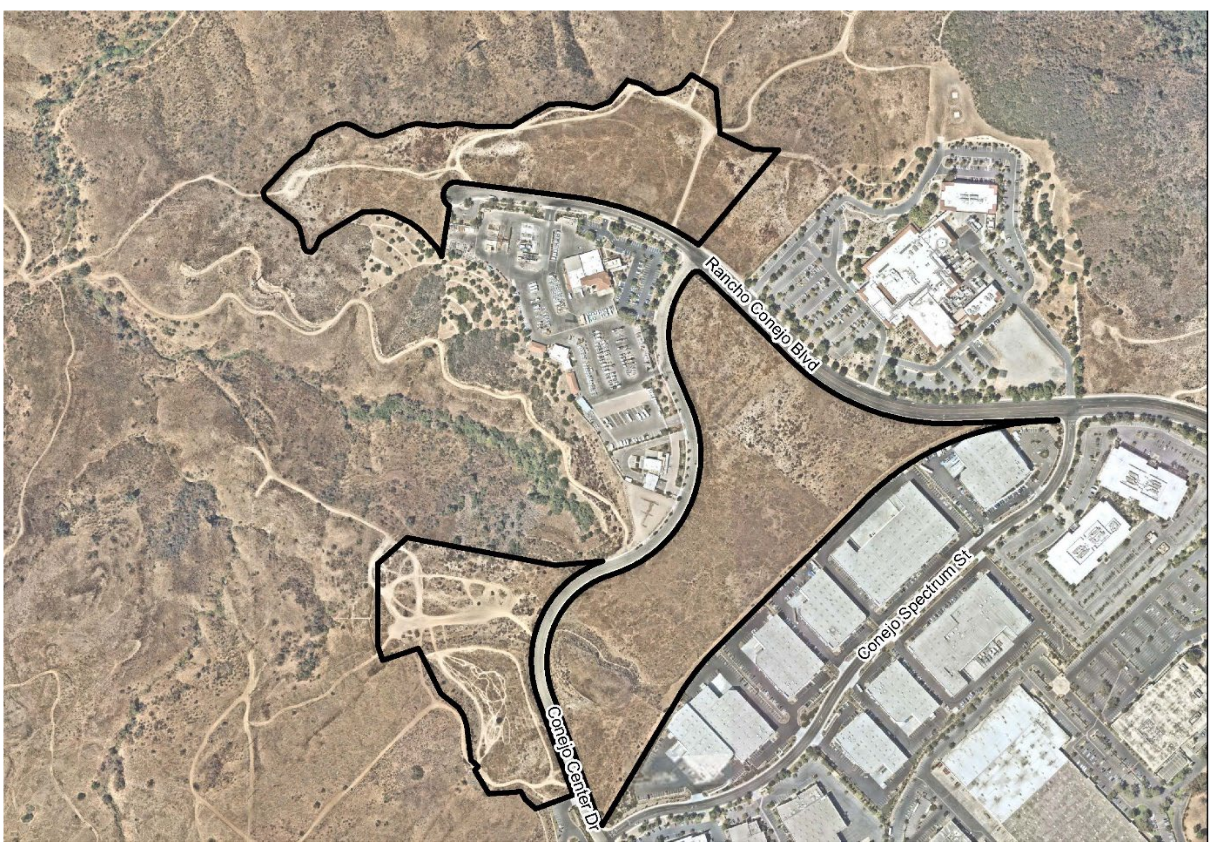
Draft

# CONEJO SUMMIT PROJECT

## Initial Study/Mitigated Negative Declaration

Prepared for
City of Thousand Oaks

February 2022



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# ACRONYMS AND ABBREVIATIONS

## Conejo Summit Project
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| Acronym/Abbreviation | Definition |
|---|---|
| AQMP | air quality management plan |
| ASHRAE | America Society of Heating, Refrigerating and Air-Conditioning Engineers |
| ATCM | Airborne Toxic Control Measures |
| BACT | Best Available Control Technology |
| BC3 | Business Council on Climate Change |
| BMP | best management practices |
| CAA | Clean Air Act |
| CAAQS | California Ambient Air Quality Standards |
| CalOSHA | California Division of Occupational Safety and Health |
| CAPCOA | California Air Pollution Control Officer's Association |
| CARB | California Air Resource Board |
| CBC | California Building Code |
| CCAR | California Climate Action Registry |
| CCR | California Code of Regulations |
| CDFA | California Department of Food and Agriculture |
| CDFG | California Department of Fish and Game |
| CDFW | California Department of Fish and Wildlife |
| CEAP | Climate and Environmental Action Plan |
| CEQA | California Environmental Quality Act |
| CESA | California Endangered Species Act |
| CGEU | California Gas and Electric Utilities |
| CGS | California Geological Survey |
| CH4 | methane |
| CNEL | Community Noise Equivalent Level |
| CNPS | California Native Plant Society |
| CNPS | Branch, California Native Plant Society |
| CO | carbon monoxide |
| $CO_2$ | carbon dioxide |
| COSCA | Conejo Open Space Conservation Area |
| CPA | Clean Power Alliance |
| CRHR | California Register of Historical Resources |
| CWA | Clean Water Act |
| CWPA | Critical Wildlife Passage Areas |
| dB | decibels |

| Acronym/Abbreviation | Definition |
|---|---|
| dBA | A-weighted decibels |
| DOC | California Department of Conservation |
| DPR | Department of Parks and Recreations |
| DTSC | California Department of Toxic Substances Control |
| EPA | Environmental Protection Agency |
| ERP | Emergency Response Plan |
| ESA | Environmental Science Associates |
| FEMA | Federal Emergency Management Act |
| FESA | Federal Endangered Species Act |
| FHWA | Federal Highway Administration |
| FMMP | Farmland Mapping and Monitoring Program |
| FTA | Federal Transit Administration |
| GSP | Groundwater Sustainability Plan |
| GWP | global warming potential |
| HCWC | Habitat Connectivity and Wildlife Corridor |
| HFC | hydrofluorocarbon |
| HMBP | Hazardous Materials Business Plan |
| HVAC | heating, ventilation, and air conditioning |
| LACM | Los Angeles County Natural History Museum |
| LEV | Low-Emission Vehicle |
| LID | Low Impact Development |
| LOS | level of service |
| LSAA | Lake or Streambed Alteration Agreement |
| LUST | leaking underground storage tank |
| MBTA | Migratory Bird Treaty Act |
| MLD | most likely descendant |
| MSC | Municipal Service Center |
| $N_2O$ | nitrous oxide |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| $NF_3$ | nitrogen trifluoride |
| NMFS | National Marine Fisheries Service |
| $NO_X$ | nitrogen oxide |
| NPDES | National Pollutant Discharge Elimination System |
| NPPA | California Native Plant Protection Act |
| OEHHA | Office of Environmental Health Hazard Assessment |
| OHP | California Office of Historic Preservation’s |
| OPR | Office of Planning and Research |
| PFC | perfluorocarbon |
| PHEV | plug-in hybrid electric vehicles |
| PM10 | respirable and fine particulate matter 10 microns or less in diameter |
| PPV | peak particle velocity |
| PRC | Public Resources Code |
| ROG | reactive organic gas |

| Acronym/Abbreviation | Definition |
|---|---|
| RPS | California Renewable Portfolio Standard |
| RWQCB | Regional Water Quality Control Board |
| SCAG | Southern California Association of Government |
| SCCAB | South Central Coast Air Basin |
| SCCIC | South Central Coastal Information Center |
| SCE | Southern California Edison |
| SCMLP | South Coast Missing Linkages Project |
| SF | square feet |
| $SF_6$ | sulfur hexafluoride |
| SLCP | Short-Lived Climate Pollutant |
| SMARA | Surface Mining and Reclamation Act |
| $SO_2$ | sulfur dioxide |
| SVP | Society of Vertebrate Paleontology |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TAC | toxic air contaminant |
| TCR | Tribal Cultural Resource |
| TIMF | Traffic Impact Mitigation Fee |
| TNM | Traffic Noise Model |
| TNW | Traditionally Navigable Water |
| TOMC | Thousand Oaks Municipal Code |
| USACE | U.S. Army Corps of Engineers |
| USDSG | U.S. Department of State Geographer |
| USEPA | U.S. Environmental Protection Agency |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | United States Geological Survey |
| VCAPCD | Ventura County Air Pollution Control District |
| VCFD | Ventura County Fire Department |
| VCOC | Ventura County Ordinance Code |
| VCOG | Ventura Council Association of Governments |
| VCTM | Ventura County Transportation Model |
| VdB | velocity in decibels |
| VMT | vehicles miles traveled |
| VTTM | Vesting Tentative Tract Maps |
| WDR | Waste Discharge Requirement |
| WSA | Water Supply Assessment |
| ZEV | Zero-Emission Vehicle |

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# CONEJO SUMMIT PROJECT

## Initial Study/Mitigated Negative Declaration

| | | |
|---|---|---|
| 1. | **Project Title:** | Conejo Summit Project |
| 2. | **Lead Agency Name and Address:** | City of Thousand Oaks, Community Development Department, 2100 Thousand Oaks Boulevard Thousand Oaks, CA 91362 |
| 3. | **Contact Person and Phone Number:** | Iain Holt, AICP Senior Planner 805 449-2314 |
| 4. | **Project Location:** | Conejo Center Drive and Rancho Conejo Blvd. Newbury Park |
| 5. | **Project Sponsor's Name and Address:** | Thousand Oaks Master LLC, 11200 Corbin Ave. Suite 201, Porter Ranch, CA 91326 |
| 6. | **General Plan Designation(s):** | Employment Park |
| 7. | **Zoning:** | M-1 Zone (Industrial Park Zone) |

8. **Description of Project:**

The proposed project includes construction of a 15-building business park on 16 privately owned parcels. The 16 parcels include previously created lots that are approximately 49.83 acres (2,170,594.80 square feet (SF)); the proposed buildings would be built on approximately 17 acres (754,222 SF). The lots are in three separate clusters: on the western side of Conejo Center Drive just northwest of the intersection of Conejo Center Drive and Conejo Spectrum Street; along the eastern side of Conejo Center Drive from Conejo Spectrum Street up to Rancho Conejo Boulevard; and north of the intersection of Conejo Center Drive and Rancho Conejo Boulevard, extending west to a parcel at the end of Rancho Conejo Boulevard. The lots would be located within and re-configured as shown on the proposed Vesting Tentative Tract No. 6021 (VTTM 6021) and Vesting Tentative Tract No. 6022 (VTTM 6022) that would be approved as part of the project development.

9. **Surrounding Land Uses and Setting.**

Nearby land uses as identified in the City of Thousand Oaks General Plan include "Industrial," "Institutional, and "Existing Parks, and Open Space" (City of Thousand Oaks, 2015). Adjacent to the project site to the north and west is land that is owned and managed by the Conejo Open Space Conservation Area (COSCA). Industrial development is located northeast of the project site as well as to the south and west of the parcels that would be developed, including the City's Municipal Service Center (MSC).

## 10. Other public agencies whose approval is required

A preliminary list of discretionary entitlements, reviews, and approvals required or requested for the project may include, but would not necessarily be limited to, the following:

- Vesting Tentative Tract Maps (2)
- Development Permit (including modifications to maximum building height and setback from centerline of street)
- Oak Tree Permit (encroachment)
- Landscape Plan Review
- Construction Permits, including building, grading, foundation, and associated permits
- Encroachment and Haul Route Permit, as may be required by the City of Thousand Oaks

## 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

*Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.*

The City has received no requests for Tribal Consultation under AB52.

# CONEJO SUMMIT PROJECT

Initial Study/Mitigated Negative Declaration

## 1.0 Project Description

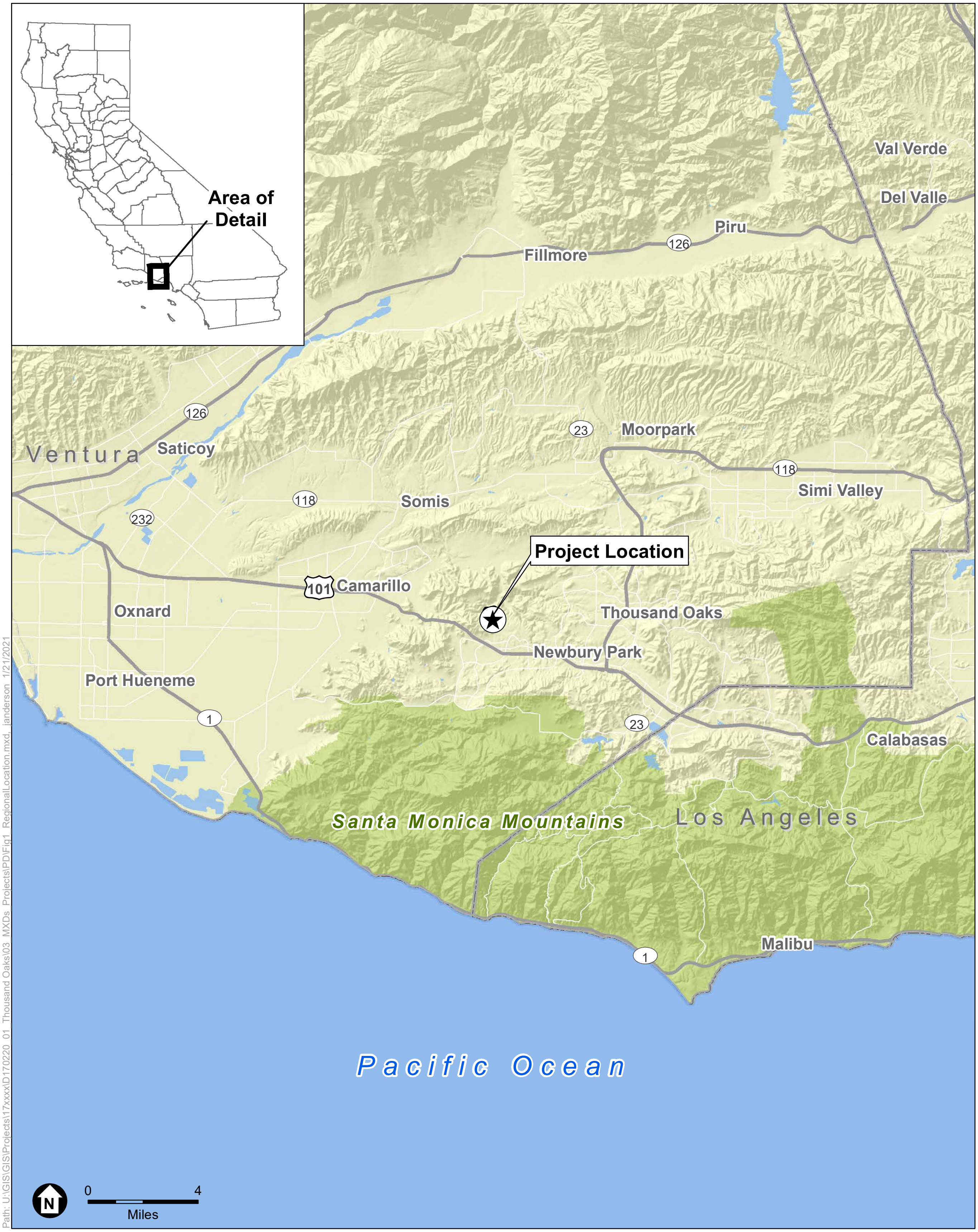
### 1.1 Introduction

Thousand Oaks Master LLC (Applicant) is proposing to implement the Conejo Summit Project (proposed project), a multiple-phase business park development that would include 15 industrial buildings within the City of Thousand Oaks (City). The City of Thousand Oaks, as Lead Agency, has determined that the proposed project is subject to the California Environmental Quality Act (CEQA), and that the preparation of this Initial Study/Mitigated Negative Declaration (IS/MND) is required. This section describes the proposed project's location and a description of the project components, including a brief description of the proposed construction schedule.

### 1.2 Project Location and Surrounding Uses

The proposed project site, which consists of approximately 49.83 acres, is located in Ventura County, within the City of Thousand Oaks (**Figure 1, Regional Location**). More specifically, the project site is located near the western boundary of the City within the northwestern portion of the Rancho Conejo Industrial Area, approximately 1 mile north of the 101 Freeway (**Figure 2, Project Site and Surrounding Area**).

The project site is located entirely within the City's Specific Plan No. 7 planning area, which is discussed in more detail below, in the northwestern portion of the existing Rancho Conejo Industrial Area. Land that is owned and managed by the COSCA is located to the north and west of the project site. Industrial development is located northeast of the project site as well as to the south and west of the parcels that would be developed, including the City's MSC.

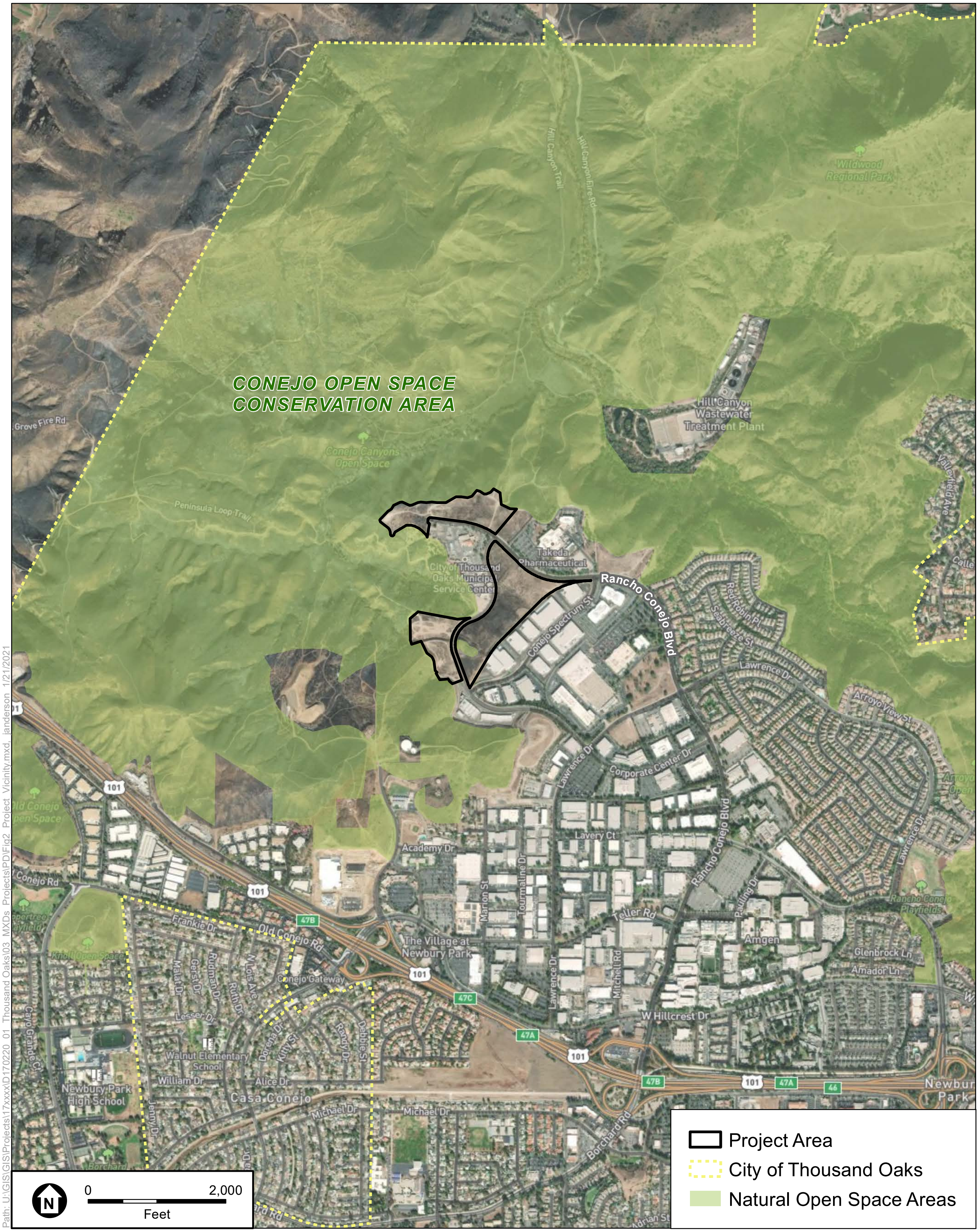



SOURCE: ESRI

Conejo Summit Project

**Figure 1**
Regional Location

ESA

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Source: Mapbox, 2020.

Conejo Summit Project

**Figure 2**
Project Site and Surrounding Area

ESA

## 1.3 Background and Existing Conditions

Specific Plan No. 7, which was originally adopted in 1983, covers approximately 1,862 acres of land.[1] Specific Plan No. 7 has been amended multiple time, most recently in January 2015 and again in October 2015. Specific Plan 7 Amendment 15 was adopted January 12, 2015, predesignated property under planning unit Q to Employment Park and evaluated the environmental impacts of the contemplated uses under that designation.[2] Specific Plan 7 Amendment 16 was adopted October 20, 2015, to change planning unit 5 from High Density to Employment Park. The City evaluated the environmental impacts of the contemplated uses under that designation[3].

Currently, the southern portions of the Rancho Conejo Industrial Area have been developed resulting in a biotech corridor with companies such as Amgen and Teledyne Technologies. These companies make up the majority of the industrial businesses in the City. As of 2017, Rancho Conejo Industrial Area contains over 120 industrial buildings ranging from 5,000 SF to 127,000 SF, with a vacancy rate of less than two percent.[4]

In 2000 the project area was graded, and infrastructure such as streets, sidewalks and utilities were installed to prepare for future buildings. The proposed project would be located within Planning Units B, 5, and Q identified in Specific Plan No. 7. The development standards provided in the Specific Plan are applicable to the project. Specific Plan No.7 designates the parcels as Employment Park and is zoned Industrial Park (M-1).

## 1.4 Project Description

The proposed project site, which encompasses approximately 49.83 acres (approximately 2,170,595 SF) of land, would be developed with 15 industrial buildings as shown in **Figure 3, Site Plan**. The lots are in three separate clusters: on the western side of Conejo Center Drive just northwest of the intersection of Conejo Center Drive and Conejo Spectrum Street; along the eastern side of Conejo Center Drive from Conejo Spectrum Street up to Rancho Conejo Boulevard; and north of the intersection of Conejo Center Drive and Rancho Conejo Boulevard, extending west to a parcel at the end of Rancho Conejo Boulevard. The application includes two proposed Vesting Tentative Tract Maps (VTTM) that will reconfigure the existing lots. No new lots are proposed. VTTM 6021, which includes lots in Planning Areas B and 5, and VTTM 6022, which includes lots in Planning Area Q. VTTM No. 6021 includes 36.85 acres that would be subdivided into 12 condominium lots for Buildings 1A, 1B, 1C, 1D, 1E, 1F, 1G, 2, 3, 4A, and 4B. VTTM 6022 includes 15.49 acres that would be subdivided into 4 condominium lots for Buildings 5A, 5B, 6A, and 6B.

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1 City of Thousand Oaks Resolution No. 83-326; Final EIR for MGM Ranch Specific Plan 7 Annexation 96, Volumes I and II) (Amendment No. 16).

2 City of Thousand Oaks Resolution No. 2015-006; Negative Declaration 2014-70252 (Amendment No. 15)

3 City of Thousand Oaks Resolution No. 2015-067; Negative Declaration 2015-70251 (Amendment No. 16)

4 Thousand Oaks Economic Development Strategic Plan. (November 2017). Retrieved April 15, 2020, from https://www.toaks.org/home/showdocument?id=16994


SOURCE: HPA Architeture, 2019

Conejo Summit Project

**Figure 3**
Site Plan

ESA

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**Table 1** provides the characteristics of each building on the 15 lots to be developed. The buildings would range in size from 32,015 SF to 93,308 SF of floor area. Building heights would range from 37 to 41 feet. The Rancho Conejo Specific Plan No. 7 applies the M-1 (Light Industrial) zoning standards, which has a maximum average height of 35 feet. As part of the Development Plan permit, the Municipal Code Section 9-4.1605 allows waivers requests to be considered by the decision-making body. The project includes waivers for the increase height as identified in Table 1 and reduction of the 100-foot setback from centerline of adjacent streets (Buildings 1A, 1G from Conejo Summit; Building 5B from Rancho Conejo Boulevard, 4A, 4B from future Academy Road extension). Typically, each building would have office space at the front of the building with warehouse/light manufacturing space in the rear. Primary access to the proposed buildings would be from Rancho Conejo Boulevard and Conejo Center Drive.

In addition, the proposed project would include site improvements for each lot as shown on Figure 3. Vehicular access, circulation and parking would be provided. The required fire lanes would be provided and are shown on Figure 3. Sufficient parking would be provided in surface lots, generally located around each building, for the ancillary office and industrial uses. In addition, utility hookups would be installed from existing lines within the streets to the proposed buildings. Loading docks and refuse areas would be developed. Landscaping would be installed on each lot.

**TABLE 1**
**SUMMARY OF BUILDING CHARACTERISTICS BY LOT**

| 7.5 | Lot Size | Building SF* | Use (SF) | | Building Height | Lot Coverage | Parking |
|---|---|---|---|---|---|---|---|
| **VTTM No. 6021** | | | **Office** | **Mfg.** | | | |
| 1A (1) | 2.38 ac (102,770 SF) | 33,552 SF | 5,000 SF (15%) | 28,552 SF (85%) | 38 feet | 32.6% | 78 stalls |
| 1B (2) | 2.27 ac (98,694 SF) | 39,896 SF | 6,500 SF (16%) | 33,396 SF (84%) | 38 feet | 40.4% | 93 stalls |
| 1C (3) | 2.22 ac (98,906 SF) | 39,900 SF | 7,500 SF (19%) | 32,400 SF (81%) | 39 feet | 41.2% | 95 stalls |
| 1D (4) | 3.98 ac (173,542 SF) | 62,568 SF | 4,500 SF (7%) | 58,068 SF (93%) | 41 feet | 36.1% | 135 stalls |
| 1E (5) | 3.86 ac (168,275 SF) | 74,101 SF | 5,000 SF (7%) | 69,101 SF (93%) | 41 feet | 44.0% | 144 stalls |
| 1F (6) | 2.81 ac (122,285 SF) | 52,924 SF | 5,000 SF (9%) | 47,924 SF (91%) | 40 feet | 43.3% | 106 stalls |
| 1G (7) | 4.07 ac (177,212 SF) | 50,460 SF | 5,000 SF (10%) | 45,460 SF (90%) | 41 feet | 28.5% | 96 stalls |
| (8) N/A** | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 2 (9) | 2.67 ac (116,490 SF) | 38,748 SF | 5,000 SF (13%) | 33,748 SF (87%) | 37 feet | 33.3% | 88 stalls |

| 7.5 | Lot Size | Building SF* | Use (SF) | | Building Height | Lot Coverage | Parking |
|---|---|---|---|---|---|---|---|
| 3<br>(10) | 5.17 ac<br>(225,088 SF) | 49,368 SF | 14,000 SF<br>(29%) | 35,368 SF<br>(71%) | 38 feet | 21.9% | 128 stalls |
| 4A<br>(11) | 2.30 ac<br>(100,047 SF) | 41,967 SF | 1,800 SF<br>(4%) | 40,167 SF<br>(96%) | 39 feet | 41.9% | 88 stalls |
| 4B<br>(12) | 2.42 ac<br>(105,362 SF) | 32,570 SF | 1,800 SF<br>(6%) | 30,770 SF<br>(94%) | 39 feet | 30.9% | 69 stalls |
| **VTTM No. 6021 Sub-Total:** | **34.15 ac (1,488,671 SF)** | **516,054 SF** | **61,100 SF** | **454,954 SF** | **N/A** | **N/A** | **1,120 stalls** |
| **VTTM No. 6022** | | **Office** | **Mfg.** | | | | |
| 5A<br>(1) | 5.50 ac<br>(239,665 SF) | 90,080 SF | 3,500 SF<br>(4%) | 86,580 SF<br>(96%) | 39 feet | 37.6% | 189 stalls |
| 5B<br>(2) | 1.29 ac<br>(56,315 SF) | 22,765 SF | 3,500 SF<br>(15%) | 19,265 SF<br>(85%) | 38 feet | 40.4% | 53 stalls |
| 6A<br>(3) | 2.09 ac<br>(90,871 SF) | 32,015 SF | 6,500 SF<br>(20%) | 25,515 SF<br>(80%) | 38 feet | 35.2% | 78 stalls |
| 6B<br>(4) | 6.61 ac<br>(268,104 SF) | 93,308 SF | 8,500 SF<br>(9%) | 84,808 SF<br>(91%) | 40 feet | 32.4% | 223 stalls |
| **VTTM No. 6022 Sub-Total:** | **15.49 ac (654,955 SF)** | **238,168 SF** | **22,000 SF** | **216,168 SF** | **N/A** | **N/A** | **543 stalls** |
| **VTTM No. 6021 and 6022 Total:** | **49.64 ac (2,143,626 SF)** | **754,222 SF** | **83,100 SF** | **671,122 SF** | **N/A** | **N/A** | **1663 Stalls** |

*VTTM = Vesting Tentative Tract Map, ac = acre(s), SF=square feet.
**VTTM No. 6021 Lot 8 is within the project area; however, the lot would not be developed as part of the project.

SOURCES: Thousand Oaks Master, LLC. (April 2019). Conejo Summit Project Site Plan.; ESA 2020.

The proposed project would include the dedication of and development of Academy Drive, which would extend to the north from Conejo Center Drive, and would provide access to Lots 4A and 4B (see Figure 3). The right-of-way for Academy Drive would be 50 feet in width and approximately 500 feet in length terminating at the western end of the Specific Plan area. In addition, the proposed project would provide an 8-foot-wide equestrian easement along the east side of the Academy Drive. The proposed project would also provide an additional 3-foot-wide easement along the north side of Conejo Center Drive. These easements would allow for a connection to the proposed equestrian trail along Academy Drive west of the project, which would be built by others, and the COSCA Western Plateau Trail. In addition, a 20-foot-wide fire access easement is proposed within the 30-foot-wide drive aisle of Lot 6B with access via Rancho Conejo Boulevard. The fire access easement would be within the drive aisle along the western side of Lot 6B and would connect in the northeastern portion of the lot to a proposed vehicular access to the Hill Canyon Fire Road. A 10-foot-wide pedestrian trail access easement is proposed to connect to the Hill Canyon Fire Trail. The pedestrian trail access would be within the surface parking lot on the eastern portion of Lot 6B and would connect to the Hill Canyon Fire Road.

### 1.4.1 Building Site Plans

This section provides a summary of the 15 proposed industrial buildings.

#### *Building 1A*

Building 1A would be constructed on a 2.36 acres (102,770 SF) lot (VTTM No. 6021 Lot 1). The building would contain a total of 33,552 SF, with approximately 5,000 SF of office (ground floor and mezzanine) and 28,552 SF of manufacturing floor area. The building would be approximately 38-feet in height. The building would cover approximately 32.6% of the lot and approximately 25.8% (26,537 SF) of the lot would be landscaped. Vehicular access to the lot would be from Rancho Conejo Boulevard and Conejo Center Drive. Surface parking would be provided, with a total of 78 parking stalls.

#### *Building 1B*

Building 1B would be constructed on a 2.27 acres (98,694 SF) lot (VTTM No. 6021 Lot 2). The building would contain a total of 39,896 SF, with approximately 6,500 SF of office (ground floor and mezzanine) and 33,396 SF of manufacturing floor area. The building would be approximately 38-feet in height. The building would cover approximately 40.4% of the lot and approximately 10.7% (10,553 SF) of the lot would be landscaped. Vehicular access to the lot would be from Rancho Conejo Boulevard and Conejo Center Drive. Surface parking would be provided, with a total of 93 parking stalls.

#### *Building 1C*

Building 1C would be constructed on a 2.22 acres (96,906 SF) lot (VTTM No. 6021 Lot 3). The building would contain a total of 39,900 SF, with approximately 7,500 SF of office (ground floor and mezzanine) and 32,400 SF of manufacturing floor area. The building would be approximately 39-feet in height. The building would cover approximately 41.2% of the lot and approximately 10% (9,684 SF) of the lot would be landscaped. Vehicular access to the lot would be from Rancho Conejo Boulevard and Conejo Center Drive. Surface parking would be provided, with a total of 95 parking stalls.

#### *Building 1D*

Building 1D would be constructed on a 3.98 acres (173,542 SF) lot (VTTM No. 6021 Lot 4). The building would contain a total of 62,568 SF, with approximately 4,500 SF of office (ground floor and mezzanine) and 58,068 SF of manufacturing floor area. The building would be approximately 41-feet in height. The building would cover approximately 36.1% of the lot and approximately 19.5% (33,838 SF) of the lot would be landscaped. Vehicular access to the lot would be from Rancho Conejo Boulevard and Conejo Center Drive. Surface parking would be provided, with a total of 135 parking stalls.

#### *Building 1E*

Building 1E would be constructed on a 3.86 acres (168,275 SF) lot (VTTM No. 6021 Lot 5). The building would contain a total of 74,101 SF, with approximately 5,000 SF of office (ground floor and mezzanine) and 69,101 SF of manufacturing floor area. The building would be approximately 41-feet in height. The building would cover approximately 44% of the lot and approximately 10% (16,900 SF) of the lot would be landscaped. Vehicular access to the lot would be from Conejo Center Drive and Rancho Conejo Boulevard. Surface parking would be provided, with a total of 144 parking stalls.

### *Building 1F*

Building 1A would be constructed on a 2.81 acres (122,285 SF) lot (VTTM No. 6021 Lot 6). The building would contain a total of 52,924 SF, with approximately 5,000 SF of office (ground floor and mezzanine) and 47,924 SF of manufacturing floor area. The building would be approximately 40-feet in height. The building would cover approximately 43.3% of the lot and approximately 10% (12,200 SF) of the lot would be landscaped. Vehicular access to the lot would be from Conejo Center Drive and Conejo Boulevard. Surface parking would be provided, with a total of 106 parking stalls.

### *Building 1G*

Building 1G would be constructed on a 4.07 acres (177,212 SF) lot (VTTM No. 6021 Lot 7). The building would contain a total of 50,460 SF, with approximately 5,000 SF of office (ground floor and mezzanine) and 45,460 SF of manufacturing floor area. The building would be approximately 41-feet in height. The building would cover approximately 28.5% of the lot and approximately 12.5% (22,170 SF) of the lot would be landscaped. Vehicular access to the lot would be from Conejo Center Drive and Rancho Conejo Boulevard. Surface parking would be provided, with a total of 96 parking stalls.

### *Vacant Lot (VTTM No. 6021 Lot 8)*

VTTM No. 6021 Lot 8 is located between Lot 7, where Building 1G is proposed to be constructed, and Lot 10, where Building 2 is proposed to be constructed. No development will occur on Lot 8, as it is a conservation easement, and it will remain in its current natural state.

