (vph)	0	0	0	91	3	4	44	2698	0	0	213	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1777	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1777	1583	1770	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	99	3	4	48	2933	0	0	232	240
RTOR Reduction (vph)	0	0	0	0	0	4	0	0	0	0	0	72
Lane Group Flow (vph)	0	0	0	0	102	0	48	2933	0	0	232	168
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)					13.2	13.2	7.6	95.4			83.8	83.8
Effective Green, g (s)					13.2	13.2	7.6	95.4			83.8	83.8
Actuated g/C Ratio					0.11	0.11	0.06	0.80			0.70	0.70
Clearance Time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Vehicle Extension (s)					4.0	4.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)					195	174	112	2813			2471	1105
v/s Ratio Prot							0.03	c0.83			0.07	
v/s Ratio Perm					0.06	0.00						0.11
v/c Ratio					0.52	0.00	0.43	1.04			0.09	0.15
Uniform Delay, d1					50.4	47.5	54.1	12.3			5.8	6.1
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					3.3	0.0	2.6	29.4			0.1	0.3
Delay (s)					53.7	47.5	56.7	41.7			5.9	6.4
Level of Service					D	D	E	D			A	A
Approach Delay (s)		0.0			53.5			41.9			6.2	
Approach LOS		A			D			D			A	

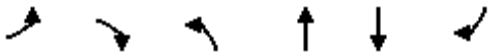
Intersection Summary			
HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.4
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	610	86	341	4	212	725
Future Volume (vph)	610	86	341	4	212	725
Ideal Flow (vphpl)	2300	2300	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2142	1917	3539	1583	4156	4284
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	2142	1917	3539	1583	4156	4284
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	616	87	344	4	214	732
RTOR Reduction (vph)	0	0	0	3	0	0
Lane Group Flow (vph)	616	87	344	1	214	732
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	4	5 4	6		5	2
Permitted Phases				6		
Actuated Green, G (s)	31.0	51.0	33.0	33.0	17.0	53.0
Effective Green, g (s)	31.0	51.0	33.0	33.0	17.0	53.0
Actuated g/C Ratio	0.34	0.57	0.37	0.37	0.19	0.59
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		5.0	5.0	3.0	5.1
Lane Grp Cap (vph)	737	1086	1297	580	785	2522
v/s Ratio Prot	c0.29	0.05	0.10		0.05	c0.17
v/s Ratio Perm				0.00		
v/c Ratio	0.84	0.08	0.27	0.00	0.27	0.29
Uniform Delay, d1	27.2	8.9	20.0	18.1	31.2	9.2
Progression Factor	1.00	1.00	0.82	0.79	1.00	1.00
Incremental Delay, d2	8.2	0.0	0.5	0.0	0.2	0.3
Delay (s)	35.3	8.9	16.9	14.3	31.4	9.5
Level of Service	D	A	B	B	C	A
Approach Delay (s)	32.0		16.9			14.4
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

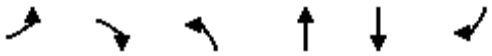
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	34	33	40	350	1275	41
Future Volume (vph)	34	33	40	350	1275	41
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0		3.0	3.0	3.0	3.0
Lane Util. Factor	1.00		1.00	0.95	0.95	1.00
Frt	0.93		1.00	1.00	1.00	0.85
Flt Protected	0.98		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1696		1770	3539	4284	1917
Flt Permitted	0.98		0.95	1.00	1.00	1.00
Satd. Flow (perm)	1696		1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	34	33	40	354	1288	41
RTOR Reduction (vph)	31	0	0	0	0	9
Lane Group Flow (vph)	36	0	40	354	1288	32
Turn Type	Prot		Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases						2
Actuated Green, G (s)	6.5		5.2	77.5	69.3	69.3
Effective Green, g (s)	6.5		5.2	77.5	69.3	69.3
Actuated g/C Ratio	0.07		0.06	0.86	0.77	0.77
Clearance Time (s)	3.0		3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	122		102	3047	3298	1476
v/s Ratio Prot	c0.02		c0.02	0.10	c0.30	
v/s Ratio Perm						0.02
v/c Ratio	0.30		0.39	0.12	0.39	0.02
Uniform Delay, d1	39.6		40.9	1.0	3.4	2.4
Progression Factor	1.00		0.88	1.30	1.52	1.58
Incremental Delay, d2	1.4		2.5	0.1	0.3	0.0
Delay (s)	41.0		38.6	1.3	5.5	3.9
Level of Service	D		D	A	A	A
Approach Delay (s)	41.0			5.1	5.4	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	55	68	61	338	1260	45
Future Volume (vph)	55	68	61	338	1260	45
Ideal Flow (vphpl)	1900	1900	1900	1900	2300	2300
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	4284	1917
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	4284	1917
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	56	69	62	341	1273	45
RTOR Reduction (vph)	0	64	0	0	0	11
Lane Group Flow (vph)	56	5	62	341	1273	34
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Actuated Green, G (s)	6.0	6.0	7.4	78.0	67.6	67.6
Effective Green, g (s)	6.0	6.0	7.4	78.0	67.6	67.6
Actuated g/C Ratio	0.07	0.07	0.08	0.87	0.75	0.75
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	4.5	4.5
Lane Grp Cap (vph)	228	105	145	3067	3217	1439
v/s Ratio Prot	c0.02		c0.04	0.10	c0.30	
v/s Ratio Perm		0.00				0.02
v/c Ratio	0.25	0.04	0.43	0.11	0.40	0.02
Uniform Delay, d1	39.9	39.3	39.3	0.9	4.0	2.8
Progression Factor	1.00	1.00	1.00	1.00	0.54	0.19
Incremental Delay, d2	0.6	0.2	2.0	0.1	0.3	0.0
Delay (s)	40.4	39.5	41.3	1.0	2.5	0.6
Level of Service	D	D	D	A	A	A
Approach Delay (s)	39.9			7.2	2.4	
Approach LOS	D			A	A	

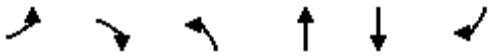
Intersection Summary			
HCM 2000 Control Delay	6.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	68	146	253	75	134	354
Future Volume (vph)	68	146	253	75	134	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	4.0	5.2	4.9	4.9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1583	1770	3539	3433	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1583	1770	3539	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	159	275	82	146	385
RTOR Reduction (vph)	0	45	0	0	0	263
Lane Group Flow (vph)	74	114	275	82	146	122
Turn Type	NA	pt+ov	Prot	NA	Prot	custom
Protected Phases	6	6 4	5	2	4	4 5 8
Permitted Phases						
Actuated Green, G (s)	64.1	82.1	23.1	91.2	12.8	40.8
Effective Green, g (s)	64.1	82.1	23.1	91.2	12.8	36.3
Actuated g/C Ratio	0.56	0.72	0.20	0.80	0.11	0.32
Clearance Time (s)	5.2		4.0	5.2	4.9	
Vehicle Extension (s)	4.5		3.0	1.2	5.0	
Lane Grp Cap (vph)	1046	1139	358	2828	385	503
v/s Ratio Prot	0.04	c0.07	c0.16	0.02	c0.04	0.08
v/s Ratio Perm						
v/c Ratio	0.07	0.10	0.77	0.03	0.38	0.24
Uniform Delay, d1	11.4	4.8	43.0	2.4	47.0	28.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1	9.5	0.0	1.3	0.5
Delay (s)	11.5	4.9	52.5	2.4	48.3	29.3
Level of Service	B	A	D	A	D	C
Approach Delay (s)	7.0			41.0	34.5	
Approach LOS	A			D	C	

Intersection Summary			
HCM 2000 Control Delay	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	14.1
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		

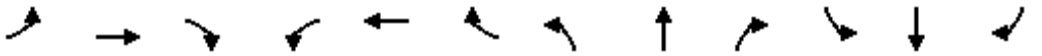
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	333	160	117	166	277	121
Future Volume (vph)	333	160	117	166	277	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	362	174	127	180	301	132
RTOR Reduction (vph)	0	82	0	0	0	20
Lane Group Flow (vph)	362	92	127	180	301	112
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	4	4 1	1	6	2	2 4
Permitted Phases						
Actuated Green, G (s)	24.1	46.5	17.8	139.9	118.1	147.2
Effective Green, g (s)	24.1	46.5	17.8	139.9	118.1	147.2
Actuated g/C Ratio	0.14	0.27	0.10	0.81	0.68	0.85
Clearance Time (s)	4.6		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	5.0	4.0	
Lane Grp Cap (vph)	476	424	181	2851	2407	1342
v/s Ratio Prot	c0.11	0.06	c0.07	0.05	c0.09	0.07
v/s Ratio Perm						
v/c Ratio	0.76	0.22	0.70	0.06	0.13	0.08
Uniform Delay, d1	72.0	49.4	75.3	3.4	9.7	2.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.0	0.3	11.6	0.0	0.1	0.0
Delay (s)	79.0	49.7	87.0	3.5	9.8	2.2
Level of Service	E	D	F	A	A	A
Approach Delay (s)	69.5			38.0	7.5	
Approach LOS	E			D	A	

Intersection Summary			
HCM 2000 Control Delay	40.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	173.6	Sum of lost time (s)	13.6
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

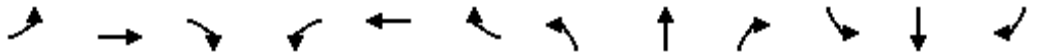
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	30	34	257	18	154	2	192	229	41	639	6
Future Volume (vph)	10	30	34	257	18	154	2	192	229	41	639	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1715		1681	1696	1583	1770	3539	1583	1770	3534	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.38	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1715		1681	1696	1583	717	3539	1583	1770	3534	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	33	37	279	20	167	2	209	249	45	695	7
RTOR Reduction (vph)	0	29	0	0	0	134	0	0	67	0	0	0
Lane Group Flow (vph)	11	41	0	148	151	33	2	209	182	45	702	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3	5		6	3	5	2	
Permitted Phases						3	6		6			
Actuated Green, G (s)	10.2	10.2		19.7	19.7	29.4	90.4	90.4	110.1	9.7	104.1	
Effective Green, g (s)	10.2	10.2		19.7	19.7	29.4	90.4	90.4	110.1	9.7	104.1	
Actuated g/C Ratio	0.07	0.07		0.13	0.13	0.20	0.60	0.60	0.73	0.06	0.69	
Clearance Time (s)	5.2	5.2		5.2	5.2	4.0	6.0	6.0	5.2	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	4.4	4.4	3.0	3.0	4.5	
Lane Grp Cap (vph)	120	116		220	222	309	430	2127	1158	114	2446	
v/s Ratio Prot	0.01	c0.02		0.09	c0.09	0.01		0.06	0.02	c0.03	c0.20	
v/s Ratio Perm						0.01	0.00		0.09			
v/c Ratio	0.09	0.35		0.67	0.68	0.11	0.00	0.10	0.16	0.39	0.29	
Uniform Delay, d1	65.8	67.0		62.3	62.3	49.7	12.0	12.7	6.1	67.5	8.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	1.9		7.9	8.3	0.2	0.0	0.1	0.1	2.2	0.3	
Delay (s)	66.1	68.8		70.1	70.6	49.9	12.0	12.8	6.2	69.8	9.2	
Level of Service	E	E		E	E	D	B	B	A	E	A	
Approach Delay (s)		68.4			63.0			9.2			12.8	
Approach LOS		E			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	150.4	Sum of lost time (s)	20.4
Intersection Capacity Utilization	54.8%	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												
Traffic Volume (vph)	0	0	0	98	1	2	21	418	0	0	802	477
Future Volume (vph)	0	0	0	98	1	2	21	418	0	0	802	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1775	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1775	1583	1770	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	107	1	2	23	454	0	0	872	518
RTOR Reduction (vph)	0	0	0	0	0	2	0	0	0	0	0	73
Lane Group Flow (vph)	0	0	0	0	108	0	23	454	0	0	872	445
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)					13.9	13.9	4.8	100.1			91.3	91.3
Effective Green, g (s)					13.9	13.9	4.8	100.1			91.3	91.3
Actuated g/C Ratio					0.11	0.11	0.04	0.80			0.73	0.73
Clearance Time (s)					5.8	5.8	4.0	5.6			5.6	5.6
Vehicle Extension (s)					4.0	4.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)					196	175	67	2824			2576	1152
v/s Ratio Prot							c0.01	0.13			0.25	
v/s Ratio Perm					0.06	0.00						c0.28
v/c Ratio					0.55	0.00	0.34	0.16			0.34	0.39
Uniform Delay, d1					52.8	49.6	58.8	2.9			6.2	6.4
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					4.1	0.0	3.1	0.1			0.4	1.0
Delay (s)					56.9	49.6	61.8	3.0			6.5	7.4
Level of Service					E	D	E	A			A	A
Approach Delay (s)		0.0			56.7			5.9			6.9	
Approach LOS		A			E			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	125.4	Sum of lost time (s)	15.4
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX F

Geotechnical Engineering Report

Mission Canyon Trailhead Parking Area

2301 N. Sepulveda Boulevard

Los Angeles, California

July 28, 2016

Terracon Project No. 60155117

Prepared for:

Mountains Recreation and Conservation Authority
Los Angeles, CA

Prepared by:

Terracon Consultants, Inc.
Irvine, California

July 28, 2016

Terracon

Mountains Recreation and Conservation Authority
Los Angeles River Center and Gardens
570 West Avenue 26, Suite 100
Los Angeles, CA 90065

Attn: Ms. Gabriella Golik
Tel: 323.221.9944 ext. 200
Email: gabriella.golik@mrca.ca.gov

Re: Geotechnical Engineering Report
Mission Canyon Trailhead Parking Area
2301 N. Sepulveda Boulevard
Los Angeles, CA
Terracon Project No. 60155117

Dear Ms. Golik:

Terracon Consultants, Inc. (Terracon) has completed the geotechnical engineering services for the above referenced project. These services were performed in general accordance with our Standard Agreement (No. MRCA 2016-00000034) dated December 14, 2015.

This geotechnical engineering report presents the results of the subsurface exploration and provides geotechnical recommendations concerning earthwork and the design and construction of foundations, infiltration systems and pavements for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report, or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

REGISTERED PROFESSIONAL ENGINEER
JOSHUA R. MORGAN
C 86032
CIVIL
STATE OF CALIFORNIA

Joshua R. Morgan, P.E.
Senior Staff Engineer

for

F. Fred Buhamdan, P.E
Department Manager

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Exhibit B-1	Laboratory Test Description
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Exhibit C-1	General Notes
Exhibit C-2	Unified Soil Classification

EXECUTIVE SUMMARY

A geotechnical exploration has been performed for the proposed project to be located at 2301 N. Sepulveda Boulevard in Los Angeles, California. Terracon's geotechnical scope of work included the advancement of seven (7) test borings to approximate depths ranging between 5 and 31½ feet below the ground surface (bgs). Three (3) of these borings were utilized for percolation testing.

Based on the information obtained from our subsurface exploration, the site is suitable for development of the proposed project provided the recommendations included within this report are implemented during the design and construction phases of the project. The following geotechnical considerations were identified:

- The on-site surface materials generally consisted of 2 to 3 inches of aggregate surface course/completely degraded asphalt concrete. At two locations, B-3 and B-4, asphalt concrete was encountered with thickness ranging from 3 to 5 inches. At location B-3, an approximately 10 inch thick layer of aggregate base was encountered beneath the asphalt concrete. The subsurface materials encountered generally consisted of fill materials comprised of clayey sand and silty sand soils to depths ranging from approximately 3 to 12 feet below existing site grades. Based on the relative density of the fill materials, it is apparent that these materials received adequate compaction during placement. These soils were overlying sandy soils with variable amounts of silt and clay to the maximum depth of exploration.
- Groundwater was encountered at depths varying from 16 to 28 feet below existing grade at the time of drilling.
- Lightly loaded structures proposed at the site may be supported on shallow foundations bearing on a minimum of 10 inches of scarified, moisture conditioned and compacted materials.
- Automobile parking areas – 3" AC over 4" AB or 5" PCC over 4" AB over compacted materials; On-site driveways and trash enclosure areas – 3" AC over 6" AB or 6" PCC over 4" AB over compacted materials.
- The 2013 California Building Code (CBC) seismic site classification for this site is D.
- Earthwork on the project should be observed and evaluated by Terracon. The evaluation of earthwork should include observation and testing of engineered fill, subgrade preparation, foundation bearing soils, and other geotechnical conditions exposed during construction.

This geotechnical executive summary should be used in conjunction with the entire report for design and/or construction purposes. It should be recognized that specific details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein. The section titled General Comments should be read for an understanding of the report limitations.