### *Building 2*

Building 2 would be constructed on a 2.67 acres (116,490 SF) lot (VTTM No. 6021 Lot 9). The building would contain a total of 38,748 SF, with approximately 5,000 SF of office (ground floor and mezzanine) and 33,748 SF of manufacturing floor area. The building would be approximately 37-feet in height. The building would cover approximately 33.3% of the lot and approximately 23% (26,749 SF) of the lot would be landscaped. Vehicular access to the lot would be from Conejo Center Drive. Surface parking would be provided, with a total of 88 parking stalls.

### *Building 3*

Building 3 would be constructed on a 5.17 acres (225,088 SF) lot (VTTM No. 6021 Lot 10). The building would contain a total of 49,368 SF, with approximately 14,000 SF of office (ground floor and mezzanine) and 35,368 SF of manufacturing floor area. The building would be approximately 38-feet in height. The building would cover approximately 21.9% of the lot and approximately 34.2% (76,916 SF) of the lot would be landscaped. Vehicular access to the lot would be from Conejo Center Drive and potentially from Academy Drive. Surface parking would be provided, with a total of 128 parking stalls.

### *Building 4A*

Building 4A would be constructed on a 2.3 acres (100,047 SF) lot (VTTM No. 6021 Lot 11). The building would contain a total of 41,967 SF, with approximately 1,800 SF of office (ground floor and mezzanine) and 40,167 SF of manufacturing floor area. The building would be approximately 39-feet in height. The building would cover approximately 41.9% of the lot and approximately 14.2% (14,245 SF) of the lot would be landscaped. Vehicular access to the lot would be from Conejo Center Drive and Academy Drive. Surface parking would be provided, with a total of 88 parking stalls.

### *Building 4B*

Building 4B would be constructed on a 2.42 acres (105,3620 SF) lot (VTTM No. 6021 Lot 12). The building would contain a total of 32,570 SF, with approximately 1,800 SF of office (ground floor and mezzanine) and 30,770 SF of manufacturing floor area. The building would be approximately 39-feet in height. The building would cover approximately 30.9% of the lot and approximately 25.5% (26,906 SF) of the lot would be landscaped. Vehicular access to the lot would be from Conejo Center Drive and Academy Drive. Surface parking would be provided, with a total of 69 parking stalls.

### *Building 5A*

Building 5A would be constructed on a 5.5 acres (239,665 SF) lot (VTTM No. 6022 Lot 1). The building would contain a total of 90,080 SF, with approximately 3,500 SF of office (ground floor and mezzanine) and 86,580 SF of manufacturing floor area. The building would be approximately 39-feet in height. The building would cover approximately 37.6% of the lot and approximately 13.2% (31,745 SF) of the lot would be landscaped. Vehicular access to the lot would be from Rancho Conejo Boulevard. Surface parking would be provided, with a total of 189 parking stalls.

### *Building 5B*

Building 5B would be constructed on a 1.29 acres (56,315 SF) lot (VTTM No. 6022 Lot 2). The building would contain a total of 22,765 SF, with approximately 3,500 SF of office (ground floor and mezzanine) and 19,265 SF of manufacturing floor area. The building would be approximately 38-feet in height. The building would cover approximately 40.4% of the lot and approximately 17% (9,566 SF) of the lot would be landscaped. Vehicular access to the lot would be from Rancho Conejo Boulevard. Surface parking would be provided, with a total of 53 parking stalls.

### *Building 6A*

Building 6A would be constructed on a 2.09 acres (90,871 SF) lot (VTTM No. 6022 Lot 3). The building would contain a total of 32,015 SF, with approximately 6,500 SF of office (ground floor and mezzanine) and 25,515 SF of manufacturing floor area. The building would be approximately

38-feet in height. The building would cover approximately 35.2% of the lot and approximately 18.6% (16,933 SF) of the lot would be landscaped. Vehicular access to the lot would be from Rancho Conejo Boulevard. Surface parking would be provided, with a total of 78 parking stalls.

### *Building 6B*

Building 6B would be constructed on a 6.61 acres (288,104 SF) lot (VTTM No. 6022 Lot 4). The building would contain a total of 93,308 SF, with approximately 8,500 SF of office (ground floor and mezzanine) and 84,808 SF of manufacturing floor area. The building would be approximately 40-feet in height. The building would cover approximately 32.4% of the lot and approximately 19.7% (56,889 SF) of the lot would be landscaped. Vehicular access to the lot would be from Rancho Conejo Boulevard. Surface parking would be provided, with a total of 223 parking stalls.

## 1.5 Cumulative Projects

CEQA Guidelines Section 15130(a) requires analysis of a project's cumulative impacts when a project's incremental effects are "cumulatively considerable. Impacts that are "cumulatively considerable" are those impacts where the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects (CEQA Guidelines Section 15065(a)(3)).

The discussion of cumulative impacts is to "be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute." CEQA Section 15130(b)(1) further states that complying with one of the following elements is necessary for an adequate discussion of significant cumulative impacts, either:

- A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
- A summary of projects contained in an adopted local, regional or statewide plan, or related planning document, which describes or evaluates conditions contributing to the cumulative effect.

For the purposes of this MND, the City has followed the first approach, evaluating the project's potential environmental impact with the potential environmental impacts associated with like projects in the immediate vicinity. **Table 2** includes a description of the cumulative projects considered.

**TABLE 2**
**CUMULATIVE PROJECTS**

| Project Location | Project Type | Project Description |
|---|---|---|
| 1300 Rancho Conejo Boulevard | Commercial | The demolition 5,600 square feet of existing industrial building and the construction of a 7,700 square foot addition, including an interior and exterior remodel, hardscape, drainage, parking lot improvements, and removal and replacement of existing landscaping to accommodate proposed building modifications, site improvements, and onsite bio-retention basins. |

| Project Location | Project Type | Project Description |
|---|---|---|
| 1515 Rancho Conejo Boulevard | Industrial | Construction of two new 181,958 square foot, one-story industrial buildings, 35 feet in height, including grading, hardscape, landscape, and encroachment into the protected zone of various oaks trees and encroachment and removal of various sycamore trees |
| West of the intersection of Corporate Center Drive and Rancho Conejo Boulevard | Commercial | Request for Residential Capacity Allocation for a proposed 26 residential apartment unit project. The project is associated with a General Plan Amendment to change the existing Land Use designation from Industrial to High Density Residential. |
| 2150 W. Hillcrest | Residential | Request for Residential Capacity Allocation for a proposed 332 residential apartment unit project with density bonus. The project is associated with a General Plan Amendment to change the existing Land Use designation from Commercial to High Density. |
| 701 N Wendy Drive | Commercial | A new 9,990 square foot building with a fenced outdoor play area to be utilized as a daycare; a new 1,800 square foot drive-through building pad; two outdoor dining areas; relocation of an existing trash enclosure; and parking modifications. |

SOURCE: City of Thousand Oaks, 2021

## 1.6 Construction Schedule and Activities

The buildings are anticipated to be of conventional tilt-up panel construction with concrete interior slabs on grade. Grading would consist of minor cuts and fills to provide level building pads and parking and circulation areas, and to remove the upper weathered desiccated soils. Additional minor grading would be needed to level the previously graded pads. The proposed project would require approximately 95,440 cubic yards of cut and fill, which would be balanced on the site. As such, no import or export of materials is anticipated to occur.

The proposed project would consist of a maximum of seven phases, with an anticipated construction period of 12 to 15 months for each phase.

## 1.7 Project Approvals

A preliminary list of discretionary entitlements, reviews, and approvals required or requested for the project may include, but would not necessarily be limited to, the following:

- Vesting Tentative Tract Maps (2)
- Development Permit (including modifications to maximum building height and setback from centerline of street)
- Oak Tree Permit (encroachment)
- Landscape Plan Review
- Construction Permits, including building, grading, foundation, and associated permits
- Encroachment and Haul Route Permit, as may be required by the City of Thousand Oaks

# 2.0 Environmental Factors Potentially Affected

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

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☒ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☐ Energy |
| ☒ Geology/Soils | ☐ Greenhouse Gas Emissions | ☒ Hazards & Hazardous Materials |
| ☐ Hydrology/Water Quality | ☐ Land Use/Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population/Housing | ☐ Public Services |
| ☐ Recreation | ☒ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities/Service Systems | ☒ Wildfire | ☒ Mandatory Findings of Significance |

**DETERMINATION: (To be completed by the Lead Agency)**
On the basis of this initial study:

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

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

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

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

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

| | |
|---|---|
| [signature] | 2/9/22 |
| Signature | Date |
| | |
| Signature | Date |

# 3.0 Environmental Checklist

## Aesthetics

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **I. AESTHETICS —** Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

### Discussion

a) **Less-than-Significant Impact.** The proposed project includes the development of 15 industrial buildings within an adopted Specific Plan area. The project site consists of approximately 50 acres of the previously approved 1,862 acres Specific Plan No.7. Currently the proposed project site includes graded lots for the future industrial buildings, sidewalks, and streets. COSCA open space land is located to the north and west of the project site and industrial development is located northeast, south, and west of the project site. To the north and west of the proposed buildings 5A, 5B and 6A within COSCA, there are several trails including the Hill Canyon Trail that have potential views of the project site. The trails within COSCA would be considered a scenic vista and therefore views could be impacted as a result of the development of the proposed project. As a result, visual simulations were prepared to illustrate the visual effect the proposed project would have to scenic quality in the area. Photos were taken from the surrounding public trails within COSCA that potentially had views of the proposed project (**Figure 4, Photo Location Map)**. From each of these photo locations a visual simulation of the proposed buildings was prepared (**Figures 5 through 7**). The proposed buildings average approximately 39 feet in height, which requires a waiver under the Municipal Code Section 9-4.1605 for the increase height as identified in Table 1 for each building. As shown on the simulations, portions of the buildings would be visible from the trails. However, the buildings would not substantially change the view from the trails or scenic vista. In addition, the buildings would be painted with earth tones to blend in with the surrounding area and would avoid reflective material, where feasible. Perimeter landscaping will also be required to soften the views of the buildings. Furthermore, the buildings' architecture would be similar in style, mass, and height as the existing surrounding industrial buildings. As a result, the proposed project would not have an adverse effect on scenic vistas and impacts would be less than significant.

b) **No Impact.** There are no officially designated state scenic highways within the vicinity of the proposed project, therefore, there would be no impact to scenic resources along a scenic highway (Caltrans, 2019).

c) **Less-than-Significant Impact.** The proposed project would not conflict with the current zoning or regulations detailed in the City of Thousand Oaks General Plan, nor Specific Plans 7 where the project is located. The project site is currently zoned as Industrial Park M-1 in the City of Thousand Oaks General Plan and as Employment Park in Specific Plan 7. Implementation of the proposed project in its proposed location would be consistent with current zoning and regulation regarding scenic quality. Impacts would be less than significant.

d) **Less-than-Significant Impact.** The proposed project once completed would introduce new light sources to the project area. These include lighting to illuminate parking areas, driveways, doorways, walkways, and signs, as well as light emitted from windows and vehicle headlights. However, all lighting installed at the project site would comply with existing City standards which currently require lighting to be shielded to prevent excessive light and glare. Impacts would be less than significant.

## Cumulative Impacts

As discussed above, construction of the proposed project would result in a less-than-significant impact on scenic vistas, scenic highways, and visual character.

Aesthetics impacts of the proposed cumulative projects, if any, would be addressed on a project-by-project basis and reviewed by the City. There would be three commercial developments and two residential developments within the vicinity of the project. Each cumulative project would be subject to planning and zoning requirements, as well as to design review by the City to ensure that each project design is consistent with established standards. Where potential impacts could occur, the City would require appropriate environmental review and analysis, and, if required, mitigation as appropriate. The proposed project would not conflict with the current zoning or architectural regulations detailed in the City of Thousand Oaks General Plan or Specific Plans 7. As a result, the proposed project combined with other projects would not result in a cumulatively considerable aesthetic impact.

## References

Caltrans, 2019. Scenic Highways. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways


Source: Nearmap, 2020.

Conejo Summit Project

**Figure 4**
Photo Location Map

ESA

Existing View

Proposed View



**Figure 5**
View from Location A

Existing View

Proposed View

SOURCE: VisionScape Imagery



**Figure 6**
View from Location B


Existing View


Proposed View

SOURCE: VisionScape Imagery

Conejo Summit Project

**Figure 7**
View from Location C

ESA

# Agriculture and Forestry Resources

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

## Discussion

a) **No Impact.** The proposed project would be constructed on land designated by the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP) as Urban/Built Up Land (DOC, 2020a). Construction and operation of the proposed project would not result in a change to the designation nor would the proposed project result in the conversion of any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. Therefore, no impact would occur.

b) **No Impact.** The project site is not located on land under a Williamson Act Contract and is not located on land zoned for agricultural use (City of Thousand Oaks, 2020a). The proposed project would be located on land zoned as M-1 Zone (Industrial Park). As a result, implementation of the proposed project would not conflict with existing zoning or agricultural use or a Williamson Act contract. No impact would occur.

c,d) **No Impact.** The City of Thousand Oaks General Plan Land Use Elements and zoning maps do not include zoning categories related to forest land, timberland, or timberland zoned as Timberland Production (City of Thousand Oaks, 2020b). The proposed project site is currently designation as Employment Pak and is zoned as Industrial Park M-1. Therefore, the project would not conflict with existing zoning for forested land or timberland nor convert timberland or forested land to other uses, no impact would occur.

e) **No Impact.** As discussed above, the project area is not located on land designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance, timberland, or forest land. Therefore, implementation of the proposed project would not convert farmland or forestland, and no impact would occur.

## Cumulative Impacts

As described above in Agriculture and Forestry Resources, the project would not impact Prime Farmland, Unique Farmland, or Farmland of Statewide Importance or be located on Williamson Act land or forest land. The proposed project and cumulative projects are located in areas designated by the California DOC FMMP as Urban/Built Up Land. There are no cumulative projects that would impact agricultural or forest lands in the vicinity of the proposed project. Therefore, the proposed project, when considered in addition to the anticipated impacts of other projects in the cumulative scenario, would not contribute to cumulatively considerable impacts to agricultural resources.

## References

California Department of Conservation (DOC). 2020. Important Farmland Maps: Ventura County. Available online at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/, accessed on March 20, 2020.

City of Thousand Oaks. 2020a. City of Thousand Oaks General Plan Zoning. Available online at: https://www.toaks.org/about-us/about-thousand-oaks/online-mapping, accessed March 20, 2020.

City of Thousand Oaks. 2020b. City of Thousand Oaks General Plan Land Use Map. Available online at: https://www.toaks.org/home/showdocument?id=330, accessed March 20, 2020

# Air Quality

| Issues (and Supporting Information Sources): | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **III. AIR QUALITY —** Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☒ | ☐ | ☐ |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | ☐ | ☒ | ☐ | ☐ |
| c) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

## Discussion

a) **Less-than-Significant Impact with Mitigation.** Ventura County Air Pollution Control District (VCAPCD) is responsible for attaining and maintaining air quality standards in the Ventura County portion of the South Central Coast Air Basin (SCCAB) through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of VCAPCD includes preparation of plans for attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. VCAPCD and the Ventura Council Association of Governments (VCOG) are responsible for preparing the air quality management plan (AQMP), which addresses federal and state Clean Air Act (CAA) requirements. The VCAPCD has adopted Air Quality Management Plans (AQMPs) to meet the CAAQS and NAAQS. The VCAPCD Governing Board adopted the 2016 AQMP on February 14, 2017.

The proposed project is located within the Ventura County portion of the SCCAB, which is under the jurisdiction of the VCAPCD for air quality planning and control. As such, VCAPCD's 2016 AQMP is the applicable air quality plan for the proposed project. Projects that are consistent with the regional population, housing, and employment forecasts identified by VCOG are considered to be consistent with the AQMP growth projections, since the forecast assumptions by VCOG forms the basis of the land use and transportation control portions of the AQMP. Additionally, because VCOG's regional growth forecasts are based upon, among other things, land uses designated in general plans, a project that is consistent with the land use designated in a general plan would also be consistent with the VCOG's regional forecast projections, and thus also with the AQMP growth projections.

The proposed project would construct 15 industrial buildings and associated infrastructure such as parking lots and lighting. The project is a planned development as discussed in the City of Thousand Oaks Rancho Conejo Specific Plan 7 (refer to Section XIV, *Population and Housing*). As the land-use and development within the proposed project was included in the General Plan updates as of 2015, the land-use and development were accounted for in the General Plan and the growth has therefore been included in the 2016 AQMP. As such, the proposed project would not change the regional growth forecasts as identified in the local General Plan or those of the 2016 AQMP.

Additionally, the proposed project construction would comply with VCAPCD Rule 55 requirements and the Airborne Toxic Control Measures (ATCM) to limit heavy duty diesel motor vehicle idling to no more than 5 minutes at any given time. These measures would also be imposed on other construction projects in the Air Basin as required, which would include each of the cumulative projects in the project area. Compliance with these applicable requirements is consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Furthermore, as detailed in III. Air Quality b) below, the projected construction emissions for criteria pollutants would not exceed the VCAPCD's regional significance thresholds for construction activities with the implementation of **Mitigation Measure AQ-1**. In addition, operational activities would not exceed regional significance thresholds. This provides further evidence that the project would not conflict with or obstruct implementation of the AQMP, and this impact would be less than significant with mitigation.

**Mitigation Measure:**

The following measure is required to reduce reactive organic gas (ROG) and nitrogen oxide ($NO_X$) emissions during construction of the proposed project.

**Mitigation Measure AQ-1:** The following measures shall be implemented with respect to construction activities to reduce $NO_X$ and ROG emissions. These requirements shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment.

- The proposed project shall use typical off-road diesel-powered construction equipment that meets or exceeds the California Air Resource Board (CARB) and United States Environmental Protection Agency (USEPA) Tier 4 off-road emissions standards for equipment rated at 50 horsepower or greater. Such equipment will be outfitted with Best Available Control Technology (BACT) devices, including a CARB-certified Level 3 Diesel Particulate Filter or equivalent; and
- The following measures to mitigate ozone precursor emissions from construction motor vehicles when emissions exceed 25 pounds per day (VCAPCD, 2003):
  - o Minimize equipment idling time;
  - o Maintain equipment engines in good condition and in proper tune as per manufacturer's specifications;

  - Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time; and
  - Use alternatively fueled construction equipment such as compressed natural gas and liquefied natural gas, or electric, if feasible.
- The proposed project shall either:
  - Incorporate low VOC coatings such that non-parking lot/paving area coatings shall be an average of 150 grams per liter or less; or
  - Extend architectural coating phases for each building to a minimum of 140 days.
  - For overlapping construction architectural coating phases, incorporate low VOC coatings such that non-parking lot/paving area coatings shall be an average of 75 grams per liter or less.

b) **Less-than-Significant Impact with Mitigation.** The City of Thousand Oaks has not developed specific air quality thresholds for air quality impacts. However, as stated in Appendix G of the *CEQA Guidelines*, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. As such, the significance thresholds and analysis methodologies in VCAPCD's CEQA Air Quality Handbook are used in evaluating project impacts. The VCAPCD 's CEQA Air Quality Handbook focuses on reducing ozone precursor emissions, which includes ROGs (also referred to as volatile organic compounds [VOCs]) and $NO_X$ because these pollutants could jeopardize attainment of the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for ozone in Ventura County. The other criteria pollutants of concern include: carbon monoxide (CO), which is a colorless and odorless gas and can cause dizziness, confusion, unconsciousness or even death at high levels; sulfur dioxide ($SO_2$), which is also colorless and can cause asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation, such as wheezing, shortness of breath and chest tightness; and respirable and fine particulate matter 10 microns or less in diameter (PM10) and 2.5 microns or less in diameter (PM2.5), which can worsen respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits and respiratory mortality. These pollutants do not have significance thresholds provided by the VCAPCD. In lieu of VCAPCD thresholds for these criteria pollutants, the SCAQMD's significance thresholds are used as screening criteria for the determination of significance. The City has determined that the SCAQMD's significant thresholds for CO, $SO_2$, PM10 and PM 2.5 provides a reasonable and thorough screening threshold for these criteria pollutants and SCAQMD is an established air basin that is adjacent to VCAPCD.

### Construction

Proposed construction activities associated with the project would generate pollutant emissions from the following construction activities: (1) grading and site preparation; (2) building construction; (3) paving; and (4) architectural coating activities. These construction activities would temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants. The amount of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring simultaneously.

Construction of proposed project is modeled to occur over seven phases beginning in 2021 and ending in 2027 with various phases occurring over different time periods. The seven phases are as follows with modeling details provided in **Appendix A**:

- Phase 1: Buildings 1A, 1B, 1C, and 1D
- Phase 2: Buildings 1E, 1F, and 1G
- Phase 3: Building 2
- Phase 4: Building 3
- Phase 5: Buildings 5A and 5B
- Phase 6: Buildings 6A and 6B
- Phase 7: Buildings 4A and 4B

For the purposes of the air quality analysis, construction activities were modeled for the earliest potential time frame to provide for a conservative analysis. If construction is delayed and begins subsequent to 2021, the emissions presented in this IS/MND would be conservative as emissions occurring in future years would be lower than those analyzed herein due to the use of a more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to State regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment. Construction activity would be limited to Monday through Friday except on federal holidays. Assumptions, including detailed phasing, and modeling output are included in Appendix A.

Construction emissions are considered short term and temporary, but have the potential to represent a significant impact with respect to air quality. Emissions of ozone precursors and particulate matter tend to be of potential concern given that the Ventura County portion of the SCCAB is designated as nonattainment for ozone (NAAQS and CAAQA) and PM10 (CAAQS). Emissions of ozone precursors ROG and $NO_X$ are primarily generated from heavy-duty equipment and motor vehicle exhaust and vary as a function of vehicle trips per day associated with debris hauling, delivery of construction materials, vendor trips, and worker commute trips, and the types and number of heavy-duty, off-road equipment used and the intensity and frequency of their operation. In addition, construction-related ROG emissions also result from the application of architectural coatings and vary depending on the amount of coatings applied each day. Particulate matter (i.e., PM10 and PM2.5) is among the pollutants of greatest localized concern with respect to construction activities given that particulate concentrations tend to be higher near the source of the emissions. Particulate emissions from construction activities can lead to adverse health effects and nuisance concerns, such as reduced visibility and soiling of exposed surfaces. Particulate emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Construction emissions of PM can vary greatly depending on the level of activity, the specific operations taking place, the number, and types of equipment operated, local soil conditions, weather conditions, and the amount of earth disturbance.

It is mandatory for all construction projects in the SCCAB to comply with VCAPCD Rule 55 for controlling fugitive dust. Incorporating Rule 55 into the proposed project reduces regional PM10 and PM2.5 emissions from construction activities. Specific Rule 55 control requirements may include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the proposed project site, covering all trucks hauling soil with a fabric cover and maintaining a freeboard height of 12 inches, and maintaining effective cover over exposed areas. Compliance with Rule 55 was accounted for in the construction emissions modeling.

**Table 3** summarizes the modeled peak daily emissions of criteria air pollutants and ozone precursors associated with the proposed project for each individual construction phase as well as for overlaps where construction of different phases occurs at the same time.[5] As shown in Table 3, the maximum daily construction emissions generated by the proposed project's worst-case construction scenario would exceed VCAPCD's daily significance threshold for ROG and $NO_X$. Therefore, the proposed project would result in potentially significant construction emission impacts.

Incorporation of Mitigation Measure AQ-1 would reduce criteria pollutant emissions, specifically with respect to ROG and $NO_X$. As shown in **Table 4**, with incorporation of mitigation, emissions of ROG and $NO_X$ would be reduced to below the significance thresholds[6]. The other criteria pollutants evaluated would remain below the screening levels. Therefore, with incorporation of mitigation measure AQ-1, the proposed project's construction emission impacts would be less than significant.

5 The maximum daily unmitigated construction emissions are associated with overlapping construction of phases 1 (Buildings 1A, 1B, 1C and 1D) and 2 (Buildings 1E, 1F, and 1G).

6 The maximum daily mitigated construction emissions are associated with overlapping construction of phases 1 (Buildings 1A, 1B, 1C and 1D) and 2 (Buildings 1E, 1F, and 1G).

**TABLE 3**
**MAXIMUM DAILY UNMITIGATED REGIONAL CONSTRUCTION EMISSIONS**

| | Maximum Regional Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **ROG** | **$NO_x$** | **CO** | **$SO_2$** | **$PM^{10}$** | **$PM^{2.5}$** |
| Grading | 9 | 96 | 65 | <1 | 4 | 4 |
| Building Construction (BC) | 6 | 60 | 34 | <1 | 3 | 2 |
| Paving | 3 | 25 | 21 | <1 | 1 | 1 |
| Architectural Coating (AC) | 73 | 3 | 4 | <1 | <1 | <1 |
| BC/Paving/AC | 82 | 88 | 59 | <1 | 4 | 4 |
| **Maximum Daily Emissions [a]** | **82** | **96** | **65** | **<1** | **4** | **4** |
| *Significance Thresholds / Screening Levels* | 25 [b] | 25 [b] | 550 [c] | 150 [c] | 150 [c] | 55 [c] |
| Significant Impact? | Yes | Yes | No | No | No | No |

[a] Maximum daily emissions are the sum of the overlapping construction phases that result in the greatest emissions on a peak day of construction. Note: All emissions shown above include VCAPCD Rule 55 fugitive dust reduction measures.

[b] VCAPCD Significance Threshold.

[c] Screening Level based on SCAQMD.

SOURCE: ESA, 2021

**TABLE 4**
**MAXIMUM DAILY MITIGATED REGIONAL CONSTRUCTION EMISSIONS**

| | Maximum Regional Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **ROG** | **$NO_x$** | **CO** | **$SO_2$** | **$PM^{10}$** | **$PM^{2.5}$** |
| Grading | 2 | 11 | 70 | <1 | <1 | <1 |
| Building Construction (BC) | 1 | 6 | 41 | <1 | <1 | <1 |
| Paving | 1 | 4 | 26 | <1 | <1 | <1 |
| Architectural Coating (AC) | 23 | <1 | 4 | <1 | <1 | <1 |
| BC/Paving/AC | 25 | 11 | 71 | <1 | <1 | <1 |
| **Maximum Daily Emissions [a]** | **25** | **11** | **70** | **<1** | **<1** | **<1** |
| *Significance Thresholds / Screening Levels* | 25 [b] | 25 [b] | 550 [c] | 150 [c] | 150 [c] | 55 [c] |
| Significant Impact? | No | No | No | No | No | No |

[a] Maximum daily emissions are the sum of the overlapping construction phases that result in the greatest emissions on a peak day of construction. Note: All emissions shown above include VCAPCD Rule 55 fugitive dust reduction measures.

[b] VCAPCD Significance Threshold.

[c] Screening Level based on SCAQMD.

SOURCE: ESA, 2021

### Operation

Proposed operational activities associated with the project would generate criteria pollutant and ozone precursor emissions from the following: (1) building energy consumption; (2) building maintenance; and (3) worker/customer vehicle trips. Project operations are anticipated to begin in 2023 with final buildout between 2027 and 2040. As emission rates related to energy consumption and vehicle exhaust decline in future years due to the adoption and implementation of more stringent building energy and vehicle emissions standards, emissions from the initial year of operation as well as both buildout years are reported herein. As shown in **Table 5**, emissions would be below significance thresholds for all operational years. Therefore, emissions from the implementation of the proposed project would be less than significant.

**TABLE 5**
**MAXIMUM DAILY REGIONAL OPERATIONAL EMISSIONS**

| | Maximum Regional Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **ROG** | **$NO_x$** | **CO** | **$SO_2$** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Initial Operational Year 2023** | | | | | | |
| Area Source | 2 | <1 | <1 | <1 | <1 | <1 |
| Energy | <1 | <1 | <1 | <1 | <1 | <1 |
| Mobile | 3 | 4 | 22 | <1 | 6 | 2 |
| Total | **5** | **4** | **22** | **<1** | **6** | **2** |
| **Buildout Operational Year 2027** | | | | | | |
| Area Source | 13 | <1 | <1 | <1 | <1 | <1 |
| Energy | <1 | <1 | <1 | <1 | <1 | <1 |
| Mobile | 5 | 7 | 38 | <1 | 13 | 3 |
| Total | **18** | **7** | **38** | **<1** | **13** | **3** |
| **Buildout Operational Year 2040** | | | | | | |
| Area Source | 13 | <1 | <1 | <1 | <1 | <1 |
| Energy | <1 | <1 | <1 | <1 | <1 | <1 |
| Mobile | 3 | 5 | 29 | <1 | 13 | 3 |
| Total | **16** | **5** | **29** | **<1** | **13** | **3** |
| Maximum Daily Emissions [a] | 18 | 7 | 38 | <1 | 13 | 3 |
| *Significance Thresholds / Screening Levels* | 25 [b] | 25 [b] | 550 [c] | 150 [c] | 150 [c] | 55 [c] |
| Significant Impact? | No | No | No | No | No | No |

[a] Maximum daily emissions are the sum of the overlapping construction phases that result in the greatest emissions on a peak day of construction. Note: All emissions shown above include VCAPCD Rule 55 fugitive dust reduction measures.

[b] VCAPCD Significance Threshold.

[c] Screening Level based on SCAQMD.

SOURCE: ESA, 2021

## Cumulative

The geographic scope for regional air quality impacts consists of the air basin(s) in which project emissions would occur. The VCAPCD's approach for assessing cumulative impacts is based on attainment of ambient air quality standards in accordance with the requirements of the CAA and California Clean Air Act. As discussed earlier, the VCAPCD has developed a comprehensive plan, the 2016 AQMP, which addresses the region's cumulative air quality condition. CEQA Guidelines Section 15064(h)(3) provides guidance in determining the significance of cumulative impacts, stating in part that:

*A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.*

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the proposed project's incremental contribution to cumulative air quality impacts is determined based on compliance with the VCAPCD's adopted 2016 AQMP. With respect to the project's short-term construction-related air quality emissions and cumulative conditions, VCAPCD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the federal CAA mandates. Construction of the project would comply with VCAPCD Rule 55 fugitive dust control requirements and the ATCM to limit heavy duty diesel motor vehicle idling to no more than 5 minutes at any location. These measures would also be imposed on construction projects in the Air Basin, which would include the cumulative projects in the project area. Additionally, with respect to operational emissions, the project's emissions would be less than the significance thresholds as shown in Table 5, and as detailed in III. Air Quality a) above is consistent with the AQMP. Since the project's construction and operational emissions do not exceed the VCAPCD's regional significance thresholds, and the proposed project is consistent with the AQMP, cumulative construction impacts would be less than significant. Furthermore, the project is a planned development as discussed in the City of Thousand Oaks Rancho Conejo Specific Plan 7. As such, the project would not induce growth that is not accounted for by the City of Thousand Oaks. The proposed project would not exceed the growth assumptions in the AQMP. Therefore, the proposed project would not conflict with AQMP growth assumptions and cumulative construction and operational impacts would be less than significant.

**Mitigation Measure:**

Implementation of Mitigation Measure AQ-1.

c) **Less-than-Significant Impact.** Separate discussions are provided below analyzing the potential for sensitive receptors to be exposed to localized air quality impacts from toxic air contaminants (TACs) from on-site sources during project construction and operations, and CO hotspots during operation from the increase in vehicle operation in the local area.

Sensitive receptors are individuals who are considered more sensitive to air pollutants than others. The reasons for greater than average sensitivity may include pre-existing health problems, proximity to emissions sources, or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with associated greater exposure to ambient air quality. The nearest sensitive receptors would be located 1,250 feet or more away from the project site.

### *CO Hotspots*

Emissions of CO are generated in greatest quantities from motor vehicle combustion of fossil fuels, and are usually concentrated at or near ground level because they do not readily disperse into the atmosphere, particularly under cool, stable (i.e., low or no wind) atmospheric conditions. Localized areas where ambient concentrations exceed State and/or federal standards are termed CO hotspots. The VCAPCD uses a screening analysis to determine the potential for CO Hotspots for any project with indirect emissions greater than the applicable ozone project significance levels as analyzed under III. Air Quality b) above where roadway intersections are currently operating at or are expected to operate at a Level of Service (LOS) of E or F. As indicated in Table 5 above, the proposed project would not exceed regulatory thresholds for ROG or $NO_X$. Additionally, as indicated in the project specific traffic analysis, the LOS for existing plus project would result in a maximum PM peak hour LOS of D with implemented mitigation, and for the buildout scenario a maximum LOS of D would occur without mitigation (Kimley Horn, 2020). Therefore, as the proposed project does not exceed regulatory thresholds and the project would not result in an LOS of E or F, a refined CO hotspot analysis is not warranted, and the project would be less than significant with respect to CO impacts.

### *Localized Construction Air Quality Impacts – TACs*

Project construction would result in short-term emissions of diesel PM, a TAC. Diesel PM poses a carcinogenic health risk that is measured using an exposure period of 70 years for a lifetime exposure or 30 years for a residential exposure. The exhaust of off-road heavy-duty diesel equipment would emit diesel PM during demolition, site preparation (e.g., clearing); site grading and excavation; paving; installation of utilities, materials transport, and handling; building construction; and other miscellaneous activities. The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., the potential exposure to TACs to be compared to applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), carcinogenic health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period for a lifetime exposure or 30 years for a residential exposure; however, such assessments should be limited to the period or duration of activities associated with the proposed project.

The construction period for the proposed project is approximately 84 months between 2021 and 2040. However, construction activities would not be continuous between 2021 and 2040 and there would be periods of inactivity. The emissions modeling analysis presented in b) above provides for a conservative assessment of the project's construction activities by assuming construction at the earliest time frame, which assumes the use of the most conservative emission factors. Furthermore, the analysis assumes heavy-duty equipment usage for each day of the various construction phases. In reality, not all equipment would necessarily be used over the whole of the construction period or individual construction phases or sub-phases with some equipment used only periodically.

Additionally, the dispersion of TACs in the atmosphere occurs relatively rapidly and pollutant concentrations are decreased by 80 percent between 50 and 1,000 feet from the pollutant source based on type emissions (CARB 2005). For example, concentrations of TACs as a result of emissions from freeways, high-traffic roads, distribution centers, and rail yards (all high emitters of diesel particulate matter) are reduced by approximately 80 percent within 1,000 feet of the source (CARB 2005). Given that the primary TAC from project construction activities would consist of diesel particulate matter and that the nearest sensitive receptors would be located 1,250 feet or more away from the project site, a health risk would not be warranted for the project as emissions would be substantially dispersed.

Given the short duration of emissions per phase, and the fact that the nearest receptors are greater than 1,000 feet from the project site (the residential development to the east of Rancho Conejo Boulevard), the project would not result in substantial risk for the nearby residents. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant. It is noted that the incorporation of Mitigation Measure AQ-1, as required in III. Air Quality b) above, would further reduce diesel particulate matter emissions from construction activities and further reduce the risk potential.

### *Project Operations – TACs*

Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes, automotive repair facilities, and dry-cleaning facilities. The project would not include any of these potential sources, although minimal emissions may result from the use of consumer products. Although the light industrial nature of the project would increase diesel trucks on the site and at the local roadways, the proposed project is greater than 1,000 feet from the nearest receptors as discussed under construction above. Therefore, while the proposed project is not anticipated to result in the level of truck traffic associated with distribution centers, the distance between the project site and the nearest receptors reduces the potential impacts from operational emissions with respect to TACs to less than significant levels.

### *Valley Fever*

Valley Fever is an infective disease caused by the fungus, *Coccidioides immiti*. Infection occurs via inhalation of *Coccidioides immiti* spores that have become airborne from the upturn of dry, dusty soil by wind, construction, farming, or other activities. The project site meets the following factors that indicate it has the potential to create significant Valley Fever impacts. The project would excavate impacted soils that could result in the disturbance of the top 12 inches. In addition, the site contains areas of dry and sandy soils, undisturbed soils, and may be subject to periodic windy conditions. Based on these factors, the site could contain *Coccidioides immiti* spores that could be disturbed by proposed construction activities, which may result in a potentially significant Valley fever impact. VCAPCD's Rule 55 advises workers to wear proper respiratory protection during the cleanup, but excavation of topsoil and wind gusts could carry spores to other areas of the site and reach workers indirectly involved. The overall site cleanup would be consistent with the VCAPCD's Rule 55. Abidance by both the local and regional AQMPs ensures that fugitive dust would be minimized by means of regularly watering excavation areas, covering truck loads, curtailing operations during high winds, and weekly monitoring conducted by the construction manager. The site may also be subject to soil stabilization and roll-compaction if deemed necessary.

Risk of exposure is further reduced by the setting of the project site and its distance from sensitive receptors. *Coccidioides immiti* grows in undisturbed, unfertilized areas usually away from developments. The site area is partially developed with paved roads and buildings, although there are some locations that could possibly harbor *Coccidioides immiti* growth. The nearest sensitive receptors are located over 1,000 feet from the project site as detailed above. Additionally, most (60 percent) of individuals are asymptomatic and require no medical attention from being exposed to the spores (VFCE 2021). Controlled construction practices to prevent fugitive dust make the spreading of Valley Fever to surrounding communities unlikely.

Onsite workers are the most at risk of contracting Valley Fever, due to their proximity to the potentially impacted soils. The project site has been previously disturbed, thus reducing the potential for impacts, however due to the undeveloped nature of the project site, there is a potential for exposure that can be further reduced with implementation of mitigation. With the implementation of **Mitigation Measure AQ-2**, impacts to workers and the surrounding community would be reduced to be less than significant.

**Mitigation Measure:**

The following measure is required to reduce PM emissions from the construction of the proposed project.

**AQ-2:** During heavy grading where the top 12 to 18 inches of soil would be disturbed, construction contractors shall comply with the following measures, as feasible to reduce potential Valley Fever impacts (VCAPCD 2003):

- Restrict employment for grading activities to persons with positive coccidioidin skin tests (since those with positive tests can be considered immune to reinfection).
- Hire crews from local populations where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune.
- Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations.
- Require that the cabs of grading and construction equipment to be air-conditioned or enclosed with sufficient ventilation and particulate matter filtration systems.
- Require crews to work upwind from excavation sites where possible.
- Where acceptable to the fire department, control weed growth by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering.
- During rough grading and construction, the access way into the project site from adjoining paved roadways should be paved or treated with environmentally-safe dust control agents.

d) **Less-than-Significant Impact.** Potential activities that may emit odors during construction include the use of architectural coatings and solvents, as well as the combustion of diesel fuel in on-and off-road equipment. In addition, the Proposed project would comply with the applicable provisions of the CARB Air Toxics Control Measure regarding idling limitations for diesel trucks. Through mandatory compliance with VCAPCD Rules, no construction activities or materials are expected to create objectionable odors affecting a substantial number of people. Furthermore, as shown in Table 4, construction emissions would not exceed the screening levels for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO, $SO_2$, and PM2.5).

During construction of the proposed project, exhaust from equipment and activities associated with the application of architectural coatings and other interior and exterior finishes may produce discernible odors typical of most construction sites. Such odors would be a temporary source of nuisance to adjacent uses, but would not affect a substantial number of people. As odors associated with project construction would be temporary and intermittent in nature, the odors would not be considered to be a significant environmental impact. Therefore, construction activities would result in less-than-significant impacts with respect to other emissions, including those leading to odors.

Proposed project operations in the office and warehouse/light manufacturing spaces would be similar to operational activities in other nearby similar office and warehouse/light manufacturing spaces. As discussed in Section 1.0, Project Description, nearby land uses as identified in the City of Thousand Oaks General Plan include

"Industrial," "Institutional, and "Existing Parks, and Open Space" (City of Thousand Oaks, 2015). Adjacent to the project Site to the north and west is land that is owned and managed by the Conejo Open Space Conservation Area (COSCA). Industrial development is located northeast of the project site as well as to the south and west of the proposed project site. The southern portions of the Rancho Conejo Industrial Area have been developed resulting in a biotech corridor with companies such as Amgen and Teledyne Technologies. The proposed project would not introduce operations that the VCAPCD CEQA Air Quality Handbook considers to be potential sources of substantial odors, such as wastewater treatment facilities; sanitary landfills; transfer stations; composting facilities; asphalt batch plants; painting and coating operations; fiberglass operations; food processing facilities; feed lots/ dairies; petroleum extraction, transfer, processing, and refining operations and facilities; chemical manufacturing operations and facilities; or rendering plants. As such, the proposed project would not introduce noise sources of substantial emissions, such as those leading to odors, to the area. Operational activities would result in less-than-significant impacts with respect to other emissions, including those leading to odors.

## Cumulative Impacts

As discussed above in Air Quality, the proposed project's incremental contribution to cumulative air quality impacts is determined based on compliance with the VCAPCD's adopted 2016 AQMP. With respect to the project's short-term construction-related air quality emissions and cumulative conditions, VCAPCD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the federal CAA mandates. Construction of the project would comply with VCAPCD Rule 55 fugitive dust control requirements and the ATCM to limit heavy duty diesel motor vehicle idling to no more than 5 minutes at any location. These measures would also be imposed on construction projects in the Air Basin, which would include the cumulative projects in the project area. Additionally, with respect to operational emissions, the project's emissions would be less than the significance thresholds as shown in Table 5, and as detailed in III. Air Quality a) above is consistent with the AQMP. Since the project's construction and operational emissions do not exceed the VCAPCD's regional significance thresholds, and the proposed project is consistent with the AQMP, cumulative construction impacts would be less than significant.

## References

California Air Resources Board, California Environmental Protection Agency; 2005. Air Quality and Land Use Handbook: A Community Health Perspective.

CARB, News Release - CARB establishes next generation of emission controls needed to improve state's air quality, https://ww2.arb.ca.gov/news/carb-establishes-next-generation-emission-controls-needed-improve-states-air-quality. Accessed February 25, 2020.

Kimley Horn 2020. Shapell Traffic Study. May 15.

VCAPCD 2003. *Ventura County Air Quality Assessment Guidelines.* October. Available: http://www.vcapcd.org/environmental-review.htm.

VCAPCD 2017. *Final 2016 Ventura County Air Quality Management Plan*. February 14. Available: http://www.vcapcd.org/pubs/Planning/AQMP/2016/Final/Final-2016-Ventura-County-AQMP.pdf

VFCE 2021. College of Medicine Tuscon Valley Fever Center for Excellence. Valley Fever in People | Valley Fever Center for Excellence (arizona.edu).

# Biological Resources

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

Prior to conducting a site visit, ESA conducted a query of available resource inventory databases to analyze the potential for sensitive resources to occur within the study area:

- California Department of Fish and Wildlife (CDFW). 2020a. California Natural Diversity Data Base (CNDDB). Database was queried for special status species records in the Newbury Park USGS 7.5-minute quadrangle and eight surrounding quadrangles including Camarillo, Moorpark, Point Dume, Point Mugu, Santa Paula, Simi, Thousand Oaks, and Triunfo Pass. Accessed September 11, 2020.
- California Department of Fish and Wildlife (CDFW). 2020b. California Natural Community List. Sacramento, CA: CDFW, Natural Heritage Division. Accessed September 11, 2020. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline
- California Native Plant Society (CNPS). 2020. Inventory of Rare and Endangered Vascular Plants of California. Database was queried for special status species records in the Newbury Park USGS 7.5-minute quadrangle and eight surrounding quadrangles including Camarillo, Moorpark, Point Dume, Point Mugu, Santa Paula, Simi, Thousand Oaks, and Triunfo Pass. Accessed September 11, 2020.
- U.S. Fish and Wildlife Service (USFWS). 2020a. Critical Habitat Portal. Accessed September 11, 2020. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265 ad4fe09893cf75b8dbfb77

- U.S. Fish and Wildlife Service (USFWS). 2020b. Information for Planning and Consultation. Accessed September 11, 2020. https://ecos.fws.gov/ipac/location/DA5TIRE4ZVGADPX2SXYNFBX6IA/resources

### *Biological Resources Assessment*

A biological resources assessment was conducted by an ESA biologist on February 26, 2020. The survey consisted of walking transects throughout the study area to characterize and map natural communities, and to determine the potential for special-status plants and wildlife to occur. All incidental, visual observations of flora and fauna, including sign (i.e., presence of scat) as well as any audible detections, were noted during the site visit and are described in further detail below.

All native and non-native natural communities and land use were characterized and delineated on aerial photographs during the field survey, and subsequently digitized using a Geographic Information System software (ArcGIS). Each description of vegetation was characterized in reference to the *Vegetation Classification of the Santa Monica Mountains National Recreation Area and Environs in Ventura and Los Angeles Counties, California, Version 1-Association Level and Specific Alliances* (CDFG et al 2006) and *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland1986). In instances where an appropriate description was not available within the aforementioned publications, the community or land use was described based on species dominance or any other apparent, defining characteristic. A detailed description of each natural community and land use is provided below.

### *Focused Rare Plant Survey*

Due to the presence of suitable habitat for special-status rare plants, observed during the biological resources assessment, a subsequent focused rare plant survey was conducted on June 30, 2021, by ESA. The focused survey was conducted in accordance with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018) and involved conducting survey transects throughout all accessible portions of the survey area with suitable habitat (e.g., vegetation, soils, slope, disturbance).

### *General Description of Project Site*

The project site is located within previously graded undeveloped parcels, adjacent to existing commercial and industrial developments to the south and east, and open space (i.e., Conejo Canyons Open Space Area) to the north and west. The surrounding open space areas are comprised of minimally disturbed, native vegetation communities, bisected by hiking trails and dirt and paved roads. In contrast, the project site is heavily disturbed with a prevalence of non-native vegetation. Review of historic aerial imagery ranging between 1994 and 2002 indicates that much of the project site has undergone various degrees of grading and/or grubbing activity (USDSG 2020) and the adjacent COSCA land was burned during the 2018 Woolsey fire.

### *Plant Communities*

A total of five (5) disturbed plant communities were mapped within the project site that include California Buckwheat Scrub, coastal sage scrub, coastal sage scrub-California buckwheat scrub, non-native grassland and Disturbed. Plant communities located within the project site are summarized in **Table 6** and depicted in **Figure 8, Plant Communities**.

**TABLE 6**
**PLANT COMMUNITIES WITHIN PROJECT SITE**

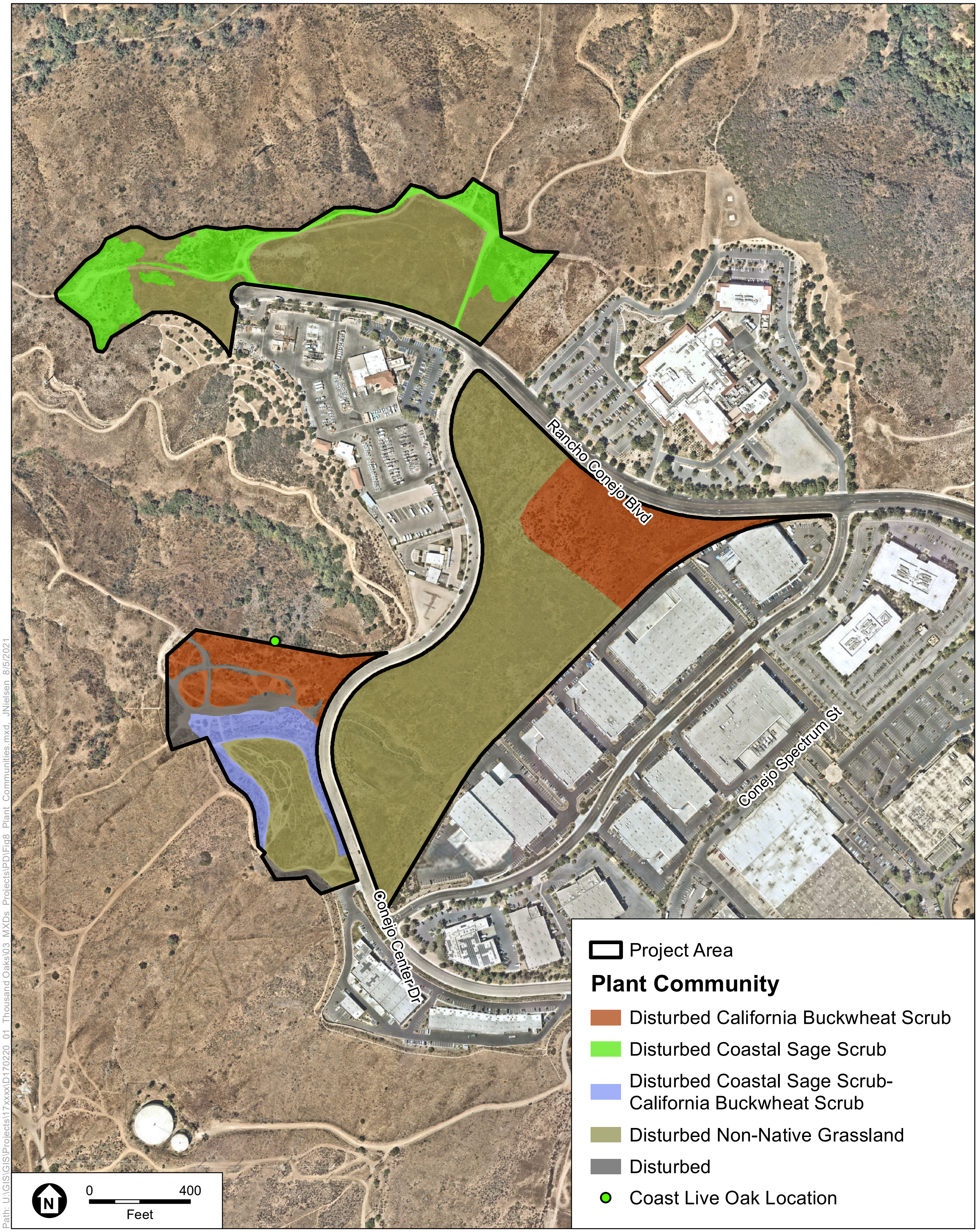
| Plant Community | Acres within Project Site |
|---|---|
| Disturbed California Buckwheat Scrub | 9.05 |
| Disturbed Coastal Sage Scrub | 6.18 |
| Disturbed Coastal Sage Scrub-California Buckwheat Scrub | 2.26 |
| Disturbed Non-native Grassland | 32.21 |
| Disturbed | 1.64 |

### Disturbed California Buckwheat Scrub

Disturbed California buckwheat scrub was mapped within the southwest portion of the project site, to the west of Conejo Center Drive, and immediately to the west of Rancho Conejo Boulevard. Vegetation within this area is characterized by a sparse shrub layer dominated by California buckwheat (*Eriogonum fasciculatum*), interspersed with various other large shrub and sub-shrub species that include deerweed (*Acmispon glaber*), California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), toyon (*Heteromeles arbutifolia*) and sawtooth goldenbush (*Hazardia squarrosa*). This community supports a dense herbaceous layer of native and non-native forbs that include tocalote (*Centaurea melitensis*), common sandaster (*Corethrogyne filaginifolia*) and interspersed with various other species that include clustered tarweed (*Deinandra fasciculata*), shortpod mustard (*Hirschfeldia incana*), sweetclover (*Melilotus* sp.), two-color rabbit-tobacco (*Pseudognaphalium biolettii*), and vinegarweed (*Trichostema lanceolatum*).

### Disturbed Coastal Sage Scrub

Disturbed coastal sage scrub was mapped within the northern portion of the project site, north and west of Rancho Conejo Boulevard. Vegetation within this area is characterized by a sparse shrub layer comprised of various species that include chamise (*Adenostema fasciculatum*), California buckwheat, California sagebrush, coyote brush, deerweed, giant ryegrass (*Elymus condensatus*), chaparral yucca (*Hesperoyucca whipplei*), lemonade berry (*Rhus integrifolia*), purple sage (*Salvia leucophylla*) and sawtooth goldenbush. This community supports an herbaceous layer ranging between sparse and moderately dense, and supports various native and non-native species that include black mustard (*Brassica nigra*), deerweed, telegraph weed (*Heterotheca grandiflora*), shortpod mustard and tocalote.




Source: Nearmap, 2020.

Conejo Summit Project

**Figure 8**
Plant Communities

ESA

### Disturbed Coastal Sage Scrub-California Buckwheat Scrub

Disturbed coastal sage scrub-California buckwheat scrub was mapped within the southwest portion of the project site, adjacent to the disturbed California buckwheat scrub and non-native grassland. This community is very similar in character to the coastal sage scrub community described above; however, supports a shrub layer dominated by California buckwheat.

### Disturbed Non-Native Grassland

Disturbed non-native grassland was mapped within the southwest portion of the project site, to the east and west of the Conejo Center Drive, and in the northern portion of the project site, to north and west of Rancho Conejo Boulevard. This community is characterized by a dense herbaceous layer, primarily of non-native grasses and forbs that include wild oats (*Avena* sp.), black mustard, ripgut brome (*Bromus diandrus*), fennel (*Foeniculum vulgare*), Russian thistle (*Salsola* sp.), shortpod mustard and tocalote.

### Disturbed

Disturbed land use was mapped throughout the southwest portion of the project site, west of Conejo Center Drive and consists of dirt access roads that appear to have been created and maintained by heavy OHV use. These areas largely devoid of vegetation; however, sparse shrub, grass and forb cover was observed throughout. Species observed include California buckwheat, shortpod mustard, sweetclover, tocalote and vinegarweed.

## *Common Wildlife*

Various common wildlife species were observed within or immediately adjacent to the project site during the biological assessment that include California quail (*Callipepla californica*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), Cassin’s kingbird (*Tyrranus vociferans*) and mourning dove (*Zenaida macroura*).

Few fossorial mammal burrows were observed interspersed throughout the project site. Based on morphology, these are likely inhabited by California ground squirrels (*Otospermophilus beecheyi*) and Botta’s pocket gopher (*Thomomys bottae*).

## *Special-Status Wildlife Species*

Special-status wildlife is defined as those animals that, because of their recognized rarity or vulnerability to various forms of habitat loss or population decline, are recognized by federal, state, or other agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special status on the basis of adopted policies and the expertise of state resource agencies or other respected organizations, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status wildlife is defined as follows:

- Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notice sin the Federal Register for proposed species).

- Animals that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register, December 2, 2016).
- Animals that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380).
- Animals listed, proposed for listing, or identified as candidate species for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- Animal species of special concern to the CDFW (Shuford & Gardali 2008 for birds; Williams 1986 for mammals; Moyle et al. 1995 for fish; and Jennings & Hayes 1994 for amphibians and reptiles).
- Animal species that are fully protected in California (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
- Ventura County Locally Important Animal Species (updated 2014).

A search of the most current CNDDB (CDFW, 2020a) records for the study area revealed that numerous special-status wildlife species have been previously recorded within a search area defined as the Newbury Park 7.5-minute USGS quadrangle map and surrounding eight USGS quadrangle maps. A complete list of the species generated in the CNDDB query are provided in **Appendix B.** Based on absence of suitable habitat, known geographic distributions and/or range restrictions, it was determined that many of these species do not have potential to occur within the study area (e.g., fish and aquatic species) and are therefore omitted from further discussion. A total of thirteen (13) special-status wildlife species, presented below in **Table 7**, were determined to have a low to high potential to occur, or were determined to be present onsite, based on the following criteria:

- **Low Potential:** The project site supports limited habitat for a particular species. For example, the appropriate vegetation assemblage may be present while the substrate preferred by the species may be absent.
- **Moderate Potential:** The project site provides marginal habitat for a particular species. For example, the habitat may meet all criteria necessary to support a species; however, is heavily disturbed, sufficient to reduce suitability; or may only support certain (i.e., Adult, or larval) stages of a species life cycle.
- **High Potential:** The project site provides suitable habitat conditions for a particular species and/or known populations occur in the immediate vicinity.
- **Present:** The species itself, or verifiable sign of presence was observed onsite during the site visit; or has been reported within the project site in the past and it is reasonable to assume that it remains extant.

Special-status wildlife species were not observed within or immediately adjacent to the project site during the site visit; however, those with a moderate or high potential to occur within the project site include the coastal whiptail (*Aspidoscelis tigris* ssp. *stejnegeri*), coast horned lizard (*Phrynosoma blainvillii*), loggerhead shrike (*Lanius ludovicianus*) and San Diego desert woodrat (*Neotoma lepida* ssp. *intermedia*).

**TABLE 7**
**POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES WITHIN THE PROJECT SITE**

| Common and Scientific Name | Status | Habitat | Potential to Occur within Project Site |
|---|---|---|---|
| **Insects** | | | |
| Crotch bumble bee (*Bombus crotchii*) | SCE | Found in grassland and scrub habitat with abundant forage plants that primarily include those within the following families: Apocynaceae, Asclepiadaceae, Asteraceae, Boraginaceae, Fabaceae, Hydrophyllaceae, and Lamiaceae (CDFW 2019). | **Low.** Low quality scrub habitat is present within the project site and while flowering plants that may be utilized by the species are present, they are not sufficiently abundant. |
| Santa Monica grasshopper (Trimerotropis occidentiloides) | SA | Found on bare hillsides and disturbed openings in chaparral vegetation communities. . | **Low.** Suitable chaparral vegetation is not present within the project site. |
| **Reptiles** | | | |
| Coastal whiptail (Aspidoscelis tigris stejnegeri) | SSC | Found in deserts & semiarid scrub/chaparral communities with sparse vegetation. | **High.** Suitable habitat for the species is present throughout the disturbed scrub communities located within the project site. |
| Coast horned lizard (Phrynosoma blainvillii) | SSC | Found within chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinon & juniper woodlands, riparian scrub, riparian woodland, and valley & foothill grassland. Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. | **Moderate.** Marginal habitat for this species is present in the disturbed scrub communities located within the project site. |
| **Birds** | | | |
| Sharp-shinned hawk (*Accipiter striatus*) | WL | Found in riparian areas. Nests usually within 275 feet of water. | **Low (Nesting)**. Suitable foraging habitat exists throughout the scrub and grassland communities; however, suitable nesting habitat (trees with adjacent water) is not present on or within 500 feet of the project site. |
| Golden eagle (*Aquila chrysaetos*) | FP, WL | Forages throughout grassland, chaparral, shrubland, forest, and other vegetated areas and nests exclusively within cliffs. | **Low (Nesting).** Suitable foraging habitat exists throughout the scrub and grassland communities; however, suitable nesting habitat (cliffs) are not present on or within 500 feet of the project site. |
| Burrowing owl (Athene cunicularia) | SSC | Found in low-lying grass-dominated areas located within lower elevations and presence of mammal burrows or manmade structures, such as irrigation pipes, culverts, and debris stockpiles. | **Low (Foraging and Nesting).** Scrub and grassland plant communities known to support this species are present within the project site; however, the herbaceous layer is likely too dense to support wintering or breeding activities. Furthermore, few fossorial mammal burrows with appropriate morphology to support owl occupancy were observed during the survey. |

| Common and Scientific Name | Status | Habitat | Potential to Occur within Project Site |
|---|---|---|---|
| Coastal cactus wren (Campylorhynchus brunneicapillus) | SSC | Found in various scrub and chaparral vegetation communities with a prominence of prickly pear (Opuntia littoralis) or coastal cholla (Cylindropuntia prolifera) to nest (Solex et. al. 2004). | **Low (Nesting).** Marginal foraging habitat is present throughout the scrub communities; however, cactus, necessary for nesting, is not present within the Project site. This species may nest within 500 feet of the project site. |
| White-tailed kite (Elanus leucurus) | FP | Found in open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. | **Low (Nesting).** Suitable foraging habitat exists throughout the scrub and grassland communities; however, suitable nesting habitat in not present within the project site. This species may nest within 500 feet of the project site. |
| Loggerhead shrike (Lanius ludovicianus) | SSC | Found in open scrub and chaparral communities. | **Marginal (Foraging and Nesting)**. Marginal foraging and nesting habitat is present throughout the Project site. |
| Coastal California gnatcatcher (Polioptila californica californica) | FT, SSC | Inhabits dry coastal slopes, washes, and mesas. They are restricted to areas of coastal sage scrub below 2,000 feet in elevation. This species is considered non-migratory and tends to remain within its territory year-round (USFWS 2010). | **Low**. Low quality scrub habitat is present within areas of the project site dominated by California buckwheat; however, the level of disturbance (i.e., historic site grading and recent fire) to the vegetation is such that this species is unlikely to occupy the site. Moreover, this resident species was not observed utilizing the site during the site visit. However, this species may nest within 500 feet of the project site. |
| **Mammals** | | | |
| San Diego desert woodrat (*Neotoma lepida intermedia*) | SSC | Occurs in moderate to dense canopies. They are particularly abundance in rock outcrops, rocky cliffs, and slopes within coastal scrub. | **Marginal**. Marginal foraging and habitat and limited nest building sites (shrubs of sufficient size) are present within the project site. |
| Mountain lion (*Puma concolor*) | SCT | Inhabits a wide range of ecosystems, making its home anywhere there is shelter and prey, including mountains, forests, deserts, and wetlands. They are territorial and have naturally low population densities, which means the species requires large swaths of habitat to thrive. Present in the Santa Monica Mountains. | **Low.** This species is known to occur within the general vicinity and may utilize the project site for foraging and movement to a limited degree; however, is much more likely to depend on the undisturbed open space that surrounds the project site. |

Federal/State/Other Status:

FT – Federally Protected; SCE – State Candidate Endangered, SCT – State Candidate Threatened, FP – State Fully Protected, SSC – State Species of Special Concern, SA – State Special Animal, WL – State watch List

SOURCE: ESA 2020

### *Special-Status Plant Species*

For the purposes of this evaluation, special-status plant species include:

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).

- Plants that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register, December 2, 2016).
- Plants that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380).
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered" in California (California Rare Plant Ranks 1B and 2B).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (California Rare Plant Ranks 3 and 4).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Plants considered sensitive by other Federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), State and local agencies or jurisdictions.
- Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range (State CEQA Guidelines).
- Ventura County Locally Important Plant Species (updated 2014).

A search of the most current CNDDB (CDFW, 2020a) and CNPS (CNPS, 2020) records for the study area revealed that numerous special-status plant species have been previously recorded within a search area defined as the Newbury Park 7.5-minute USGS quadrangle map and surrounding eight USGS quadrangle maps. A complete list of the species generated in the CNDDB query are provided in Appendix B. Based on absence of suitable habitat, known geographic distributions and/or range restrictions, it was determined that many of these species do not have potential to occur within the project site and are therefore omitted from further discussion. A total of 12 special-status plant species, presented below in **Table 8**, were determined to have a low to high potential to occur, or were determined to be present onsite, based on the following criteria:

- **Absent:** Species is a perennial tree that is easily identifiable during all seasons, and was not observed within the project site.
- **Low Potential:** The project site supports limited habitat for a particular species. For example, the appropriate vegetation assemblage may be present while the substrate preferred by the species may be absent.
- **Moderate Potential:** The project site provides marginal habitat for a particular species. For example, the habitat may meet all criteria necessary to support a species; however, is heavily disturbed, sufficient to reduce suitability.
- **High Potential:** The project site provides suitable habitat conditions for a particular species and/or known populations occur in the immediate vicinity.
- **Present:** The species itself, or verifiable sign of presence was observed onsite during the site visit; or has been reported within the project site in the past and it is reasonable to assume that it remains extant.

Special-status plant species were not observed within or immediately adjacent to the project site during the initial biological resources assessment; however, based on the presence of suitable habitat, it was determined that the Catalina mariposa lily (*Calochortus catalinae*), Plummer's mariposa lily (*C. plummerae*), club haired mariposa-lily (*C. clavatus var. clavatus*), slender mariposa lily (*C.c.gracilis*), southern tarplant (*Centromadia parryi* ssp. *australis*), Ojai navarretia (*Navarretia ojaiensis*) and Lyon's pentachaeta (*Pentachaeta lyonii*) had a moderate or high potential to occur within the project site. Therefore, a focused rare plant survey was conducted by ESA within and immediately adjacent to the project site, to determine presence/absence of these species and whether they may be impacted by proposed project activities. The results of the focused survey revealed that special-status plant species are not present onsite (absent) and would therefore not be affected by the proposed project activities (ESA 2021). The focused rare plant survey memorandum can be found in the **Appendix C** of this IS/MND.

**TABLE 8**
**SPECIAL-STATUS PLANT SPECIES OBSERVED AND POTENTIALLY OCCURRING WITHIN THE PROJECT SITE**

| Common and Scientific Name | Status | Habitat | Potential to Occur within Project Site |
|---|---|---|---|
| Braunton's milk-vetch (*Astragalus brauntonii*) | FE, CRPR 1B.1 | Requires recent burns or disturbed areas on limestone outcrops; usually on sandstone with carbonate layers. Chaparral, coastal scrub, valley and foothill grassland on hilltops, saddles, or bowls between hills at elevations of 3-640 meters amsl. Flowering Time: March-July | **Absent**. Suitable vegetation communities are present; however, the sandy substrate preferred by the species does not occur within the project site.<br>Focused surveys further verified that this species is not present within or immediately adjacent to the project site. |
| Catalina mariposa-lily (*Calochortus catalinae*) | CRPR 4.2 | Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities between 15 and 700 meters amsl. Flowering Time: March-May | **Absent**. Suitable habitat for this species is present throughout openings in the scrub vegetation and non-native grass vegetation; however, focused surveys revealed that this species is not present within or immediately adjacent to the project site. |
| Plummer's mariposa-lily (*Calochortus plummerae*) | CRPR 4.2, LIS | Occurs on rocky and sandy sites, usually of granitic or alluvial material. Common after fire at elevations of 60-2,500 meters amsl. Found in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Flowering Time: May-July | **Absent.** Suitable habitat for this species is present throughout openings in the scrub vegetation and non-native grass vegetation; however, focused surveys revealed that this species is not present within or immediately adjacent to the project site. |
| Club haired mariposa-lily (*Calochortus clavatus* var. *clavatus*) | CRPR 4.3 | Chaparral, cismontane woodland, valley and foothill grassland, coastal scrub. Generally, on serpentine clay, rocky soils. <1300 m. Flowering Time: May-June. | **Absent**. This species is generally associated with serpentine and clay soils, which do not appear to be prevalent onsite; however, appropriate plant communities are present throughout.<br>Focused surveys revealed that this species is not present within or immediately adjacent to the project site. |
| Slender mariposa-lily (*Calochortus clavatus* var. *gracilis*) | CRPR 1B.2 | Chaparral, cismontane woodland, valley and foothill grassland, coastal scrub. Generally, within shaded canyons. < 1000 m. Flowering Time: May-June. | **Absent**. Suitable habitat for this species is present throughout openings in the scrub vegetation and non-native grass vegetation; however, focused surveys revealed that this species is not present within or immediately adjacent to the project site. |

| Common and Scientific Name | Status | Habitat | Potential to Occur within Project Site |
|---|---|---|---|
| Southern tarplant (*Centromadia parryi* ssp. *australis*) | CRPR 1B.1 | Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 meters amsl. Flowering Time: June-October | **Absent.** This species is generally found along the margins of vernal pools and other wetland habitats; however, are also known to occur in disturbed, upland scrub and chaparral communities.<br>Focused surveys revealed that this species is not present within or immediately adjacent to the project site. |
| Conejo dudleya (*Dudleya parva*) | FT, LIS, CRPR 1B.2 | Grows on clay or volcanic substrates in coastal scrub and valley and foothill grassland communities between 60 and 450 meters amsl. Flowering Time: May-July | **Absent.** Suitable outcrop formations necessary to support this species are not present within the project site.<br>Focused surveys further verified that this species is not present within the project site. |
| Verity's dudleya (*Dudleya verityi*) | FT, LIS, CRPR 1B.1 | Occurs on volcanic outcrops in chaparral, cismontane woodland, and coastal scrub communities between 60 and 120 meters amsl. Flowering Time: May-June | **Absent.** Suitable outcrop formations necessary to support this species are not present within the project site.<br>Focused surveys revealed that this species is not present within the project site. |
| Southern California black walnut (*Juglans californica*) | CRPR 4.2, G3, S3 | Occurs in chaparral, cismontane woodland, and coastal scrub communities between 50 and 900 meters amsl. Flowering Time: Mar-May | **Absent.** This species is a perennial tree, identifiable outside of its blooming period, and was not observed within the project site during the initial site visit.<br>Focused surveys further verified that this species is not present within the project site. |
| White-veined Monardella (*Monardella hypoleuca* ssp. *hypoleuca*) | LIS, CRPR 1B.3 | Found on dry slopes in chaparral, cismontane woodland communities from 50-1,525 meters amsl. Flowering Time: May-October | **Absent.** Suitable chaparral vegetation types necessary to support this species are not present within the project site.<br>Focused surveys further verified that this species is not present within the project site. |
| Ojai navarretia (*Navarretia ojaiensis*) | CRPR 1B.1 | Openings in chaparral, coastal scrub, and valley and foothill grassland communities between 275 and 620 meters amsl. Flowering Time: May-July | **Absent.** Suitable habitat for this species is present throughout openings in the scrub vegetation and non-native grass vegetation; however, focused surveys revealed that this species is not present within or immediately adjacent to the project site. |
| Lyon's pentachaeta (*Pentachaeta lyonii*) | FE, SE, CRPR 1B.1 | Rocky clay soils of volcanic origin (Conejo volcanics) in openings within chaparral, coastal scrub, and valley and foothill grassland communities between 30 and 630 meters. It does not compete well with dense annual grasses or shrubs, but occurs in areas that consist mostly of bare ground. Flowering Time: March-August | **Absent.** Appropriate vegetation is present within the project site. Much of the substrate onsite appears to consist of fill that supports little of the Conejo volcanic substrate, preferred by the species; however, the quantity may be sufficient to support its presence.<br>Focused surveys revealed that this species is not present within the project site. |
| Chaparral ragwort (*Senecio aphanactis*) | LIS, CNPS 2B.2 | Occurs within chaparral, cismontane woodland, and coastal scrub habitats at elevations from 20 and 855 meters amsl. This species is sometimes associated with alkaline soils. Flowering Time: February-May | **Absent.** Appropriate vegetation is present within the project site; however, alkaline soils, commonly associated with the species, were not observed.<br>Focused surveys further verified that this species is not present within the project site. |

Federal/State/Other Status:

FE – Federally Endangered, FSC – Federal Species of Concern; SE – State Endangered;
California Native Plant Society (CNPS) 1B – Plants rare, threatened or endangered in California and elsewhere; 0.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat) and 0.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat).