GEOTECHNICAL ENGINEERING REPORT
MISSION CANYON TRAILHEAD PARKING AREA
2301 N. SEPULVEDA BOULEVARD
LOS ANGELES, CALIFORNIA
Terracon Project No. 60155117
July 28, 2016

1.0 INTRODUCTION

This report presents the results of our geotechnical engineering services performed for the proposed park entrance improvements to be located at 2301 N. Sepulveda Boulevard in Los Angeles, California. The Site Location Plan (Exhibit A-1) is included in Appendix A of this report. The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- subsurface soil conditions
- earthwork
- seismic considerations
- floor slab design and construction
- groundwater conditions
- foundation design and construction
- pavement design and construction
- infiltration systems

Our geotechnical engineering scope of work for this project included the advancement of seven (7) test borings to approximate depths ranging between 5 and 31½ feet bgs.

Logs of the borings along with a Boring Location Diagram (Exhibit A-2) are included in Appendix A of this report. The results of the laboratory testing performed on soil samples obtained from the site during the field exploration are included in Appendix B of this report. Descriptions of the field exploration and laboratory testing are included in their respective appendices.

2.0 PROJECT INFORMATION

2.1 Project Description

ITEM	DESCRIPTION
Site layout	Refer to the Boring Location Diagram (Exhibit A-2 in Appendix A).
Structures and Construction	It is our understanding that the proposed site developments will include the following; 1. New 1-story Restroom Building and Drinking Fountain with sewer and potable water connections (1,000 SF) 2. Removal of deteriorated asphalt parking 3. New installation of asphalt and/or road base 4. New infiltration rea for stormwater or bioswales

ITEM	DESCRIPTION
Finished floor elevation	Within one foot of existing grade (assumed).
Grading	Grading will include minor site grading anticipated to be less than 2 feet cut/fill. Excavations of 2 to 5 feet are anticipated for the new infiltration and bioswale areas. Pavement grades are anticipated to generally match existing elevations.
Traffic loading (assumed Traffic Index)	Automobile parking areas – 4.5; On-site driveways and trash enclosure areas – 5.5

2.2 Site Location and Description

Item	Description
Location	The project site is located at 2301 N. Sepulveda Boulevard in Los Angeles, California.
Existing site features	The project site consists of existing small municipal buildings and minor ancillary equipment storage structures and pads with associated asphalt and concrete pavements. A communication tower is located on the south side of the subject site.
Current ground cover	Aggregate surface course and concrete pavements.
Existing topography	The site is located in mountainous topography. However, the site is within a valley and is relatively flat with minor (<5%) descending slopes from NW to SE. The site is bounded by ascending slopes along the north and south boundaries of the site. Based on available topographic maps, the bounding slopes generally range from 2H (horizontal): 1V (vertical) to 3H:1V. The site is bounded on the east by descending slopes with approximate grades of 10%.

2.3 Background

Based on a review of historical aerial photographs, the site was undeveloped until the 1952. Between 1952 and 1964, mass grading operations were noted and several small buildings with surrounding pavements was constructed. The grading included filling the natural drainage features, diverting the creek with a concrete channel and grading the bounding roadways. We estimate fill was used to raise grades as much as approximately 10 to 15 feet in some areas.

Based on our observations made on-site, the site is generally level. The site is bordered with graded easterly facing (3H:1V) descending slopes which we anticipate are comprised of fill materials, at the entrance off of Sepulveda Boulevard. We reviewed current topographic surveys with historical

elevation data, however the precision of the contours was inconclusive. From this comparison and in conjunction with review of our samples obtained from the exploration, we were able to estimate the depth of fill, where encountered, in our borings. The estimated depth of fill materials should not be considered exact due to the similarity of lithology, color, and densities of the fill materials and native soils.

3.0 SUBSURFACE CONDITIONS

3.1 Site Geology

The site is situated along the border between the northern Peninsular Ranges Geomorphic Province in Southern California and the Transverse Ranges Geomorphic Province. Geologic structures within the Peninsular Ranges Province trend mostly northwest, in contrast to the prevailing east-west trend in the neighboring Transverse Ranges Geomorphic Province to the north.[1, 2] Surficial geologic units mapped at the site consists of marine deposits ranging from Jurassic to Triassic age of the Mesozoic period[3].

3.2 Typical Subsurface Profile

Specific conditions encountered at the boring locations are indicated on the individual boring logs. Stratification boundaries on the boring logs represent the approximate location of changes in soil types; in-situ, the transition between materials may be gradual. Details for the borings can be found on the boring logs included in Appendix A. Surface materials generally consisted of 2 to 3 inches of aggregate surface course/completely degraded asphalt concrete. At two locations, B-3 and B-4, asphalt concrete was encountered with thickness ranging from 3 to 5 inches. At location B-3, an approximately 10 inch thick layer of aggregate base was encountered beneath the asphalt concrete. The subsurface materials encountered generally consisted of fill materials comprised of clayey sand and silty sand soils to depths ranging from approximately 3 to 12 feet below existing site grades. Based on the relative density of the fill materials, it is apparent that these materials received adequate compaction during placement. These soils were overlying sandy soils with variable amounts of silt and clay to the maximum depth of exploration.

Laboratory tests were conducted on selected soil samples and the test results are presented in Appendix B and on the boring logs. Atterberg limit test results indicate that the on-site soils exhibit non plastic to low plasticity behavior. R-value testing of the near surface soils indicates a resistance value of 44 by expansion pressure.

---

[1] Harden, D. R., "*California Geology, Second Edition*," Pearson Prentice Hall, 2004.

[2] Norris, R. M. and Webb, R. W., *"Geology of California, Second Edition,"* John Wiley & Sons, Inc., 1990.

[3] *State of California – Division of Mines and Geology, Geologic Map of California, Olaf P. Jenkins Edition, Los Angeles, Compiled in 1962.*

3.3 Groundwater

Groundwater was encountered in the deeper test borings at depths varying from 16 to 28 feet below existing grade at the time of drilling. These observations represent groundwater conditions at the time of the field exploration and may not be indicative of other times, or at other locations. Groundwater conditions can change with varying seasonal and weather conditions, and other factors.

Based on historical groundwater data recorded from a monitoring well located approximately 1.5 miles southwest of the project site, groundwater was approximately encountered between 28 to 40 feet bgs between November 1950 and February 1957.[4]

3.4 Seismic Considerations

3.4.1 Seismic Site Classification Parameters

DESCRIPTION	VALUE
2013 California Building Code Site Classification (CBC) [1]	D
Site Latitude	N 34.118°
Site Longitude	W 118.483°
S_s Spectral Acceleration for a Short Period	2.182g
S_1 Spectral Acceleration for a 1-Second Period	0.763g
F_a Site Coefficient for a Short Period	1.000
F_v Site Coefficient for a 1-Second Period	1.500

[1] Note: The 2013 California Building Code (CBC) requires a site soil profile determination extending to a depth of 100 feet for seismic site classification. The current scope does not include the required 100 foot soil profile determination. Borings were extended to a maximum depth of 31½ feet, and this seismic site class definition considers that similar or denser soils continue below the maximum depth of the subsurface exploration. Additional exploration to deeper depths would be required to confirm the conditions below the current depth of exploration.

3.4.2 Faulting and Estimated Ground Motions

The site is located in Southern California, which is a seismically active area. The type and magnitude of seismic hazards affecting the site are dependent on the distance to causative faults, the intensity, and the magnitude of the seismic event. The table below indicates the distance of the fault zones and the associated maximum credible earthquake that can be produced by nearby seismic events, as calculated using the USGS Earthquake Hazard Program 2008 interactive

[4] Data collected by Los Angeles County Department of Public Work from Well Nos. 2490A located approximately 1.5 miles southwest of the project site at an elevation of 901 feet above MSL (http://dpw.lacounty.gov/)

deaggregations. The Santa Monica Fault, which is located approximately 6.7 kilometers from the site, is considered to have the most significant effect at the site from a design standpoint.

Characteristics and Estimated Earthquakes for Regional Faults		
Fault Name	**Approximate Distance to Site (kilometers)**	**Maximum Credible Earthquake (MCE) Magnitude**
Santa Monica	6.7	7.3
Northridge	19.5	6.8

Based on the USGS Design Maps Summary Report, using the American Society of Civil Engineers (ASCE 7-10) standard, the peak ground acceleration (PGA) at the project site is expected to be approximately 0.795g. Based on the 2008 interactive deaggregations, the mean magnitude for the project site is on the order of 6.81. Furthermore, the site is not located within an Alquist-Priolo Earthquake Fault Zone based on our review of the State Fault Hazard Maps.[5]

3.4.3 Liquefaction Potential

Liquefaction is a mode of ground failure that results from the generation of high pore water pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose sandy soils exist below groundwater. The California Geologic Survey (CGS) has designated certain areas within Southern California as potential liquefaction hazard zones. These are areas considered at a risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table. The project site is not located in a mapped liquefaction hazard potential zone by the CGS. Based on the CGS hazard maps and subsurface conditions we anticipated liquefaction hazard at the site to be low.

3.4.4 Landslide Potential.

The California Geologic Survey (CGS) has designated certain mountainous areas within Southern California as potential landslide hazards. These are areas considered at a risk of slope stability related ground failure during a seismic event, based upon mapped subsurface deposits and existing topographic gradients. The project site is not located in a mapped landslide hazard potential zone by the CGS. However the neighboring slopes along the north and south boundary of the sites are mapped as potential landslide hazards.

A landslide occurring in the slopes adjacent to the north and south sides of the proposed parking lot represent a potential geologic hazard, most likely in times of heavy rain. These landslides are expected to be shallow, surficial-type failures of relatively small magnitude. Debris from a

[5] California Department of Conservation Division of Mines and Geology (CDMG), *"Digital Images of Official Maps of Alquist-Priolo Earthquake Fault Zones of California, Southern Region"*, CDMG Compact Disc 2000-003, 2000.

landslide on the slopes of the north of the project site would likely be contained sufficiently by the existing drainage feature. Debris from a landslide on the adjacent southern slopes could cover portions of the parking lot. If desired by the client, a fence may be constructed that will surround the parking lot, which should temporarily retain most of the debris from a minor landslide, although some mud and debris, may still extend into the parking lot. Landslides occurring beneath the proposed parking lot to the east are unlikely, based on the apparent compactive effort applied to the fill materials encountered in other areas on the site.

The proposed changes in topography of the project site are minor. No changes to the topography of the surrounding slopes or ground surface relief features are anticipated. Based on the proposed improvements to the site, it is our opinion that the construction will not adversely affect the stability of the existing slopes. If slope stability analysis of the existing natural and fill slopes outside of the project site is desired, Terracon may contacted to perform these analyses.

3.5 Percolation Test Results

Three (3) in-situ percolation tests (constant head borehole permeability) were performed to approximate depths between 5 and 10 feet bgs. A 2-inch thick layer of gravel was placed in the bottom of each boring after the borings were drilled to investigate the soil profile. A 3-inch diameter perforated pipe was installed on top of the gravel layer in each boring. Gravel was used to backfill between the perforated pipes and the boring sidewall. The borings were then filled with water for a pre-soak period. Testing began after the entire amount of water added to the borings had infiltrated into the ground. At the beginning of each test, the pipes were refilled with water and readings were taken at standardized time intervals. Percolation rates are provided in the following table:

TEST RESULTS				
Test Location (depth)	**Soil Classification**	**Percolation Rate, in/hr**	**Correlated Infiltration Rate*, in/hr**	**Water Head, in**
P-1 (5 ft)	Clayey Sand	90	6.7	57
P-2 (5 ft)	Silty Sand	171	15.1	55
P-3 (10 ft)	Clayey Sand	6.0	0.2	116

*If the proposed infiltration systems will mainly rely on vertical downward seepage, the correlated infiltration rates should be used. The correlated infiltration rates were calculated using the County of Los Angeles - Reduction Factor Method.

With the exception of location P-3, the corrected infiltration rates were generally found be higher than 0.3 in/hr, therefore infiltration onsite appears to be feasible near the locations of P-1 and P-2. If the proposed infiltration systems will mainly rely on vertical downward seepage, the correlated infiltration rates should be used. The field test results are not intended to be design rates. They represent the result of our tests, at the depths and locations indicated, as described above. The design rate should be determined by the designer by applying an appropriate factor of safety. With time, the bottoms of infiltration systems tend to plug with organics, sediments, and other

debris. Long term maintenance will likely be required to remove these deleterious materials to help reduce decreases in actual percolation rates.

The percolation test was performed with clear water, whereas the storm water will likely not be clear, but may contain organics, fines, and grease/oil. The presence of these deleterious materials will tend to decrease the rate that water percolates from the infiltration systems. Design of the storm water infiltration systems should account for the presence of these materials and should incorporate structures/devices to remove these deleterious materials.

Siltation and plugging may reduce the equivalent hydraulic conductivity values of the facilities by an order of magnitude or more over the course of its design life. This will result in a corresponding reduction in infiltration rate. If pretreatment of runoff cannot be provided, infiltration rates calculated may need to be reduced by a factor of 2 or more.

Based on the soils encountered in our borings, we expect the percolation rates of the soils could be different than measured in the field due to variations in fines and gravel content. The design elevation and size of the proposed infiltration system should account for this expected variability in infiltration rates.

Infiltration testing should be performed after construction of the infiltration system to verify the design infiltration rates. It should be noted that siltation and vegetation growth along with other factors may affect the infiltration rates of the infiltration areas. The actual infiltration rate may vary from the values reported here. Infiltration systems should be located a minimum of 10 feet from any existing or proposed foundation system.

3.6 Corrosion Potential

Results of soluble sulfate testing indicate that ASTM Type I/II Portland cement may be used for all concrete on and below grade. Foundation concrete may be designed for low sulfate exposure in accordance with the provisions of the ACI Design Manual, Section 318, Chapter 4.

Laboratory test results indicate the on-site soils have a pH of 8.52, a minimum resistivity of 3,541 ohm-centimeters, a water soluble sulfate content of 0.01%, Red-Ox potential of +677 mV, negligible sulfides, and a chloride content of 75 ppm, as shown on the attached Results of Corrosivity Analysis sheet. These values should be used to evaluate corrosive potential of the on-site soils to underground ferrous metals.

Refer to the Results of Corrosivity Analysis sheet in Appendix B for the complete results of the corrosivity testing conducted in conjunction with this geotechnical exploration.

4.0 RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION

4.1 Geotechnical Considerations

The site appears suitable for the proposed construction based upon geotechnical conditions encountered in the test borings, provided the recommendations included within this report are implemented. Based on the geotechnical engineering analyses, subsurface exploration, and laboratory test results, lightly loaded structures proposed at the site may be supported on shallow foundations bearing on a minimum of 10 inches of scarified, moisture conditioned and compacted native soils.

We assume that the fill materials encountered in select borings were placed during previous mass grading operations performed on-site. Terracon does not have any documentation to show if the fill placement or grading operations were inspected and if fill compaction was tested. However, the field in-situ standard penetration test blow counts and dry density test results indicate that the fill materials received compaction effort during placement.

Removing and replacing the existing fill materials would involve significant expense, but would reduce the risk of unanticipated settlements associated with fills. Based on the results of our field work and testing, we have provided recommendations in this report for supporting the proposed construction on scarified, moisture conditioned and compacted soils; however, this option involves more risk of unanticipated settlements and associated cracking and movement of the building if existing fill soils, beneath these processes materials, were not uniformly and properly compacted. If such risk is not acceptable, we recommend that all of the existing fill soils be removed or the building be supported on deep foundations extending past the depth of fill materials.

Based on the findings summarized in this report, it is our professional opinion that the proposed construction will not be subject to a hazard from settlement, slippage, or landslide, provided the recommendations of our report are incorporated into the proposed construction. It is also our opinion that the proposed construction will not adversely affect the geologic stability of the site or adjacent properties provided the recommendations contained in our report are incorporated into the proposed construction.

Geotechnical engineering recommendations for foundation systems and other earth connected phases of the project are outlined below. The recommendations contained in this report are based upon the results of field and laboratory testing (which are presented in Appendices A and B), engineering analyses, and our current understanding of the proposed project.

4.2 Earthwork

The following presents recommendations for site preparation, excavation, subgrade preparation and placement of engineered fills on the project. The recommendations presented for the design and construction of earth supported elements including foundations, slabs, and pavements, are

contingent upon following the recommendations outlined in this section. All grading for the proposed structures should include a lateral distance of 2 feet beyond the perimeter of the basin.

Earthwork on the project should be observed and evaluated by Terracon. The evaluation of earthwork should include observation and testing of engineered fill, subgrade preparation, foundation bearing soils, and other geotechnical conditions exposed during the construction of the project.

4.2.1 Site Preparation

Strip and remove existing pavements, demolition debris, and other deleterious materials from the containment basin and pavement areas. Exposed surfaces should be free of mounds and depressions which could prevent uniform compaction.

Multiple utilities including sewer pipes and electrical lines were observed onsite. Evidence of underground facilities such as septic tanks, cesspools, and basements, was not observed during the site reconnaissance, however such features could be encountered during construction. If fill materials, underground facilities, and/or utilities lines are encountered, such features should be removed and the excavation thoroughly cleaned prior to backfill placement and/or construction.