SOURCE: ESA, 2020.

### Aquatic Resources

A formal Aquatic Resources Delineation was not completed for the project; however, a preliminary investigation to identify such resources was completed during the site visit. No aquatic resources that display wetland characteristics (i.e., hydric soils, hydrophytic vegetation and hydrology), or drainage features such as an established bed and bank, depressed vegetation/debris, changes in substrate, etc. were observed within the project site.

However, an unnamed ephemeral drainage was observed immediately to the north of the project site, originating at Conejo Center Drive, and continuing to the northwest. This feature appears to connect to the Arroyo Conejo, downstream of the project site and ultimately the Pacific Ocean. This feature would likely not be considered jurisdictional with the U.S. Army Corps of Engineers (USACE) due to a lack of intermittent or perennial flows; however, would likely be regulated by the Regional Water Quality Control Board (RWQCB) and/or the CDFW.

### Habitat Connectivity and Wildlife Corridors

#### Santa-Monica–Sierra Madre Connection

The Santa Monica – Sierra Madre Connection is an area associated with the South Coast Missing Linkages Project (SCMLP) deemed vital to wildlife movement between the coast/Santa Monica Mountains and the Santa Susana and Sierra Madre Ranges. The SCMLP is a joint effort between various entities including California State Parks, National Park Service, The Wildlands Conservancy, etc. This established migratory corridor is one of the few remaining coastal-inland connections remaining in coastal Southern California and is comprised of a rich mosaic of oak woodland, savanna, chaparral, coastal sage scrub, grasslands, and riparian forests and woodlands, and has several major strands to accommodate diverse reptile, bird, and mammal species, and ecosystem functions (Penrod et al. 2006).

The Santa Monica – Sierra Madre Connection extends into the south westernmost portion of the project.

#### Ventura County Habitat Connectivity and Wildlife Corridors and The Critical Wildlife Passage Areas Overlay Zones

Ventura County Ordinances 4537 and 4539, Habitat Connectivity and Wildlife Corridors (HCWC) and the Critical Wildlife Passage Areas (CWPA), were instated to "preserve the functional connectivity for wildlife and vegetation throughout the overlay zone, by minimizing direct and indirect barriers, minimizing loss of vegetation and habitat fragmentation and minimizing impacts to those areas that are narrow, impacted or otherwise tenuous with respect to wildlife movement." The limits of the HCWC and CWPA were based on the findings presented in the SCLMP and mirror the boundaries of the Santa Monica-Sierra Madre Connection. As stated above, The Santa Monica-Sierra Madre Connection (HCWC/CWPA) extends into the south westernmost portion of the project (VCOC 2020).

### *City of Thousand Oaks General Plan – Conservation Element*

The Conservation Element discusses the importance of wildlife movement corridors within the Planning Area, broadly described as those linkages that can be utilized by animals to gain access to critical foraging, nesting, and breeding habitats that are necessary to maintain healthy populations. This Section describes the most important corridors within the Planning Area as those linking the Santa Monica Mountains, Simi Hills, and Santa Susana Mountains.

The Santa Monica-Sierra Madre Connection (HCWC/CWPA overlay zones), extends slightly into the southwestern portion of the project. Additionally, wildlife was seen utilizing the immediate vicinity during the biological assessment and it is expected that the habitat onsite is used in a limited capacity for wildlife movement. However, the project site does not function as a "pinch point," nor does it provide resources that are necessary for the survival of a particular species. In contrast, the COSCA land located to the north and west of the project site more closely represents the value of a HCWC/CWPA, as defined in Ventura County Ordinances 4537 and 4539; this open space area supports large swathes of undisturbed, contiguous habitat (i.e., coastal sage scrub, chaparral, and various riparian vegetation communities) that provide a largely unimpeded connection between Camarillo to the southwest and the Santa Rosa Valley to the north. Furthermore, various unnamed canyons and associated drainages connect directly to the Arroyo Conejo, which is part of the Calleguas Creek Watershed and serves as an important corridor for various species of wildlife (i.e., amphibians, birds, fish, mammals), providing passage under U.S. Route 101 in Camarillo, CA, to the Pacific Ocean.

Wildlife is much more likely to depend on this adjacent habitat (i.e., COSCA and unnamed drainage) than the project site, for local, largescale movement.

### *Critical Habitat*

Under the Federal Endangered Species Act (FESA), to the extent feasible, the USFWS and National Marine Fisheries Service (NMFS) are required to designate critical habitat for endangered and threatened species. Critical habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. Designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Designated critical habitats require special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. Critical habitat designates this suitable habitat, occupied or not, as essential to the survival and recovery of the species.

No critical habitat is located within the project site (USFWS 2020a).

### *Protected Trees*

Ordinance No. 1610-NS of the TOMC, protects any tree species within the oak (*Quercus*) genus including, but not limited to valley oak (*Q. lobata*), coast live oak (*Q. agrifolia*) and scrub oak (*Quercus berberidifolia*) that measure 2 inches or greater in diameter when measured at 4.5 feet above the trees natural grade (dbh). Additionally, Ordinance No. 1217-NS as amended by Part 4, Ordinance No.1610-NS of the TOMC protects larger-sized black walnut (8 inches dbh), California sycamore (*Platanus racemosa*; 12 inches dbh), toyon (8 inches dbh) and bay laurel (*Umbellularia californica*; 8 inches dbh), designated as Landmark trees. Larger specimens of the aforementioned species meet the criteria of landmark trees, and warrant protection during development if they are located on parcels greater than two acres and preclude those with single-family detached houses (TOMC 2020).

As identified in Ordinance No. 1610-NS, a permit is required to cut, remove, encroach within the protected zone (i.e., 5 feet from canopy or 15 feet from trunk, whichever is further), or relocate any oak or Landmark tree on public or private property within the City of Thousand Oaks (TOMC 2020).

No Oak or Landmark trees were observed within the project site during the site visit. One protected Coast Live Oak (1) is situated just outside the property line approximately 400 feet to the west of Conejo Center Drive.

### *Regulatory Setting*

This subsection summarizes federal, state, and local regulations, permits, and policies pertaining to biological resources and wetlands considered for applicability to the proposed project.

#### Federal Endangered Species Act

USFWS, which has jurisdiction over plants, wildlife, and most freshwater fish, and NMFS, which has jurisdiction over anadromous fish, marine fish, and marine mammals, oversee implementation of FESA to ensure that federal agencies' actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. A federal agency is required to consult with USFWS and NMFS if it determines that its decision may affect a listed species under the agency's jurisdiction. FESA prohibits the "take" of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

FESA Section 9 take prohibition applies only to wildlife and fish species that are listed as threatened or endangered. Candidate species and species that are proposed for listing or are under petition for listing receive no protection under Section 9. Section 9 also prohibits the removal, possession, damage, or destruction of any endangered plant from federal land, as well as acts to remove, cut, dig up, damage, or destroy an endangered plant species in nonfederal areas in knowing violation of any state law or in the course of criminal trespass.

FESA Section 10 requires the issuance of an "incidental take" permit before any public or private action may be taken that would potentially harm, harass, injure, kill, capture, collect, or otherwise hurt (i.e., take) any individual of an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan that would offset the take of individuals that may occur incidental to implementation of otherwise lawful activities, by providing for the overall preservation of the affected species through specific conservation measures.

Under FESA, the Secretary of the Interior (or the Secretary of Commerce, as appropriate) formally designates critical habitat for certain federally listed species and publishes these designations in the Federal Register. Critical habitat is not automatically designated for all federally listed species; thus, many do not have designated critical habitat.

Critical habitat is defined as the specific areas that are essential to the conservation of a federally listed species, and that may require special management consideration or protection. Critical habitat is determined using the best available scientific information about the physical and biological needs of the species. These needs, or primary constituent elements, include space for individual and population growth and for normal behavior; food, water, light, air, minerals, or other nutritional or physiological needs; cover or shelter; sites for breeding, reproduction, and rearing of offspring; and habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species.

#### Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, §703, Supplement I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. An April 11, 2018, USFWS memorandum indicates that the MBTA's prohibitions on take apply when the purpose of an action is to take migratory birds, their eggs, or their nests. Therefore, take occurring as the result of an activity, the purpose of which is not to take birds, eggs, or nests, is not prohibited by the MBTA.

#### California Environmental Quality Act

The intent of CEQA is to maintain "high-quality ecological systems and the general welfare of the people of the State." It is the policy of the State to "prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history." CEQA forbids agencies from approving projects with significant adverse impacts when feasible alternatives or feasible mitigation measures can substantially reduce such impacts.

CEQA Guidelines Section 15065(a) indicates that impacts to state- and federally listed rare, threatened, or endangered plants or animals are significant if they significantly reduce the number or restrict the range of an endangered, rare, or threatened species. Under CEQA Guidelines Section 15380, impacts to other species ("special status species") that meet certain criteria (i.e., it can be shown that the species' survival in the wild is in jeopardy or it is at risk of becoming endangered in the near future) but are not officially listed also may be considered significant by the lead agency under CEQA, depending on the applicability of other laws (e.g., MBTA) and the discretion of the lead agency. For example, CDFW interprets Lists 1A, 1B, and 2 of the CNPS Inventory of Rare and Endangered Vascular Plants of California to consist of plants that, in a majority of cases, would qualify for listing as rare, threatened, or endangered. However, the determination of whether an impact is significant is a function of the lead agency, absent the protection of other laws. Projects subject to CEQA review must specifically address potential impacts to listed species and provide mitigation measures if the impact is significant.

### California Environmental Quality Act Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(b) provides that a species not included on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the FESA definition and the FGC section that addresses rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a “candidate species” that has not yet been listed by either USFWS or CDFW. Thus, CEQA provides a CEQA lead agency with the ability to protect a species from a project’s potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

### California Department of Fish and Wildlife

#### California Endangered Species Act

Under the California Endangered Species Act (CESA) (FGC §2070 et seq.), CDFW has the responsibility for maintaining a list of threatened and endangered species. CDFW also maintains a list of “candidate species,” which are species formally noticed as being under review for addition to either the list of endangered species or the list of threatened species. In addition, CDFW maintains lists of “species of special concern,” which serve as “watch lists.” Pursuant CESA requirements, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present in the area affected by the project and determine whether the proposed project could have a potentially significant impact on such species. In addition, CDFW encourages informal consultation on any proposed project that may affect a candidate species.

#### California Native Plant Protection Act

State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed CDFW (then California Department of Fish and Game) to carry out the legislature’s intent to “preserve, protect, and enhance endangered plants in this State.” The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare and to require permits for collecting, transporting, or selling such plants. CESA expanded upon the original NPPA and enhanced legal protection for plants. CESA established threatened and endangered species categories and grandfathered all rare animals—but not rare plants—into the act as threatened species. Thus, there are three listing categories for plants in California: rare, threatened, and endangered.

#### Nesting Birds

Under FGC Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. In turn, Section 3503.3 prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs.

#### Fully Protected Species

The FGC also allows the designation of a species as Fully Protected (see §3511 regarding birds, §4700 regarding mammals, §5050 regarding reptiles and amphibians, and §5515 regarding fish). This designation provides a greater level of protection than is afforded by CESA, and until recently, fully protected species could not be taken at any time. On October 18, 2011, Senate Bill 618 was signed into law, which permits take of fully protected species where a Natural Communities Conservation Plan has been approved and is being implemented to ensure protection of those species.

#### Sensitive Natural Communities

"Sensitive" natural communities and habitats are defined by the CDFW as those natural communities that have a reduced range and/or are imperiled as a result of residential and commercial development, agriculture, energy production and mining, or an influx of invasive species. Natural communities are evaluated by the CDFW (CDFW 2020b) by utilizing NatureServe's Heritage Methodology (NatureServe, 2020) which is based on the knowledge of range and distribution of a specific vegetation type and the proportion of occurrences that are of good ecological integrity. Evaluation is done at both Global (natural range within and outside of California [G]) and Subnational (State level for California [S]), each given a Conservation Rank from 1 ("critically imperiled" or very rare and threatened) to 5 (demonstrably secure). Natural communities and habitats with state ranks of S1-S3 are considered Sensitive Natural Communities and require review when evaluating environmental impacts (CDFW, 2020b).

#### Rivers, Streams and Lakes

Pursuant to Division 2, Chapter 6, Section 1600 et seq. of the FGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake which supports fish or wildlife. A notification of a Lake or Streambed Alteration Agreement must be submitted to CDFW for "any activity that may substantially change the bed, channel, or bank of any river, stream, or lake." In addition, CDFW has authority under FGC over wetland and riparian habitats associated with lakes and streams. The CDFW reviews proposed actions, and if necessary, submits to the applicant a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement (LSAA).

### U.S. Army Corps of Engineers – Clean Water Act Section 404

The USACE and the Environmental Protection Agency (EPA) have issued a set of guidance documents detailing the process for determining Clean Water Act (CWA) jurisdiction over waters of the United States (waters of the U.S.) following the 2008 Rapanos decision. On April 21, 2020, the EPA finalized a revised definition of "waters of the United States under the CWA. The new rule streamlined the definition is as follows:

"The territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes and ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters" (33 CFR 328.3[b]; 40 CFR 120.2[t]).

The EPA and USACE issued a summary memorandum of the guidance for implementing the Supreme Court's decision in Rapanos that addresses the jurisdiction over waters of the U.S. under the CWA. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for evaluation by the EPA and the USACE to determine CWA jurisdiction over the project and to complete the "significant nexus test" as detailed in the guidelines.

The significant nexus test includes consideration of hydrologic and ecologic factors. For circumstances such as those described in the Rapanos Guidance Key Points Summary below, the significant nexus test would take into account physical indicators of flow (evidence of an ordinary high water mark [OHWM]), if a hydrologic connection to a Traditionally Navigable Water (TNW) exists, and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a TNW. The USACE and EPA will apply the significant nexus standard to assess the flow characteristics and functions of a potential water of the U.S. to determine if it significantly affects the chemical, physical, and biological integrity of the downstream TNW.

Wetlands (including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas) are also considered waters of the U.S. (subject to the significant nexus test), and are defined by USACE as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by USACE (Environmental Laboratory 1987).

### Rapanos Guidance Key Points Summary

The USACE and USEPA will assert jurisdiction over the following waters:

- TNWs
- Wetlands adjacent to TNWs
- Non-navigable tributaries of TNWs that are intermittent or perennial
- Wetlands that abut such tributaries

The USACE and USEPA will decide jurisdiction over the following waters based on whether they have a significant nexus with a TNW:

- Intermittent, non-navigable tributaries.
- Wetlands adjacent to non-navigable, intermittent, and perennial tributaries.
- Wetlands adjacent to but that do not directly abut a non-navigable, intermittent and perennial tributary

The USACE and USEPA will not assert jurisdiction over the following waters:

- Ephemeral drainages, swales, or erosional features (gullies, small washes characterized by low volume, infrequent, or short duration flow)

- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

Section 401 of the CWA gives the state authority to grant, deny, or waive certification of proposed federally licensed or permitted activities resulting in discharge to waters of the U.S. The State Water Resources Control Board (State Water Board) directly regulates multi-regional projects and supports the Section 401 certification and wetlands program statewide. The RWQCB regulates activities pursuant to Section 401(a)(1) of the federal CWA, which specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State or appropriate interstate water pollution control agency in/where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

### Los Angeles Regional Water Quality Control Board

Most projects involving water bodies or drainages are regulated by the RWQCB, the principal State agency overseeing water quality of the State at the local/regional level. The survey area is located within the jurisdiction of the San Diego (R9) RWQCB. Where waters of the State overlap with waters of the U.S., pending verification from the USACE, those waters would be regulated under Section 401 of the CWA which is described in the Regulatory Framework in Section 3.1.

In the absence of waters of the U.S., waters may be regulated under the Porter-Cologne Water Quality Control Act if project activities, discharges, or proposed activities or discharges could affect California's surface, coastal, or ground waters. The permit submitted by the applicant and issued by RWQCB is either a Water Quality Certification in the presence of waters of the U.S. or a Waste Discharge Requirement (WDR) in the absence of waters of the U.S.

The State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), as prepared by the State Water Resources Control Board, was implemented on May 28, 2020. The Procedures include a definition for wetland waters of the state that include 1) all wetland waters of the U.S.; and 2) aquatic resources that meet both the soils and hydrology criteria for wetland waters of the U.S. but lack vegetation.

### Local Plans and Policies

#### Thousand Oaks Tree Protection Ordinances (Ord. No. 16104-NS)

Ordinance No. 937-NS, as amended by Ordinance No. 1534-NS and No. 1610-NS, of the TOMC, is intended “to preserve and protect oak trees in recognition of their historical, aesthetic, environmental and landmark value to the citizens of Thousand Oaks, present and future...” Protected trees include any species within the oak (*Quercus*) genus including, but not limited to valley oak (*Q. lobata*), coast live oak (*Q. agrifolia*) and scrub oak (*Q. berberidifolia*) that measure 2 inches or greater in dbh when measured at 4.5 feet above the trees natural grade. Before any protected tree is trimmed, removed, or encroached upon, property owners must contact the Community Development Department to ensure these activities are conducted in compliance with the tree protection ordinance and obtain a permit for tree modification or removal when applicable (TOMC 2020).

Ordinance No. 1217-NS as amended by Ordinance No.1610-NS of the TOMC protects larger-sized black walnut (8 inches dbh), California sycamore (*Platanus racemosa*; 12 inches dbh), toyon (8 inches dbh) and bay laurel (*Umbellularia californica*; 8 inches dbh), designated as Landmark trees. Larger specimens of the aforementioned species meet the criteria of landmark trees, and warrant protection during development; this excludes those present within properties with single-family detached dwellings, provided they are less than 2 acres in size (TOMC 2020).

## Discussion

a) **Less-than-Significant Impact with Mitigation**.

***Special-Status Plant Species***

No special-status plants listed as endangered, threatened, candidate, or state rare pursuant to the federal or state Endangered Species Acts, or as rare by the CNPS, were observed during the initial site visit or focused rare plant survey; therefore, special-status plants have been determined not to be present within or immediately adjacent to the project site.

**Construction**

***Special-Status Avian Wildlife Species and Nesting Birds***

The loggerhead shrike and dozens of other resident and migratory bird species protected in accordance with the MBTA and Sections 3505, 3503.5, and 3511 of the California Fish and Game Code, may nest within and adjacent to the project site. Additionally, the coastal Cactus wren, coastal California gnatcatcher and white-tailed kite may nest outside of the project site, within 500 feet of ground disturbance. **Mitigation Measure BIO-1** requires preconstruction bird surveys and the implementation of avoidance buffers if nests are detected; therefore, with the implementation of mitigation, the potential for the proposed project to impact nesting birds and other special-status avian species will be reduced to a less-than-significant level.

**Operation**

Nighttime lighting associated with the completed project may disrupt foraging and breeding avian species and nesting birds. Implementation of **Mitigation Measure BIO-2** would reduce the potential for nighttime lighting associated with project operation to impact special-status avian species and nesting birds to a less-than-significant level.

**Construction**

***Special-Status Mammal and reptile Species***

The coast horned lizard, coastal whiptail and San Diego desert woodrat may occur on or within 500 feet of the project site and may affected by construction activities. **Mitigation**

**Measure BIO-3a through BIO-3c** would ensure that construction impacts are reduced to a less-than-significant level.

Mitigation Measure BIO-3a would require a pre-construction survey for coast horned, coastal whiptail and San Diego desert woodrat and the relocation of individuals detected within proposed work areas. Mitigation Measure BIO-3b would require that active coast horned lizard and coastal whiptail nests are left in place until they can be verified as inactive. Mitigation Measure BIO-3c would require that active San Diego desert woodrat middens be relocated outside of the limits of construction limits to avoid impact to this species.

**Operation**

Nighttime lighting associated with the completed project may disrupt foraging and breeding special-status wildlife adjacent to the project site. However, the implementation of Mitigation Measure BIO-2 would reduce the potential effects of nighttime lighting to a less-than-significant level.

**Mitigation Measures:**

**BIO-1:** If work activities occur within the bird nesting season (generally defined as February 15 through September 15), a qualified biologist shall conduct a nesting bird survey within 3-7 days prior to the proposed construction start date, to identify any active nests within 500 feet of the project site. If an active nest is found, the nest shall be avoided and a suitable buffer zone shall be delineated in the field such that no impacts shall occur until the chicks have fledged the nest as determined by a qualified biologist. Construction buffers shall be 300 feet for passerines and up to 500 feet for the coastal Cactus wren, coastal California gnatcatcher, white-tailed kite, and raptor species; however, avoidance buffers may be reduced at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations.

**BIO-2:** To minimize potential indirect impact to special-status wildlife species, nighttime lighting shall be shielded downward to limit spillage onto adjacent habitats.

**BIO-3a:** Prior to the commencement of construction activities, a qualified biologist shall conduct a preconstruction clearance survey throughout portions of the project impact area (i.e., in areas of proposed ground disturbance), including a 500-foot buffer for coast-horned lizard, coastal western whiptail and San Diego desert woodrat. If any of these species are observed within or near the project site during preconstruction clearance surveys, a qualified biologist shall relocate the individual(s) to suitable habitat outside of the project site to ensure that construction-related impacts are avoided.

**BIO-3b:** If an active nest of coast-horned lizard or coastal western whiptail is inadvertently excavated during construction activities, it shall be carefully replaced, to the extent feasible, and left undisturbed until the eggs have hatched and young have matured enough for the biologist to deem the nest inactive.

**BIO-3c:** If an active woodrat midden is observed within or immediately adjacent to areas proposed for ground disturbance, it shall be dismantled by hand under the supervision of a qualified biologist prior to the commencement of project activities. If young are encountered during the dismantling process, the material shall be returned in place and the midden remain unmolested for two to three weeks in order to give the young enough time to mature and disperse on their own accord. Material shall be moved to suitable adjacent areas (i.e., native scrub habitat at least 500 feet away) that would not be directly impacted by the proposed project.

b) **No Impact**. The project site does not support riparian vegetation and/or sensitive natural communities identified in regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

c) **Less-than-Significant Impact**. An Aquatic Resources Delineation report was not conducted for the project; however, an unnamed ephemeral drainage was observed during the site visit, immediately adjacent to the project site. The unnamed drainage originates at Conejo Center Drive, immediately north of the project site, and provides connectivity to Arroyo Conejo, downstream and ultimately the Pacific Ocean. This feature would not be considered jurisdictional with the U.S. Army Corps of Engineers (USACE) due to a lack of intermittent or perennial flows; however, would likely be regulated by the Regional Water Quality Control Board (RWQCB) and/or the CDFW. The feature is not anticipated to be impacted as part of the project; however, if the feature is impacted then the applicant would be required to enter into permit agreements with the USACE (CWA Section 404 Permit), CDFW (Section 1602, Streambed Alteration Agreement) and RWCQB (CWA Section 401 permit) to ensure that impacts to aquatic resources are avoided and/or mitigated as deemed appropriate. By complying with the terms of those permits, project impacts would be reduced to less than significant.

d) **Less-than-Significant Impact**. Wildlife is expected to utilize the available habitat onsite in a limited capacity for foraging, breeding and movement. However, the project site does not function as a "pinch point," nor does it provide resources that are necessary for the survival of a particular species. Impacts would be less than significant.

e) **Less-than-Significant Impact with Mitigation**.

**Construction**

***Thousand Oaks Tree Protection Ordinance (Ord. No. 1610-NS)***

<u>Protected Trees</u>

No Oak or Landmark trees were observed within the project site during the site visit. One protected Coast Live Oak (1) is situated just outside the property line approximately 400 feet to the west of Conejo Center Drive. The removal or damage to the dripline of the Coast Live Oak would result in a significant impact. If during construction the Coast Live Oak is impacted, then the applicant would be required to comply with the Thousand Oaks Tree Protection Ordinance (Ord. No. 1610-NS). Compliance with the tree protection ordinance would ensure that impacts to protected oak trees are reduced to a less-than-significant level.

**Thousand Oaks General Plan**

***Community Forest/Forestry Element***

TOGP Policy F-13 - *The City's legacy of trees shall be preserved through the rigorous enforcement of its Oak and Landmark Tree Ordinances. City staff shall keep current with research and practices relating to oak tree preservation and should disseminate such information to maintenance personnel, property owners and others responsible for the City's oak and landmark trees*

Compliance with the Thousand Oaks Tree Protection Ordinance (Ord. No. 1610-NS) would ensure that the project minimizes impacts to protected oak and landmark trees, to the extent feasible, and remains in compliance with TOGP Policy F-13 to reduce impacts to a less-than-significant-level.

***Conservation Element***

Streams and Creeks

TOGP Policy CO-10 – *Streams and creeks should be protected as open space and maintained in as natural a state as possible, and appropriate measures taken to manage urban runoff, in order to protect the City's and other downstream communities' water quality, wildlife diversity, native vegetation, and aesthetic value. This will contribute to the regional effort to improve the quality of Calleguas Creek.*

TOGP Policy CO-23 - *Critical wildlife habitat resources such as movement corridors, surface water impoundments, streams and springs should be given special consideration for protection, restoration or enhancement, in order to maintain biodiversity, biological productivity and ecological integrity of natural open space areas.*

The completion of an Aquatic Resources Delineation and acquisition of the applicable permits will ensure that the project remains in compliance with Policies CO-10 and CO-23.

Native Plant and Wildlife Resources

TOGP Policy CO-21 - *The City shall encourage the proper management, conservation and protection of native plant communities throughout the City's Planning Area, including developed areas and undeveloped open space lands.*

Disturbed California buckwheat scrub, disturbed coastal sage scrub and disturbed coastal sage scrub-California buckwheat scrub, totaling up to 17.49 acres, will be removed as a result of construction activities. However, the implementation of **Mitigation Measure BIO-4** will ensure compliance with Policy CO-21 by enhancing 17.49 acres of native scrub habitat located within the adjacent COSCA land.

TOGP Policy CO-25 - *The City should foster a holistic approach to conservation of wildlife resources including consideration of biological crusts and pollinator species in recognition of the many important functions they perform in a healthy ecosystem.*

Mitigation Measures BIO-1 and BIO 3a-3c will ensure that pre-construction surveys for special-status wildlife are completed, and if detected, measures would be implemented to reduce impacts to a less-than-significant level.

Oak and Landmark Trees

TOGP Policy CO-29 – *Continue to protect oak and landmark trees and their habitat in recognition of their historic, aesthetic and environmental value to the citizens of Thousand Oaks, in particular Valley Oak habitat.*

Compliance with the Thousand Oaks Tree Protection Ordinance (Ord. No. 1610-NS) will ensure that impacts to protected oak and landmark trees are reduced to a less-than-significant level.

Rare, Threatened or Endangered Species

TOGP Policy CO-32 – *The City shall encourage and promote the conservation and protection of all rare, threatened, endangered or sensitive species listed by State and Federal agencies (United States Fish and Wildlife Service and California Department of Fish and Wildlife), the California Native Plant Society (CNPS), the County of Ventura and the City of Thousand Oaks*

Mitigation Measure BIO-1, BIO-2, and BIO 3a-3c will ensure that pre-construction surveys for special-status wildlife are completed. If detected within the project site, measures will be implemented to reduce impacts to special-status plant and wildlife species to a less-than-significant level.

***Open Space Element***

Unit Area 3, Conejo Canyons is located to the north and west of the project site. Numerous policies have been adopted to aid in the preservation of areas designated as open space in the TOGP. The proposed project is not expected to extend into the Unit Area 3; therefore, project would remain in compliance with all policies set forth within the TOGP.

**Operation**

***Native Plant and Wildlife Resources***

TOGP Policy CO-21 - *The City shall encourage the proper management, conservation and protection of native plant communities throughout the City's Planning Area, including developed areas and undeveloped open space lands.*

TOGP Policy CO-25 - *The City should foster a holistic approach to conservation of wildlife resources including consideration of biological crusts and pollinator species in recognition of the many important functions they perform in a healthy ecosystem.*

Mitigation Measure BIO-2 will ensure that impacts to biological crusts/pollinator species (CO-25) and the native plant communities (CO-21) in which they occur, as a result of lighting associated with the completed project, would be reduced to a less-than-significant level.

***Wildlife Movement Corridors***

TOGP Policy CO-28 – *Urban land uses adjoining natural open space areas should be designed in a manner that is sensitive to the needs of wildlife and avoids or minimizes any potentially adverse impacts to movement corridors.*

***Rare, Threatened or Endangered Species***

TOGP Policy CO-32 – *The City shall encourage and promote the conservation and protection of all rare, threatened, endangered or sensitive species listed by State and Federal agencies (United States Fish and Wildlife Service and California Department of Fish and Wildlife), the California Native Plant Society (CNPS), the County of Ventura and the City of Thousand Oaks*

Mitigation Measure BIO-2 will ensure that impacts to biological resources described in the policies above (CO-28 and 32), as a result of lighting associated with the completed project, would be reduced to a less-than-significant level.

**Mitigation Measures:**

**BIO-4:** Enhance 17.49 acres of native scrub vegetation located within adjacent COSCA land, at a ratio of 1:1. The proposed enhancement shall include, at a minimum, the treatment of non-native and/or invasive (Cal-IPC moderate or high rating) present within existing native scrub vegetation. The proposed methods and extent of the proposed enhancement activities shall be approved by the City of Thousand Oaks.

f) **No Impact**. The project site is located in an adopted Specific Planning area and is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impact would occur.

## Cumulative Impacts

The five cumulative projects described in Table 2 are located within previously developed lots and are not expected to contain sensitive biological resources, but there is the potential to support nesting by birds protected by State and federal regulation. Impacts to nesting birds for the proposed project and the related projects would be below the level of significance with the compliance with regulations protecting nesting birds. In addition, it is also anticipated that the other related projects would implement similar mitigation measures on a case-by-case basis as determined by project-specific environmental review to reduce individual project impacts, if any. Impacts during construction and operation at the cumulative project locations are expected to be less than significant as the projects are located on previously developed lots which are lacking native vegetation. Therefore, cumulative impacts to biological resources as a result of implementation of the proposed project would not be expected to be significant with the incorporation of Mitigation Measure BIO-1 through BIO-4.

## References

California Department of Fish and Game (CDFG) Wildlife and Habitat Data Analysis Branch, California Native Plant Society (CNPS), Todd Keeler-Wolf and Julie Evens. 2006. Vegetation Classification of the Santa Monica Mountains National Recreation Area and Environs in Ventura and Los Angeles Counties, California. Version 1—Association Level and Specific Alliances. January 2006.

California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations. March 20, 2018.

California Department of Fish and Wildlife (CDFW). 2019. Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety, To List Four Species of Bumble Bees as Endangered Under the California Endangered Species Act.

City of Thousand Oaks (TOMC). 2020. Thousand Oaks Municipal Code. https://www.toaks.org/departments/city-clerk/municipal-code

Environmental Laboratory, Department of the Army. 1987. Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1). U.S. Army Corps of Engineers. Waterways Experimental Station. Vicksburg, Mississippi.

Environmental Science Associates (ESA). 2021. Focused Rare Plant Survey for the Conejo Summit Project. July 21, 2021.

Holland, Robert F., California Department of Fish and Game (CDFG) Non-game Heritage Program. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California.

Penrod, K.C. Cabanero, P. Beier, C. Luke, W. Spencer, E. Rubin, R. Sauajot, S. Riley, and D. Kamradt. 2006. South Coast Missing Linkages Project: A Linkage Design for the Santa Monica-Sierra Madre Connection. Produced by South Coast Wildlands, Idyllwild, CA. www.scwildlands.org, in cooperation with National Park Service, Santa Monica Mountains Conservancy, California State Parks, and the Nature Conservancy.

Solek, C. and L. Szijj. 2004. Cactus Wren (*Campylorhynchus brunneicapillus*). *In* The Coastal Scrub and Chaparral Bird Conservation Plan: a strategy for protecting and managing coastal scrub and chaparral habitats and associated birds in California. California Partners in Flight. http://www.prbo.org/calpif/htmldocs/scrub.html

U.S. Department of State Geographer (USDSG). 2020. Google Earth Pro.

U.S. Fish and Wildlife Service (USFWS). 2010. Coastal California Gnatcatcher (*Polioptila californica californica*), 5-year Review: Summary and Evaluation. September 29, 2010.

Ventura County Ordinance Code (VCOC). 2020. Ventura County Ordinance Code. https://vcrma.org/county-ordinances

# Cultural Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES —** Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? | ☐ | ☒ | ☐ | ☐ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ☒ | ☐ | ☐ |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | ☐ | ☒ | ☐ | ☐ |

## Discussion

The following discussion is based on *Conejo Summit Project – Final Phase I Cultural Resources Survey Report* (Vader and Gonzalez, 2020). The *Phase I Cultural Resources Survey Report* is confidential and is not for public distribution due to the sensitive nature of the resources discussed. The assessment included a records search at the South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton; a California Native American Heritage Commission (NAHC) Sacred Lands File search; review of historic topographic maps and aerial photographs; a desktop geoarchaeological review; and a cultural resources survey.

a) **Less-than-Significant Impact with Mitigation**. One prehistoric archaeological resource (P-56-000449) consisting of a village site was identified in the project area as a result of the cultural resources survey report. The site was subject to a testing program in 1978 and, as a result, the site was found to contain intact subsurface archaeological deposits. Based on the results of the 1978 testing program, it was recommended that the site either be preserved, or subject to data recovery excavations to salvage relevant data prior to its destruction to mitigate potential impacts associated with development. Although the site does not appear to have been formally evaluated for inclusion in the California Register of Historical Resources (CRHR), based on the previous recommendations and on a review of the site's constituents, the site appears eligible under CRHR Criterion 4 (data potential) and, therefore, qualifies as a historical resource pursuant to CEQA. The site is located within an undisturbed portion of the project area within a fenced perimeter atop the remnant of a ridgeline. No additional cultural resources were identified within or immediately adjacent to the project, and previous mass grading of the Project area in the mid-1990s reduces the possibility for encountering intact subsurface archaeological deposits during project-related ground disturbance.

The project's current design does not propose any development or other disturbances to P-56-000449, and, therefore, the site would not be subject to direct impacts. Although no direct impacts are anticipated, the site could be subject to indirect impacts during and after project construction as a result of increased use of the site's vicinity. Indirect impacts may include increased foot traffic through the site as well as looting. As such, the project could impact the significance of an archaeological site that qualifies as a historical resource pursuant to CEQA. Implementation of **Mitigation Measures CUL-1 through -5** would reduce potential impacts to an archaeological resource qualifying as historical resources to less than significant.

**Mitigation Measures:**

**CUL-1:** Prior to project approval**,** a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior, 2008) shall be retained by the Applicant to carry out all mitigation measures related to archaeological resources.

**CUL-2:** Within 30 days of final project approval of entitlements or deed restrictions 30 days before pulling of the first grading permit, consistent with City of Thousand Oaks' General Plan, Conservation Element (2013) CO-35, resource P-56-000449 shall be protected by deed restriction as permanent "open space", in order to prevent any future development or use that might otherwise adversely impact the resource. The deed restriction shall contain stipulations to ensure the protection and maintenance of P-56-000449 in perpetuity. The deed restriction shall outline the types of protective measure to be implemented (e.g., fencing, capping). The agreement shall also include provisions for the preparation of an archaeological site maintenance plan that outlines roles and responsibilities, types of maintenance that are allowed and disallowed, as well as a maintenance schedule to ensure the site's protective measures are maintained. The qualified archaeologist shall review and comment on the agreement and maintenance plan. If significant new information related to the presence of the resources emerges then the revaluation of the deed restriction shall occur.

**CUL-3:** An annual site condition verification program shall be undertaken to document the condition of P-56-000449. The site verification program shall be implemented by the qualified archaeologist, shall occur once every month during project grading and construction of Building 1G and Building 2, and on an annual basis for the first three years after the completion of project construction.

The goal of the annual site condition verification program is to monitor whether P-56-000449 is being indirectly impacting as a result of an increased use of the surrounding area. The results of the annual site condition verification shall be documented in a brief memorandum and shall include: confirmation of resource boundaries with sub-meter GPS; general condition and disturbances observed; and photography to document whether any change in resource condition has occurred. California Department of Parks and Recreations (DPR) 523 form updates, following California Office of Historic Preservation's (OHP) *Instructions for Recording Historical Resources,* shall be prepared and filed with the South Central Coastal Information Center for P-56-000449 if changes in setting or condition are observed.

If no impacts to P-56-000449 are observed following the first three years, the annual site condition verification program may be discontinued. If the annual site condition verification program identifies impacts to P-56-000449 resulting from project operations, or if, at any time, the City becomes aware of such impacts, additional protective measures shall be implemented immediately as recommended by the qualified archaeologist. If protective measures are implemented, annual verification of the measures' success shall be conducted for a period of three years.

**CUL-4:** Prior to the start of any ground disturbing activities associated with the project, the qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel. Construction personnel shall be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. Construction personnel shall also be instructed to avoid P-56-000449. The Applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

**CUL-5:** In the event of the unanticipated discovery of archaeological materials during project implementation, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the City on the significance of the resource.

If it is determined that the discovered archaeological resource constitutes a significant resource, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the City that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource

b) **Less-than-Significant Impact with Mitigation**. The only one known archaeological resource, P-56-000449, was identified within the project area as a result of the cultural resources survey report prepared for the project. Resource P-56-000449 qualifies as a historical resource, and, therefore, cannot qualify as a unique archaeological resource pursuant to CEQA. No additional archaeological resources were identified within or immediately adjacent to the project. Previous mass grading of the project area in the mid-1990s likely removed native soils that would have had the potential to contain intact archaeological deposits. As such, the likelihood for encountering intact archaeological deposits that qualify as unique archaeological resources during project implementation is low. Nonetheless, should project-related ground disturbing activities encounter subsurface archaeological deposits that qualify as unique archaeological resources, the project could cause a substantial adverse change in the significance of a unique archaeological resources. Implementation of **Mitigation Measures CUL-1, CUL-4, and CUL-5** will reduce potential impacts to unknown archaeological deposits that could qualify as unique archaeological resources to less than significant.

**Mitigation Measures:**

Implement Mitigation Measure CUL-1, CUL-4 and CUL-5

c) **Less-than-Significant Impact with Mitigation.** No known formal or informal cemeteries or other burial places are known to exist within the project area and the project is unlikely to disturb human remains. However, because the project would involve earthmoving activities, there is the possibility, albeit low, that such actions could unearth, expose, or disturb previously unknown human remains. With the incorporation of **Mitigation Measure CUL-6**, which requires compliance with State Health and Safety Code Section 7050.5 and PRC Section 5097.98, potential impacts to human remains would be less than significant.

**Mitigation Measures:**

**CUL-6:** If human remains are encountered, the contractor shall halt work in the vicinity (within 100 feet) of the find and contact the Ventura County Coroner in accordance with Public Resources Code (PRC) Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the California Native American Heritage Commission (NAHC) shall be notified, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). The NAHC shall designate a most likely descendant (MLD) for the remains per PRC Section 5097.98. The contractor shall ensure that the immediate vicinity where the Native American human remains are located is not damaged or disturbed by further development activity, according to generally accepted cultural or archaeological standards or practices, until the landowner has discussed and conferred with the MLD regarding their recommendations, as prescribed in PRC Section 5097.98, taking into account the possibility of multiple human remains

## Cumulative Impacts

As discussed above, Cultural Resources, ground-disturbing activities associated with construction may uncover cultural resources in the proposed project areas. Implementation of Mitigation Measures CUL-1 through CUL-6 would reduce the proposed project impacts to a less than significant level. It is also anticipated that the other related projects would implement similar mitigation measures on a case-by-case basis as determined by project-specific environmental review. The incremental effect on cumulative cultural resources during construction and operation of the proposed project would be less than significant. Therefore, the contribution is not cumulatively considerable and would not result in a cumulative impact on cultural resources.

## References

Vader, Michael and Mathew Gonzalez. 2020. Conejo Summit Project – Phase I Cultural Resources Survey Report. Prepared for the City of Thousand Oaks by Environmental Science Associates.

# Energy

| Issues (and Supporting Information Sources): | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. ENERGY —** Would the project: | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☒ | ☐ |

## Discussion

a) **Less-than-Significant Impact.**

**Construction**

Construction of the project would result in energy consumption from the use of heavy-duty construction equipment, on-road trucks, and construction workers commuting to and from the project Site. Electricity would be used during construction to provide temporary power for lighting and electronic equipment (e.g., computers) and to power certain construction equipment (e.g., hand tools or other electric equipment). Energy use during construction would generally not result in a substantial increase in on-site electricity consumption. Electricity use during construction would be variable depending on lighting needs and the use of electric-powered equipment and would be temporary for the duration of construction activities. It is expected that construction electricity use would be temporary and negligible over the long-term. Natural gas is not anticipated to be used during construction activities.

Heavy-duty construction equipment would be primarily diesel-fueled. The assumption that diesel fuel would be used for most equipment represents the most conservative scenario for maximum potential energy use during construction. The estimated total diesel fuel that would be consumed by heavy-duty construction equipment approximately 622,148 gallons over the entire construction period. This results in annual consumption over an 84-month project of 92,170 gallons. Calculation details are provided in **Appendix D** of this document. Based on CARB's on-road vehicle emissions model, EMFAC2017, heavy-duty haul trucks and vendor trucks operating in the South Coast Air Basin would have an estimated average fuel economy of approximately 6.6 and 8.1 miles per gallon respectively in 2021. Although construction would occur over 84 months, 2021 fuel economy values were used to provide a conservative assessment as fuel economies would increase in future years.

The number of construction workers that would be required would vary based on the phase of construction and activity taking place. The transportation fuel required by construction workers to travel to and from the project Site would depend on the total number of worker trips estimated for the duration of construction activity. The total gasoline fuel was estimated for workers and is 36,617 gallons over the total construction period or an annual average of 5,425 gallons per year.

For comparison purposes only, and not for the purpose of determining significance, the annual average fuel usage would represent approximately 0.002 percent of the 2019 annual on-road gasoline-related energy consumption and 0.28 percent of the 2019 annual diesel fuel-related energy consumption in Ventura County (CEC 2019), as shown in Appendix D of this Draft EIR.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption (BP Global, 2021). Vehicles that would be used by construction workers would comply with Corporate Average Fuel Economy fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Vehicles that would be used by construction workers would also comply with Pavley and Low Carbon Fuel Standards which are designed to reduce vehicle GHG emissions, but would also result in fuel savings in addition to compliance with Corporate Average Fuel Economy standards.[7]

Construction of the project would utilize fuel-efficient equipment consistent with State and federal regulations, such as fuel efficiency regulations in accordance with the CARB Pavley Phase II standards, the anti-idling regulation in accordance with Section 2485 in Title 13 of the California Code of Regulations, and fuel requirements in accordance with Section 93115 in Title 17 of the California Code of Regulations, and would comply with State measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While these regulations are intended to reduce construction emissions, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines.

**Operation**

Operational energy consumption would occur as a result of the building's energy needs and the use of transportation fuels (e.g., diesel and gasoline) associated with vehicles traveling to and from the project Site. This analysis estimates the maximum operational energy consumption to evaluate the project's associated impacts on energy resources.

Daily operation of the project would consume energy in the form of electricity. Based on the type of land use (light industrial) natural gas is not anticipated to be consumed. Additionally, energy would be consumed off-site for the conveyance and treatment of

[7] In September 2019, the USEPA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule in the federal register (Federal Register, Vol. 84, No. 188, Friday, September 27, 2019, Rules and Regulations, 51310-51363) that maintains the vehicle miles per gallon standards applicable in model year 2020 for model years 2021 through 2026. California and 23 other states and environmental groups in November 2019 in U.S. District Court in Washington, filed a petition for the EPA to reconsider the published rule. The Court has not yet ruled on these lawsuits.

water, wastewater, and the disposal of solid waste. Building energy use factors and water demand factors from CalEEMod, consistent with the project analyses conducted for air quality and greenhouse emissions, are used to estimate building energy use. The project's estimated net operational energy demand is provided in **Table 9**. The project would install solar electric PV systems, as required to meet local applicable Codes. The project would be designed to meet the applicable standards of the Green Building Code requirements such as, energy-efficient appliances, water efficient plumbing fixtures and fittings, and water-efficient landscaping. These energy saving features are included in the electricity estimates in Table 9.

**TABLE 9**
**SUMMARY OF ANNUAL NET NEW ENERGY USE DURING PROJECT OPERATION**

| Energy Type[a,b] | Annual Quantity |
|---|---|
| **Electricity** | |
| Project | 6.89 GWh |
| Percent County Use | 0.13% |
| **Natural Gas (From Transportation)** | |
| Project | 329 MMBtu |
| Percent County Use | 0.002% |
| **Transportation** | |
| Project | |
| Gasoline | 29,402 gallons |
| Diesel | 168,760 gallons |
| Percent County Use | |
| Gasoline | 0.01% |
| Diesel | 0.51% |

GWh = Gigawatt-hours
MMBtu = million British thermal units
a Detailed calculations are provided in Appendix D.
b Project electricity and natural gas estimates assume compliance with applicable 2019 Title 24 and CALGreen Code requirements.

SOURCE: ESA, 2021.

## Electricity

As shown in Table 9, with compliance with 2019 Title 24 standards and applicable CALGreen requirements, buildout of the project would result in a projected net increase in the on-site demand for electricity totaling approximately 6.89 GWh per year. The project would include building features such as energy-efficient appliances, water efficient plumbing fixtures and fittings, and water-efficient landscaping. All components would, at a minimum, meet the City's Green Building Program requirements.

SCE is required to procure at least 33 percent of its energy portfolio from renewable sources by 2020. With the passage of SB 100 in September 2018, SCE will be required to update its long-term plans to demonstrate compliance including providing 60 percent of its energy portfolio from renewable sources by December 31, 2030, and ultimately planning for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045. SCE's current sources include wind, solar, eligible hydroelectric, biomass/biowaste, and geothermal sources. These sources accounted for 35 percent of SCE's overall energy mix in 2019, the most recent year for which data are available (SCE 2019a).

Based on SCE's 2019 Annual Report, SCE total system sales for 2018-2019 fiscal year (the latest data available) was 84,654,000 MWh of electricity (SCE 2019b). As such, the project-related net increase in annual electricity consumption of 6.89 GWh per year would represent less than 0.001 percent of SCE's total energy sales. In addition, as previously described, the proposed project would incorporate a variety of energy conservation measures to reduce energy usage. Therefore, operation of the project would not result in the wasteful, inefficient, or unnecessary consumption of electricity.

### Natural Gas

With compliance with 2019 Title 24 standards and applicable CALGreen Code requirements, buildout of the project is projected to generate a net increase in the transportation demand for natural gas totaling approximately 3.29 MMBtu per year. Based on the 2020 California Gas Report, the California Energy and Electric Utilities, a collective of California utility companies, estimates natural gas supplies within SoCalGas' planning area would be approximately 1,300,164,675 MMBtu in 2027 (CGEU 2020). The proposed project would account for less than 0.001 percent of the 2027 forecasted consumption in SoCalGas' planning area.

As previously described, the proposed project incorporates a variety of energy conservation measures and features to reduce energy usage and minimize energy demand. Therefore, operation of the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of natural gas.

### Transportation Energy

During operation, project-related traffic would result in the consumption of petroleum-based fuels related to vehicular travel to and from the project site. As summarized in Table 9, the proposed project's estimated net increase in petroleum-based fuel usage would be approximately 29,402 gallons of gasoline and 168,760 gallons of diesel per year.

Based on the CEC's California Annual Retail Fuel Outlet Report, Ventura County consumed approximately 13,473,000,000 gallons of gasoline and approximately 1,559,000,000 gallons of diesel fuel in 2019 (CEC 2020). The proposed project would account for 0.01 percent of County gasoline consumption and 0.51 percent of County diesel consumption (based on the available County fuel sales data for the year 2019).

Additionally, in accordance with the CALGreen Code, infrastructure for EV charging stations would be provided to meet local applicable Codes. The project would provide a total of 51 charging stations (Iteris 2020).

The project would support Statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles for the reasons provided below. As detailed in the transportation analysis for the project, VMT reductions would be achieved through providing a pedestrian network, providing bike parking and end of trip facilities, providing electrical vehicle charging stations, ride share parking program, and a connection to the Hill Canyon Road Bicycle Trail (Iteris 2020). As a result, operation of the project would provide employees, and visitors with alternative transportation options. As with the project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions consistent with applicable provision of the SCAG 2020-2045 RTP/SCS for the land use type.

Furthermore, the project would be consistent with the energy efficiency policies emphasized by the 2020-2045 RTP/SCS. The project would not conflict with the 2020-2045 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations, provide better "placemaking," provide more transportation choices, and reduce vehicular demand and associated emissions. Therefore, the project would not conflict with the energy reduction-related actions and strategies contained in the 2020-2045 RTP/SCS.

As the above discussion demonstrates, the project would minimize operational transportation fuel demand consistent with and not in conflict with State, regional, and City goals. Therefore, operation of the project would not result in the wasteful, inefficient, and unnecessary consumption of energy, and impacts would be less than significant

b) **Less-than-Significant Impact.** As discussed above, the proposed project would incorporate green building design features such as solar electric PV systems and electric vehicle charging parking spaces, consistent with the energy efficiency standards in the CALGreen Code.

The project would not conflict with the 2020-2045 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations, provide better "placemaking," provide more transportation choices, and reduce vehicular demand and associated emissions. The proposed project would provide a pedestrian-friendly design, as well as provide bicycle storage areas for project employees, and visitors. Further, the proposed project would install EV charging spaces.

As detailed in the transportation analysis for the project, VMT reductions would be achieved through providing a pedestrian network, providing bike parking and end of trip facilities, providing electrical vehicle charging stations, ride share parking program, and a connection to the Hill Canyon Road Bicycle Trail (Iteris 2020).

As a result, the proposed project would support Statewide efforts to improve transportation energy efficiency and reduce wasteful or inefficient transportation energy consumption with respect to private automobiles. Overall, the project's features would support and promote the use of renewable energy and energy efficiency, therefore, impacts would be less than significant.

## Cumulative Impacts

Like the project, other cumulative developments would be required to incorporate energy conservation features in order to comply with applicable mandatory regulations including CALGreen Code, state energy standards under Title 24, and incorporate mitigation measures, as necessary. As such, the project's contribution to cumulative impacts due to wasteful, inefficient, and unnecessary consumption of energy would not be cumulatively considerable. Further, as previously described, the proposed project incorporates a variety of energy conservation measures and features to reduce energy usage and minimize energy demand. Related projects, as with the project, would be required to evaluate natural gas conservation features and compliance with applicable regulations including the Title 24 standards and CALGreen Code, and incorporate mitigation measures, as necessary under CEQA. Therefore, operation of the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of natural gas.

## References

BP Global, Oil reserves, 2021, http://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/oil/oil-reserves.html, accessed January 2021.

California Gas and Electric Utilities (CGEU), 2020 California Gas Report, page 146.

CEC, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2019 https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting, accessed January 2021.

Iteris 2020. Draft Shapell Industrial Project –CEQA Transportation Analysis. December 21.

Kimley Horn 2020. Shapell Traffic Study. May 15.

SCE 2019a, Power 2019 Power Content Label, Southern California Edison.

Edison International and SCE 2019. 2019 Annual Report, page 2.

# Geology and Soils

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **VII. GEOLOGY AND SOILS —** Would the project: | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ |

## Discussion

Descriptions and analysis for this section are based on information contained in the Geotechnical Site Evaluation Update Commercial Development of Tract 4823, Phase 1 and 3 Conejo Center Drive and Rancho Conejo Boulevard in the Newbury Park area of Thousand Oaks, California prepared by Gorian & Associates, Inc. (Gorian 2019), which is included in **Appendix E**

a.i–ii) **Less-than-Significant Impact.** The faults most susceptible to earthquake rupture are active faults, which have experienced surface displacement within the last 11,000 years. The project site is not located within an Alquist-Priolo Earthquake Fault Zone and no mapped active faults are known to pass through the immediate project region (Gorian 2019). Therefore, the potential for fault rupture to affect the proposed project would be considered less than significant.

The project area is located in a seismically active region and is subject to strong ground shaking. The principal potential earthquake hazard for the project area is ground shaking, which could cause damage to buildings and infrastructure. However, the proposed project would be required to meet the California Building Code (CBC) requirements for constructing structures in seismically active regions. Therefore, impacts would be considered less than significant.

a.iii–iv) **Less-than-Significant Impact.** Liquefaction is a phenomenon where unconsolidated and/or near saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil during strong earthquake shaking results in the temporary fluid-like behavior of the soil. The proposed development is not within an area shown to have a potential for liquefaction or landsliding on the State's Seismic Hazard Zones Map. The alluvium and engineered fill underlying the site are not considered susceptible to liquefaction or seismic induced settlement. Geomorphic features typical of significant landslides were not identified on or directly off-site the site (Gorian 2019). Impacts would be less than significant.

b) **Less-than-Significant Impact.** The upper soils in the project area have become weathered and disturbed. Therefore, within all areas of construction or grading soil removals would extend to the previously placed engineered fill or native soils. The grading is anticipated to removal approximately 18 inches from the present grade. Soil exposed by construction activities could be subject to erosion if exposed to heavy rain, winds, or other storm events. However, the proposed project would require a National Pollution Discharge Elimination System (NPDES) Construction General Permit from the Regional Water Quality Control Board, as the proposed project would disturb at least one acre of soil. A project specific Storm Water Pollution Prevention Plan (SWPPP) would be prepared in compliance with the Construction General Permit. The SWPPP would identify erosion control and sediment control best management practices (BMPs) that would be implemented to minimize the occurrence of soil erosion or loss of topsoil. With implementation of the required SWPPP and BMPs, impacts would be less than significant.

c) **Less-than-Significant Impact.** As discussed above, the proposed development is not within an area shown to have a potential for liquefaction or landslides on the State's Seismic Hazard Zones Map. The alluvium and engineered fill underlying the site are not considered susceptible to liquefaction or seismic induced settlement and the geomorphic features typical of significant landslides were not identified on or directly off-site the site (Gorian 2019). Additionally, the proposed project would execute all recommendation provided in the Geotechnical Report prepared for the project to ensure safety and reduce risk related to geologic hazards. Impacts would be less than significant.

d) **Less-than-Significant Impact.** Expansive soils are predominantly comprised of clays, which expand in volume when water is absorbed and shrink when the soil dries. Expansion is measured by shrink-swell potential, which is the volume change in soil with a gain in moisture. Soils with a moderate to high shrink-swell potential can cause damage to roads, buildings, and infrastructure (USDA, 2019). The project site is surrounded by Older Alluvium (Terrace Deposits) and underlain by bedrock of the Conejo Volcanics.

The lots were graded in phases in 2000 to the bedrock and then engineered fill was placed on each lot. Eight- and ten-inch diameter subdrains were installed within the lots in accordance with the recommendation of the geotechnical report to avoid future water ponding and/or drainage issues. With proper drainage the proposed project would not pose an issue related to shrinking and swelling. Further, the proposed project would be subject to the CBC which controls the design and location of facilities in order to safeguard the public and reduce potential impacts related to expansive soils to less than significant levels.

e) **No Impact.** The proposed project would not include the installation or use of septic tanks or alternative wastewater disposal systems. Therefore, no construction or operational impacts associated with septic tanks or alternative wastewater disposal systems would occur.

f) **Less-than-Significant Impact with Mitigation.** A geologic map review indicates the surficial geology of the project area consists of the Miocene-aged (23.03 to 5.333 million years ago) Conejo Volcanics (map unit Tco) and Pleistocene-age (2,580,000 to 11,700 years ago) Quaternary older alluvium (map unit Qoa) (Campbell et al., 2014). The Conejo Volcanics geologic unit consists of igneous rock, which is not conducive to the preservation of fossil resources. The Pleistocene-age Quaternary older alluvium is of appropriate age to contain paleontological resources.

The geotechnical report prepared for the project indicates the project area was subject to mass grading from mid-1990s through 2000 during which the project area's higher elevations were reduced and the lower elevations filled in (Gorian 2019). As part of the grading, building pads were also developed using fill material. Grading removed the surficial sediments to depths wherein either bedrock or older alluvial sediments were encountered (Gorian 2019). As such, the present surface of the project area is comprised of engineered fill (map unit afl), Pleistocene-age alluvial terrace deposits (map unit Qt), and Conejo Volcanic bedrock.

A records search conducted by the Los Angeles County Natural History Museum (LACM) did not identify any fossil localities in the project area; however, it did indicate the presence two fossil localities within Pleistocene-age alluvial deposits in the project vicinity (McLeod, 2020). The closest fossil locality is LACM 1680, located approximately 2 miles southeast of the project, which produced fossil specimens of mammoth (*Mammuthus*) and horse (*Equus*) at depths of 14-15 below the ground surface. The second fossil locality is LACM 560, located approximately 3 miles north of the project, which produced fossil specimens of horse (*Equus*) from unknown depths.

The geotechnical report indicates Pleistocene-age terrace deposits (Qt) are mapped at surface at various points within the project area. These deposits are of appropriate age to contain paleontological resources as indicated by the LACM's identification of two fossil localities originating from similar Pleistocene deposits in the project's vicinity. As such, project-related ground disturbance into portions of the project area mapped as containing

Pleistocene terrace deposits at the surface have the potential to directly or indirectly destroy a unique paleontological resource or unique geologic feature (Buildings 1, 4, 5, and 6). Implementation of **Mitigation Measures GEO-1 through -3** would reduce impacts to paleontological resource and unique geologic features to less than significant.

**Mitigation Measures:**

**GEO-1:** Prior to the start of ground disturbing activities, all construction personnel shall be trained to identify the types of paleontological resources that may be encountered during Project implementation. The training may be provided during the archaeological sensitivity training conducted pursuant to Mitigation Measure CUL-4. Documentation shall be retained demonstrating that all construction personnel attended the training.

**GEO-2:** The qualified paleontologist shall supervise a paleontological monitor meeting the Society for Vertebrate Paleontology standards (2010). The monitor shall be present during all ground-disturbing activities occurring within undisturbed native soils within areas mapped as Quaternary Terrace Deposits (Qt). Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. Monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the qualified paleontologist in consultation with the City. Monitoring activities shall be documented in a Paleontological Resources Monitoring Report to be prepared by the qualified paleontologist at the completion of construction and shall be provided to the City and filed with the Natural History Museum of Los Angeles County within six (6) months of project completion.

**GEO-3**: If a unique geologic feature or paleontological resource is discovered during construction, the paleontological monitor shall be empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area shall be established by the qualified paleontologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the qualified paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing and evaluation of the find. All significant fossils shall be collected by the paleontological monitor and/or the qualified paleontologist. Collected fossils shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the Los Angeles County Natural History Museum, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.

## Cumulative Impact

The proposed project impacts associated with geology, soils, and seismicity are site specific and would neither increase nor be magnified by potential impacts from impacts associated with geology, soils, and seismicity for related projects as listed on Table 2. The project would result in less-than-significant impacts related to fault rupture, ground shaking, landslides, and unstable geologic units. However, as discussed in above, the proposed project has the potential to encounter significant paleontological resources. To reduce the potential impact to less than significant, the proposed project would implement mitigation measures GEO-1 through GEO-3. Cumulative projects would also have the potential to encounter significant paleontological resources if ground-disturbing activities occur within undisturbed native soils. To reduce the potential impact to less than significant, the cumulative projects that include excavation within native soils would also be required to implement mitigation measures similar to Mitigation Measures as GEO-1 through GEO-3. With implementation of these mitigation measures, the potential impacts to paleontological resources would be reduced to not cumulatively considerable and less than significant.

## References

California Geological Survey (CGS), 2002, Seismic Hazard Zone Report for the Newbury Park 7.5-minute Quadrangle, Ventura County, California. CGS Seismic Hazard Zone Report 055, last revision date 1/13/06.

California Geological Survey (CGS), 2018, Earthquake Fault Zones, A Guide for Government Agencies, Property Owners / Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California. California Geological Survey Special Publication 42, Revised 2018.

Campbell, Russell H., Chris J. Wills, Pamela J. Irvine, and Brian J. Swanson. 2014. *Preliminary Geologic Map of the Los Angeles 30' x 60' Quadrangle, California.* California Geological Survey, Sacramento, CA.

Chang, S.W., Bray, J.D., and Seed, R.B., 1994, Ground Motions and Local Site Effects. in Stewart, J.P., Bray, J.D., Seed, R.B. and Sitar, N. eds., Preliminary Report on the Principal Geotechnical Aspects of the January 17, 1994 Northridge Earthquake, Earthquake Engineering Research Center, University of California at Berkeley, Report No. UBC/EERC-94/08

Gorian and Associates, 2019. *Geotechnical Site Evaluation Update Commercial Development of Tract 4823, Phases 1 and 3 Conejo Center Drive and Rancho Conejo Boulevard in the Newbury Park area of Thousand Oaks, California.* Prepared for Thousand Oaks Master, LLC, by Gorian and Associates, Inc.

McLeod, Samuel. 2020. *Paleontological resources for the proposed Conejo Summit Project, in the City of Thousand Oaks, Los Angeles County*. Prepared for Environmental Science Associates by the Los Angeles County Natural History Museum.

Society of Vertebrate Paleontology (SVP). 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Available at: http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx Accessed January 3, 2017.

# Greenhouse Gas Emissions

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **VIII. GREENHOUSE GAS EMISSIONS —** Would the project: | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

## Discussion

a,b) **Less-than-Significant Impact.** State regulated GHGs include carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride ($NF_3$), and sulfur hexafluoride (SF6). $CO_2$ is the most abundant GHG in the atmosphere. Not all GHGs exhibit the same ability to induce climate change; as a result, GHG contributions are commonly quantified in equivalent mass of $CO_2$, denoted as $CO_2e$. Mass emissions are calculated by converting pollutant specific emissions to $CO_2e$ emissions by applying the proper global warming potential (GWP) value. These GWP ratios are available from the U.S. Environmental Protection Agency (USEPA) and are published in the California Climate Action Registry (CCAR) General Reporting Protocol. By applying the GWP ratios, Project related $CO_2e$ emissions can be tabulated in metric tons per year.

The City has not yet adopted a numerical significance threshold for assessing impacts related to GHG emissions and has not formally adopted a local plan for reducing GHG emission. When no guidance exists under CEQA, the lead agency may look to and assess general compliance with comparable regulatory schemes.[8] In its January 2008 CEQA and Climate Change white paper, the California Air Pollution Control Officer's Association (CAPCOA) identified a number of potential approaches for determining the significance of GHG emissions in CEQA documents. In its white paper, CAPCOA suggests making significance determinations on a case-by-case basis when no significance thresholds have been formally adopted by a lead agency.

Amendments to Section 15064.4 of the CEQA Guidelines were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. If a

8 See Protect Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal. App. 4th 1099, 1107 ["'[A] lead agency's use of existing environmental standards in determining the significance of a project's environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and resolution."'"]. Lead agencies can, and often do, use regulatory agencies' performance standards. A project's compliance with these standards usually is presumed to provide an adequate level of protection for environmental resources. See, e.g., Cadiz Land Co. v. Rail Cycle (2000) 83 Cal.App.4th 74, 99 (upholding use of regulatory agency performance standard).

qualitative analysis is used, in addition to quantification, this section recommends certain qualitative factors that may be used in the determination of significance (i.e., extent to which the project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs). The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as CAPCOA, so long as any threshold chosen is supported by substantial evidence (see Section 15064.7(c)). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and that they should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see Section 15064(h)(3)).[9]

Although GHG emissions can be quantified, CARB, SCAQMD, and the City of Thousand Oaks have not adopted project-level significance thresholds for GHG emissions that would be applicable to the Project. The Governor's Office of Planning and Research (OPR) released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that "lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice," and that while "climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment."[10] Furthermore, the technical advisory states that "CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project."[11]

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project.[12] To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the

9 See generally California Natural Resources Agency, Final Statement of Reasons for Regulatory Action (December 2009), pp. 11-13, 14, 16. http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf, accessed November 2019; see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, April 13, 2009. Available at http://www.valleyair.org/Programs/CCAP/documents/Transmittal_LetterOPRApril2009.pdf, accessed November 2019.

10 Governor's Office of Planning and Research, Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, (2008).

11 Governor's Office of Planning and Research, Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, (2008).

12 14 CCR § 15064(h)(3).

public agency.[13] Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."[14] Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions.[15]

In the absence of any adopted, quantitative threshold, the Project would not have a significant effect on the environment if the Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within CARB's Climate Change Scoping Plan, SCAG's 2020-2045 RTP/SCS, and City of Thousand Oaks policies established for the purpose of increasing energy efficiency and reducing GHG emissions for new developments and the City's Green Building Code. The proposed project would generate GHG emissions from a variety of sources. First, GHG emissions would be generated during construction of the project. Once fully operational, the project's operations would generate GHG emissions from direct sources such as electrical consumption and vehicle use.

Construction emissions are forecasted by assuming a conservative estimate of construction activities from each phase of the project. Construction emissions are estimated using the CalEEMod software. CalEEMod is based on outputs from OFFROAD and EMFAC, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including off- and on-road vehicles.

Consistent with calculations in Section III, Air Quality, construction emissions were forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source emissions factors. The emissions were estimated using the CalEEMod software and EMFAC2017. The output values used in this analysis were adjusted to be project-specific based on equipment types and the construction schedule. These values were then applied to the same construction phasing assumptions used in the criteria pollutant analysis in Section III, Air Quality, to generate GHG emissions values for the proposed project.

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[13] 14 CCR § 15064(h)(3).

[14] 14 CCR § 15064(h)(3).

[15] See, for example, San Joaquin Valley Air Pollution Control District (SJVAPCD), CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation, APR-2025 (June 25, 2014), in which the SJVAPCD "determined that GHG emissions increases that are covered under ABR's Cap-and-Trade regulation cannot constitute significant increases under CEQA…" Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 $MTCO_2e$/yr significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See SCAQMD, Final Negative Declaration for Ultramar Inc. Wilmington Refinery Cogeneration Project, SHC No. 2012041014 (October 2014); SCAQMD Final Negative Declaration for Phillips 99 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014); SCAQMD Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014); and SCAQMD Final Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (August 2015).

Industry standards recommend that construction project GHG emissions should be "amortized over a 30-year project lifetime, so that construction GHG emissions are included as part of the operational GHG life cycle. In accordance with that GHG emissions from construction have been amortized over the 30-year lifetime of the project and are added to the operational emissions for the determination of significance. Total estimated construction-related GHG emissions for the project are estimated at approximately 6,899 $MTCO_2e$. This would equal to approximately 230 $MTCO_2e$ per year after amortization over 30 years.

Operation of the proposed project would result in GHG emissions from building operations, energy and water consumption, waste generation and mobile source operations. Emissions from the operation of the proposed project were modeled consistent with operational modeling in Section III, Air Quality. **Table 10** represent the greenhouse gas emissions for the proposed project for both the initial operation year as well as the 2027 and 2040 potential buildout years.

**TABLE 10**
**GHG EMISSIONS**

| | Maximum GHG Emissions (MT $CO_2e$/year) | | |
|---|---|---|---|
| **Source** | **2023** | **2027** | **2040** |
| Area | <1 | *<1* | <1 |
| Energy | 607 | *1,043* | 295 |
| Mobile | 978 | *1,819* | 1,495 |
| Waste | 127 | *267* | 267 |
| Water | 233 | *422* | 201 |
| Total Operational: | 1,944 | *3,552* | 2,258 |
| Amortized Construction: | 230 | 230 | 230 |
| Total Project: | 2,174 | 3,782 | 2,488 |

SOURCE: ESA, 2021

## *Consistency with State Plan, Policies, or Regulations*

### AB 32 & EO B-30-15

In support of AB 32, the state has promulgated specific laws aimed at GHG reductions applicable to the Project. The Project's HVAC system would be sized and designed in compliance with the CALGreen Code to maximize energy efficiency caused by heat loss and heat gain. The Project would also be designed with 100 percent drought tolerant shrubs and ground cover and approximately 75 percent drought tolerant trees, which would reduce water irrigation demand and associated GHG emissions. Further, as discussed in Section XVII, Transportation, the Project would implement mitigation measures TRAF-1 through TRAF-7 to create pedestrian and bicycle networks on site, provide 51 EV charging parking spots, and provide funding for local bicycle infrastructure that would reduce the Project's VMT in line with the general goals of Senate Bill 375 and the Southern California Association of Governments 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. Therefore, the Project would be consistent with State efforts to reduce motor vehicle emissions and congestion. The Project would generate GHG emissions due to construction and operational activities; however, its annual GHG emissions would be reduced due to location and designs consistent with relevant goals and actions intended to encourage development that results in the efficient use of public and private resources.

### 2017 Climate Change Scoping Plan

According to the 2017 Scoping Plan Update, reductions needed to achieve the 2030 goal is expected to be achieved by targeting specific emission sectors, including those sectors that are not directly controlled or influenced by the Project, but nonetheless contribute to project-related GHG emissions. **Table 11** contains a list of GHG emission reduction actions and strategies from the 2017 Scoping Plan and describes the Project's consistency.