4.2.2 Subgrade Preparation

Lightly loaded structures proposed at the site may be supported on shallow foundations bearing on a minimum of 10 inches of scarified, moisture conditioned and compacted native soils.

Subgrade soils beneath slabs and pavements should be scarified, moisture conditioned, and compacted to a minimum depth of 10 inches. The moisture content and compaction of subgrade soils should be maintained until slab or pavement construction.

Exposed areas which will receive fill, if required to raise grades, once properly cleared and benched where necessary, should be scarified to a minimum depth of 10 inches, moisture conditioned, and compacted per the compaction requirements in Section 4.2.4.

4.2.3 Fill Materials and Placement

All fill materials should be inorganic soils free of vegetation, debris, and fragments larger than three inches in size. Pea gravel or other similar non-cementitious, poorly-graded materials should not be used as fill or backfill without the prior approval of the geotechnical engineer.

Onsite soils are considered suitable for use as engineered fill onsite for the following:

- exterior slab areas
- foundation areas
- general site grading
- floor slabs
- pavement areas

Imported soils for use as fill material within proposed building and structure areas should conform to low volume change materials as indicated in the following specifications:

Gradation	Percent Finer by Weight (ASTM C 136)
3”	100
No. 4 Sieve	50-100
No. 200 Sieve	15-40

- Liquid Limit ..... 30 (max)
- Plasticity Index ..... 15 (max)
- Maximum expansive index* ..... 20 (max)

*ASTM D 4829

Engineered fill should be placed and compacted in horizontal lifts, using equipment and procedures that will produce recommended moisture contents and densities throughout the lift. Fill lifts should not exceed ten inches loose thickness.

4.2.4 Compaction Requirements

Recommended compaction and moisture content criteria for engineered fill materials are as follows:

Material Type and Location	Per the Modified Proctor Test (ASTM D 1557)		
	Minimum Compaction Requirement (%)	Range of Moisture Contents for Compaction Above Optimum	
		Minimum	Maximum
On-site soils or approved imported fill materials:			
Beneath foundations:	90	0%	+4%
Beneath slabs:	90	0%	+4%
Exposed surfaces to receive fill:	90	0%	+4%
Beneath pavements:	95	0%	+4%
Miscellaneous backfill:	90	0%	+4%
Utility Trenches*:	90	0%	+4%
Aggregate base (beneath pavements):	95	0%	+4%

* Upper 12 inches should compacted to 95% within pavement and structural areas

4.2.5 Grading and Drainage

Positive drainage should be provided during construction and maintained throughout the life of the development. Infiltration of water into utility trenches or foundation excavations should be

prevented during construction. Planters and other surface features which could retain water in areas adjacent to the building or pavements should be sealed or eliminated. In areas where sidewalks or paving do not immediately adjoin the structure, we recommend that protective slopes be provided with a minimum grade of approximately 5 percent for at least 10 feet from perimeter walls.

Backfill against footings, containment walls, and in utility and sprinkler line trenches should be well compacted and free of all construction debris to reduce the possibility of moisture infiltration. We recommend a minimum horizontal setback distance of 10 feet from the perimeter of any building and the high-water elevation of the nearest storm-water retention basin.

Roof drainage should discharge into splash blocks or extensions when the ground surface beneath such features is not protected by exterior slabs or paving. Sprinkler systems and landscaped irrigation should not be installed within 5 feet of foundation walls.

4.2.6 Exterior Slab Design and Construction

Exterior slabs-on-grade, exterior architectural features, and utilities founded on, or in backfill may experience some movement due to the volume change of the backfill. To reduce the potential for damage caused by movement, we recommend:

- minimizing moisture increases in the backfill;
- controlling moisture-density during placement of backfill;
- using designs which allow vertical movement between the exterior features and adjoining structural elements;
- placing effective control joints on relatively close centers.

4.2.7 Slopes

For permanent slopes in fill and cut areas, recommended maximum configurations for on-site materials are as follows:

Maximum Slope Configuration	
Inclination (horizontal:vertical)	**Slope Treatment**
5:1 to less steep than 3:1	Re-vegetate
3:1 to less steep than 2:1	Stability analysis – Mitigation measures may be required
Steeper than 2:1	Stability analysis - Mitigation measures and/or structural retaining walls may be required

The face of all slopes should be compacted to the minimum specification for fill embankments. We expect slopes in these configurations to be stable against circular failure. Alternately, fill slopes can be over-built with compacted material and trimmed to final configurations.

Buildings and ancillary structures should be setback from the top of descending slopes a minimum distance of H/3 (not to exceed 40 feet) and a minimum distance of H/2 (not to exceed 15 feet) from the toe of ascending slopes.

4.2.8 Construction Considerations

It is anticipated that excavations for the proposed construction can be accomplished with conventional earthmoving equipment. At the time of our study, moisture contents of the surface and near-surface native soils ranged from about 6 percent to 10 percent. Based on these moisture contents, some moisture conditioning will likely be needed for the project.

Upon completion of filling and grading, care should be taken to maintain the subgrade moisture content prior to construction of floor slabs and pavements. Construction traffic over the completed subgrade should be avoided to the extent practical. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. If the subgrade should become desiccated, saturated, or disturbed, the affected material should be removed or these materials should be scarified, moisture conditioned, and recompacted prior to floor slab and pavement construction.

The geotechnical engineer should be retained during the construction phase of the project to observe earthwork and to perform necessary tests and observations during subgrade preparation, proof-rolling, placement and compaction of controlled compacted fills, backfilling of excavations to the completed subgrade.

We recommend that the earthwork portion of this project be completed during extended periods of dry weather if possible. If earthwork is completed during the wet season (typically November through April) it may be necessary to take extra precautionary measures to protect subgrade soils. Wet season earthwork operations may require additional mitigative measures beyond that which would be expected during the drier summer and fall months. This could include diversion of surface runoff around exposed soils and draining of ponded water on the site. Once subgrades are established, it may be necessary to protect the exposed subgrade soils from construction traffic.

The individual contractor(s) is responsible for designing and constructing stable, temporary excavations as required to maintain stability of both the excavation sides and bottom. Excavations should be sloped or shored in the interest of safety following local, and federal regulations, including current OSHA excavation and trench safety standards.

4.3 Foundations

4.3.1 Design Recommendations

DESCRIPTION	RECOMENDATION
Lightly Loaded Structure Foundation Type	Continuous Spread Footings (thickened edges)
Bearing Material	10 inches of scarified, moisture conditioned and compacted on-site soils.
Allowable Bearing Pressure	2,000 psf for spread footings
Minimum Dimensions	Walls: 18 inches; Columns: 24 inches
Minimum Embedment Depth Below Finished Grade	18 inches
Total Estimated Settlement	1 inch;
Estimated Differential Settlement	¾ inch in 40 feet.

Finished grade is defined as the lowest adjacent grade within five feet of the foundation for perimeter (or exterior) footings. The allowable foundation bearing pressures apply to dead loads plus design live load conditions. The design bearing pressure may be increased by one-third when considering total loads that include wind or seismic conditions. The weight of the foundation concrete below grade may be neglected in dead load computations.

Footings should be proportioned to reduce differential foundation movement. Proportioning on the basis of equal total settlement is recommended; however, proportioning to relative constant dead-load pressure will reduce differential settlement between adjacent footings. Additional foundation movements could occur if water, from any source, saturates the foundation soils; therefore, proper drainage should be provided during construction and in the final design.

Foundations should be reinforced as necessary to reduce the potential for distress caused by differential foundation movement. The use of joints at openings or other discontinuities in masonry walls is recommended.

4.3.2 Construction Considerations

Care should be taken to prevent wetting or drying of the bearing materials during construction. Extremely wet, dry, or loose/disturbed material in the bottom of the footing excavations should be removed before foundation concrete is placed. Place a lean concrete mud-mat over the bearing soils if the excavations must remain open overnight or for an extended period of time.

The geotechnical engineer should observe foundation excavations. If the soil conditions encountered differ significantly from those presented in this report, supplemental recommendations will be required.

4.4 Support Slab

DESCRIPTION	VALUE
Slab system	Slab-on-grade concrete.
Slab support	10 inches of scarified, moisture conditioned and compacted on-site native soils.
Modulus of subgrade reaction	200 pounds per square inch per inch (psi/in) (The modulus was obtained based on 10 inches of scarified, moisture conditioned and compacted on-site soils beneath slabs, and estimates obtained from NAVFAC 7.1 design charts). This value is for a small loaded area (1 Sq. ft or less) such as for forklift wheel loads or point loads and should be adjusted for larger loaded areas.

In areas of exposed concrete, control joints should be saw cut into the slab after concrete placement in accordance with ACI Design Manual, Section 302.1R-37 8.3.12 (tooled control joints are not recommended). Additionally, dowels should be placed at the location of proposed construction joints. To control the width of cracking (should it occur) continuous slab reinforcement should be considered in exposed concrete slabs.

The use of a vapor retarder or barrier should be considered beneath concrete slabs on grade that will be covered with moisture sensitive or impervious coverings, or when the slab will support equipment sensitive to moisture. A ten mil PVC or polyethylene membrane with a two-inch aggregate base blanket on each side should be provided beneath all interior slabs to prevent moisture migration. When conditions warrant the use of a vapor retarder, the slab designer and slab contractor should refer to ACI 302 and ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder/barrier.

4.5 Lateral Earth Pressures

The lateral earth pressure recommendations herein are applicable to the design of rigid retaining walls subject to slight rotation, such as cantilever, or gravity type concrete walls. These recommendations are not applicable to the design of geogrid-reinforced-backfill walls. Recommendations covering these types of wall systems are beyond the scope of services for this assignment; however, we would be pleased to develop recommendations for the design of such wall systems upon request.

For engineered fill comprised of onsite soils or imported granular fill materials above any free water surface, recommended equivalent fluid pressures for foundation elements are:

ITEM	VALUE[1]
Active Case	37 psf/ft
Passive Case	390 psf/ft
At-Rest Case	56 psf/ft
Surcharge Pressure	0.31*(Surcharge)
Coefficient of friction	0.40[2]

[1] Note: The values are based on granular engineered fill materials used as backfill.
[2] Note: Reduce to 0.30 when used in conjunction with passive pressure.

The lateral earth pressures herein do not include any factor of safety and are not applicable for submerged soils/hydrostatic loading. A safety factor of 2.0 is considered adequate for the passive lateral earth pressure value. Additional recommendations may be necessary if such conditions are to be included in the design.

Fill against foundation and retaining walls should be compacted to densities specified in the Earthwork section of this report. Compaction of each lift adjacent to walls should be accomplished with hand-operated tampers or other lightweight compactors.

4.6 Pavements

4.6.1 Design Recommendations

A design R-Value, based on laboratory testing, was used to calculate the asphalt concrete pavement thickness sections and the portland cement concrete pavement sections. R-value testing should be completed prior to pavement construction to verify the design R-value.

Assuming the pavement subgrades will be prepared as recommended within this report, the following pavement sections should be considered minimums for this project for the traffic indices assumed in the table below. As more specific traffic information becomes available, we should be contacted to reevaluate the pavement calculations.

	Recommended Pavement Section Thickness (inches)*	
	Light (Automobile) Parking Assumed Traffic Index (TI) = 4.5	**Heavy Duty areas Traffic Index (TI) = 5.5**
Section I Portland Cement Concrete (600 psi Flexural Strength)	5.0” Concrete over 4” Class II Aggregate Base over 10” of scarified, moisture conditioned, and compacted soils	6.0” Concrete over 4” Class II Aggregate Base over 10” of scarified, moisture conditioned, and compacted soils
Section II Asphaltic Concrete	3” Asphaltic Concrete over 4” Class II Aggregate Base over 10” of scarified, moisture conditioned, and compacted soils	3” Asphaltic Concrete over 6” Class II Aggregate Base over 10” of scarified, moisture conditioned, and compacted soils

* All materials should meet the CALTRANS Standard Specifications for Highway Construction.

These pavement sections are considered minimal sections based upon the expected traffic and the existing subgrade conditions. However, they are expected to function with periodic maintenance and overlays if good drainage is provided and maintained.

All concrete for rigid pavements should have a minimum flexural strength of 600 psi, and be placed with a maximum slump of four inches. Proper joint spacing will also be required to prevent excessive slab curling and shrinkage cracking. All joints should be sealed to prevent entry of foreign material and dowelled where necessary for load transfer.

4.6.2 Construction Considerations

Materials and construction of pavements for the project should be in accordance with the requirements and specifications of the State of California Department of Transportation, or other approved local governing specifications.

Base course or pavement materials should not be placed when the surface is wet. Surface drainage should be provided away from the edge of paved areas to minimize lateral moisture transmission into the subgrade.

Preventative maintenance should be planned and provided for through an on-going pavement management program in order to enhance future pavement performance. Preventative maintenance activities are intended to slow the rate of pavement deterioration, and to preserve the pavement investment.

Preventative maintenance consists of both localized maintenance (e.g. crack sealing and patching) and global maintenance (e.g. surface sealing). Preventative maintenance is usually the first priority when implementing a planned pavement maintenance program and provides the highest return on investment for pavements.

5.0 GENERAL COMMENTS

Terracon should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Terracon also should be retained to provide observation and testing services during grading, excavation, foundation construction and other earth-related construction phases of the project.

The analysis and recommendations presented in this report are based upon the data obtained from the borings performed at the indicated locations and from other information discussed in this report. This report does not reflect variations that may occur between borings, across the site, or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. If variations appear, we should be

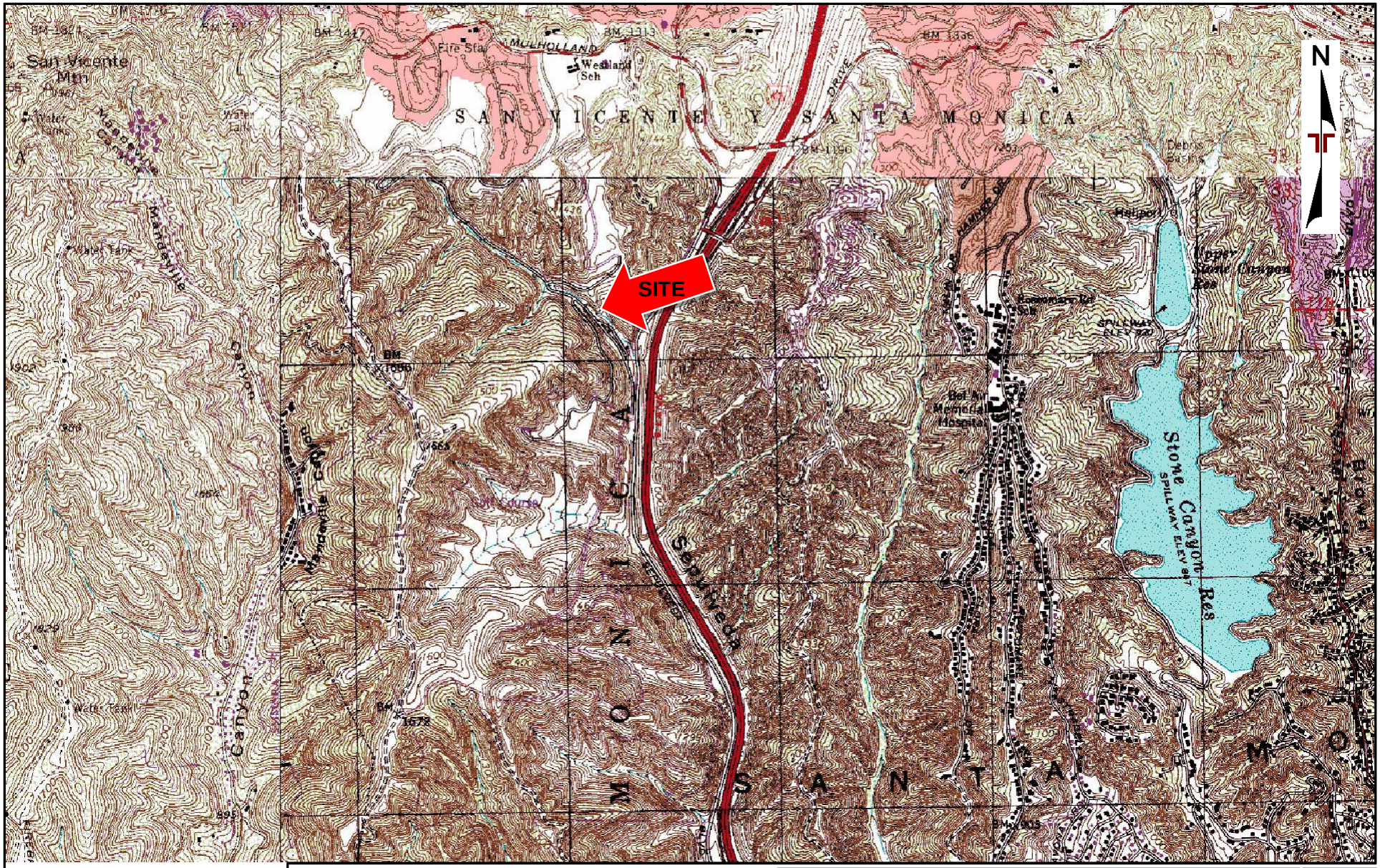
immediately notified so that further evaluation and supplemental recommendations can be provided.