**TABLE 11**
**PROJECT COMPLIANCE WITH**
**2017 CLIMATE CHANGE SCOPING PLAN ACTIONS AND STRATEGIES**

| Actions and Strategies | Responsible Party(ies) | Compliance Analysis |
|---|---|---|
| **Senate Bill 350 (SB 350):**<br>The Clean Energy and Pollution Reduction Act of 2015 increases the standards of the California Renewable Portfolio Standard (RPS) program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by 2030.[a]<br>Required measures include:<br>Increase RPS to 50 percent of retail sales by 2030.<br>Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.<br>Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in IRPs to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs. | CPUC, CEC, CARB | Compliant. The Project would use electricity provided by Clean Power Alliance (CPA) and distributed by Southern California Edison (SCE), which is required to meet the energy performance standard of 50 percent renewable energy by 2030, along with applicable GHG emissions reductions planning targets in its Strategic Long-Term Resource Plan. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027. In 2019, CPA provided customers three options of 36 percent, 50 percent, or 100 percent from renewable sources, all of which exceeded the required target 33 percent by 2020 established under previous legislation.[b]<br>As required under SB 350, doubling of the energy efficiency savings from final end uses of retail customers by 2030 would primarily rely on the existing suite of building energy efficiency standards under California Code of Regulations Title 24, Part 6 and utility-sponsored programs such as rebates for high-efficiency appliances, HVAC systems, and insulation. The Project would meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards Code in Title 24, Part 11. |

| Actions and Strategies | Responsible Party(ies) | Compliance Analysis |
|---|---|---|
| **Implement Mobile Source Strategy (Cleaner Technology and Fuels):**<br>• At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025.<br>• At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.<br>• Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Cars regulations.<br>• Implementation of federal phase 2 standards for medium- and heavy-duty vehicles.<br>• Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-$NO_X$ standard.<br>• Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.<br>• Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.” | CARB, CalSTA, SGC, Caltrans, CEC, OPR, Local Agencies | **Compliant.** CARB approved the Advanced Clean Cars Program that includes Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. While this action does not directly apply to individual projects, the standards would apply to all vehicles purchased or used by students, staff, faculty, and visitors to the Project. The Project would comply with CalGreen requirements regarding the number of EV Ready and EV Capable parking spaces to support ZEVs and PHEVs. As such, the Project would support compliance with this regulation.<br><br>The Advanced Clean Truck Regulation has two components, a manufacturer sales requirement and a reporting requirement. The manufacturer component of the regulation requires manufacturers that certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales. The reporting component of the regulation requires large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations.[c]<br><br>CARB is also developing the Innovative Clean Transit measure to encourage purchase of advanced technology buses such as alternative fueled or battery powered buses. This would allow fleets to phase in cleaner technology in the near future. CARB is also in the process of developing proposals for new approaches and strategies to achieve zero emission trucks under the Advanced Clean Local Trucks (Last Mile Delivery) Program.[d] GHG emissions generated by transit trips by the Project would be reduced under this regulation.<br><br>GHG emissions generated by Project-related passenger, truck, and bus vehicular travel would benefit from the above regulations and programs, and mobile source emissions generated by the Project would be reduced with implementation of standards under the Advanced Clean Cars Program, Advanced Clean Truck Regulation, and Innovative Clean Transit measure consistent with reduction of GHG emissions under SB 32. Mobile source GHG emissions provided in Table 10 of the ISMND conservatively do not specifically include the numeric reduction in mobile source GHG emissions from the above regulations as the CalEEMod model does not yet fully account for these regulation or programs. |

| Actions and Strategies | Responsible Party(ies) | Compliance Analysis |
|---|---|---|
| | | SB 375 requires SCAG to direct the development of the RTP/SCS for the region, which is discussed in the Draft EIR. The Project would not conflict with the RTP/SCS goal to adapt to a changing climate and to support an integrated regional development pattern. On an annualized basis, the Project is anticipated to generate approximately 2,916 average daily weekday vehicle trips under a worst-case scenario. The Project would implement mitigation measures TRAF-1 through TRAF-7 that are aimed at reducing VMT through creation of pedestrian networks, bicycle parking, electric vehicle charging stations, rideshare programs, and funding for bicycle infrastructure. This, together with the overall modest increase in daily trips, would be consistent with the 2020-2045 RTP/SCS goal of reducing daily VMT per capita. As such, the Project would not conflict with the VMT reduction standards of the 2020-2045 RTP/SCS. Thus, the Project would be compliant with, and would not conflict with, applicable 2020-2045 RTP/SCS actions and strategies to reduce GHG emissions. |
| **Increase Stringency of SB 375 Sustainable Communities Strategy (2035 Targets).** | CARB | **Compliant.** Under SB 375, CARB sets regional targets for GHG emission reductions from passenger vehicle use. In 2010, the CARB established targets for 2020 and 2035 for each region. As required under SB 375, the CARB is required to update regional GHG emissions targets every 8 years, which have been updated in 2018. As part of the 2018 updates, the CARB adopted a passenger vehicle related GHG reduction of 19 percent per capita for 2035 for the SCAG region. On an annualized basis, the Project is anticipated to generate approximately 2,916 average daily weekday vehicle trips under a worst-case scenario. The Project would implement mitigation measures TRAF-1 through TRAF-7 that are aimed at reducing VMT through creation of pedestrian networks, bicycle parking, electric vehicle charging stations, rideshare programs, and funding for bicycle infrastructure. As such, the Project would not conflict with the 2020-2045 RTP/SCS goal of reducing daily VMT per capita. |
| **By 2019, adjust performance measures used to select and design transportation facilities.**<br>• Harmonize project performance with emissions reductions, and increase competitiveness of transit and active transportation modes (e.g., via guideline documents, funding programs, project selection, etc.). | CalSTA and SGC, OPR, CARB, GoBiz,<br>IBank, DOF, CTC, Caltrans | **Not Applicable.** The Project would not involve construction of transportation facilities. |
| **By 2019, develop pricing policies to support low-GHG transportation (e.g., low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).** | CalSTA, Caltrans, CTC, OPR/SGC, CARB | **Compliant.** The Project would support this policy through the implementation of TRAF-3, requiring the construction of 51 EV Ready and EV Capable parking spaces. As such, the Project would support compliance with this regulation. |

| Actions and Strategies | Responsible Party(ies) | Compliance Analysis |
|---|---|---|
| **Implement California Sustainable Freight Action Plan:**<br>• Improve freight system efficiency.<br>• Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030. | CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GoBiz | **Compliant.** The Project does not involve the manufacture of vehicles or production of vehicle fuels. However, vehicles that are purchased and used within the Project Site would comply with any vehicle and fuel standards that the CARB adopts or has adopted. In addition, the Project would comply with SCAQMD Rule 2305. |
| **Adopt a Low Carbon Fuel Standard with a CI reduction of 18 percent.** | CARB | **Compliant.** This regulatory program applies to fuel suppliers, not directly to land use development. GHG emissions related to vehicular travel associated with the Project would benefit from this regulation because fuel used by Project-related vehicles would be required to comply with LCFS. Mobile source GHG emissions provided in Table 10 were calculated using CalEEMod. However, CalEEMod does not include implementation of the LCFS into mobile source emission factors. Thus, Table 10 provides conservatively estimated GHG emissions.<br>On September 27, 2018, CARB approved an amendment to the LCFS regulation to require a 20 percent reduction in carbon intensity from a 2010 baseline by 2030. Reductions in carbon intensity are phased in starting in 2019 with a reduction of 6.25 percent and increases by 1.25 percent each year. Thus, in 2021, LCFS emissions reductions are 8.75 percent reduced carbon intensity relative to the 2010 baseline. Project-related mobile source GHG emissions would be reduced accordingly, and would increase as LCFS compliance increases to 20 percent reduce carbon intensity by 2030 relative to the 2010 baseline year. |
| **Implement the Short-Lived Climate Pollutant Strategy by 2030:**<br>• 40-percent reduction in methane and hydrofluorocarbon emissions below 2013 levels.<br>• 50-percent reduction in black carbon emissions below 2013 levels. | CARB, CalRecycle, CDFA, SWRCB, Local air districts | **Compliant.** Senate Bill 605 (SB 605), adopted in 2014, directs CARB to develop a comprehensive Short-Lived Climate Pollutant (SLCP) strategy. Senate Bill 1383 was later adopted in 2016 to require CARB to set statewide 2030 emission reduction targets of 40 percent for methane and hydrofluorocarbons and 50 percent black carbon emissions below 2013 levels.[e]<br>SB 1383 requires various agencies including CARB, California Department of Food and Agriculture (CDFA), the State Water Resources Board (SWRCB) to be responsible for adopting regulations to reduce GHG emissions. These regulations would be applicable to the Project. Therefore, the Project would comply with the CARB SLCP Reduction Strategy, which limits the use of hydrofluorocarbons for refrigeration uses. |

| Actions and Strategies | Responsible Party(ies) | Compliance Analysis |
|---|---|---|
| **By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.** | CARB, CalRecycle, CDFA, SWRCB, Local air districts | **Compliant.** Under SB 1383, the California Department of Resources Recycling and Recovery (CalRecycle) is responsible for achieving a 50 percent reduction in the level of statewide disposal of organic waste from the 2014 level by 2020 and 75-percent reduction by 2025. The Project would be consistent with AB 341 which requires not less than 75 percent of solid waste generated to be source reduced through recycling, composting, or diversion. This reduction in solid waste generated by the Project would reduce overall GHG emissions. Compliance with AB 341 would also help achieve the goals of SB 1383. |
| **Implement the post-2020 Cap-and-Trade Program with declining annual caps.** | CARB | **Compliant.** Assembly Bill 398 (AB 398) was enacted in 2017 to extend and clarify the role of the State's Cap-and-Trade Program from January 1, 2021, through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade program to establish updated protocols and allocation of proceeds to reduce GHG emissions. Under the Cap-and-Trade program, entities such as power generation companies and natural gas processing plants would be required to limit or reduce GHG emissions. While the Project itself is not a regulated entity under the Cap-and-Trade Program, it would result in a reduction of GHG emissions associated with the Project's energy usage, since energy supplied to the Project would be from a regulated entity. As the Project would not impede the Program's progress, the Project is considered compliant. |
| **By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink:**<br>• Protect land from conversion through conservation easements and other incentives.<br>• Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.<br>• Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments.<br>• Establish scenario projections to serve as the foundation for the Implementation Plan. | CNRA and departments within, CDFA, CalEPA, CARB | **Not Applicable.** This regulatory program applies to Natural and Working Lands, not directly related to development of the Project. However, the Project would not interfere or impede implementation of the Integrated Natural and Working Lands Implementation Plan. |
| **Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018.** | CARB | **Not Applicable.** This regulatory program applies to Natural and Working Lands, not directly related to development of the Project. However, the Project would not interfere or impede implementation of the Integrated Natural and Working Lands Implementation Plan. |
| **Implement Forest Carbon Plan.** | CNRA, CAL FIRE, CalEPA and departments within | **Not Applicable.** This regulatory program applies to state and federal forest land, not directly related to development of the Project. However, the Project would not interfere or impede implementation of the Forest Carbon Plan. |

| Actions and Strategies | Responsible Party(ies) | Compliance Analysis |
|---|---|---|
| **Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.** | State Agencies & Local Agencies | **Not Applicable.** Funding and financing mechanisms are the responsibility of the state and local agencies. The Project would not conflict with funding and financing mechanisms to support GHG reductions. |

[a] Senate Bill 350 (2015–2016 Regular Session) Stats 2015, Ch. 547.

[b] LADWP, 2019 Power Content Label, Version October 2020, https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-powercontentlabel. Accessed May 18, 2021.

[c] CARB, Advance Clean Cars, 2017 Midterm Review, https://ww2.arb.ca.gov/resources/documents/2017-midterm-review-report. Accessed May 18, 2021.

[d] CARB, Advanced Clean Local Trucks, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks. Accessed May 18, 2021.

[e] CARB, Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions, https://www.calrecycle.ca.gov/climate/slcp/. Accessed May 18, 2021.

SOURCE: ESA, 2021.

**Conflict with City of Thousand Oaks General Plan Conservation Element.**

The City of Thousand Oaks is in the process of developing a Climate and Environmental Action Plan (CEAP), which is intended to be a long-range plan that outlines comprehensive strategies to reduce GHG emissions and address other environmentally related issues. The City anticipates that implementation of the CEAP GHG emission reduction strategies will provide co-benefits to the community by reducing air pollution, supporting local economic development, increasing local resilience, improving public health and quality of life. The City anticipates review and approval by City Council in late 2021.

The City's current General Plan Conservation Element 2013 Update includes a policy related to climate change and GHG emissions as follows:

- **Policy CO-39:** Support efforts to reduce greenhouse gas emissions, consistent with the intent of the State of California's California Global Warming Solutions Act of 2006 (Assembly Bill 32).
- **Implementation Measures:** Prepare Greenhouse Gas Analyses for development projects which require the preparation of Environmental Impact Reports or Mitigated Negative Declarations; Reduce energy use and utilize sustainable energy sources at City facilities where feasible, in accordance with City-adopted Energy Action Plan.

As discussed above, GHG emissions for the project have been analyzed and disclosed demonstrating that the project would not exceed the applicable significance threshold and that the project would not conflict with AB 32, EO B-30-15, SB 375, or the 2017 Climate Change Scoping Plan. Therefore, the proposed project would not conflict with the City General Plan and would not conflict with attainment of the goals of the Plan. Therefore, impacts would be less than significant.

## Cumulative Impact

As discussed above, Greenhouse Gas Emission, the primary source of GHG emissions generated by implementation of the proposed project would occur during construction, which would be temporary in nature. The proposed projects' total construction and operational GHG emissions would not conflict with an applicable plan, policy, or regulation, see Table 11, for the purposes of reducing the emissions of GHGs. Therefore, even when considered in conjunction with the projects listed on Table 2, the proposed projects' impact would not be considered cumulatively significant.

## References

Iteris 2020. Draft Shapell Industrial Project –CEQA Transportation Analysis. December 21.

Kimley Horn 2020. Shapell Traffic Study. May 15.

# Hazards and Hazardous Materials

| Issues (and Supporting Information Sources): | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. HAZARDS AND HAZARDOUS MATERIALS —** Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? | ☐ | ☒ | ☐ | ☐ |

## Discussion

a) **Less-than-Significant Impact**. The California Office of Emergency Services oversees state agencies and programs that regulate hazardous materials (Health and Safety Code, Article 1, Chapter 6.95). A hazardous material is any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. The proposed project would require the use of construction vehicles and equipment and thus involve the routine transport, use, storage, and disposal of hazardous materials such as diesel fuel, gasoline, oils, grease, equipment fluids, cleaning solutions and solvents, lubricant oils, and adhesives. If such hazardous materials were not handled properly, in accordance with federal, state and local regulations, a potentially significant hazards to the public or environmental could occur.

Existing federal and state law regulates the handling, storage and transport of hazardous materials and hazardous wastes. Pursuant to the federal Hazardous Materials Transportation Act, 49 U.S.C. § 5101 et seq., the United States Department of Transportation promulgated strict regulations applicable to all trucks transporting hazardous materials. Occupational safety standards have been established in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace, including construction sites. The California Division of Occupational Safety and Health (CalOSHA) has primary responsibility for developing and enforcing standards for safe workplaces and work practices in California in accordance with regulations specified in California Code of Regulations (CCR) Title 8. For example, under Title 8 CCR 5194 (Hazard Communication Standard), construction workers must be informed about hazardous substances that may be encountered, and under Title 8 CCR 3203 (Injury Illness Prevention Program) workers must be properly trained to recognize workplace hazards and to take appropriate steps to reduce potential risks due to such hazards. During construction, contractors handling, storing or transporting hazardous materials or wastes must comply with regulations that would reduce the risk of accidental release and provide protocols and notification requirements should an accidental release occur.

Operation and maintenance activities associated with the proposed project would potentially require transport, storage, use, and disposal of hazardous materials. Hazardous materials would be stored in appropriate containers within the various buildings and would be used in accordance with state and local regulations. Therefore, by complying with relevant federal, state, and local laws, the proposed project would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials during implementation of the proposed project.

b) **Less-than-Significant Impact.** As discussed above in the response to Hazards and Hazardous Materials, Issue IX. a), the proposed project would involve the routine use of hazardous materials during activities associated with construction; the transport, use, storage and disposal of such hazardous materials would be required to comply with existing applicable federal, state and local regulations. Accidental spills of small amounts of these materials could occur during routine transport, use, storage or disposal, and could potentially injure construction workers, contaminate soil, and/or affect the groundwater below the site. Impacts associated with the accidental release, although localized to the project site, could potentially create a significant hazard to the environment.

In the event of an accidental release during implementation of the proposed project, containment and clean up would be in accordance with existing applicable regulatory requirements. Title 8 CCR 5194 requires preparation of a hazards communication program identifying hazardous materials onsite and reducing the potential for a spill; and 29 CFR 1910.120 includes requirements for emergency response to releases or substantial threats of releases of hazardous substances. Contractors would be required to prepare and implement a Hazardous Materials Business Plan (HMBP), as required under the state Hazardous Materials Release Response Plans and Inventory Act, to manage any hazardous materials they use during construction and operation, respectively. A HMBP is a document containing detailed information on the inventory of hazardous materials at a facility; Emergency Response Plans (ERP) and procedures in the event of a reportable release or threatened release of a hazardous material; a Site Safety Plan with provisions for training for all workers; a site map that contains north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, emergency shutoffs, hazardous material handling and storage areas, and emergency response equipment. Further, all spent hazardous materials would be disposed of in accordance with California Department of Toxic Substances Control (DTSC) and County regulations. Construction and maintenance specifications prepared for the proposed project would identify BMPs to ensure the lawful transport, use, storage, and disposal of hazardous materials.

As discussed above, operation and maintenance activities associated with the proposed project could also require routine transport, storage, use, and disposal of hazardous materials. In the event of an accidental release during operation of the proposed project, containment and clean up would be in accordance with existing applicable regulatory requirements. Therefore, potential impacts to the public or the environment related to reasonably foreseeable accident conditions involving hazardous materials would be less than significant.

c) **Less-than-Significant Impact.** The nearest school to the project site is Conejo Adventist Elementary School located approximately 0.30 miles southwest of the project site. Additionally, Passageway School is located approximately 0.36 miles southeast of the project site. Construction of the proposed project would require equipment that use petroleum oil or other fuels considered hazardous materials. Construction equipment would be contained within a designated work area and equipment would be stored within designated staging areas overnight. Vehicle fueling would be limited to designated fueling areas outfitted with secondary containment measures in case of spill. While these schools are not located within the designated one-quarter mile radius of the project site, construction workers would utilize applicable BMPs and would be required to comply with existing and future hazardous materials laws and regulations for the transport, use and disposal of hazardous materials. As discussed in IX. Hazards and Hazardous Materials a,b) above, existing regulations and safety measures would reduce public exposure to hazardous materials. Adherence to applicable BMPs, federal, state, and local regulations, the proposed project would have a less-than-significant impact related to handling hazardous materials within one-quarter mile of a school.

d) **No Impact.** A review of the Department of Toxic Substances Control's (DTSC) Hazardous Waste and Substances List – Site Cleanup (Cortese List) indicates that there are no identified hazardous material sites located within the proposed project site (DTSC 2020a). Further, a database search of hazardous materials sites using the online DTSC EnviroStor and State Water Resources Control Board (SWRCB) GeoTracker databases identified zero hazardous clean-up sites within the project area (DTSC 2020b; SWRCB 2020). A closed Leaking Underground Storage Tank (LUST) cleanup site is located east of the project at 1515 Rancho Conejo Boulevard. The potential contaminant was gasoline and the media of concern was an aquifer used for drinking water. However, the case was closed in October of 1996. In addition, approximately three quarters of a mile south of the project site, there is an open cleanup site that has been inactive since 2016 concerning solvents in the soil.

Since the proposed project would disturb an area of more than an acre, the project would be required to comply with the Construction General Permit, including the preparation and implementation of a site-specific SWPPP. The SWPPP would contain BMPs to monitor and prevent pollutants (including sediment and hazardous materials) from leaving the construction site in runoff. In addition, compliance with the federal and state standards would be required. Therefore, with implementation of BMPs and compliance with existing standards, construction of the proposed projects would not create a significant hazard to the public or environment. The proposed project would not be located on a hazardous materials site and no impact would occur.

e) **No Impact.** The nearest airport to the project is the Camarillo airport located approximately 8.4 miles west of the project site. The project would not be affected by operations of the Camarillo airport nor would implementation of the project result in a safety hazard or excessive noise caused by an airport. No impact would occur.

f) **Less-than-Significant Impact.** Construction of the proposed project could affect traffic in the surrounding area on Rancho Conejo Boulevard. As result, construction of the proposed project could interfere with emergency response or evacuation plans. However, proposed project would include a traffic control plan that would ensure that there would be no inference with emergency response or evacuation plans. Once operational, the proposed project would not interfere with emergency response or evacuation plans. The Traffic Control Plan would ensure that all public roads remain passable to emergency service vehicles during construction of the proposed project or clearly delineate alternate detour routes, if needed. In addition, the Traffic Control Plan would require emergency personnel be notified in advance of the proposed project schedule and any proposed road closures, including planned detour routes. Impacts would be considered less than significant.

g) **Less-than-Significant Impact with Mitigation.** The proposed project is located in a highly urbanized area and while it is located in a Very High Fire Hazard Severity Zone Local Responsibility Area it would continue to be served by the Ventura County Fire Department (VCFD). The use of spark-producing construction machinery within these fire risk areas could create hazardous fire conditions and expose construction workers to wildfire risks. Impacts would be potentially significant during construction. However, the implementation of **Mitigation Measure HAZ-1** would ensure fire hazard reduction measures are conducted during construction to reduce the potential for wildfire impacts on people or structures to less than significant levels. The operation of the proposed project would adhere to standard requirements set forth by the City Municipal Code, the CBC, and the California Fire Code, and include the creation and maintenance of wildfire buffers, and sprinkler and alarm requirements. As a result, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires to significant levels. Impacts related to wildland fire would be less than significant with the implementation of mitigation.

**Mitigation Measure:**

**HAZ-1:** During project implementation, the contractor shall require all spark arrestors on construction equipment to be in good working order. Contractors shall require all vehicles and crews to have access to functional fire extinguishers at all times.

## Cumulative Impact

Hazardous materials are generally site specific and handled on a project-by-project basis. Cumulative projects would be required to comply with all applicable federal, state, and local standards regarding the accidental release of hazardous materials. As such, the project would not result in a cumulatively considerable impact related to the upset or accidental release of hazardous materials. However, the project would be located in a Very High Fire Hazard Severity Zone Local Responsibility Area and includes Mitigation Measure HAZ-1 to reduce the potential for causing a wildfire during construction. The potential for wildland fires resulting in the loss of life or property is generally unique to each site. All cumulative projects are subject to the fire codes and regulations. The cumulative projects are all located within developed areas, but similar to the project, other cumulative projects would be required to include such features as fuel modification zones, fire access roads, and fire hydrants to reduce the risk of potential wildland fires. As a result, through the project's compliance Mitigation Measure HAZ-1 and with fire codes and regulations, the potential cumulative impacts from wildland fires would be less than significant.

## References

Department of Toxic Substance Control (DTSC), 2020a. Available online at: https://calepa.ca.gov/sitecleanup/corteselist/, accessed October 2020.

DTSC, 2020b. EnviroStor Database. Available online at: https://www.envirostor.dtsc.ca.gov/public/, accessed October 2020.

State Water Resources Control Board (SWRCB), 2020. GeoTracker. Available online at: https://geotracker.waterboards.ca.gov/, accessed October 2020

# Hydrology and Water Quality

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **X. HYDROLOGY AND WATER QUALITY —** Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| i) result in substantial erosion or siltation on- or off-site; | ☐ | ☐ | ☒ | ☐ |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | ☐ | ☐ | ☒ | ☐ |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☒ | ☐ |
| iv) impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☐ | ☒ |

## Discussion

a) **Less-than-Significant Impact**. Construction of the proposed project consists of fine grading of level pads for the construction of the buildings on each of the lots. Conejo Center Drive and Rancho Conejo Boulevard adjacent to the project site have already been improved with utilities infrastructure stubbed out to the proposed lots, including but not limited to water, storm drain, electrical and sewer. Nevertheless, exposed soils would have the potential to erode and be transported down gradient areas, potentially resulting in water quality impacts. Additionally, stormwater runoff passing through the construction and staging sites has the potential to pick up construction-related pollutants. Since the proposed project would disturb more than one acre during construction, the City would be required to obtain coverage under the Statewide Construction General Permit. Construction activity subject to this permit includes clearing, grading and disturbances to one-acre or more, stockpiling and excavation. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. The SWPPP would identify BMPs to control erosion and sedimentation issues. Compliance with the Construction General Permit by developing and implementing a SWPPP, would ensure issues related to soil erosion and loss of topsoil would be less than significant. Project operations would be subject to compliance with the existing National Pollutant Discharge Elimination System (NPDES) Permit and follow guidelines within the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures. Through compliance with Best Management Practices (BMPs) in the SWPPP, the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures, the project would maintain water quality standards during construction. During operations, Low Impact Development (LID) BMPs, to be reviewed and approved by the Public Works Department, would assure water is contained and slowed to infiltrate the groundwater as much as possible, which reduces pollutants (total dissolved solids) entering the water stream and assures the volume of runoff leaving the site is not increased. As such, the project would have a less-than-significant impact with regard to violating any state or federal water quality standards or waste discharge requirements.

b) **Less-than-Significant Impact**. The proposed project is the construction of 15 industrial buildings within an approved Specific Plan area. The project would not require the use of groundwater. Potable water would be supplied by Cal Am via Calleguas Municipal Water District. The construction of the buildings would require the use of water for concrete, dust suppression, and equipment cleaning. Construction would not affect groundwater supplies because the quantity of water used would be minimal. Once constructed, the proposed project would result in an increase in new impervious surface. However, rainwater falling on the project site would be captured and treated on-site pursuant to the General Industrial Stormwater Permit and would comply with SWPPP requirements and follow guidelines within the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures, as discussed above. Once treated in compliance with the General Industrial Stormwater Permit, the rainwater would be routed to on-site infiltration systems (e.g., infiltration swales) or to the storm drain system and returned to the environment. Therefore, impacts would be less than significant.

c.i–iv) **Less-than-Significant Impact.** Construction of the proposed projects would not alter existing drainages that could result in erosion or flooding or exceed the capacity of a drainage system. Potential stormwater quality impacts during construction are evaluated in Hydrology and Water Quality Impact X a), above.

Once constructed, the project would result in an alteration of the drainage pattern of the existing land surface. The impact would be the addition of hardscape that would concentrate the flow of surface water runoff. This concentrated flow could result in substantial drainage issues related to erosion, siltation, flooding, drainage system capacity, or additional sources of polluted runoff. However, the project would include design features including bioswales and catch basins with filters for each of the 15 buildings. The stormwater calculations and associated design feature for each building to reduce flooding and pollution runoff can be found in **Appendix F**. In addition, compliance with MS4 development design would ensure that the new buildings do not channelize runoff in a manner that could cause scouring and erosion, and captures water prior to runoff from the facility. Impacts would be less than significant.

d) **No Impact.** The proposed project area is located within the Federal Emergency Management Act (FEMA) Flood Zone X, indicating a moderate to low risk for flooding (FEMA, 2019). The proposed project is located on a mesa and there are no waterbodies with the vicinity of the project site. The proposed project site is located approximately 12 miles away from the Pacific Ocean and would not be subject to the maximum force of a Pacific Ocean tsunami and would not risk release of pollutants due to inundation from a tsunami. No impact would occur.

e) **No Impact**. The proposed project does not involve extraction of groundwater and would be required to comply with the Groundwater Sustainability Plan (GSP) in accordance with California's Sustainable Groundwater Management Act. Stormwater runoff from the site would comply with mandated BMPs as discussed above. Therefore, the proposed project does not conflict with implementation of a water quality control plan or groundwater management plan and impacts would be less than significant.

## Cumulative Impact

Significant cumulative impacts related to hydrology and water quality could occur if the incremental impacts of the proposed project combined with the incremental impacts of one or more of the cumulative projects identified in Table 2 to substantially increase a significant risk to people or their environment.

All of these projects would be subject to the same previously discussed regulatory requirements. That is, cumulative projects that have the potential to impact hydrology and water quality would also be required to comply with NPDES Construction General Permit and its required SWPPP, the NPDES Municipal Permits and its MS4 BMP requirements, and the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program and its required HMBP, all designed to prevent impacts to water quality and have procedures in place for responding to spills. While it is possible that the proposed project and cumulative projects could result in releases of sediment and/or pollutants that could adversely affect water quality, the responsible parties associated with each project would be required to control runoff and respond to spills to the same established regulatory standards. Accordingly, the cumulative impact with respect to water quality would not be cumulatively considerable. Compliance with these regulations would prevent erosion, siltation, and flooding. Accordingly, no significant cumulative impact with respect to hydrology would result.

## References

Federal Emergency Management Act (FEMA), 2019. FEMA Flood Map Service Center. https://msc.fema.gov/portal/home

# Land Use and Planning

| Issues (and Supporting Information Sources): | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. LAND USE AND PLANNING —** Would the project: | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ |

## Discussion

a) **No Impact.** The physical division of an established community typically refers to the construction of a linear feature, such as a highway or railroad, or removal of a means of access, such as a road or bridge that would impact mobility within or between existing communities. The proposed project would be located entirely on property that has been planned for development, Specific Plan No. 7. Once constructed, the proposed project would not create a barrier or physically divide an established community, therefore, no impact would occur.

b) **Less-than-Significant Impact.** The proposed project would be located within Planning Units B (southern portion), 5, and Q identified in Specific Plan No. 7. The development standards provided in the Specific Plan are applicable to the proposed project. Specific Plan No.7 designates the parcels as Employment Park and is zoned Industrial Park (M-1). Construction and operation of the proposed project would not cause a change to the current land use or create a significant impact to its land use designation. A consistency analysis with the General Plan was prepared and is presented in **Table 12**. As shown in Table 12, the project would be consistent with the applicable policies of the General Plan regarding an industrial development. Therefore, the proposed project would be compatible with the General Plan and existing land use designations and zoning, and impacts would be less than significant.

**TABLE 12**
**GENERAL PLAN CONSISTENCY ANALYSIS**

| General Plan Goals and Policies | Consistency Analysis |
|---|---|
| Goal 6: To provide and maintain a system of natural open space and trails | **Consistent:** As discussed in Section XVI. Recreation, the proposed project includes an eight-foot multi-use/equestrian easement along the east side of the proposed Academy Drive and an additional three-foot multi-use/equestrian easement along the north side of Conejo Center Drive. This multi-use/equestrian trail will eventually connect to the proposed equestrian trail along Academy Drive west of the proposed project and the COSCA Western Plateau Trail. |
| Policy 5: Highly intensive land uses--major industrial and commercial centers--should be located in proximity to or within easy access of the Ventura Freeway corridor | **Consistent:** The proposed project would be located entirely on property that has been planned for development, Specific Plan No. 7. The proposed project would be located within Planning Units B (southern portion), 5, and Q identified in Specific Plan No. 7. The site is within close proximity of the 101 Freeway. |

| General Plan Goals and Policies | Consistency Analysis |
|---|---|
| Industrial Policy 1: Industrial development should occur in the designated major complexes near the Ventura Freeway and at the western and eastern ends of the Planning Area (Rancho Conejo and Westlake industrial areas). | **Consistent:** The proposed project would be located entirely on property that has been planned for development, Specific Plan No. 7. The proposed project would be located within Planning Units B (southern portion), 5, and Q identified in Specific Plan No. 7. The site is within close proximity of the 101 Freeway. |
| Industrial Policy 2: The City shall continue to encourage light industries that are highly specialized, scientific or research-oriented. | **Consistent:** The proposed project would be located entirely on property that has been planned for development, Specific Plan No. 7. The area to the south has been developed resulting in a biotech corridor with companies such as Amgen and Teledyne Technologies. |
| Industrial Policy 4: Industrial development should comply with the City's height restrictions. Exceptions, through height overlays, may be appropriate under certain conditions | **Consistent:** As discussed in Section I. Aesthetics, the buildings' architecture would be similar in style, mass and height as the existing surrounding industrial buildings. The building would be consistent with the height restrictions. |
| Circulation Policy 7:Access to industrial areas shall be via major arterials to minimize impacts to residential areas. | **Consistent:** The proposed project would be located entirely on property that has been planned for development, Specific Plan No. 7. The area is accessible by Rancho Conejo Boulevard major arterial. |
| Circulation Policy 10: The City shall maintain a Level of Service C on all roads and at all intersections. Lower levels of service may be tolerated to preserve or enhance landscaping and aesthetic integrity. | **Consistent:** As discussed in Section XVII. Transportation, a vehicles miles traveled (VMT) analysis was prepared for the project. The analysis identified impacts and identified mitigation measures to reduce those impacts to below a level of significance. |
| Additional Policy 3: Air Quality: The City shall place high priority on maintaining and improving local and regional air quality. | **Consistent:** See Section III Air Quality for the proposed projects potential air quality impacts. The analysis identified impacts and identified mitigation measures to reduce those impacts to below a level of significance. |
| Additional Policy 4: Archaeological: The City shall preserve and protect archaeological resources for future generations and the Conejo Valley's cultural heritage. | **Consistent:** See Section V Cultural Resources and Section XVIII Tribal Cultural Resources for the proposed projects potential impacts. The analysis identified impacts and identified mitigation measures to reduce those impacts to below a level of significance. |
| Additional Policy 5: Conservation/Natural Resources: The City shall preserve and protect the unique biodiversity of the City's open spaces and wetlands, including natural arroyos and oak trees. | **Consistent:** The proposed project would be constructed within an approved Specific Plan area on lots that have been previously grade. The site plans have been designed to avoid natural resources. |

SOURCE: City of Thousand Oaks General Plan Goals and Policies, adopted December 22, 1970, last amended January 28, 1997. Accessed on March 10, 2021 at https://www.toaks.org/departments/community-development/planning/ general-plan/general-plan-goals-and-policies.

## Cumulative Impact

The proposed project is fully consistent with General Plan Goals and Policies and the construction and operation of the proposed project would not cause a change to the current land use or create a significant impact to its land use designation. Because related projects would be subject to existing land use and zoning regulations and would not be located within the immediate project vicinity, cumulative land use impacts would be less than significant. Therefore, the proposed project would not be expected to cause incremental impacts to land use and planning when considering related past, present, or foreseeable future projects, and no mitigation measures are required to reduce cumulative impacts.

# Mineral Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XII. MINERAL RESOURCES —** Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☒ |

## Discussion

a) **No Impact.** According to the Surface Mining and Reclamation Act (SMARA) Mineral Land Classification maps, the proposed project is located in an area with a mineral land classification of MRZ-1 (DOC, 2020). These are areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence (CDMG, 1981). No significant mineral resources exist within the Thousand Oaks planning area; mineral resources are not inventoried in the General Plan and it contains no policies related to mineral resources (City of Thousand Oaks, 2013). According to the United States Geological Survey (USGS) Mineral Resources Data System, the project area is not identified as a known mineral resource area and does not have a history of mineral extraction uses (USGS 2020). Therefore, the proposed project would not result in the loss of availability of a known mineral resource, and no impact would occur.

b) **No Impact.** The proposed project area is not currently used for mineral extraction and is not known as a locally important resource recovery site. Further, the project area is not delineated on the City of Thousand Oaks General Plan for mineral resource recovery uses. Therefore, no impact would occur.