The scope of services for this project does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.

APPENDIX A

FIELD EXPLORATION



TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY QUADRANGLES INCLUDE: CANOGA PARK, CA (1/1/1967), VAN NUYS, CA (1/1/1972), TOPANGA, CA (1/1/1991) and BEVERLY HILLS, CA (1/1/1995).
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Manager:	JM
Drawn by:	GA
Checked by:	TML
Approved by:	JM

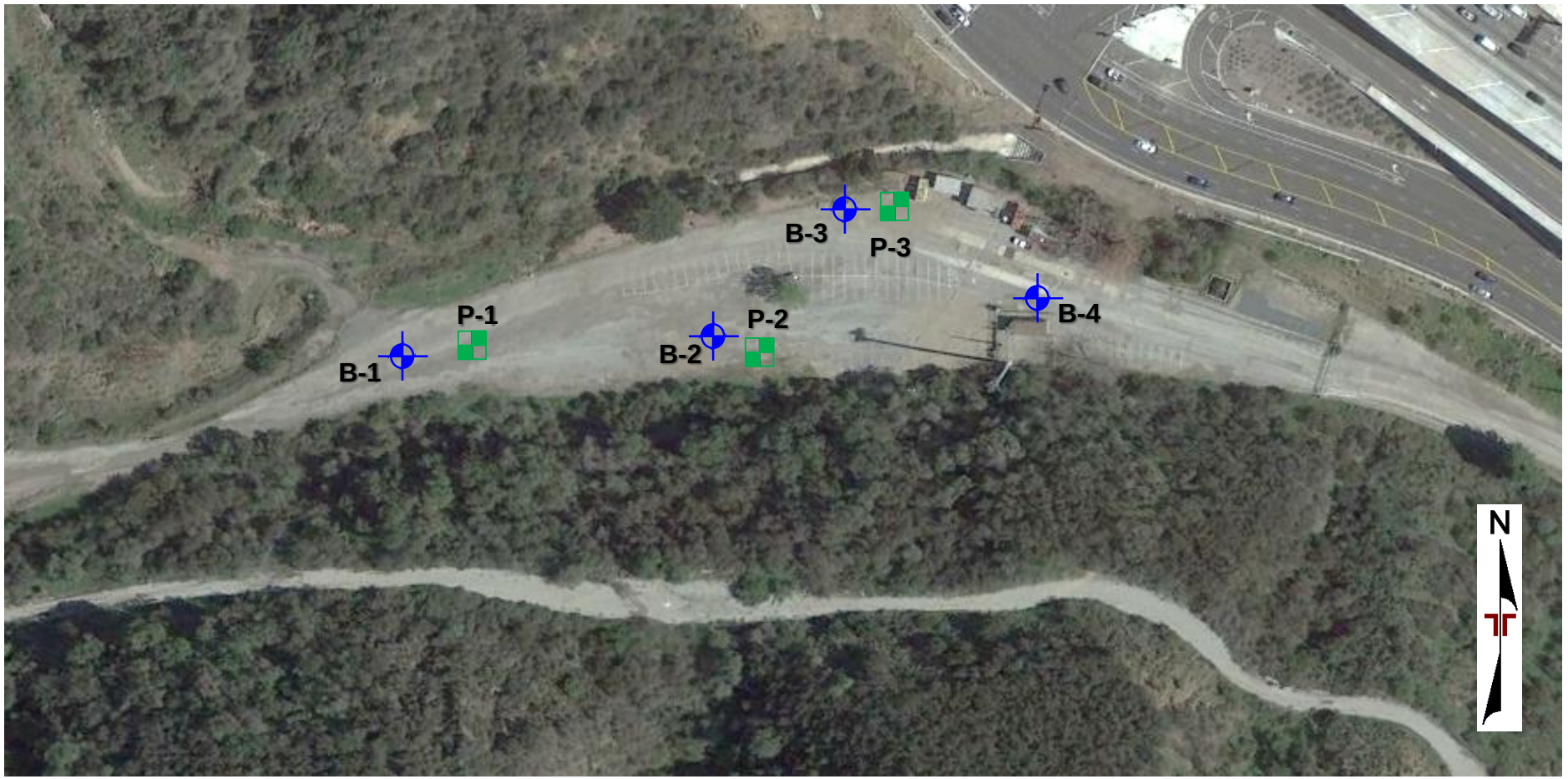
Project No.	60155117
Scale:	1"=2,000'
File Name:	A-1
Date:	7/18/2016

Terracon
2817 McGaw Ave
Irvine, CA 92614-5835

SITE LOCATION

Mission Canyon Trailhead Parking Area
2301 N. Sepulveda Blvd
Los Angeles, CA

Exhibit
A-1



LEGEND

B-1 **BORING APPROXIMATE LOCATION**

P-1 **PERCOLATION TEST APPROXIMATE LOCATION**

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Manager: JM	Project No. 60155117
Drawn by: GA	Scale: 1 in ~ 150 ft.
Checked by: TML	File Name: A-2
Approved by: JM	Date: 7/19/2016

Terracon
Consulting Engineers & Scientists
2817 McGaw Avenue Irvine, CA 92614
PH. (949) 261-0051 FAX. (949) 261-6110

BORING LOCATION DIAGRAM

Mission Canyon Trailhead Parking Area
2301 N. Sepulveda Blvd
Los Angeles, California

Exhibit
A-2

Field Exploration Description

A total of seven (7) test borings were drilled at the site on June 30, 2016. The borings were drilled to approximate depth ranging between 5 and 31½ feet bgs at the approximate locations shown on the attached Boring Location Diagram, Exhibit A-2. Test borings were advanced with a truck-mounted CME-75 drill rig utilizing 8-inch diameter hollow-stem augers. Three (3) of the boring locations were used for percolation testing.

The borings were located in the field by using the proposed site plan, aerial photographs of the site, and measuring from existing site features. The accuracy of boring locations should only be assumed to the level implied by the method used.

Continuous lithologic logs of the borings were recorded by the field engineer during the drilling operations. At selected intervals, samples of the subsurface materials were taken by driving split-spoon or ring-barrel samplers. Bulk samples of subsurface materials were also obtained. Groundwater conditions were evaluated in the borings at the time of site exploration.

Penetration resistance measurements were obtained by driving the split-spoon and ring-barrel samplers into the subsurface materials with a 140-pound automatic hammer falling 30 inches. The penetration resistance value is a useful index in estimating the consistency or relative density of materials encountered.

An automatic hammer was used to advance the split-barrel sampler in the borings performed on this site. A significantly greater efficiency is achieved with the automatic hammer compared to the conventional safety hammer operated with a cathead and rope. This higher efficiency has an appreciable effect on the SPT-N value. The effect of the automatic hammer's efficiency has been considered in the interpretation and analysis of the subsurface information for this report.

The samples were tagged for identification, sealed to reduce moisture loss, and taken to our laboratory for further examination, testing, and classification. Information provided on the boring logs attached to this report includes soil descriptions, consistency evaluations, boring depths, sampling intervals, and groundwater conditions. The borings were backfilled with auger cuttings prior to the drill crew leaving the site.

BORING LOG NO. B-1

PROJECT: Mission Canyon Trailhead Parking Area

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

LOCATION See Exhibit A-2

Latitude: 34.11911° Longitude: -118.48443°

DEPTH	GRAPHIC LOG		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (psf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
0.2		**GRAVEL**, Ground covered with broken asphalt and gravel											
		FILL: CLAYEY SAND, with gravel, brown to reddish-brown, dense										29-20-9	24
						30-30-41				8	124		
4.0		**CLAYEY SAND (SC)**, with gravel, brown to reddish-brown, dense											
		medium dense	5			3-5-7 N=12							
		loose				5-8-10				5	115		
10.0		**SILTY SAND (SM)**, gray, medium dense	10			6-7-9 N=16							
15.0		**CLAYEY SAND (SC)**, with gravel, gray, medium dense	15	▽		3-7-8 N=15							
		reddish-brown, dense	20			12-19-19 N=38							
21.5		***Boring Terminated at 21.5 Feet***											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic SPT Hammer

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-3 for description of field procedures.
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
The estimated depth of the fill materials should not be considered exact due to the similarity of lithology, color, and densities of the graded materials and native soils.

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered at 16' while drilling*

Terracon
2817 McGaw Ave
Irvine, CA

Boring Started: 6/30/2016 Boring Completed: 6/30/2016

Drill Rig: CME-75 Driller: 2R Drilling

Project No.: 60155117 Exhibit: A-4

BORING LOG NO. B-2

PROJECT: Mission Canyon Trailhead Parking Area

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

LOCATION See Exhibit A-2

Latitude: 34.11853° Longitude: -118.48478°

DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (psf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
0.2		**GRAVEL**, Ground covered with broken asphalt and gravel											
		FILL: CLAYEY SAND (SC), with gravel, brown										29-18-11	25
2.5		**CLAYEY SAND (SC)**, with gravel, brown, medium dense				13-17-11				6	111		
5.0		**SILTY SAND (SM)**, with gravel, brown, medium dense	5			4-5-6 N=11						NP	17
7.5		**CLAYEY SAND (SC)**, with gravel, reddish-brown to brown, medium dense				11-12-12				6	122		
			10			8-8-9 N=17							
			15			7-5-9 N=14							
				▽									
		gray	20			3-5-10 N=15							
21.5		***Boring Terminated at 21.5 Feet***											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic SPT Hammer

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-3 for description of field procedures.
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
The estimated depth of the fill materials should not be considered exact due to the similarity of lithology, color, and densities of the graded materials and native soils.

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered at 18.5' while drilling*

Terracon
2817 McGaw Ave
Irvine, CA

Boring Started: 6/30/2016 Boring Completed: 6/30/2016

Drill Rig: CME-75 Driller: 2R Drilling

Project No.: 60155117 Exhibit: A-5

BORING LOG NO. B-3

PROJECT: Mission Canyon Trailhead Parking Area

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

LOCATION See Exhibit A-2

Latitude: 34.11829° Longitude: -118.48337°

DEPTH	GRAPHIC LOG		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (psf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
0.3		**ASPHALT CONCRETE**, 3" Thickness											
1.1		**AGGREGATE BASE COURSE**, 10" Thickness											
		FILL: CLAYEY SAND (SC), trace gravel, brown to reddish-brown, medium dense										34-21-13	22
						8-15-17				9	118		
			5			3-5-10 N=15							
						9-9-21				10	120		
9.0		**CLAYEY SAND (SC)**, trace gravel, brown to reddish-brown, medium dense	10			7-7-10 N=17							
15.0		**SILTY SAND (SM)**, trace gravel, dark brown, medium dense	15			6-6-8 N=14						NP	14
			20			8-8-10 N=18							
21.5		***Boring Terminated at 21.5 Feet***											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic SPT Hammer

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-3 for description of field procedures.
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
The estimated depth of the fill materials should not be considered exact due to the similarity of lithology, color, and densities of the graded materials and native soils.

WATER LEVEL OBSERVATIONS
Groundwater not encountered

Terracon
2817 McGaw Ave
Irvine, CA

Boring Started: 6/30/2016 | Boring Completed: 6/30/2016
Drill Rig: CME-75 | Driller: 2R Drilling
Project No.: 60155117 | Exhibit: A-6

BORING LOG NO. B-4

PROJECT: Mission Canyon Trailhead Parking Area

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

LOCATION See Exhibit A-2

Latitude: 34.11746° Longitude: -118.48391°

GRAPHIC LOG	DEPTH	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (psf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
	0.4 **ASPHALT CONCRETE**, 5" Thickness											
	FILL: CLAYEY SAND (SC), brown, medium dense										33-22-11	28
	reddish-brown				12-14-24				10	123		
		5			22-23-30				12	123		
					5-10-14 N=24							
		10			10-21-25				11	121		
	12.0 **CLAYEY SAND (SC)**, brown, medium dense											
	dark brown	15			5-3-7 N=10							
		20			7-10-19				11	118		

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic SPT Hammer

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-3 for description of field procedures.
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
The estimated depth of the fill materials should not be considered exact due to the similarity of lithology, color, and densities of the graded materials and native soils.

WATER LEVEL OBSERVATIONS

Groundwater encountered at 28' while drilling

Terracon
2817 McGaw Ave
Irvine, CA

Boring Started: 6/30/2016 Boring Completed: 6/30/2016

Drill Rig: CME-75 Driller: 2R Drilling

Project No.: 60155117 Exhibit: A-7

BORING LOG NO. B-4

PROJECT: Mission Canyon Trailhead Parking Area

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

LOCATION See Exhibit A-2

Latitude: 34.11746° Longitude: -118.48391°

GRAPHIC LOG	DEPTH	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (psf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
	CLAYEY SAND (SC), brown, medium dense *(continued)*											
		25			8-8-10 N=18							
	reddish-brown	30	▽		6-8-8 N=16							
	31.5 ***Boring Terminated at 31.5 Feet***											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic SPT Hammer

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-3 for description of field procedures.
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
The estimated depth of the fill materials should not be considered exact due to the similarity of lithology, color, and densities of the graded materials and native soils.

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered at 28' while drilling*

Terracon
2817 McGaw Ave
Irvine, CA

Boring Started: 6/30/2016 | Boring Completed: 6/30/2016

Drill Rig: CME-75 | Driller: 2R Drilling

Project No.: 60155117 | Exhibit: A-7

BORING LOG NO. P-1

PROJECT: Mission Canyon Trailhead Parking Area

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

LOCATION See Exhibit A-2

Latitude: 34.11914° Longitude: -118.48449°

GRAPHIC LOG	DEPTH	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (psf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
	0.2 **GRAVEL**											
	FILL: CLAYEY SAND (SC), trace gravel, gray to reddish-brown, medium dense				9-11-15 N=26							
	4.0 **CLAYEY SAND (SC)**, trace gravel, gray to reddish-brown, medium dense											
	5.0 ***Boring Terminated at 5 Feet***	5										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic SPT Hammer

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-3 for description of field procedures.
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
The estimated depth of the fill materials should not be considered exact due to the similarity of lithology, color, and densities of the graded materials and native soils.

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
2817 McGaw Ave
Irvine, CA

Boring Started: 6/30/2016 Boring Completed: 6/30/2016

Drill Rig: CME-75 Driller: 2R Drilling

Project No.: 60155117 Exhibit: A-8

BORING LOG NO. P-2

PROJECT: Mission Canyon Trailhead Parking Area

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

LOCATION See Exhibit A-2

Latitude: 34.11863° Longitude: -118.48397°

GRAPHIC LOG	DEPTH	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (psf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
	0.2 **GRAVEL**											
	FILL: SILTY SAND (SM), trace gravel, brown, medium dense											
	2.5 **SILTY SAND (SM)**, trace gravel, brown, medium dense				5-6-6 N=12							
	5.0 ***Boring Terminated at 5 Feet***	5										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic SPT Hammer

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-3 for description of field procedures.
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
The estimated depth of the fill materials should not be considered exact due to the similarity of lithology, color, and densities of the graded materials and native soils.

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
2817 McGaw Ave
Irvine, CA

Boring Started: 6/30/2016 Boring Completed: 6/30/2016

Drill Rig: CME-75 Driller: 2R Drilling

Project No.: 60155117 Exhibit: A-9

BORING LOG NO. P-3

PROJECT: Mission Canyon Trailhead Parking Area

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

LOCATION See Exhibit A-2

Latitude: 34.11851° Longitude: -118.48338°

GRAPHIC LOG	DEPTH	DESCRIPTION	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (psf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
	0.2	**GRAVEL**, Ground covered with broken asphalt and gravel											
		FILL: CLAYEY SAND (SC), trace gravel, brown, medium dense											
		with gravel, reddish-brown to gray	5			7-10-13 N=23							
	9.0												
	10.0	**CLAYEY SAND (SC)**, trace gravel, brown, medium dense	10										
		Boring Terminated at 10 Feet											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic SPT Hammer

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-3 for description of field procedures.
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
The estimated depth of the fill materials should not be considered exact due to the similarity of lithology, color, and densities of the graded materials and native soils.

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
2817 McGaw Ave
Irvine, CA

Boring Started: 6/30/2016 Boring Completed: 6/30/2016

Drill Rig: CME-75 Driller: 2R Drilling

Project No.: 60155117 Exhibit: A-10

APPENDIX B

LABORATORY TESTING

Laboratory Testing

Samples retrieved during the field exploration were taken to the laboratory for further observation by the project geotechnical engineer and were classified in accordance with the Unified Soil Classification System (USCS) described in Appendix C. At that time, the field descriptions were confirmed or modified as necessary and an applicable laboratory testing program was formulated to determine engineering properties of the subsurface materials.

Laboratory tests were conducted on selected soil samples and the test results are presented in this appendix. The laboratory test results were used for the geotechnical engineering analyses, and the development of foundation and earthwork recommendations. Laboratory tests were performed in general accordance with the applicable ASTM, local or other accepted standards.

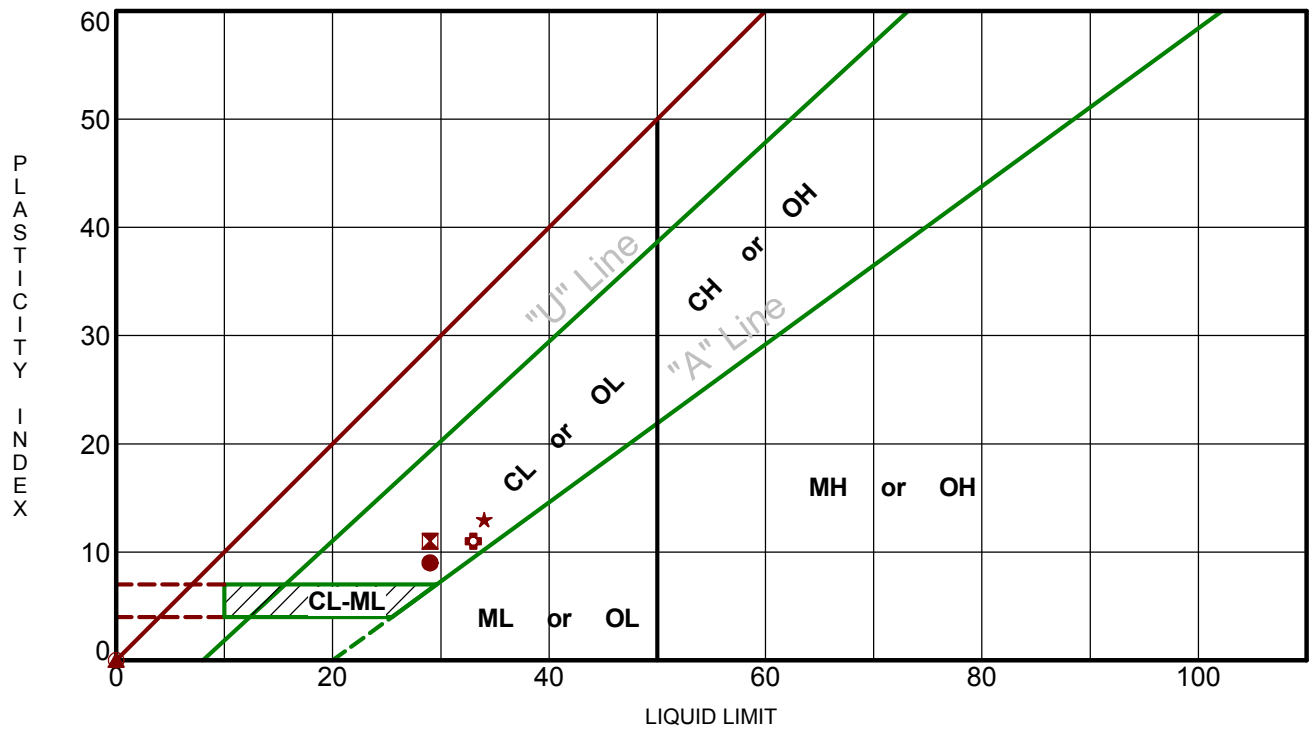
Selected soil samples obtained from the site were tested for the following engineering properties:

- ASTM D7263 Dry Density
- CT422 Chloride Content
- CT643 pH
- ASTM C136 Minus #200 Sieve
- ASTM D4318 Atterberg Limits
- CA 301 R-Value
- ASTM D2216 Moisture Content
- CT417 Soluble Sulfates
- CT643 Minimum Resistivity
- ASTM D3080 Direct Shear Test
- ASTM D1557 Modified Proctor

Procedural standards noted above are for reference to methodology in general. In some cases variations to methods are applied as a result of local practice or professional judgment.

ATTERBERG LIMITS RESULTS

ASTM D4318



Boring ID		Depth	LL	PL	PI	Fines	USCS	Description
●	B-1	0 - 2.5	29	20	9	24	SC	CLAYEY SAND
⊠	B-2	0 - 2.5	29	18	11	25	SC	CLAYEY SAND
▲	B-2	5 - 6.5	NP	NP	NP	17	SM	SILTY SAND
★	B-3	0 - 2.5	34	21	13	22	SC	CLAYEY SAND
⊙	B-3	15 - 16.5	NP	NP	NP	14	SM	SILTY SAND
✿	B-4	0 - 2.5	33	22	11	28	SC	CLAYEY SAND

PROJECT: Mission Canyon Trailhead Parking Area

SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

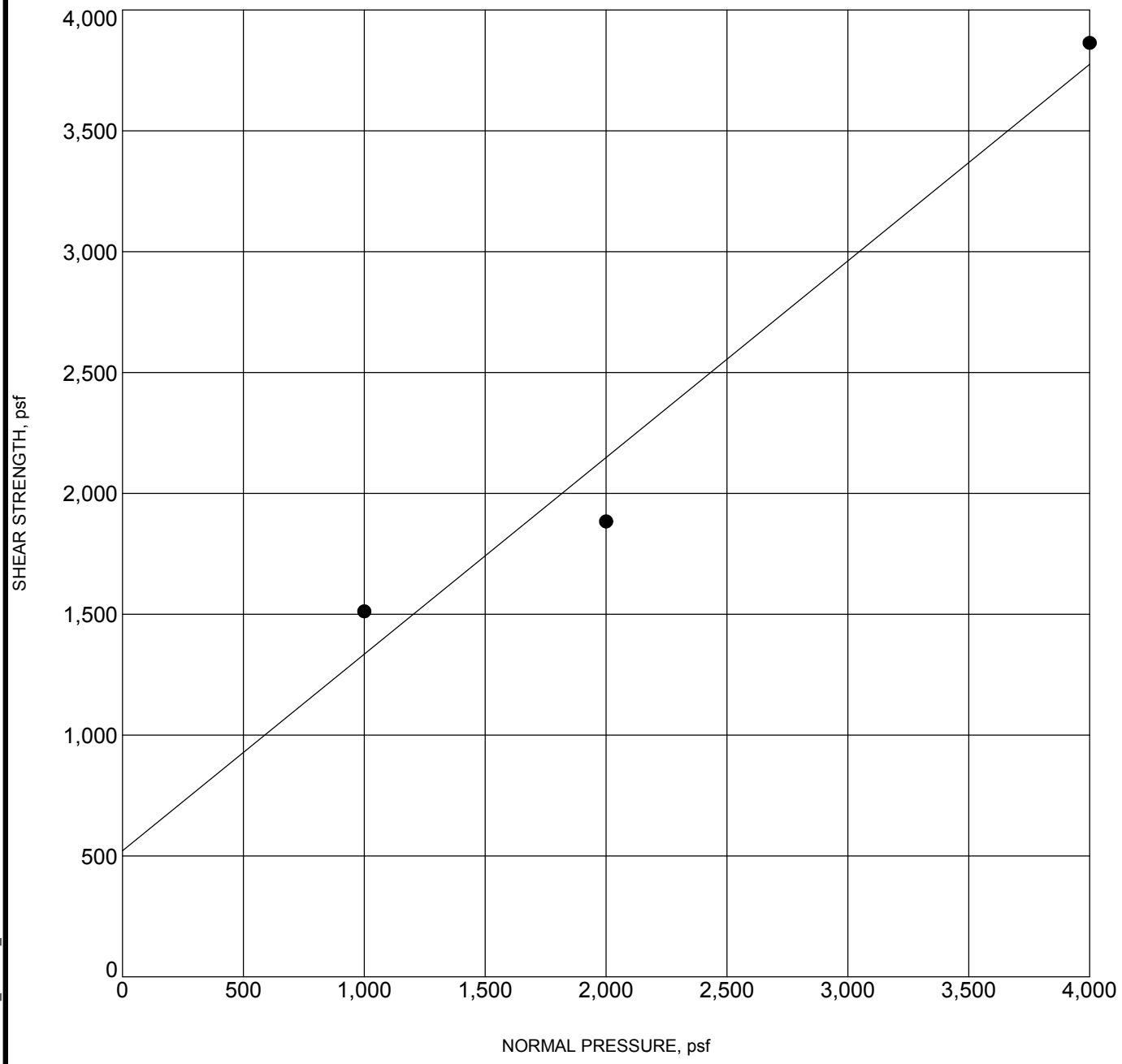
Terracon
2817 McGaw Ave
Irvine, CA

PROJECT NUMBER: 60155117

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

EXHIBIT: B-2

DIRECT SHEAR TEST ASTM D3080



Specimen Identification		Classification	γ_d, pcf	WC,%	c, psf	$\phi°$
● **B-3**	**7.5ft**	**CLAYEY SAND (SC)**	**120**	**10**	**522**	**39**

PROJECT: Mission Canyon Trailhead Parking Area
60155117
SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

Terracon
2817 McGaw Ave
Irvine, CA

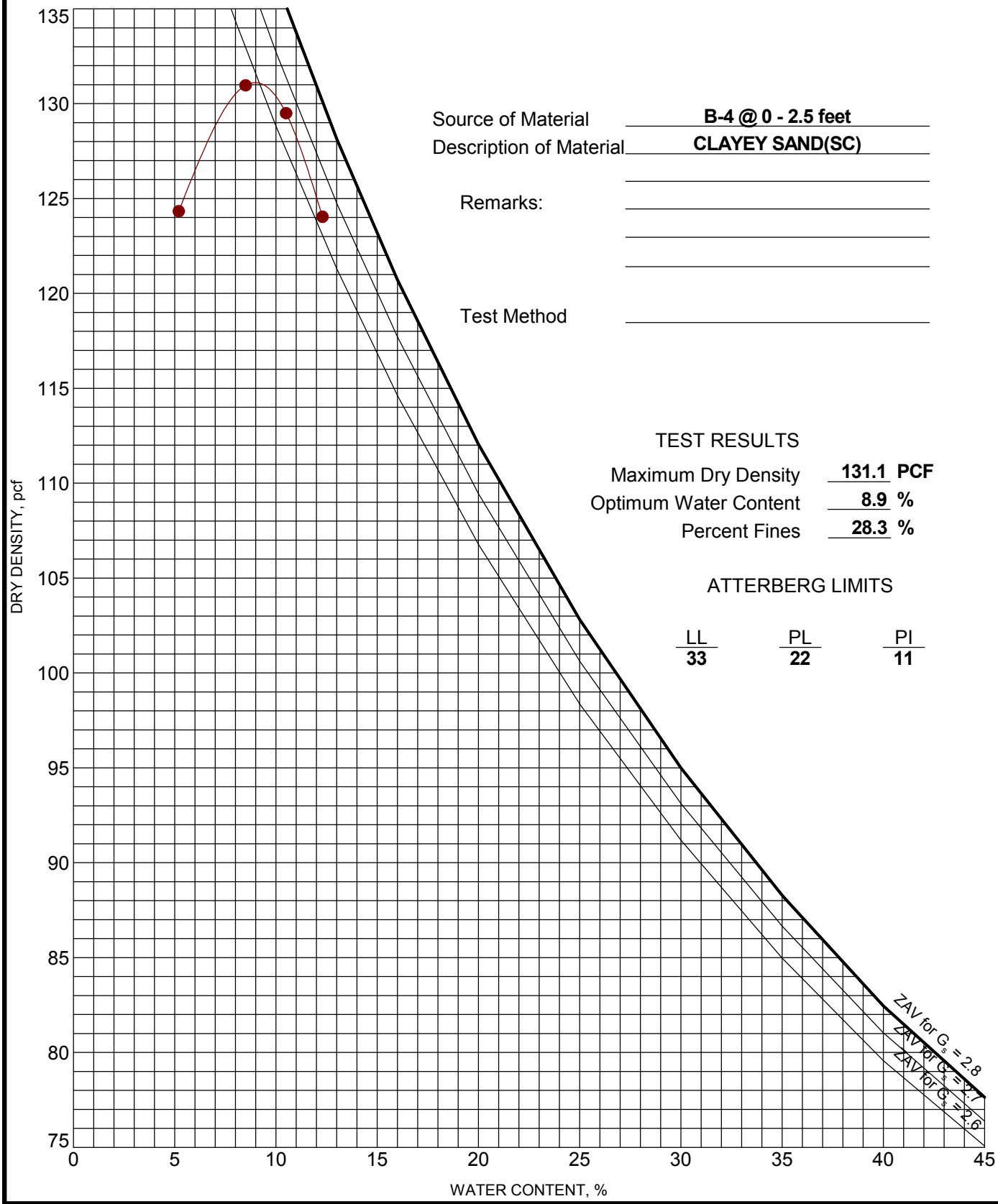
PROJECT NUMBER:

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

EXHIBIT: B-3

MOISTURE-DENSITY RELATIONSHIP

ASTM D698/D1557



Source of Material: **B-4 @ 0 - 2.5 feet**

Description of Material: **CLAYEY SAND(SC)**

Remarks:

Test Method

TEST RESULTS

Maximum Dry Density	**131.1**	**PCF**
Optimum Water Content	**8.9**	**%**
Percent Fines	**28.3**	**%**

ATTERBERG LIMITS

LL	PL	PI
33	**22**	**11**

PROJECT: Mission Canyon Trailhead Parking Area
60155117
SITE: 2301 N. Sepulveda Blvd
Los Angeles, CA

Terracon
2817 McGaw Ave
Irvine, CA

PROJECT NUMBER:

CLIENT: Mountains Recreation and Conservation Authority
Los Angeles, CA

EXHIBIT: B-4

'R' VALUE CA 301

Client: Terracon Date: 5/7/16 By: LD

Client's Job No.: # 60155117 Sample No.: B-3 @ 0'

GLA Reference: 2011-0104 Soil Type: Brown, F.M. Clayey Sand w. Gravel

TEST SPECIMEN		A	B	C	D
Compactor Air Pressure	psi	**100**	**55**	**70**	
Initial Moisture Content	%	**7.5**	**7.5**	**7.5**	
Water Added	ml	**30**	**45**	**37**	
Moisture at Compaction	%	10.2	11.5	10.8	
Sample & Mold Weight	gms	**3260**	**3194**	**3229**	
Mold Weight	gms	**2107**	**2091**	**2103**	
Net Sample Weight	gms	1153	1103	1126	
Sample Height	in.	**2.509**	**2.44**	**2.482**	
Dry Density	pcf	126.4	122.8	124.0	
Pressure	lbs	**5450**	**2080**	**3430**	
Exudation Pressure	psi	434	166	273	
Expansion Dial	x 0.0001	**29**	**13**	**22**	
Expansion Pressure	psf	126	56	95	
Ph at 1000lbs	psi	**29**	**31**	**30**	
Ph at 2000lbs	psi	**62**	**81**	**70**	
Displacement	turns	**3.45**	**4.06**	**3.82**	
R' Value		53	38	46	
Corrected 'R' Value		**53**	**38**	**46**	

FINAL 'R' VALUE	
By Exudation Pressure (@ 300 psi):	**48**
By Epansion Pressure :	**44**
TI = 5	

Geo-Logic ASSOCIATES

CHEMICAL LABORATORY TEST REPORT

Project Number: 60155117
Service Date: 07/06/16
Report Date: 07/06/16
Task:

Terracon
750 Pilot Road, Suite F
Las Vegas, Nevada 89119
(702) 597-9393

Client

Project

Mission Canyon Trail Parking Area

Sample Submitted By: Terracon (60) **Date Received:** 7/5/2016 **Lab No.: 16-0627**

Results of Corrosion Analysis

Sample Number	
Sample Location	B-2
Sample Depth (ft.)	0.0
pH Analysis, AWWA 4500 H	8.52
Water Soluble Sulfate (SO4), AWWA 4500 E (percent %)	0.01
Sulfides, AWWA 4500-S D, (mg/kg)	Nil
Red-Ox, AWWA 2580, (mV)	+677
Total Salts, AWWA 2510, (mg/kg)	442
Chlorides, AWWA 4500 Cl B, (mg/kg)	75
Resistivity, ASTM G-57, (ohm-cm)	3541

Analyzed By:

Kurt D. Ergun
Chemist

APPENDIX C

SUPPORTING DOCUMENTS

GENERAL NOTES

DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

SAMPLING


Auger


Shelby Tube


Split Spoon


Rock Core


Macro Core


Modified California Ring Sampler


Grab Sample


No Recovery


Modified Dames & Moore Ring Sampler

WATER LEVEL


Water Initially Encountered


Water Level After a Specified Period of Time


Water Level After a Specified Period of Time

Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.