## Cumulative Impact

The proposed project would not result in significant impacts to mineral resources. The project would be located in an area where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. Therefore, even in combination with other projects that may interfere with mineral resources listed on Table 2, the proposed projects' contribution would not be cumulatively considerable and would not result in a cumulative impact as the proposed projects would not interfere with or obstruct access to mineral resources in the area

## References

California Department of Conservation. Newbury Park Quadrangle, Special Report 145 Plate 1.17. Available online at: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_145/, accessed March 20, 2020.

California Division of Mines and Geology. 1981. Special Report 145, Parts I, II, and III, Mineral Land Classification of Ventura County. Available online at: https://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf, Accessed March 20, 2020

City of Thousand Oaks, 2013. City of Thousand Oaks General Plan, Conservation Element, amended October 22,2013

United States Geological Survey (USGS). 2020. Mineral Resources Data System. Available at: https://mrdata.usgs.gov/mineral-resources/mrds-us.html. Accessed March 20, 2020.

# Noise

| Issues (and Supporting Information Sources): | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. NOISE —** Would the project result in: | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☒ | ☐ |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

## Discussion

a) **Less-than-Significant Impact.** Noise is defined as unwanted sound; however, not all unwanted sound rises to the level of a potentially significant noise impact. To differentiate unwanted sound from potentially significant noise impacts, the City of Thousand Oaks has established noise regulations. The following analysis evaluates potential noise impacts of the construction and operation of the proposed project.

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is generally defined as unwanted sound (i.e., loud, unexpected, or annoying sound). Acoustics is defined as the physics of sound. In acoustics, the fundamental scientific model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. Acoustics addresses primarily the propagation and control of sound.

Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale (i.e., not linear) that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain. In a non-controlled environment, a change in sound level of 3 dB is considered "just perceptible," a change in sound level of 5 dB is considered "clearly noticeable," and a change in 10 dB is perceived as a doubling of sound volume (Caltrans 2013a). Pressure waves traveling through air exert a force registered by the human ear as sound.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements.

An individual's noise exposure is a measure of noise over a period of time, whereas a noise level is a measure of noise at a given instant in time. Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual. These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts.

The time-varying characteristic of environmental noise over specified periods of time is described using statistical noise descriptors in terms of a single numerical value, expressed as dBA. The most frequently used noise descriptors are summarized below:

Leq: The Leq, or equivalent sound level, is used to describe the noise level over a specified period of time, typically 1-hour, i.e., Leq(1), expressed as Leq. The Leq may also be referred to as the "average" sound level.

Lmax: The maximum, instantaneous noise level.

Lmin: The minimum, instantaneous noise level.

Lx: The noise level exceeded for specified percentage (x) over a specified time period; i.e., L50 and L90 represent the noise levels that are exceeded 50 and 90 percent of the time specified, respectively.

Ldn: The Ldn is the average noise level over a 24-hour period, including an addition of 10 dBA to the measured hourly noise levels between the hours of 10:00 P.M. to 7:00 A.M. to account nighttime noise sensitivity. Ldn is also termed the day-night average noise level or DNL,

CNEL: Community Noise Equivalent Level (CNEL), is the average noise level over a 24-hour period that includes an addition of 5 dBA to the measured hourly noise levels between the evening hours of 7:00 P.M. to 10:00 P.M., and an addition of 10 dBA to the measured hourly noise levels between the nighttime hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity during the evening and nighttime hours, respectively.

### City of Thousand Oaks Municipal Code

City currently regulates the hours of construction activity to limit the impact of construction noise. As a matter of compliance with regulatory requirements enforced through standard conditions of approval for all construction projects within the City, project generated noise would be subject to existing noise ordinance regulations in the Thousand Oaks Municipal Code (TOMC). In particular, Title 8, Section 8-11.01, "Construction activities restricted to certain hours," states the following:

"It shall be unlawful for any person to engage in or conduct any activity in the construction of any building or structure, the moving of earth, or the laying of any pavement, including, but not limited to, the making of any excavation, clearing or grading of surface land, and loading or unloading material, equipment, or supplies, except between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday, unless a permit for each work at different hours or days has first been issued by the Public Works Director."

In addition, TOMC Sec. 4-3.804(a) requires vehicles propelled by an internal combustion engine on private property to have state-approved spark arrestors or a noise-muffling device approved by the state.

### On-Site Construction Noise

Noise from on-site construction activities would be generated by the use of equipment involved during various stages of the construction activities. The noise levels generated by construction equipment would vary depending on factors such as the type and number of equipment, the specific model (horsepower rating), the construction activities being performed, and the maintenance condition of the equipment. Individual pieces of construction equipment anticipated to be used during the proposed project construction could produce maximum noise levels of 75 dBA to 85 dBA Lmax at a reference distance of 50 feet from the noise source, as shown in **Table 13.** These maximum noise levels would occur when equipment is operating under full power conditions. The estimated usage factor for the equipment is also shown in Table 13. The usage factors are based on the Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide (FHWA 2006).

To characterize construction-period noise levels, the hourly Leq noise level associated with each construction phase is estimated based on the quantity, type, and usage factors for each type of equipment used during each construction phase and are typically attributable to multiple pieces of equipment operating simultaneously. Over the course of a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently. The estimated noise levels at noise sensitive receptors were calculated using the FHWA's RCNM and were based on a maximum concurrent operation of construction equipment, which is considered a worst-case evaluation. This is considered a worst-case scenario because the project would typically use less equipment simultaneously, and as such would generate lower noise levels during construction.

**TABLE 13**
**CONSTRUCTION EQUIPMENT AND ESTIMATED NOISE LEVELS**

| Source | Estimated Usage Factor (%) | Reference Noise Level at 50 feet (dBA Lmax) |
|---|---|---|
| Cranes | 16% | 81 |
| Dozers | 40% | 82 |
| Dump/Haul Trucks | 40% | 76 |
| Excavators | 40% | 81 |
| Forklifts | 10% | 75 |
| Front End Loaders | 40% | 79 |
| Graders | 40% | 85 |
| Other Equipment | 50% | 85 |
| Pavers | 50% | 77 |
| Rollers | 20% | 80 |
| Scrapers | 40% | 84 |
| Tractors/Loaders/Backhoes | 25% | 80 |
| Water Trucks | 10% | 80 |

SOURCE: FHWA 2006

**Table 14** shows the estimated maximum construction noise levels that would occur at the nearest off-site sensitive uses during a peak day of construction activity at the project site. As shown in Table 14, for the nearest sensitive receptor, construction noise levels were estimated to reach a maximum of 62 dBA Leq during the overlap of several construction phases (all grading/excavation phases, Phase 1 building construction, and Phase 2 building construction). However, these increases would only occur for a temporary duration at the nearest sensitive receptor location as construction activities would occur throughout the project site and result in lower noise levels at greater distances.

Construction would occur Monday through Friday, within the hours of 7:00 A.M. and 7:00 P.M. and no construction would occur on the weekends. As such, the proposed project is consistent with TOMC Title 8, Section 8-11.01, which limits construction to between the hours of 7:00 A.M. and 7:00 P.M. Monday through Saturday, and at no time on Sunday. As a result, compliance with applicable noise standards established in the TOMC, in particular, Title 8, Section 8-11.01, would reduce construction noise impacts to less than significant.

**TABLE 14**
**UNMITIGATED MAXIMUM CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS**

| Source | Estimated Distance (feet) | Noise Level (dBA Leq) |
|---|---|---|
| Phase 1 and 2 Fine Grading/Excavation | 1,250 | 57 |
| Phase 3, 4, and 7 Fine Grading/Excavation | 2,250 | 51 |
| Phase 5 and 6 Grading/Excavation | 2,000 | 51 |
| Building Construction – Phase 1 | 1,250 | 57 |
| Building Construction – Phase 2 | 1,250 | 57 |
| Building Construction – Phase 3 | 2,250 | 52 |
| Building Construction – Phase 4 | 2,600 | 50 |
| Building Construction – Phase 5 | 2,000 | 53 |
| Building Construction – Phase 6 | 2,600 | 50 |
| Building Construction – Phase 7 | 2,500 | 51 |
| **Maximum Noise Level – All Grading Phases + Building Construction Phase 1 and 2** | **-** | **62** |

NOTES: Detailed construction noise calculations are provided in Appendix G.

SOURCE: ESA 2020

### *Off-Site Construction Noise*

Regarding construction truck and vehicle trips, construction worker commutes and trucks hauling materials and equipment to and from the project site would be the primary generator of offsite mobile sources. A maximum of approximately 179 worker trips per day, and up to 82 haul and vendor trucks per day during all excavation and Phase 1 and 2 building construction phases would occur (based on the air quality modeling included in Appendix A. Noise associated with construction truck trips were estimated using the FHWA Traffic Noise Model (TNM) Version 2.5 method described in FHWA Traffic Noise Model Technical Manual (FHWA 1998) and based on the maximum number of worker and truck trips in a peak hour (assuming an 8-hour workday). The results of the analysis indicate that the proposed project construction-related trips would generate noise levels of approximately 54.3 dBA $L_{eq}$ at the noise sensitive receptors along Rancho Conejo Boulevard between Conejo Spectrum Street and Corporate Center Drive. A representative noise level from the City's General Plan Noise Element was used to determine the incremental increase in noise levels caused by on-road construction vehicles (City of Thousand oaks, 2000). The representative existing noise level of 54.7 dBA $L_{eq}$ combined with the estimated construction noise level of 54.3 dBA $L_{eq}$ would result in a combined noise level of 57.5 dBA $L_{eq}$ and a noise level increase of 2.8 dBA $L_{eq}$ over existing. A change of less than 1 dBA in sound levels generally cannot be perceived by the human ear and an increase of 3 dBA would be barely perceivable (Caltrans, 2013). As the increase in construction traffic noise levels generated by the proposed project would not exceed the 3 dBA thresholds barely perceivable by the human ear, the proposed project's construction traffic noise impact would be less than significant.

### *Operational Noise*

Potential long-term noise impacts from the proposed project would result from activities associated with vehicular noise generation on area roadways and heating, ventilation, and air conditioning (HVAC) equipment. These increases could result in a substantial permanent increase in ambient noise levels on area roadways. To predict the noise increase due to vehicular traffic, the Federal Highway Administration's (FHWA's) Traffic Noise Model (TNM), Version 2.5, was used to predict vehicular traffic noise levels at off-site noise-sensitive receivers based on peak hour trip rates and trip distribution from the traffic study (Kimley Horn 2020). The estimated noise contribution from project trips was then compared to existing noise levels that are representative of the proposed project area taken from the City's General Plan Noise Element (City of Thousand Oaks, 2000) The project noise contribution, existing noise levels, and estimated combined noise levels are shown in **Table 15**.

**TABLE 15**
**PREDICTED TRAFFIC NOISE LEVELS**

| Roadway Segment | Project Noise Contribution (Leq, dBA) | Existing Noise Level (Leq, dBA) | Combined Noise Level (Project + Existing) (Leq, dBA) | Increase over Existing Noise Level (Combined – Existing) |
|---|---|---|---|---|
| **Rancho Conejo Boulevard** | | | | |
| Between Conejo Spectrum Street and Corporate Center Drive | 53.4 | 54.7 | 57.1 | 2.4 |

SOURCE: ESA, 2020, City of Thousand Oaks General Plan Noise Element, 2000

As shown in Table 15, the predicted combined traffic noise levels would increase existing noise levels along the analyzed roadway by 2.4 dBA Leq. A change of less than 1 dBA in sound levels generally cannot be perceived by the human ear and an increase of 3 dBA would be barely perceivable (Caltrans, 2013). As the increase in traffic noise levels generated by the proposed project would not exceed the 3 dBA thresholds barely perceivable by the human ear, the proposed project's traffic noise impact would be less than significant.

In addition, the proposed project would result in the operation of on-site stationary noise sources, including HVAC units on new buildings. HVAC equipment would be a primary (loudest) operational noise source on-site associated with the proposed project. Noise levels from HVAC equipment vary significantly depending on unit efficiency, size, and location but generally average from 45 dBA to 70 dBA $L_{eq}$ at 50 feet (USEPA 1971). HVAC Noise levels are typically attenuated by design, baffling, enclosures, barriers and distance. Assuming a worst-case noise level of 70 dBA $L_{eq}$ at 50 feet and accounting for distance attenuation, the closest sensitive receptors located approximately 1,250 feet east of the proposed project would experience noise levels of 41.8 dBA $L_{eq}$. A noise level of 41.8 dBA Leq would not increase noise levels above typical ambient noise levels in a suburban environment. In addition, the City does not place specific numerical limits on noise levels from the operation of HVAC. Operational noise levels from HVAC would be less than significant.

b) **Less-than-Significant Impact.** The proposed project would be constructed using typical construction techniques, such as jack hammers, bulldozers, and loaded trucks. As such, it is anticipated that the equipment to be used during construction would generate ground-borne vibration.

Ground-borne vibration is primarily generated from the use of construction equipment and from heavy-duty vehicle traffic and trains. Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. The vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as ground-borne noise. Vibration levels for potential structural damage is described in terms of the peak particle velocity (PPV) measured in inches per second (in/sec). Road vehicles rarely create enough ground-borne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps.

Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes. Ground-borne vibration related to human annoyance is generally related to root mean square (rms) velocity levels and expressed as velocity in decibels (VdB).

The City of Thousand Oaks does not address vibration in the City's municipal code or general plan noise elements. Thus, for the proposed program, the Federal Transit Authorities (FTA)'s criteria for structural damage and human annoyance from the Transit Noise and Vibration Impact Assessment Manual (FTA, 2018) was used. With respect to residential and commercial structures, the FTA, provides a vibration damage potential criterion for continuous/frequent intermittent vibration sources of 0.5 in/sec PPV for Category I, Reinforced-concrete, steel, or timber (no plaster) buildings, which includes newer residential structures and modern industrial/commercial buildings and 0.2 in/sec PPV for Category III, Non-engineered timber and masonry buildings, which includes older residential structures (FTA 2018). The guidance also provides an 80 VdB threshold for construction and operational vibration impacts associated with human annoyance for infrequent events (FTA 2018). The proposed project's construction activities would generate vibration at vibration-sensitive receptors infrequently from occasional equipment activity and only when within 50 to 100 feet from vibration-sensitive receptors. Therefore, consistent with the FTA Transit Noise and Vibration Impact Assessment Manual, the criteria for infrequent events is used. Further, the closest buildings assessed for structural damage are 50 feet southeast of the project site and are evaluated as Category I buildings with a threshold 0.5 in/sec.

### *Construction Vibration*

According to the FTA, ground vibrations from construction activities very rarely reach the level that can damage structures. A possible exception is the case of old, fragile buildings of historical significance where special care must be taken to avoid damage (FTA 2006). The construction activities that typically generate the most severe vibrations are blasting, which would not be utilized for the proposed project. The proposed project would utilize construction equipment such as use of loaded trucks and bulldozer, which would generate groundborne vibration during construction activities. The vibration velocities at various distances for several types of construction equipment that can generate perceptible vibration levels are identified in **Table 16**. Based on the information presented in Table 16, vibration velocities could range from 0.003 to 0.076 in/sec PPV at 25 feet from the source of activity.

**TABLE 16**
**VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT**

| | Approximate PPV (in/sec) | | | | | | |
|---|---|---|---|---|---|---|---|
| **Equipment** | **25 Feet** | **50 Feet** | **60 Feet** | **75 Feet** | **100 Feet** | **200 Feet** | **300 Feet** |
| Bore/Drill Rig | 0.0890 | 0.0361 | 0.0285 | 0.0213 | 0.0147 | 0.0060 | 0.0035 |
| Loaded Trucks | 0.0760 | 0.0309 | 0.0244 | 0.0182 | 0.0125 | 0.0060 | 0.0035 |
| Jackhammer | 0.0350 | 0.0142 | 0.0112 | 0.0084 | 0.0058 | 0.0051 | 0.0030 |
| Small Bulldozer | 0.0030 | 0.0012 | 0.0010 | 0.0007 | 0.0005 | 0.0023 | 0.0014 |

SOURCE: FTA 2018; ESA 2020.

As stated earlier, a distance of 50 feet is used as the conservatively estimated average closest distance for construction equipment to adjacent sensitive receptors around the project site. Based on the vibration levels presented in Table 16, at a distance of 50 feet from the project site, the maximum vibration level would be up to approximately 0.076 in/sec PPV for loaded truck, which would not exceed the significance threshold of 0.5 in/sec PPV. Therefore, the use of construction equipment would not result in a groundborne vibration velocity level above 0.5 inches per second at the nearest off-site structure and impacts would be less than significant.

With respect to human annoyance, FTA's *Transit Noise and Vibration Impact Assessment* identifies residential buildings, not commercial buildings, as vibration sensitive receptors for human annoyance. The closest residential building is located approximately 1,250 feet east of the project site. As discussed above, per FTA guidance, the significance criteria for human annoyance is 80 VdB for sensitive uses, including residential uses. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration and at a distance of 1,250 feet, the vibration levels would be imperceptible and indistinguishable from any background vibration. Therefore, the use of construction equipment would not result in vibration levels that would cause human annoyance and impacts would be less than significant.

### *Operational Vibration*

The proposed project's day-to-day operations would include typical commercial-grade stationary mechanical and electrical equipment, such as air handling units, condenser units, and exhaust fans, which would produce vibration at low levels that would not cause structural damage or human annoyance impacts to the project buildings or on-site occupants and would not cause vibration impacts to the off-site environment. In addition, the primary sources of transient vibration would include passenger vehicle circulation within the proposed parking area. According to America Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), pumps or compressor would generate ground-borne vibration levels of 0.5 in/sec PPV at 1 foot. It is anticipated that project mechanical equipment, including air handling units, condenser units, and exhaust fans, would be located on building rooftops. Therefore, ground-borne vibration from the operation of such mechanical equipment would not impact any of the off-site sensitive receptors. Therefore, structural damage and human annoyance vibration impacts from the Project operation would be less than significant.

c) **No Impact.** The proposed project would not locate noise-sensitive uses within an airport land use plan area, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip, heliport, or helistop. Therefore, the proposed project would not result in an exposure of noise-sensitive uses to excessive noise levels from such uses. No impact would occur.

## Cumulative Impact

As described above, the proposed project would not result in a substantial permanent increase in ambient noise levels and impacts would be less than significant. Impacts associated with temporary ambient noise levels would also be less than significant; temporary noise impacts would be intermittent and short in duration given the constant mobility of construction activities. Further, there would be no impact related to airports since the proposed project is not located within an airport land use plan, private airstrip, or public airport. Typically, groundborne vibration generated by man-made activities (i.e., rail and roadway traffic, operation of mechanical equipment, and typical construction equipment) diminishes rapidly with distance from the vibration source. The other related projects are located at a sufficient distance from the project site and would not combine with the project to create cumulative impact on sensitive receptors.

## References

America Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Heating, Ventilating, and Air-Conditioning Applications, 1999

California Department of Transportation (Caltrans), 2013a. Technical Noise Supplement (TeNS), Section 2.2.1, September 2013. Available at: http://www.dot.ca.gov/env/noise/docs/tens-sep2013.pdf. Accessed July 2020.

Caltrans, 2013b. Transportation and Construction Vibration Guidance Manual, September 2013. Available at: http://www.dot.ca.gov/env/noise/docs/tcvgm-sep2013.pdf. Accessed July 2020.

California Estimator Emissions Model, Appendix A Calculation Details for CalEEMod, October 2017. Available: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6. Accessed July 2020.

City of Thousand Oaks, General Plan Noise Element, 2000. Available: https://www.toaks.org/home/showdocument?id=340#:~:text=The%20Noise%20Element%20of%20the,issues%20and%20review%20draft%20policies. Accessed July 2020.

Federal Highway Administration (FHWA), 2006. Roadway Construction Noise Model – RCNM and User Guide, January 2006. Available at: https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/. Accessed June 2020.

Federal Transit Administration, 2006. Transit Noise and Vibration Impact Assessment, May 2006. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf. Accessed July 2020.

Federal Transit Administration (FTA), 2018. Transit Noise and Vibration Impact Assessment Manual.

# Population and Housing

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XIV. POPULATION AND HOUSING —** Would the project: | | | | |
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

## Discussion

a) **Less-than-Significant Impact.** The proposed project entails the construction of 15 industrial buildings and associated infrastructure such as parking lots and lighting within an approved Specific Planning area. While the project could promote growth in the local area, this is a planned development as discussed in the City of Thousand Oaks Rancho Conejo Specific Plan 7. Further, construction jobs would be temporary and are highly specialized. Construction workers would not be anticipated to relocate their residence to the project area and would not induce substantial population growth or require permanent housing. As such, the project would not induce growth that is not accounted for by the City of Thousand Oaks and impacts would be less than significant.

b) **No Impact.** The existing conditions of the project site are either undeveloped land or existing industrial buildings. Implementation of the proposed project would not include a residential component and would not displace any existing housing through construction or operation. As such, the project would not require the construction of replacing housing elsewhere. No impact would occur.

## Cumulative Impact

As described above, Population and Housing, the proposed project would result in less-than-significant impacts related to inducing population growth, displacing housing or displacing people. When added to the cumulative scenario, the proposed project would not contribute incrementally to cumulative impacts related to population and housing. Because the proposed projects would not involve construction or operation of new residences, the proposed projects' contribution to cumulative impacts to population and housing would not be cumulatively considerable.

# Public Services

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XV. PUBLIC SERVICES —** | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: | | | | |
| i) Fire protection? | ☐ | ☐ | ☒ | ☐ |
| ii) Police protection? | ☐ | ☐ | ☒ | ☐ |
| iii) Schools? | ☐ | ☐ | ☐ | ☒ |
| iv) Parks? | ☐ | ☐ | ☐ | ☒ |
| v) Other public facilities? | ☐ | ☐ | ☒ | ☐ |

## Discussion

a.i) **Less-than-Significant Impact.** The proposed project area receives fire protection services by the Ventura County Fire Department (VCFD). The VCFD covers an 848-square mile service areas and serves more than 480,000 people in both the City of Thousand Oaks as well as unincorporated parts of Ventura County and other cities within the county (City of Thousand Oaks, 2020a). The proposed project would not result in unplanned growth and is a part of The City of Thousand Oaks' Specific Plan No. 7. Further, construction jobs would be temporary and workers would not be anticipated to relocate their residence to the project area and would not induce substantial population growth or require permanent housing. Implementation of the proposed project would not induce growth that could result in the need for new or physically altered government facilities to maintain acceptable service ratios, response times, or other performance objectives of the VCFD. As such, the proposed project would have a less-than-significant impact on fire protection services.

a.ii) **Less-than-Significant Impact.** The proposed project area receives police protection services by the Ventura County Sherriff's Department (City of Thousand Oaks, 2020b). As discussed above, the proposed project would not result in unplanned growth and is a part of The City of Thousand Oaks' Specific Plan No. 7. Further, construction jobs would be temporary and workers would not be anticipated to relocate their residence to the project area and would not induce substantial population growth or require permanent housing. Implementation of the proposed project would not induce growth that could result in the need for new or physically altered government facilities to maintain acceptable service ratios, response times or other performance objectives of the Ventura County Sherriff's Department. As such, the proposed project would have a less-than-significant impact on police protection services.

a.iii) **No Impact.** The proposed project would not change existing demand for school services, as the proposed project would not result in an increase in population or new housing. Therefore, the proposed project would have no impact related to school services.

a.iv) **No Impact.** The proposed project would not result in an increase in population and would not prompt the need for new parks. Construction jobs would be temporary and workers would not be anticipated to relocate their residence to the project area and would not induce substantial population growth or require permanent housing. Therefore, the proposed project would have no impact related to parks.

a.v) **Less-than-Significant Impact.** As discussed above, the proposed project would not result in unplanned growth and is a part of The City of Thousand Oaks' Specific Plan No. 7. Construction jobs would be temporary and workers would not be anticipated to relocate their residence to the project area and would not induce substantial population growth or require permanent housing. Implementation of the proposed project would not induce growth that could result in the need for new or physically altered government facilities to maintain acceptable service ratios, response times or other performance objectives of public services within the City of Thousand Oaks for the proposed project area. As such, impacts would less than significant.

## Cumulative Impact

As described above, Public Services*,* implementation of the proposed project would not include development of new housing. Therefore, the proposed project would not directly or indirectly generate population growth within the proposed project area. As such, the proposed project would not significantly increase the need for fire or police protection services, or increase the usage of schools, libraries, or hospitals, beyond the planned growth identified in the relevant General Plans and Specific Plan No. 7.

When added to the cumulative scenario, the proposed project would not contribute incrementally to significant cumulative impacts related to public services. Because the proposed project would not involve construction or operation of new residences and would not increase the need or usage of public services, the proposed projects' contribution to cumulative impacts related to public services would not be cumulatively considerable.

## References

City of Thousand Oaks. 2020. Fire Department. Available online at: https://www.toaks.org/departments/fire, accessed on April 1, 2020.

City of Thousand Oaks. 2020b. Police Department. Available online at: https://www.toaks.org/departments/police, accessed on April 1, 2020.

# Recreation

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XVI. RECREATION —** | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

## Discussion

a) **No Impact.** The proposed project consists of construction of a business park that includes 15 industrial buildings. The project is a part of planned development discussed in the City of Thousand Oaks Specific Plan 7. Construction jobs would be temporary and workers would not be anticipated to relocate their residence to the project area and would not induce substantial population growth or require permanent housing. The proposed project would not result, directly or indirectly, in an unplanned increase in population. Therefore, the proposed project would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities and would not cause physical deterioration of facilities. Therefore, no impact would occur.

b) **No Impact.** As discussed above, the proposed project would not result, directly or indirectly, in an unplanned increase in population. The proposed project includes an eight-foot multi-use/equestrian easement along the east side of the proposed Academy Drive and an additional three-foot multi-use/equestrian easement along the north side of Conejo Center Drive. This multi-use/equestrian trail will eventually connect to the proposed equestrian trail along Academy Drive west of the proposed project and the COSCA Western Plateau Trail. The proposed project would not require the construction or expansion of additional recreational facilities which might have an adverse physical effect on the environment. Therefore, no impact would occur.

## Cumulative Impact

The proposed project would result in a less-than-significant impact on recreational facilities. The project does not include development of new housing and would not require the construction or expansion of recreational facilities. Therefore, the proposed projects’ contribution to cumulative impacts to recreation would not be cumulatively considerable.

# Transportation

| Issues (and Supporting Information Sources): | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. TRANSPORTATION —** Would the project: | | | | |
| a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☐ | ☐ | ☒ | ☐ |
| b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☒ | ☐ | ☐ |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |
| d) Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ |

## Discussion

a) **Less-than-Significant Impact.** A significant impact may occur if the project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The City's General Plan Goals and Policies includes a circulation policy of maintaining a Level of Service (LOS) C within the city limits. The policy states: "The City shall maintain a Level of Service C on all roads and at all intersections. Lower levels of service may be tolerated to preserve or enhance landscaping and aesthetic integrity." As a result, a traffic impact analysis was prepared by Kimley Horn to evaluate the impacts of the proposed project on the local circulation system and the project consistency with the General Plan Goals and Policies. The following analysis is based on the traffic impact analysis prepared by Kimley Horn (Kimley Horn 2020). The Kimley Horn traffic impact analysis can be found in **Appendix H** of this IS/MND.

The traffic impact analysis studied traffic conditions under the following conditions:

- Existing (2020)
- Existing (2020) + Project
- Buildout (2040)

The year 2020 is the defined year for existing conditions. Traffic volumes for the Existing (2020) conditions were interpolated between the 2016 counts and the approved 2040 volumes found in the Traffic Impact Mitigation Fee Nexus Study (TIMF), completed in 2019. Approved 2040 traffic volumes from the TIMF were used for the Build Out (2040) analysis.

Existing operations and peak-hour project traffic impacts were analyzed at the following four intersections within the vicinity of the project:

- Rancho Conejo Boulevard at Hillcrest Drive/Signalized
- Camino Dos Rios/Teller Road at Hillcrest Drive/Signalized

- Ventu Park Road at Hillcrest Drive/Signalized
- Broadbeck at Camino Dos Rios/Signalized

The traffic impact analysis concluded the Existing (2020) conditions, all study intersections operate at an acceptable level of service with the exception of the intersection of Ventu Park Road at Hillcrest Drive during the PM peak hour, which operates at a LOS D.

For the Existing (2020) + Project conditions, the project has a significant impact on the intersections of Rancho Conejo Boulevard at Hillcrest Drive (AM peak hour) and Ventu Park Road at Hillcrest Drive (AM and PM peak hours). To reduce the impact to the above intersections the following actions are required, signal timing changes at both intersections to accommodate the vehicular demand and changing the lane assignment of the southbound approach of the intersection of Ventu Park Road at Hillcrest Drive to be a through, through, through-right approach.

For the Build Out (2040) Condition the above improvements from the Existing (2020) + Project scenario were included in the Build Out (2040) conditions. In the Build Out (2040) scenario, all study intersections continue to operate at an acceptable LOS, except for the intersection of Ventu Park Road at Hillcrest Drive. However, it is anticipated that when the future Academy Drive extension is built and connects to the project site, it would alleviate the traffic experienced on Ventu Park Road and therefore decrease the delay seen at the intersection of Ventu Park Road at Hillcrest Drive.

As a result, compliance with the improvements identified in the traffic impact analysis requiring the implementation of signal timing changes at both the intersections of Rancho Conejo Boulevard at Hillcrest Drive and Ventu Park Road at Hillcrest Drive and the changing of the lane assignment of the southbound approach of the intersection of Ventu Park Road at Hillcrest Drive would reduce the LOS to C or better, making the project consistent with General Plan Goals and Policy. Impacts would be less than significant.

b) **Less-than-Significant Impact with Mitigation:** CEQA Guidelines Section 15064.3 describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled (VMT) is identified as the most appropriate measure of transportation impacts. For the purposes of this discussion, VMT refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) (regarding roadway capacity for some transportation projects), a project's effect on automobile delay shall not constitute a significant environmental impact.

Per CEQA Guidelines 15064.3 subdivision (b)(1), for land use projects, VMT exceeding an applicable threshold of significance may indicate a significant impact. Projects that decrease VMT in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

A VMT analysis was prepared for the proposed project to evaluate the transportation impacts of the proposed project and the report can be found (Iteris 2020). The VMT analysis used a land-use based model that was developed using the Ventura County Transportation Model (VCTM), which is a subarea model of the Southern California Association of Government's (SCAG) travel demand model. The VCTM is consistent with the 2016 SCAG RTP/SCS travel-demand model assumptions and inputs. The project model consists of a 2012 base year scenario and 2040 future year scenario. The 2012 base year of the 2016 model is the region wide standard for existing and baseline conditions analysis. The Iteris VMT analysis can be found in Appendix H of this IS/MND.

The City has adopted an administrative policy stating that thresholds of significance will be determined on a case-by-case basis. For the proposed project, a significant impact would occur if the: *VMT per capita or VMT per employee exceeds the citywide average VMT per capita or per employee of the baseline*. The Citywide average daily VMT per employee is 14.58 and the proposed projects daily VMT per employee is 16.52. The project daily VMT per employee is 13.3 percent greater than the citywide average. Based on the thresholds of significance, the proposed project would result in a significant transportation impact and the project would need to mitigate its daily VMT per employee to a less than significant level. The 985 project employees are estimated to generate a total 16,275 daily vehicle miles and to be at the citywide average the project employees would need to generate an estimated 14,361 vehicle miles per day—a difference of 1,914 vehicle miles. In order to be mitigated to a less than significant level, the total number of estimated project-related vehicle miles would need to be reduced by 1,915 vehicle miles. However, the implementation of **Mitigation Measures TRAF-1 through TRAF-7**, which would include both on-site and off-site physical infrastructure improvements, would reduce the impacts to less than significant.

**Mitigation Measures:**

**TRAF-1-** The Applicant shall provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site and eliminate physical barriers such as walls, landscaping, and slopes that impede pedestrian circulation.

**TRAF-2**- The Applicant shall provide bike parking at each building and "end-of-trip" facilities for bicycle riders including bicycle racks and lockers.

**TRAF-3**- The Applicant shall build electrical charging infrastructure including solar energy generation and battery storage for a minimum of 51 electrical vehicle charging stations. Charging stations shall be located at each building and the number of stations shall be based a number of parking spaces provided at each building.

**TRAF-4**- The Applicant shall provide one space per building for preferential parking in convenient locations (such as near public transportation or building front doors) in terms of free or reduced parking fees, priority parking, or reserved parking for commuters who carpool, vanpool, ride-share or use alternatively fueled vehicles

**TRAF-5**- The Applicant shall contribute a fair share contribution to the extension of Academy Drive.

**TRAF-6**- The Applicant shall contribute to the fair contribution to complete the Hill Canyon Wastewater Treatment Plan Access Road.

**TRAF-7**- The Applicant shall contribute to the fair contribution to complete the new bicycle access from new Hill Canyon Wastewater access road to Hill Canyon Road.

c) **Less-than-Significant Impact.** The project area has been previously graded, and infrastructure such as streets, sidewalks and utilities were installed to prepare for the future development. The proposed project would not include any new roadways beyond what was previously installed. As result, the proposed project would not result in any new roadway features or alignments or otherwise alter the geometric design of an existing roadway. As such, the project would not increase hazards due to a geometric design feature or incompatible use. Therefore, impacts would be less than significant.

d) **Less-than-Significant Impact.** Refer to response to Issue f), in Section IX, Hazards and Hazardous Materials, and Section XVII, Transportation, Issue a) and c) above. The proposed project would nominally add vehicles to the local roadway and circulation system. However, no lane or road closures would be required. All project-related activities would occur onsite. The proposed project would not interfere with emergency response access or impact long-term emergency access. Impacts would be less than significant.

## Cumulative Impact

The Citywide average daily VMT per employee is 14.58 and the proposed projects daily VMT per employee is 16.52. The project daily VMT per employee is 13.3 percent greater than the citywide average. Based on the thresholds of significance, the proposed project would result in a significant transportation impact and the project would be required to implementation Mitigation Measures TRAF-1 through TRAF-7 to reduce the daily VMT per employee to a less than significant level. Because related projects within the City would also be required to comply with CEQA Guidelines Section 15064.3 for evaluating a project’s transportation impacts and similar to the proposed project, cumulative projects would have a significant impact if the VMT per capita or VMT per employee exceeds the citywide average VMT per capita or per employee of the baseline. Individual projects would be required to mitigate any significant impact. Therefore, the proposed project would not be expected to cause incremental impacts to transportation and traffic when considering related past, present, or foreseeable future projects, with the implementation of the Mitigation Measures TRAF-1 through TRAF-7.

## References

Iteris 2020. *Draft Shapell Industrial Project –CEQA Transportation Analysis.* December 21.