FIELD TESTS

(HP)	Hand Penetrometer
(T)	Torvane
(b/f)	Standard Penetration Test (blows per foot)
N	N value
(PID)	Photo-Ionization Detector
(OVA)	Organic Vapor Analyzer
(WOH)	Weight of Hammer

DESCRIPTIVE SOIL CLASSIFICATION

Soil classification is based on the Unified Soil Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

LOCATION AND ELEVATION NOTES

Unless otherwise noted, Latitude and Longitude are approximately determined using a hand-held GPS device. The accuracy of such devices is variable. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

STRENGTH TERMS

RELATIVE DENSITY OF COARSE-GRAINED SOILS (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance Includes gravels, sands and silts.			CONSISTENCY OF FINE-GRAINED SOILS (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance			
Descriptive Term (Density)	**Standard Penetration or N-Value Blows/Ft.**	**Ring Sampler Blows/Ft.**	**Descriptive Term (Consistency)**	**Unconfined Compressive Strength, Qu, psf**	**Standard Penetration or N-Value Blows/Ft.**	**Ring Sampler Blows/Ft.**
Very Loose	0 - 3	0 - 6	Very Soft	less than 500	0 - 1	< 3
Loose	4 - 9	7 - 18	Soft	500 to 1,000	2 - 4	3 - 4
Medium Dense	10 - 29	19 - 58	Medium-Stiff	1,000 to 2,000	4 - 8	5 - 9
Dense	30 - 50	59 - 98	Stiff	2,000 to 4,000	8 - 15	10 - 18
Very Dense	> 50	≥ 99	Very Stiff	4,000 to 8,000	15 - 30	19 - 42
			Hard	> 8,000	> 30	> 42

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 15
With	15 - 29
Modifier	> 30

GRAIN SIZE TERMINOLOGY

Major Component of Sample	Particle Size
Boulders	Over 12 in. (300 mm)
Cobbles	12 in. to 3 in. (300mm to 75mm)
Gravel	3 in. to #4 sieve (75mm to 4.75 mm)
Sand	#4 to #200 sieve (4.75mm to 0.075mm
Silt or Clay	Passing #200 sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 5
With	5 - 12
Modifier	> 12

PLASTICITY DESCRIPTION

Term	Plasticity Index
Non-plastic	0
Low	1 - 10
Medium	11 - 30
High	> 30

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]					Soil Classification	
					Group Symbol	Group Name [B]
Coarse Grained Soils: More than 50% retained on No. 200 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	$Cu \geq 4$ and $1 \leq Cc \leq 3$ [E]		GW	Well-graded gravel [F]
			$Cu < 4$ and/or $1 > Cc > 3$ [E]		GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH		GM	Silty gravel [F,G,H]
			Fines classify as CL or CH		GC	Clayey gravel [F,G,H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	$Cu \geq 6$ and $1 \leq Cc \leq 3$ [E]		SW	Well-graded sand [I]
			$Cu < 6$ and/or $1 > Cc > 3$ [E]		SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH		SM	Silty sand [G,H,I]
			Fines classify as CL or CH		SC	Clayey sand [G,H,I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots on or above "A" line [J]		CL	Lean clay [K,L,M]
			PI < 4 or plots below "A" line [J]		ML	Silt [K,L,M]
		Organic:	Liquid limit - oven dried	< 0.75	OL	Organic clay [K,L,M,N]
			Liquid limit - not dried			Organic silt [K,L,M,O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above "A" line		CH	Fat clay [K,L,M]
			PI plots below "A" line		MH	Elastic Silt [K,L,M]
		Organic:	Liquid limit - oven dried	< 0.75	OH	Organic clay [K,L,M,P]
			Liquid limit - not dried			Organic silt [K,L,M,Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor				PT	Peat

[A] Based on the material passing the 3-inch (75-mm) sieve

[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ≥ 15% sand, add "with sand" to group name.

[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H] If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.

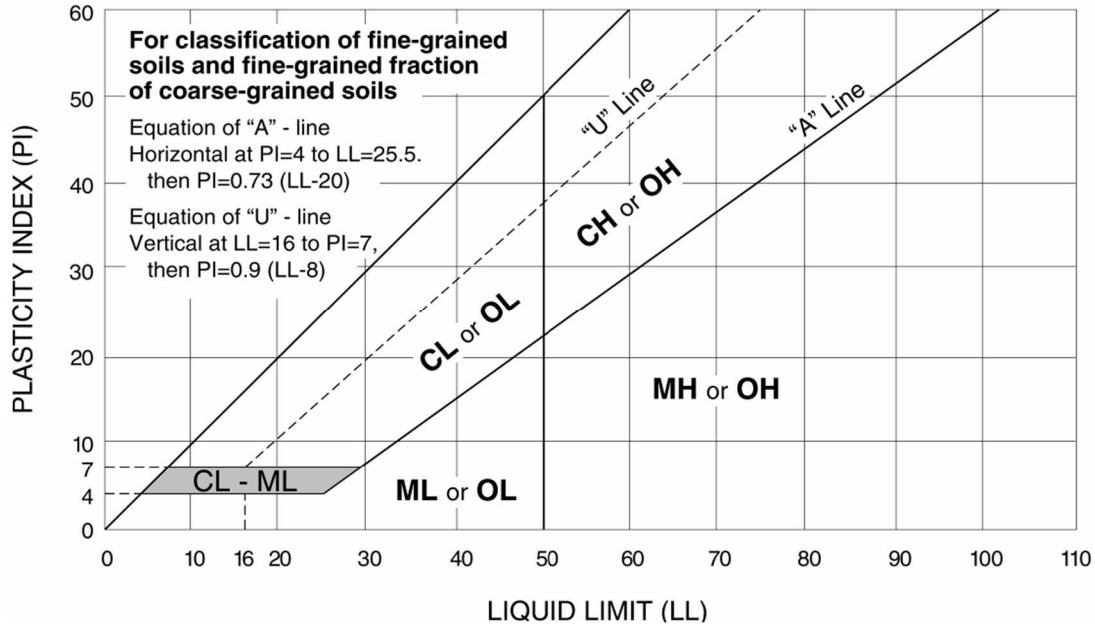
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[N] PI ≥ 4 and plots on or above "A" line.

[O] PI < 4 or plots below "A" line.

[P] PI plots on or above "A" line.

[Q] PI plots below "A" line.



APPENDIX G

SANITATION DISTRICTS OF LOS ANGELES COUNTY

GRACE ROBINSON HYDE
Chief Engineer and General Manager

Memorandum

Date: March 15, 2018

To: Gabriella G. Garry
Project Manager
Mountains Recreation and Conservation Authority

From: Charles Boehmke
Department Head
Solid Waste Management Department

Subject: Landfill Gas Management at Mission Canyon Landfill

Closed landfills can provide an important benefit to the surrounding communities. Wildlife habitats, recreational parks, botanical gardens, and golf courses are a few examples of how closed landfills can be developed to enhance the end-use of a landfill and become an asset to the community. A closed landfill that is properly maintained is environmentally sound and poses no risk to public health and safety.

Landfill gas is the product of the natural anaerobic microbiological decomposition of buried organic material, and primarily contains nearly equal amounts of carbon dioxide and methane. The amount and composition of landfill gas depends on the age, organic content, and moisture content of the buried solid waste. Soon after a landfill closes the production of landfill gas declines significantly. The composition of landfill gas now collected at Mission Canyon is primarily air with a relatively small percentage of methane.

Southern California has among the most stringent landfill regulations in place designed to reduce the emission of methane, the primary component of landfill gas, from municipal solid waste landfills. South Coast Air Quality Management District (SCAQMD) Rule 1150.1, Control of Gaseous Emissions from Municipal Solid Waste Landfills, is considered the most comprehensive landfill gas control regulation in the United States. The purpose of this rule is to reduce landfill gas emissions from landfills in order to protect the environment and ensure public health and safety.

Rule 1150.1 requires owners and operators of landfills to:

- install and operate a landfill gas control system to capture and properly dispose of landfill gas
- to install subsurface probes to measure methane levels at the perimeter of the landfill
- to measure methane levels in the air immediately above the landfill surface to ensure it is below regulatory threshold limits

The SCAQMD Rule 1150.1 integrated (area) surface methane gas regulatory limit is 25 ppm and the instantaneous surface methane gas (at any point on the landfill surface) regulatory limit is 500 ppm. The Mission Canyon Landfill has been subject to compliance with Rule 1150.1 since April 2000.

A gas control system was installed at Mission Canyons 1, 2, and 3 in 1982 to control the emission of landfill gas to the environment and to protect the health and safety of the public. The existing control system consists of 58 active vertical gas collection wells and 2.5 miles of gas transport header pipeline. A vacuum is applied to the gas wells such that landfill gas is drawn from the refuse into the gas control system. The collected landfill gas is transported through header pipelines that are situated around the landfill to the onsite flare station for disposal. Presently, approximately 350 cubic feet per minute of landfill gas is collected by the gas control system and

disposed by flaring. The collected landfill gas is approximately 10 percent methane, with the remaining 90 percent being mostly air.

Since April 2000 the Mission Canyon landfill has been in continuous compliance with the strict requirements of SCAQMD Rule 1150.1. The Sanitation Districts currently perform the following environmental monitoring in compliance with SCAQMD Rule 1150.1:

- semiannual integrated surface methane gas monitoring
- semiannual instantaneous surface methane gas monitoring
- monthly perimeter probe monitoring
- annual ambient air monitoring

The Mission Canyon Landfill Canyons 1, 2 and 3 have been closed for over 50 years. Figure 1 below is an illustration of the average integrated surface methane gas levels measured at the Mission Canyon Landfill and compares that with the South Coast Botanic Garden (Botanic Garden) in Palos Verdes California.

With the comprehensive environmental control systems in place, Mission Canyon Landfill and the use of the proposed park will not pose any adverse effects to public health and safety or the environment.

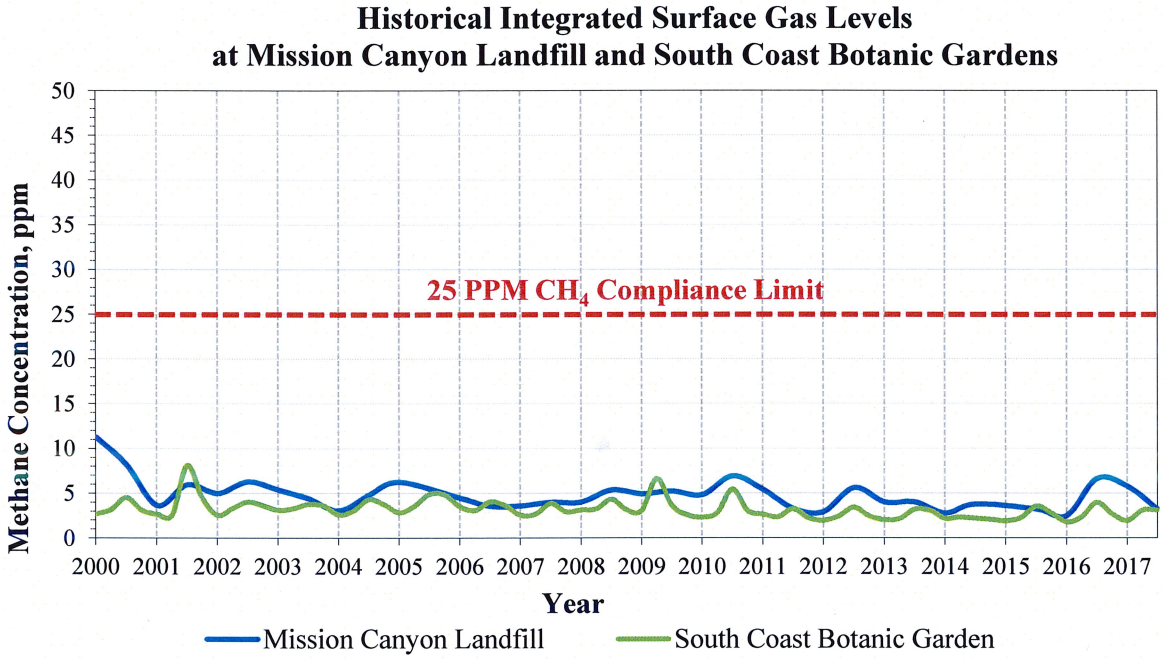


Figure 1. Historical Average Integrated Surface Gas Methane Levels

APPENDIX H

MISSION CANYON PARK

PRESENTED BY
Gabriella Golik Garry, PLA, ASLA MRCA

PROJECT PARTNERS
County of Los Angeles Supervisor Sheila Kuehl; Third District
Los Angeles County Sanitation District
Mountains Recreation and Conservation Authority

TRAFFIC AND FEASIBILITY STUDY BY
Fehr & Peers
MIG

Mountains Recreation & Conservation Authority

RANCHO SIMI RECREATION AND PARK DISTRICT

Agenda

- Mission Canyon Presentation: Design Options Feasibility Study
- Next Steps and Project Timeline
- Public Q&A

PRESENTED BY
Gabriella Golik Garry, PLA, ASLA MRCA

PROJECT PARTNERS
County of Los Angeles Supervisor Sheila Kuehl; Third District
Los Angeles County Sanitation District
Mountains Recreation and Conservation Authority

TRAFFIC AND FEASIBILITY STUDY BY
Fehr & Peers
MIG

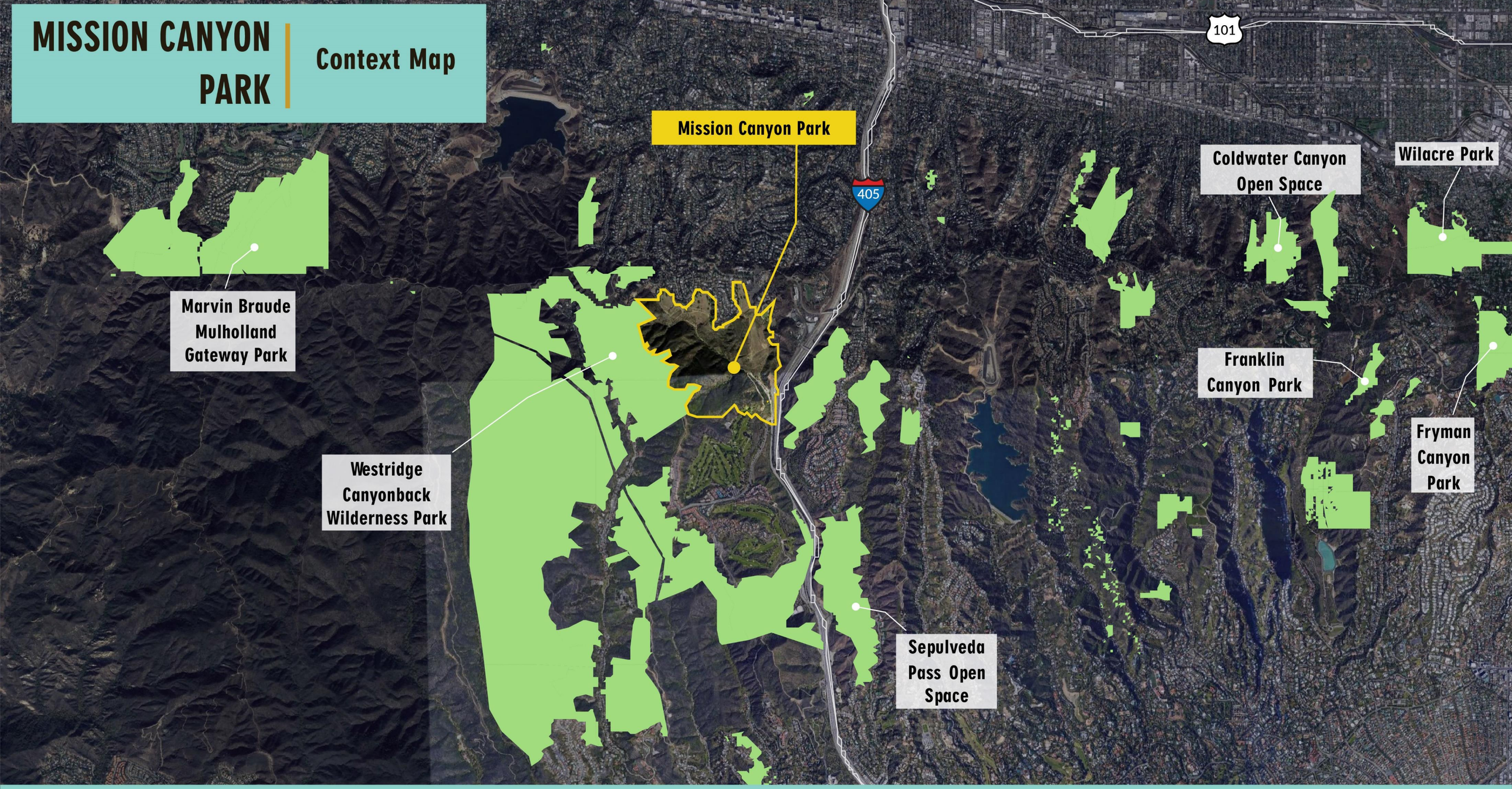
Mountains Recreation & Conservation Authority

RANCHO SIMI RECREATION AND PARK DISTRICT

MOUNTAINS RECREATION AND CONSERVATION AUTHORITY MISSION:

MRCA is dedicated to the preservation of open space, parklands, watersheds, trails, and wildlife habitat.

MISSION CANYON PARK | Context Map



MOUNTAINS RECREATION AND CONSERVATION AUTHORITY
2020

SMMC/MRCA Property

PROJECT HISTORY

- 1966: Joint Powers Agreement specified that the County shall construct operate and maintain park and recreation facilities when lands are in no longer need of refuse disposal.
- 2005: Joint Powers Agreement amended to end use of the landfill
- 2014: MRCA received funding from the County
- 2015: MRCA received mitigation funds from Cal Trans.
- 2018: Community outreach for project's CEQA Initial Study and MND.
- 2018: Based on community input, MND is on hold to re-evaluate traffic and the park entry.
- 2019: MRCA and consultant team re-evaluated traffic study and entry feasibility study for the entry at Sepulveda
- 2020: Feasibility and traffic findings to be presented to project partners and the public

DESIGN CONSIDERATIONS

ASPHALT AND AGGREGATE PAVING

DECOMPOSED GRANITE PAVING

WOOD RAILING (MRCA STANDARD)

WOOD LOG SEATING

PICNIC TABLE (MRCA STANDARD)

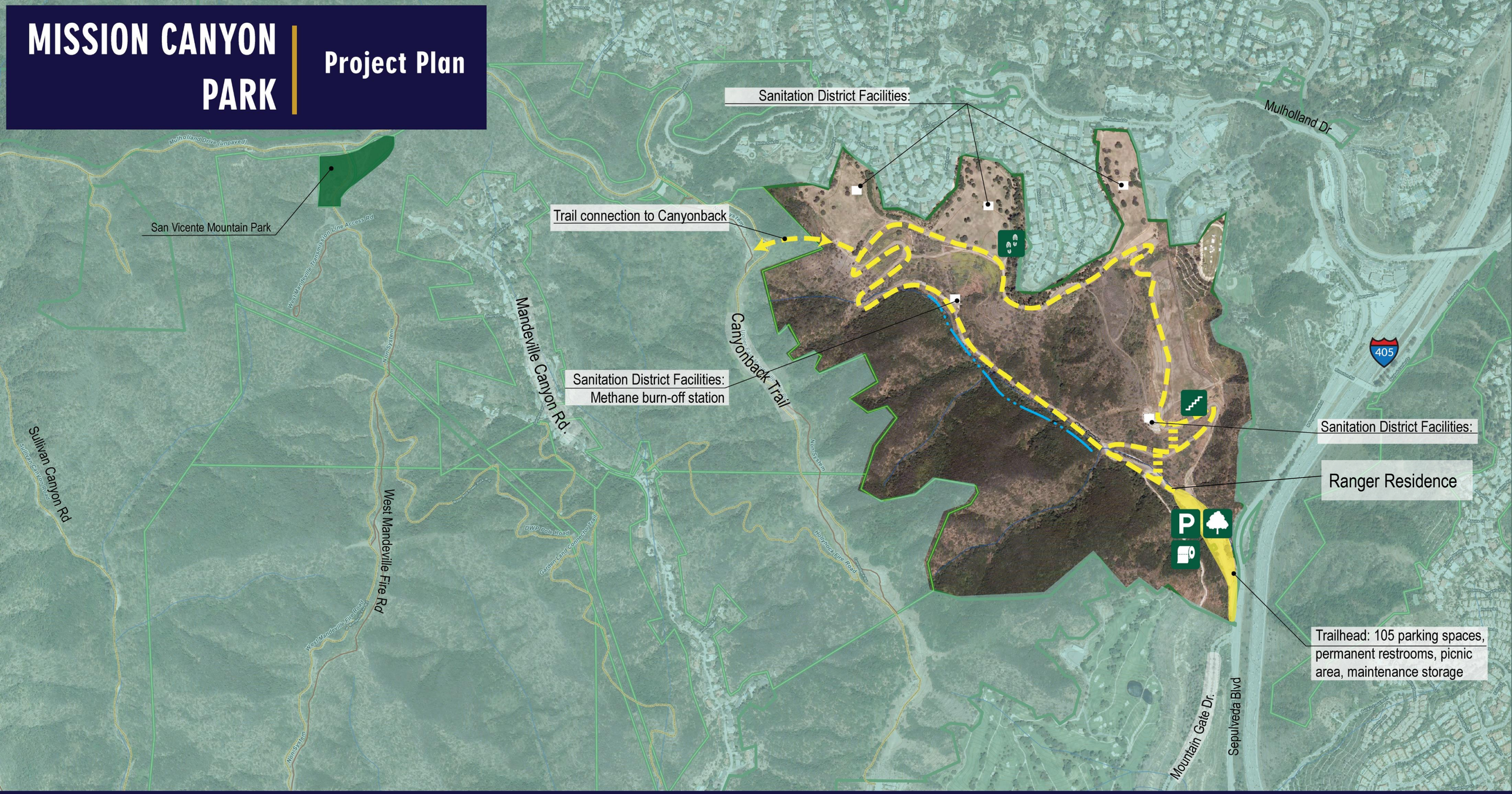
FITNESS STAIRS

CALIFORNIA NATIVE PLANTS

ROMTEC PREFAB BATHROOM BUILDING

- No access from Mulholland Dr.
- Vehicle Access Only at Sepulveda Park Main Entry
- Park Safety
- Fire Readiness
- Traffic Conditions

MISSION CANYON PARK | Project Plan



MOUNTAINS RECREATION AND CONSERVATION AUTHORITY
2020

Project Elements

Sanitation District Environmental Control

Existing Official Trail
Existing Unofficial Trail
SMMC MRCA Property
Other Public Land

0 0.125 0.25 Miles

N

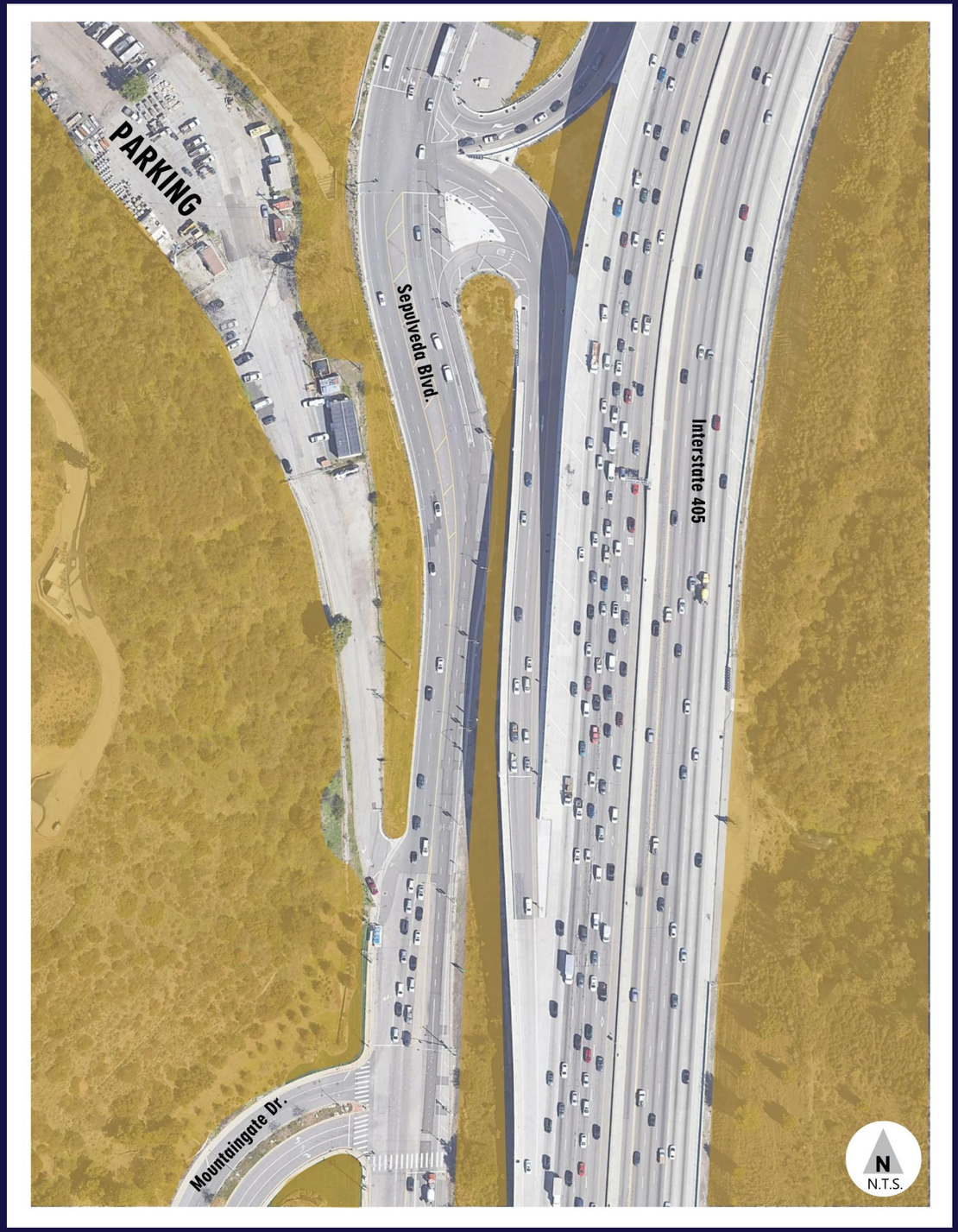
ACCESS STUDY AND TRAFFIC SIMULATION

EXISTING CONDITIONS

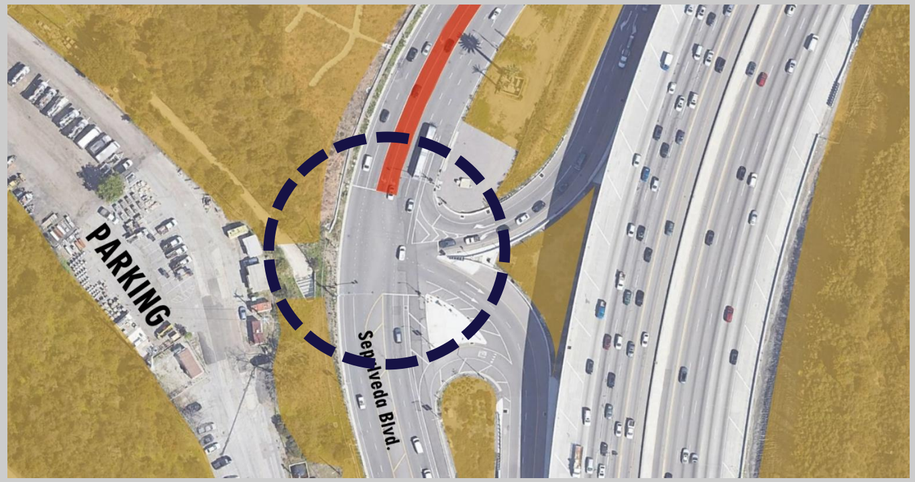
SB 405 Ramps and Sepulveda

Sepulveda and Mission Canyon Road

Sepulveda and Mountaingate Dr.



EXISTING CONDITIONS



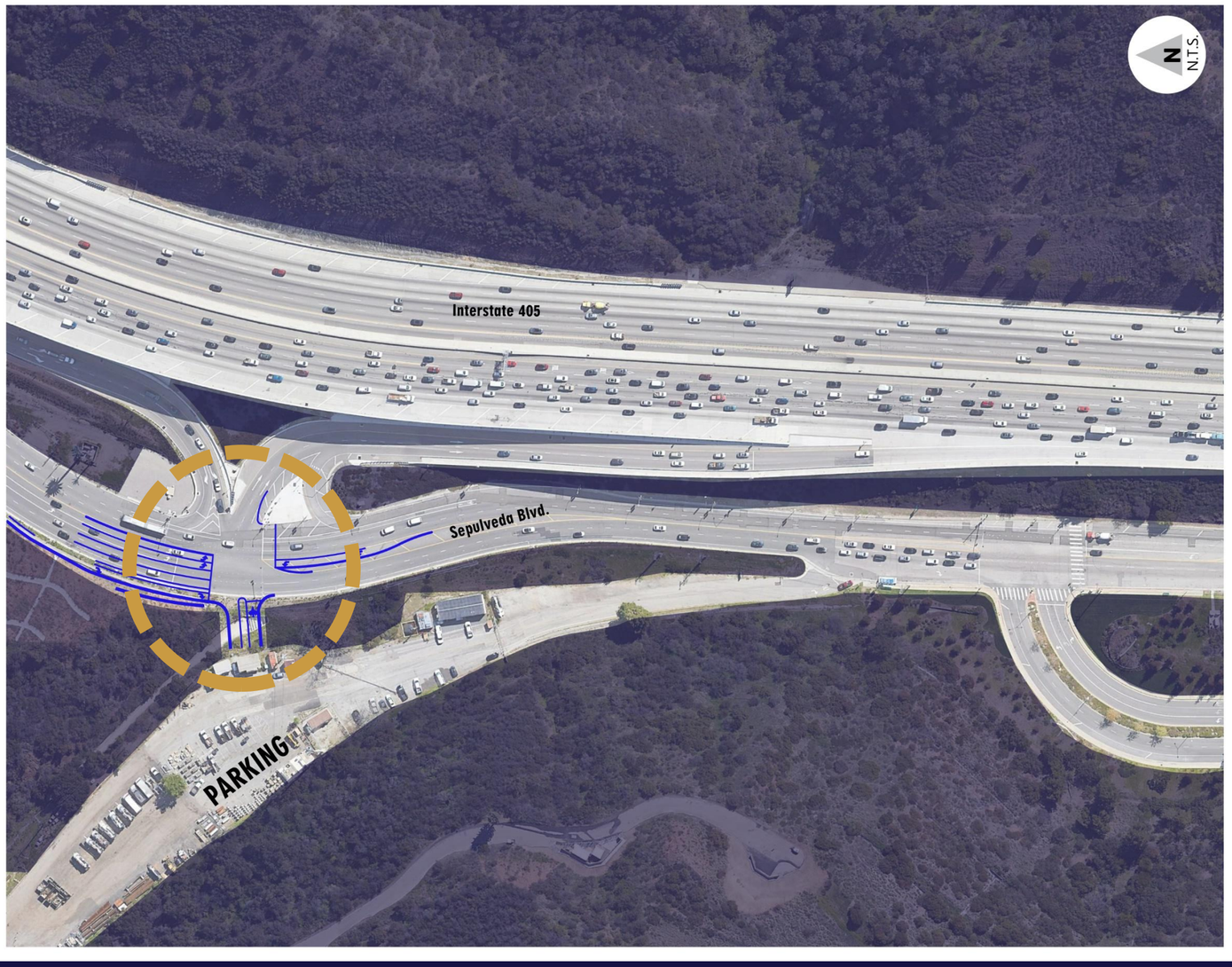
7-9
AM WEEKDAY TRAFFIC

SOUTHBOUND LEFT AT 405 SIGNAL

LF = Lineal Feet

OPTION A

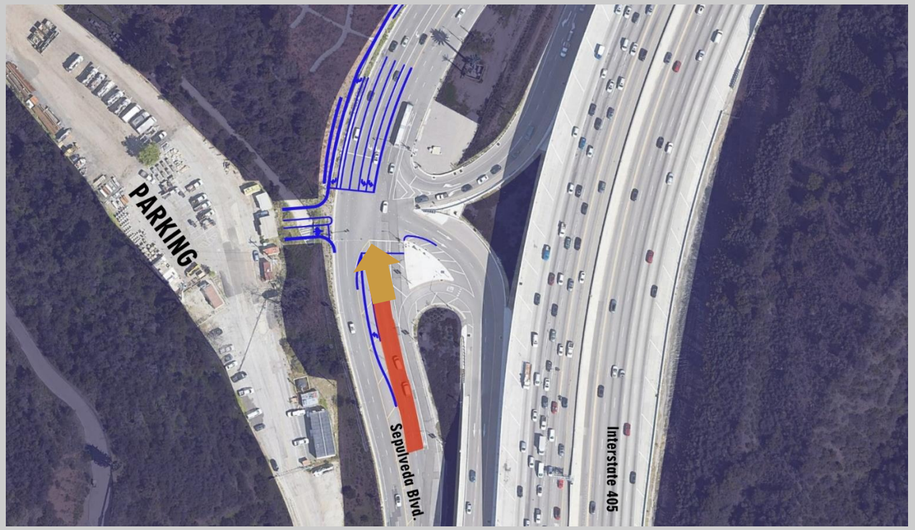
SIMULATION : NEW PARK ENTRY AT EXISTING 405 RAMP SIGNAL



Additional leg to the existing SB 405 Ramps and Sepulveda

OPTION A

SIMULATION : NEW PARK ENTRY AT EXISTING 405 RAMP SIGNAL



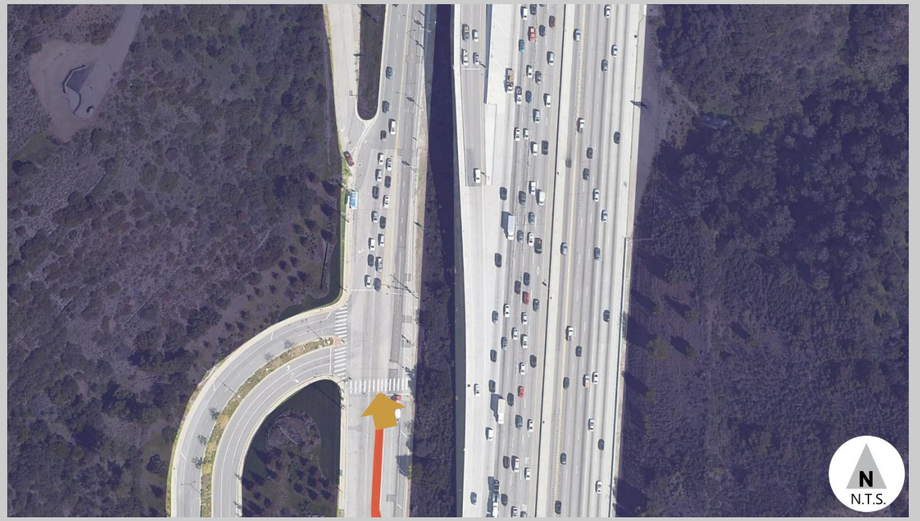
4-6
PM WEEKDAY TRAFFIC

NORTHBOUND THROUGH LANES AT 405 SIGNAL

LF = Lineal Feet

OPTION A

SIMULATION : NEW PARK ENTRY AT EXISTING 405 RAMP SIGNAL



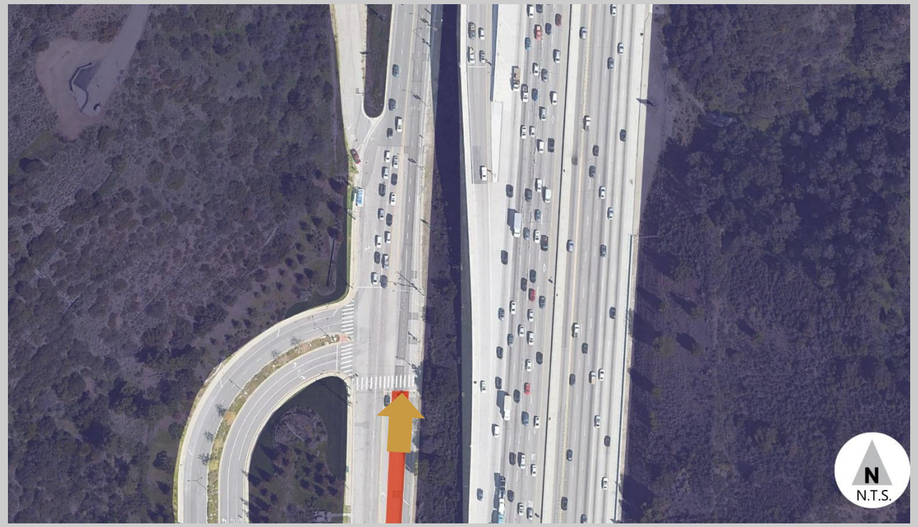
4-6
PM WEEKDAY TRAFFIC

NORTHBOUND LEFT LANE AT MOUNTAINGATE

LF = Lineal Feet

OPTION A

SIMULATION : NEW PARK ENTRY AT EXISTING 405 RAMP SIGNAL



4-6
PM WEEKDAY TRAFFIC

NORTHBOUND THROUGH LANES AT MOUNTAINGATE

EXISTING

200 LF | 1625 LF lane storage capacity

NEW PARK

1625 LF at capacity

0 | 1250 LF | 1500 LF | 1750 LF

LF = Lineal Feet

OPTION B

SIMULATION : NEW SIGNAL AND ALIGNMENT AT EXISTING PARK ENTRY

Proposed new signal at intersection of Sepulveda and Mission Canyon Road

OPTION B

SIMULATION : NEW SIGNAL AND ALIGNMENT AT EXISTING PARK ENTRY

7-9
AM WEEKDAY TRAFFIC

SOUTHBOUND THROUGH LANES AT 405

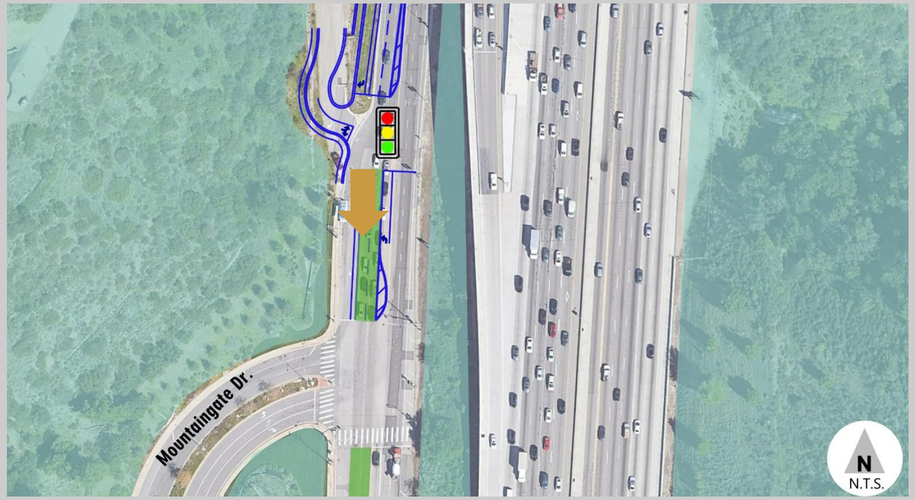
EXISTING — 1975 LF

NEW PARK — 1950 LF

LF = Lineal Feet

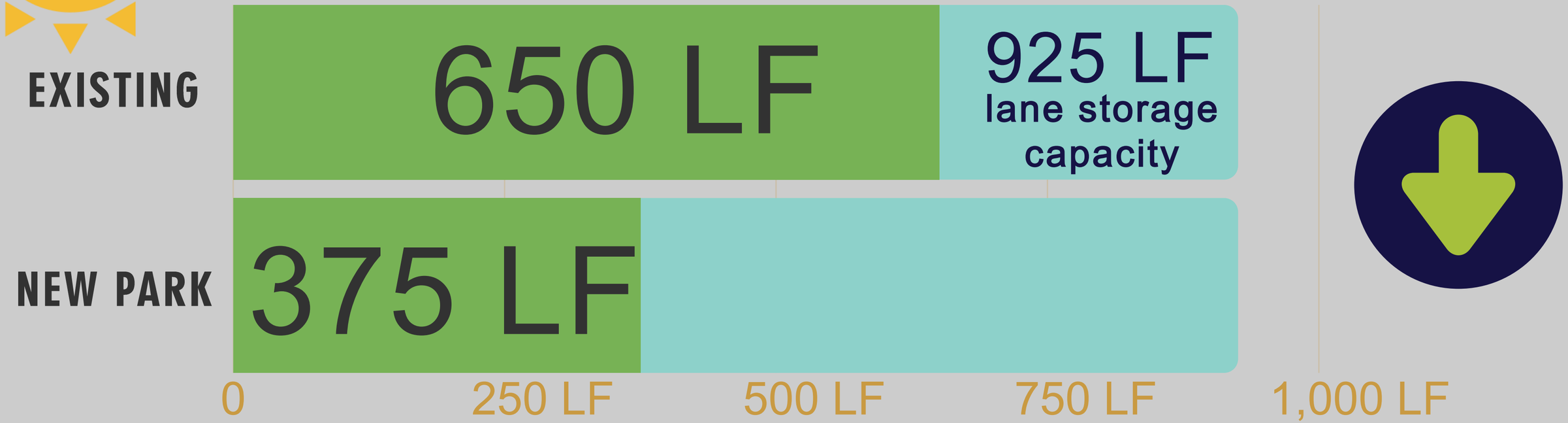
OPTION B

SIMULATION : NEW SIGNAL AND ALIGNMENT AT EXISTING PARK ENTRY



7-9
AM WEEKDAY TRAFFIC

SOUTHBOUND THROUGH LANES AT MOUNTAINGATE



LF = Lineal Feet

COMPARISON OF ALTERNATIVES A AND B

INTERSECTION	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekend MD Peak Hour		
	AM TRAFFIC	Future (2022) with Mission Canyon Park Project		PM TRAFFIC	Future (2022) with Mission Canyon Park Project		MD TRAFFIC	Future (2022) with Mission Canyon Park Project	
	Existing (2019)	Option A	Option B	Existing (2019)	Option A	Option B	Existing (2019)	Option A	Option B
1. Sepulveda Blvd & I-405 SB Ramps	F	F SIMILAR	F SIMILAR	C	E	C SIMILAR	C	D	B BETTER
2. Sepulveda Blvd & Mission Canyon Rd	A	--	C	A	--	A SIMILAR	A	--	A SIMILAR
3. Sepulveda Blvd & Mountaingate Dr.	C	C SIMILAR	B SIMILAR	A	F	B	A	A SIMILAR	A SIMILAR

Changes in existing conditions

Delay in Seconds: A ≤10 B >10 to 20 C >20 to 35 D >35 to 55 E >55 to 80 G >80

FEASIBILITY STUDY

COSTS AND TIMELINE: OPTION A

Additional cost of: **$9,868,032**
Construction Timeline: **18-24 months**

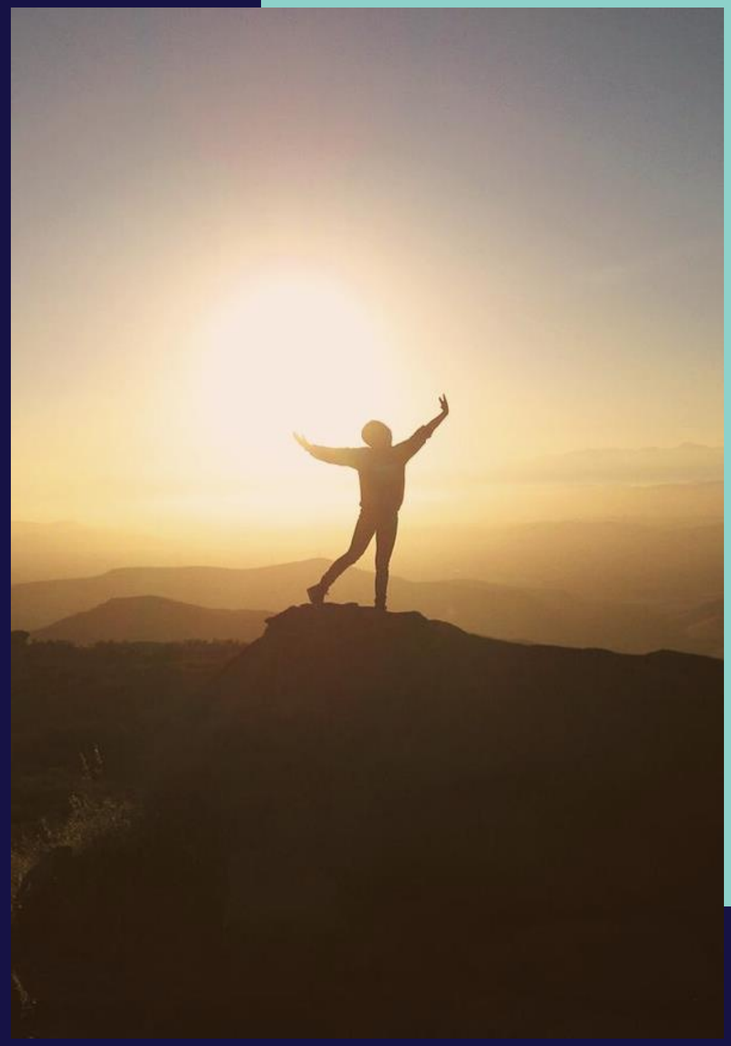
COSTS AND TIMELINE: OPTION B

Additional cost of: **$4,477,861**
Construction timeline: **9-12 months**

Conclusion

OPTION B : PREFERRED

- Based on preferable traffic simulation conditions
- Traffic safety
- Feedback from both Caltrans and LADOT
- Design Constraints from Option A
- Cost
- Construction timeline



Timeline and Next Steps

- **December 2020**: Revise CEQA Mitigated Negative Declaration
- **Jan/Feb. 2021**: Open Comment Period
- **Jan/Feb. 2021**: Community Meeting
- **Spring 2021**: Project Design and permitting
- **2022**: Shovel Ready Project

QUESTIONS?

FOR MORE INFORMATION

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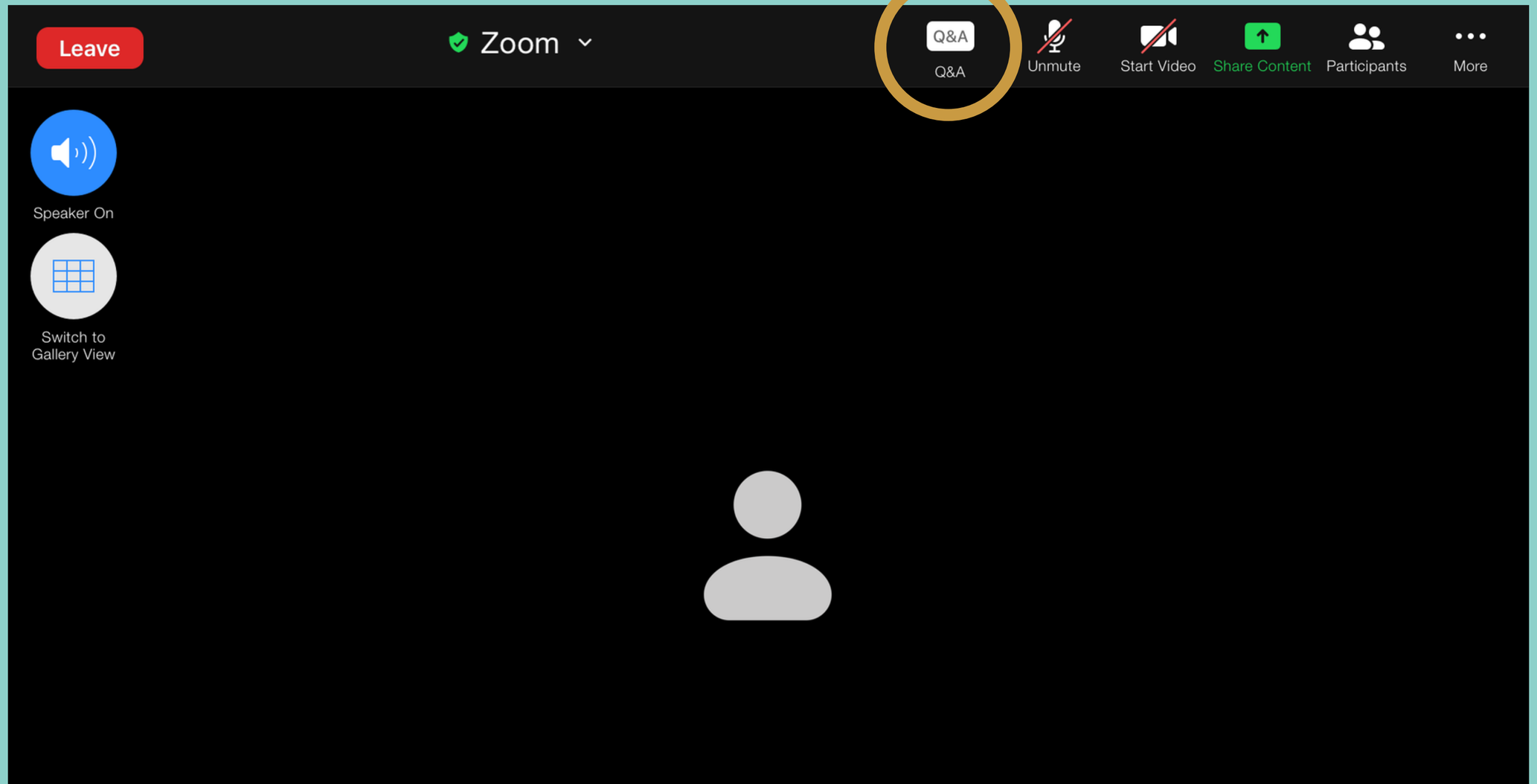
QUESTIONS?



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Questions and Comments

If you have any questions regarding the project please contact us:
323-221-9944 x350

Want to stay informed?

Email *

Name *

Questions or Comments

Keep Me Updated