Kimley Horn 2020. Shapell Traffic Study. May 15

# Tribal Cultural Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XVIII. TRIBAL CULTURAL RESOURCES —** | | | | |
| a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources. Code Section 5020.1(k), or | ☐ | ☐ | ☒ | ☐ |
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☐ | ☒ | ☐ |

## Discussion

a.i) **Less-than-Significant Impact**. Assembly Bill 52 (AB 52), signed into law on September 25, 2014, requires lead agencies to evaluate a project's potential to impact Tribal Cultural Resources (TCR) and establishes a formal consultation process for California Native American Tribes as part of CEQA. TCRs includes sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register or included in a local register of historical resources. AB 52 also gives lead agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a TCR. Consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects, and that is traditionally and culturally affiliated with the geographic area of a proposed project.

The City has received no requests for Tribal Consultation under AB52.

a.ii) **Less-than-Significant Impact.** Under AB 52, if a lead agency determines that a project may cause a substantial adverse change to a TCR, the lead agency must consider measures to mitigate that impact. PRC Section 21074 provides a definition of a TCR. In brief, in order to be considered a TCR, a resource must be either: 1) listed, or determined to be eligible for listing, on the national, State, or local register of historic resources, or 2) a resource that the lead agency chooses, in its discretion supported by substantial evidence, to treat as a TCR. In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the State register of historic resources or County

Designated Cultural Resource. In applying those criteria, a lead agency shall consider the value of the resource to the tribe.

As discussed above, The City has received no requests for Tribal Consultation under AB52.

## Cumulative Impact

As discussed above, the proposed project would have a less-than-significant impact with respect to tribal cultural resources. Accordingly, the proposed project would not contribute to cumulative impacts related to these types of resources.

# Utilities and Service Systems

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XIX. UTILITIES AND SERVICE SYSTEMS —** Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ☒ | ☐ |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

## Discussion

a) **Less-than-Significant Impact.** The lots where the project would be constructed have already been installed with infrastructure such as sidewalks and utilities. However, during construction minor modifications to existing built infrastructure might occur to accommodate project construction. However, the proposed project would not require expanded water (see XIX b, below), electricity, gas or telecommunication services that could cause significant environmental effects. Impacts would be less than significant.

b) **Less-than-Significant Impact.** The proposed project is a planned development that is a part of the City of Thousand Oaks' Specific Plan No. 7 which is currently designated industrial and institutional. Since the proposed project would exceed the requirements of SB 610, which requires A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area., requires the preparation of a Water Supply Assessment (WSA). A WSA was prepared for the project in December 2020 and concluded that the estimated water demand for the proposed project was included in the Cal-Am Ventura District 2015 Urban Water Management Plan (UWMP) (**Appendix I**). Additionally, as a result of land use designation changes for portions of the project site that occurred after the adoption of the 2015 UWMP, there was overall reduction in water demand for use. The water demand projections in the Ventura County District 2015 UWMP considered 9.9 acres of the project site to be residential use ("Residential High Density"15-30 du/net acre). That land use designation was changed in

2015 to "Industrial" use. Since the estimated water demand for industrial uses is less than the water demand for residential uses included in the Cal-Am Ventura County District 2015 UWMP estimate, the future water demand for the project was accounted for in the Cal-Am Ventura District 2015 UWMP. As such, the project would have sufficient water supplies for the foreseeable future. Impacts would be less than significant.

c) **Less-than-Significant Impact.** Wastewater generated during construction of the proposed project would be minimal, consisting of portable toilet waste generated by construction workers. Wastewater generated during construction would be collected within portable toilet facilities. All wastewater generated in portable toilets would be collected by a permitted portable toilet waste hauler and appropriately disposed of at an identified liquid-disposal station. Therefore, construction or expansion of water or wastewater facilities would not be required for construction of the proposed project. As discussed above, the proposed project is a planned development that is a part of the City of Thousand Oaks' Specific Plan No. 7. The City of Thousand Oaks currently serves the wastewater needs of project site and would serve the project. Wastewater generated from the project site would be conveyed to the Hill Canyon Treatment Plant. Currently, the Hill Canyon Treatment Plant treats an average of 8.5 million gallons per day (mgd) of wastewater with the capacity to treat 14 mgd, and therefore has excess capacity of approximately 5.5 mgd. Impacts would be less than significant.

d) **Less-than-Significant Impact.** The waste generated during construction of the proposed project would mainly consist of general construction debris and worker personal waste. The construction contractor would be required to dispose of solid waste in accordance with local solid waste disposal requirements. In compliance with the California Integrated Waste Management Act of 1989 and the California Green Building Code, the proposed project would be required to divert 50 percent of its construction waste from landfills. The remaining construction solid waste would be taken to a nearby landfill to the project area to be determined by the construction contractor. The closest active landfill to the proposed project would be the Simi Valley Landfill & Recycling Center, which is located in Simi Valley approximately 20 miles northeast from the proposed project area. Simi Valley Landfill & Recycling Center has a permitted throughput of 9,250 tons per day, and has a remaining capacity of 88,300,00 cubic yards (CalRecycle, 2020). The landfill's cease operation date is anticipated to be in the year 2052. Therefore, the landfill would have sufficient capacity to accommodate the proposed project's construction waste disposal needs. Impacts would be less than significant.

The project proposes 83,100 SF of office space and 671,222 SF of space for manufacturing. CalRecycle provides solid waste generation rates that estimate amounts of waste typically created during daily operation of various land uses, including office buildings and warehouse/light manufacturing. CalReycle's solid waste generation rate for office operations is 6 lbs of waste per 1,000 SF per day, and for manufacturing operations the rate is 1.42 lbs of waste per 100 SF per day (Cal Recycle, 2020b). Thus, solid waste that would be generated during operation of proposed office buildings and manufacturing warehouses would amount to approximately 500 lbs per day and 9,500 lbs per day, respectively. These amounts would contribute less than 1 percent to Simi Valley Landfill & Recycling Center's permitted daily throughput capacity and the proposed project would not otherwise significantly impact the landfill's remaining operation timeline. Therefore, impacts related to solid waste generation during operation of the proposed project would be less than significant.

e) **Less-than-Significant Impact.** The proposed project would comply with all federal, state, and local construction requirements during construction of the proposed project. The proposed project would be required to comply with the California Integrated Waste Management Act of 1989 and the California Green Building Code requiring 50 percent diversion of its construction waste from landfills through reuse and recycling. Therefore, project impacts related to potential noncompliance with solid waste statutes and regulations would be considered less than significant.

## Cumulative Impact

As discussed above, the proposed project is a planned development that is a part of the City of Thousand Oaks' Specific Plan No. 7. The project would have a less-than-significant impact associated with utilities and service systems. When added to the cumulative scenario, the effects of the proposed project would not contribute incrementally to the cumulative impacts on utilities. The proposed project is planned development and would result in a less-than-significant impact to utilities without requiring mitigation. Therefore, when considered in addition to the anticipated impacts of other projects in the cumulative scenario, the proposed projects' incremental contribution to utilities and service systems would not be cumulatively considerable.

## References

CalRecycle. 2020. Facility/Site Summary Detail: Simi Valley Landfill & Recycling Center. Available at: https://www2.calrecycle.ca.gov/swfacilities/Directory/56-AA-0007, accessed on April 2, 2020.

# Wildfire

| Issues (and Supporting Information Sources): | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XX. WILDFIRE —** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☒ | ☐ | ☐ |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☒ | ☐ |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☒ | ☐ |

## Discussion

a) **Less-than-Significant Impact.** As discussed in response to Section IX. Hazards and Hazardous Materials, Issue f), implementation of the proposed project is not anticipated to substantially impair an adopted emergency response plan or evacuation plan because all construction and operational activities would be within the boundaries of an approved Specific Plan. The circulation system has previously been constructed and the road widths and cul-de-sac diameters are in compliance with city code. As a result, impacts would be less than significant.

b) **Less-than-Significant Impact with Mitigation.** The proposed project is located is the Local Responsibility Area Very High Fire Hazard Severity Zone according to California Department of Forestry and Fire Protection (CAL FIRE). Construction of the proposed project would involve the use of flammable materials such as fuels used for construction equipment. The use of spark-producing construction machinery within fire risk areas such as the project area could expose temporary project workers and contractors to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. However, contractors would have to comply with Public Resource Codes (PRC) Sections 4427, 4428, 4431, and 4442. During construction, strict adherence to these PRC sections would ensure that contractors are responsible for all monitoring and safety measures ensuring that any risk to exacerbate wildfire. Furthermore, as described in Section IX, Hazards and Hazardous Materials, implementation of Mitigation Measure HAZ-1 would ensure fire hazard reduction measures are implemented during construction activities to further reduce the potential for wildfire impacts on project workers and contractors to a less than significant level.

Once constructed, the project would include 15 industrial buildings. Fire hydrants and utilities already exist on the project site and are currently operational. In addition, the project would include a fire buffer around the perimeter of the site void of vegetation to protect the structures from fires. Further, all buildings would be required to have a fire suppression system and assessable fire extinguishers in compliance with the California Code of Regulations (CCR) and Cal/OSHA. With adherence to applicable laws and regulations, impacts would be reduced to a less than significant level.

**Mitigation Measure:**

Implement Mitigation Measure HAZ-1

c) **Less-than-Significant Impact.** The proposed project would not result in the installation fuel breaks, emergency water sources or new power lines. The proposed project entails the construction of 15 industrial buildings. Infrastructure such as streets, sidewalks, fire hydrants and utilities already exist on the project site and would not be required during construction. In addition, the project would include a fire buffer around the perimeter of the site void of vegetation to protect the structures from fires. However, all building activities must comply with fire protection and prevention requirements specified by the CCR and Cal/OSHA. This includes various measures such as easy accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, and worker training for firefighter extinguisher use. With adherence to applicable laws and regulations, impacts would be reduced to a less than significant level.

d) **Less-than-Significant Impact.** As discussed in Section VII, Geology, Soils, and Seismicity a)(iv) and c), Section IX Hydrology and Water Quality c)(ii), and c)(i), the project would not result in increased drainage or runoff that could contribute to landslide or flooding impacts. Impacts would be less than significant.

## Cumulative Impact

As discussed above, the project would be located in a Very High Fire Hazard Severity Zone Local Responsibility Area and includes Mitigation Measure HAZ-1 to reduce the potential for causing a wildfire during construction. The potential for wildland fires resulting in the loss of life or property is generally unique to each site. All cumulative projects are subject to the fire codes and regulations. The cumulative projects are all located within developed areas, but similar to the project, other cumulative projects would be required to include such features as fuel modification zones, fire access roads, and fire hydrants to reduce the risk of potential wildland fires. As a result, through the project's compliance Mitigation Measure HAZ-1 and with fire codes and regulations, the potential cumulative impacts from wildland fires would be less than significant.

## References

California Department of Forestry and Fire Protection (CAL FIRE), 2020. California Fire Hazard Severity Zone Viewer. Available online at: https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414, accessed January 2021.

# Mandatory Findings of Significance

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

## Discussion

a) **Less-than-Significant Impact with Mitigation**. Construction of the proposed project has the potential to effect state and federally listed species, as well as nesting and foraging activities for common avian species protected under the Migratory Bird Treaty Act. However, implementation of **Mitigation Measures BIO-1** through **BIO-6** would ensure that impacts to biological resources are mitigated to a less than significant level.

The proposed project area is considered sensitive for the presence of subsurface archaeological deposits based on proximity to a known prehistoric site within a 0.5-mile radius, and potential underlying paleontological resources based on the underlying geologic formation of the proposed project area. Implementation of **Mitigation Measures CR-1** through **CR-5** and **GEO-1** through **GEO-3** would ensure impacts to archaeological resources and paleontological resources are mitigated to a less than significant level.

**Mitigation Measures:**

Implement Mitigation Measures BIO-1 through BIO-6, CR-1 through CR-5, and GEO-1 through GEO-3.

b) **Less-than-Significant Impact with Mitigation.** A cumulative impact could occur if the proposed project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects for each resource area. No direct significant impacts were identified for the proposed project that could not be mitigated to a less than significant level.

The proposed project is a planned development that is a part of the City of Thousand Oaks' Specific Plan No. 7. Any project that would be constructed concurrently with the proposed project would be required to mitigate any potential impacts. As a result, implementation of mitigation measures during construction and operation of future concurrent projects are expected to reduce impacts to non-significant levels and therefore, would not be cumulatively considerable.

**Mitigation Measures:**

Implement Mitigation Measures AIR-1 and AIR-2, BIO-1 through BIO-6, CR-1 through CR-6, and GEO-1 through GEO-3, HAZ-1, and TRAF-1 through TRAF-7.

c) **Less-than-Significant Impact with Mitigation.** Based on the analysis of the project's impacts in the Responses to I thru XX, there is no indication that this project could result in substantial adverse effects on human beings. While there would be a variety of effects during construction related to biological resources, cultural and paleontological resources, and hazards and hazardous materials, these impacts would be less than significant based on compliance with applicable regulatory requirements and mitigation measures, where applicable. The project would not have any long-term impacts. With implementation of mitigation measures included in this IS/MND, the proposed project would not result in substantial adverse effects to humans, either directly or indirectly.

**Mitigation Measures:**

Implement Mitigation Measures AIR-1 and AIR-2, BIO-1 through BIO-6, CR-1 through CR-6, and GEO-1 through GEO-3, HAZ-1, and TRAF-1 through TRAF-7.

# Appendix A
## Air Quality and Greenhouse Gases Emissions Calculations

# Appendix A
# Air Quality Analysis
## Conejo Summit Project

1. Assumptions

2. Construction Summary
    a. Unmitigated Construction
    b. Mitigated Construction

3. HCW Operational Summary

4. CO Hotspot Analysis

5. CalEEMod Output

6. EMFAC 2017

# Air Quality Analysis
## Conejo Summit Project
### 1. Assumptions

**Conejo Summit Project**
**Assumptions**

**CalEEMod Inputs (Non-Default information only)**

| | | |
|---|---|---|
| Project Location | | |
| County | Ventura County | |
| Air District | Ventura County APCD | |
| Climate Zone | 8 | |
| Construction Year | 2021 | |
| Operational Year | 2023 | Initial |
| | 2027 | Potential completion |
| | 2040 | Buildout |
| Utility Provider | Southern California Edison | |
| Source Receptor Area (SCAQMD) | N/A | |
| Nearest sensitive receptor: | 1,250 | feet |

| | 2021 | 2023 | 2027 | 2040 | 2015 |
|---|---|---|---|---|---|
| CO intensity | 483.26633 | 441.8972278 | 361.0394372 | 100.2887325 | 556.6024656 |
| % renewable | 36% | 41.25% | 52.00% | 86.67% | 26.00% |

| **Land Use** | **Building SQFT** | **Building KFS** | **Stalls** | **Acres** | |
|---|---|---|---|---|---|
| General Light Industrial - Phase 1 | 175,916 | 175.916 | | 4.04 | |
| Parking - Phase 1 | | | 401 | 6.81 | |
| General Light Industrial - Phase 2 | 187,485 | 187.485 | | 4.08 | |
| Parking - Phase 2 | | | 346 | 6.66 | |
| General Light Industrial - Phase 3 | 38,748 | 38.748 | | 0.89 | |
| Parking - Phase 3 | | | 88 | 1.78 | |
| General Light Industrial - Phase 4 | 49,368 | 49.368 | | 1.13 | |
| Parking - Phase 4 | | | 128 | 4.04 | |
| General Light Industrial - Phase 5 | 112,845 | 112.845 | | 2.59 | |
| Parking - Phase 5 | | | 242 | 4.20 | |
| General Light Industrial - Phase 6 | 125,323 | 125.323 | | 2.88 | |
| Parking - Phase 6 | | | 301 | 5.82 | |
| General Light Industrial - Phase 7 | 74,537 | 74.537 | | 1.71 | |
| Parking - Phase 7 | | | 157 | 3.01 | |
| Total: | 764,222 | 764.22 | 1,663 | 49.64 | |
| Max | 187,485 | | | | 13.47 |
| | | | | | 6.81 |
| **Operational Summary** | | | | | |
| 2023 Initial Light Industrial | 363,401 | 363.40 | 401 | 21.59 | |
| 2027/2040 Buildout | 764,222 | 764.22 | 1,663 | 49.64 | |

**Construction**

**Construction Schedule**

| Phases / Activity | | Modeled Schedule Start (month/date/ year) | Finish (month/date/ year) | Months | Days |
|---|---|---|---|---|---|
| Phase 1 & 2 | | | | | |
| | Grading | 1/1/2021 | 5/31/2021 | 5 | 129 |
| Phase 3, 4, & 7 | | | | | |
| | Grading | 6/1/2021 | 8/30/2021 | 3 | 78 |
| Phase 5 & 6 | | | | | |
| | Grading | 9/1/2021 | 12/31/2021 | 4 | 105 |
| Phase 1 | | | | | |
| | Building Construction | 1/1/2022 | 11/30/2022 | 11 | 286 |
| Phase 2 | | | | | |
| | Building Construction | 12/1/2022 | 10/30/2022 | 11 | 286 |
| Phase 3 | | | | | |
| | Building Construction | 11/1/2023 | 6/30/2024 | 8 | 208 |
| Phase 4 | | | | | |
| | Building Construction | 7/1/2023 | 3/31/2025 | 9 | 235 |
| Phase 5 | | | | | |
| | Building Construction | 4/1/2025 | 1/31/2026 | 10 | 263 |
| Phase 6 | | | | | |
| | Building Construction | 2/1/2026 | 11/30/2026 | 10 | 259 |
| Phase 7 | | | | | |
| | Building Construction | 12/1/2026 | 9/30/2027 | 10 | 261 |

Notes:

- Assumes 12 hour construction day (8 hour equipment usage), 6 days per week
- Equipment is similar for all 3 grading and all 7 building phases. For simplicity in modeling only the worst case of each construction phase is modeled. Emissions per phase are adjusted to fit specific phase lengths for energy and GHG quantifications.

Phases Modeled: Grading - Phase 1&2
Building Construction - Phase 2
Paving - Phase 1

-As a conservative estimate of equipment and vehicle emissions, all phases are modeled as if they begin on 1/1/2021.

| Total Schedule | Start | End | Months | Years |
|---|---|---|---|---|
| Phase 1 Thru 7 | Jan-21 | Sep-27 | 81 | 6.75 |
| Phase 1 & 2 | Jan-21 | Nov-22 | 23 | 1.92 |
| Phase 3 thru 7 | Jun-21 | Sep-27 | 76 | 6.33 |

**Construction Phases and Equipment Summary**

The following abbreviations are used in the following sections.

| | |
|---|---|
| # = | number of each type of equipment that would operate on a max day. |
| Hrs/day = | estimated hours per day each piece of equipment would operate (This is not representative of the total length of the construction day) |
| HP = | horse power of the equipment. |
| LF = | Load factor for the equipment |

**Construction Phases Modeled:**

***Grading:***

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Equipment Service Truck | 1 | 4 hours | Default | Default | off-highway truck |
| Scrapers | 4 | 10/Default | Default | Default | |
| Dozers | 2 | 10/Default | Default | Default | |
| Grader | 1 | 10/Default | Default | Default | |
| Bottom Dump Trucks | 20 | | Modeled as haul trip | | Haul Truck |
| Excavators | 1 | 10/Default | Default | Default | |
| Backhoe | 2 | 10/Default | Default | Default | |
| 10-wheeler Dump Truck | 1 | | Modeled as haul trip | | Haul Truck |
| Sheep Rollers | 2 | 10/Default | Default | Default | |
| Paving Machine | 1 | 10/Default | Default | Default | Paver |
| Curb Machine | 1 | 10/Default | Default | Default | Paving Equipment |
| Water Truck | 2 | 4 hours | Default | Default | off-highway truck |
| Flat bed semi | 1 | | Modeled as vendor trip | | * Vendor Truck |

*No vibratory causing action

***Building Construction:***

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Forklift | 2 | 10/Default | Default | Default | |
| 500 ton crane | 1 | 10/Default | Default | Default | |
| Dozers | 1 | 10/Default | Default | Default | |
| Grader | 1 | 10/Default | Default | Default | |
| Dump Truck | 1 | | Modeled as haul trip | | Haul Truck |
| Excavators | 1 | 10/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |

*No vibratory causing action

***Paving:***

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** |
|---|---|---|---|---|
| Curb machine | 1 | 10/Default | Default | Default |
| Paving Machine | 1 | 10/Default | Default | Default |
| Steelpavement roller | 1 | 10/Default | Default | Default |
| bobcat | 1 | 10/Default | Default | Default |
| 100ton crane | 1 | 10/Default | Default | Default |

***Architectural Coating:***

***Equipment Type*** Default Equipment Used

* CalEEMod Overestimate coating area for Industrial Landuses indoor areas. Coating for indoor area divided by 1/2 for more accurate general industrial coating applications.

| | | |
|---|---|---|
| Default | 281,228 | sqft |
| Revised | 140,614 | sqft |

***Trips and VMT***

| | Workers | Worker Trips | Vendor Trips | Haul Trips | |
|---|---|---|---|---|---|
| | | *Provided totals. Trips are total round trips* | | | |
| Phase 1 & 2 | 15 | 630 | 74 | 2,835 | |
| Phase 3, 4, & 7 | 18 | 935 | 100 | 0 | |
| Phase 5 & 6 | 15 | 518 | 64 | 0 | |
| Phase 1 | 28 | 2668 | 961 | 300 | |
| Phase 2 | 30 | 2857 | 949 | 329 | |
| Phase 3 | 10 | 840 | 212 | 21 | |
| Phase 4 | 12 | 935 | 244 | 24 | |
| Phase 5 | 26 | 2252 | 778 | 231 | |
| Phase 6 | 27 | 2338 | 980 | 268 | |
| Phase 7 | 27 | 2233 | 814 | 260 | |
| | | *Daily trips modeled - One-way Trips* | | | Days |
| Phase 1 & 2 | 15 | 30 | 2 | 50 | 129 |
| Phase 3, 4, & 7 | 18 | 36 | 4 | 0 | 78 |
| Phase 5 & 6 | 15 | 30 | 2 | 0 | 105 |
| Phase 1 | 28 | 56 | 8 | 4 | 286 |
| Phase 2 | 30 | 60 | 8 | 4 | 286 |
| Phase 3 | 10 | 20 | 4 | 2 | 208 |
| Phase 4 | 12 | 24 | 4 | 2 | 235 |
| Phase 5 | 26 | 52 | 6 | 2 | 263 |
| Phase 6 | 27 | 54 | 8 | 4 | 259 |
| Phase 7 | 27 | 54 | 8 | 2 | 261 |
| Distance (miles): | | 10.8 | 7.3 | 0.4 | |

**Provided Equipment lists by phase:**

***Phase 1 & 2***

**Grading**

*Phase Type* Grading

| | | |
|---|---|---|
| *Soil Import/Export* | 2,835 | trips |
| | 0.375 | miles per trip |
| | | *No off-site disposal, just dispersal between sites. |

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Equipment Service Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Scrapers | 4 | 8/Default | Default | Default | |
| Dozers | 2 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Bottom Dump Trucks | 20 | 8/Default | Default | Default | Haul Truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Backhoe | 2 | 8/Default | Default | Default | |
| 10-wheeler Dump Truck | 1 | 8/Default | Default | Default | Haul Truck |
| Sheep Rollers | 2 | 8/Default | Default | Default | |
| Paving Machine | 0 | 8/Default | Default | Default | |
| Curb Machine | 0 | 8/Default | Default | Default | |
| Water Truck | 2 | 4 hours | Default | Default | off-highway truck |
| Flat bed semi | 1 | Modeled as vendor trip | | | * Vendor Truck |

*No vibratory causing action

***Phase 3, 4, & 7***

**Grading**

*Phase Type* Grading

| | | |
|---|---|---|
| *Soil Import/Export* | 0 | trips |
| | 0.375 | miles per trip |
| | | *No off-site disposal, just dispersal between sites. |

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Equipment Service Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Scrapers | 1 | 8/Default | Default | Default | |
| Dozers | 1 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Bottom Dump Trucks | 0 | 8/Default | Default | Default | off-highway truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Backhoe | 1 | 8/Default | Default | Default | |
| 10-wheeler Dump Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Sheep Rollers | 1 | 8/Default | Default | Default | |
| Paving Machine | 1 | 8/Default | Default | Default | |
| Curb Machine | 1 | 8/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |
| Flat bed semi | 1 | Modeled as vendor trip | | | * Vendor Truck |

*No vibratory causing action

***Phase 5 & 6***

**Grading**

*Phase Type* Grading

*Soil Import/Export* 0 trips
0.375 miles per trip
*No off-site disposal, just dispersal between sites.

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Equipment Service Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Scrapers | 1 | 8/Default | Default | Default | |
| Dozers | 1 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Bottom Dump Trucks | 0 | 8/Default | Default | Default | off-highway truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Backhoe | 1 | 8/Default | Default | Default | |
| 10-wheeler Dump Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Sheep Rollers | 1 | 8/Default | Default | Default | |
| Paving Machine | 0 | 8/Default | Default | Default | |
| Curb Machine | 0 | 8/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |
| Flat bed semi | 1 | Modeled as vendor trip | | | * Vendor Truck |

*No vibratory causing action

***Phase 1***

**Building Construction**

*Phase Type* Building Construction

*Soil Import/Export* 300 trips
0.375 miles per trip
*No off-site disposal, just dispersal between sites.

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Forklift | 2 | 8/Default | Default | Default | |
| 500 ton crane | 1 | 8/Default | Default | Default | |
| Dozers | 1 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Dump Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Curb machine | 1 | 8/Default | Default | Default | |
| Paving Machine | 1 | 8/Default | Default | Default | |
| Steelpavement roller | 1 | 8/Default | Default | Default | |
| bobcat | 1 | 8/Default | Default | Default | |
| 100ton crane | 1 | 8/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |

*No vibratory causing action

***Phase 2***

**Building Construction**

*Phase Type* Building Construction

*Soil Import/Export* 329 trips
0.375 miles per trip
*No off-site disposal, just dispersal between sites.

| Equipment Type | # | Hrs/day | HP | LF | |
|---|---|---|---|---|---|
| Forklift | 2 | 8/Default | Default | Default | |
| 500 ton crane | 1 | 8/Default | Default | Default | |
| Dozers | 1 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Dump Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Curb machine | 1 | 8/Default | Default | Default | |
| Paving Machine | 1 | 8/Default | Default | Default | |
| Steelpavement roller | 1 | 8/Default | Default | Default | |
| bobcat | 1 | 8/Default | Default | Default | |
| 100ton crane | 1 | 8/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |

*No vibratory causing action

***Phase 3***

**Building Construction**

*Phase Type* Building Construction

*Soil Import/Export* 21 trips
0.375 miles per trip
*No off-site disposal, just dispersal between sites.

| Equipment Type | # | Hrs/day | HP | LF | |
|---|---|---|---|---|---|
| Forklift | 1 | 8/Default | Default | Default | |
| 500 ton crane | 1 | 8/Default | Default | Default | |
| Dozers | 1 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Dump Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Curb machine | 1 | 8/Default | Default | Default | |
| Paving Machine | 1 | 8/Default | Default | Default | |
| Steelpavement roller | 1 | 8/Default | Default | Default | |
| bobcat | 1 | 8/Default | Default | Default | |
| 100ton crane | 1 | 8/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |

*No vibratory causing action

***Phase 4***

**Building Construction**

*Phase Type* Building Construction

| | | |
|---|---|---|
| *Soil Import/Export* | 24 | trips |
| | 0.375 | miles per trip |
| | | *No off-site disposal, just dispersal between sites. |

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Forklift | 1 | 8/Default | Default | Default | |
| 500 ton crane | 1 | 8/Default | Default | Default | |
| Dozers | 1 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Dump Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Curb machine | 1 | 8/Default | Default | Default | |
| Paving Machine | 1 | 8/Default | Default | Default | |
| Steelpavement roller | 1 | 8/Default | Default | Default | |
| bobcat | 1 | 8/Default | Default | Default | |
| 100ton crane | 1 | 8/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |

*No vibratory causing action

***Phase 5***

**Building Construction**

*Phase Type* Building Construction

| | | |
|---|---|---|
| *Soil Import/Export* | 231 | trips |
| | 0.375 | miles per trip |
| | | *No off-site disposal, just dispersal between sites. |

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Forklift | 1 | 8/Default | Default | Default | |
| 500 ton crane | 1 | 8/Default | Default | Default | |
| Dozers | 1 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Dump Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Curb machine | 1 | 8/Default | Default | Default | |
| Paving Machine | 1 | 8/Default | Default | Default | |
| Steelpavement roller | 1 | 8/Default | Default | Default | |
| bobcat | 1 | 8/Default | Default | Default | |
| 100ton crane | 1 | 8/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |

*No vibratory causing action

***Phase 6***

**Building Construction**

*Phase Type* Building Construction

*Soil Import/Export* 268 trips
0.375 miles per trip
*No off-site disposal, just dispersal between sites.

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Forklift | 1 | 8/Default | Default | Default | |
| 500 ton crane | 1 | 8/Default | Default | Default | |
| Dozers | 1 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Dump Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Curb machine | 1 | 8/Default | Default | Default | |
| Paving Machine | 1 | 8/Default | Default | Default | |
| Steelpavement roller | 1 | 8/Default | Default | Default | |
| bobcat | 1 | 8/Default | Default | Default | |
| 100ton crane | 1 | 8/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |

*No vibratory causing action

***Phase 7***

**Building Construction**

*Phase Type* Building Construction

*Soil Import/Export* 260 trips
0.375 miles per trip
*No off-site disposal, just dispersal between sites.

| ***Equipment Type*** | **#** | **Hrs/day** | **HP** | **LF** | |
|---|---|---|---|---|---|
| Forklift | 1 | 8/Default | Default | Default | |
| 500 ton crane | 1 | 8/Default | Default | Default | |
| Dozers | 1 | 8/Default | Default | Default | |
| Grader | 1 | 8/Default | Default | Default | |
| Dump Truck | 1 | 8/Default | Default | Default | off-highway truck |
| Excavators | 1 | 8/Default | Default | Default | |
| Curb machine | 1 | 8/Default | Default | Default | |
| Paving Machine | 1 | 8/Default | Default | Default | |
| Steelpavement roller | 1 | 8/Default | Default | Default | |
| bobcat | 1 | 8/Default | Default | Default | |
| 100ton crane | 1 | 8/Default | Default | Default | |
| Water Truck | 1 | 4 hours | Default | Default | off-highway truck |

*No vibratory causing action

**Operational Assumptions**

***<u>Mobile source emissions</u>***

| | Daily trips | trips per kSF |
|---|---|---|
| 2040 | **2,916** | |
| Phase 1 | 671 | 3.82 |
| Phase 2 | 715 | 3.82 |
| Phase 3 | 148 | 3.82 |
| Phase 4 | 188 | 3.82 |
| Phase 5 | 431 | 3.82 |
| Phase 6 | 478 | 3.82 |
| Phase 7 | 284 | 3.82 |

| | VMT | |
|---|---|---|
| Unitigated | 16,275 | 6.00 |
| Reduced | 1,941 | |
| Mitigated | 14,334 | |
| % Reduction | 12% | |

**trips per SF**
0.0038

Note: VMT per trip adjusted in CalEEMod to equal VMT provided

Source: Kimley Horn 2020. *Chapell Traffic Study. May 15.*
Iteris 2020. *Draft Shapell Industrial Project -CEQA Transportation Analysis. December 21*

***<u>Energuy</u>*** ***No Natural Gas Consumption***

% change from 2016 (CalEEMod Default)

| | 2013 | | | 2019 | | |
|---|---|---|---|---|---|---|
| | Electric | Lighting | NG | Electric | Lighting | NG |
| Residential | 28.00% | 28.00% | 28.00% | 2.00% | 0.00% | 5.00% |
| Non-Residential | 5.00% | 5.00% | 5.00% | 10.70% | 0.00% | 1.00% |

| | Default | | | Adjusted | | |
|---|---|---|---|---|---|---|
| **Land Use** | Electric | Lighting | NG | Electric | Lighting | NG |
| Project | 1.63 | 2.99 | 0.000 | 1.456 | 2.990 | 0.000 |
| BAU | 1.63 | 2.99 | 0.000 | 1.7115 | 3.1395 | 0 |

***<u>Water and Wastewater</u>***

| | Default | | Revised | | 20% Reduction |
|---|---|---|---|---|---|
| | Indoor | Outdoor | Indoor | Outdoor | |
| Initial | 84,036,250.00 | 0 | 67,229,000 | 0 | |
| Buildout | 176,725,875.00 | 0 | 141,380,700 | 0 | |
| BAU | *Same as Project | | | | |
| 545,581.35 | tons per year | | | | |

## ***<u>Solid Waste</u>***

Default used and adjusted for 44% recycle/reuse rate achieved by California.

Source: CalRecycle 2020.California's Statewide Recycling Rate. Available:
https://www.calrecycle.ca.gov/75percent/RecycleRate/ Accessed December 2020.

***Project***

| | | |
|---|---|---|
| Initial | 450.62 | 252.347 |
| Buildout | 947.63 | 530.673 |
| BAU | Uses baseline as EO B-30-15 was not signed until April of 2015. | |

# Air Quality Analysis
## Conejo Summit Project
### 2. Construction Summary

## 2. Construction Summary
### a. Unmitigated Construction

## Conejo Summit Project

## Maximum Daily Unmitigated Construction Emissions

CalEEMod 2016.3.2

Title: Conejo Summit Project - Construction Only (T4F w/Low VOC) Date: 7/17/2020

Conejo Summit - EMFAC2017 7/17/2020

**Unmitigated Construction**

| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | *Maximum Daily Emissions (lbs/day)* | | | | | |
| Phase 1&2 Grading | *8.78* | *96.42* | *65.10* | *0.14* | *4.02* | *3.70* |
| Phase 3,4&7 Grading | *8.51* | *92.61* | *61.76* | *0.13* | *4.01* | *3.69* |
| Phase 5&6 Grading | *8.50* | *92.41* | *61.52* | *0.13* | *4.01* | *3.69* |
| Phase 1 Building Construction | *2.79* | *30.06* | *17.18* | *0.04* | *1.30* | *1.19* |
| Phase 2 Building Construction | *2.79* | *30.07* | *17.27* | *0.04* | *1.30* | *1.19* |
| Phase 1&2 BC | *5.58* | *60.13* | *34.45* | *0.08* | *2.59* | *2.39* |
| Phase 3 Building Construction | *2.74* | *29.46* | *16.00* | *0.04* | *1.29* | *1.19* |
| Phase 4 Building Construction | *2.74* | *29.47* | *16.09* | *0.04* | *1.29* | *1.19* |
| Phase 5 Building Construction | *2.77* | *29.71* | *16.85* | *0.04* | *1.29* | *1.19* |
| Phase 6 Building Construction | *2.79* | *30.06* | *17.13* | *0.04* | *1.30* | *1.19* |
| Phase 7 Building Construction | *2.78* | *29.90* | *16.99* | *0.04* | *1.30* | *1.19* |
| Phase 1 BC/Paving/AC | *40.87* | *43.90* | *29.69* | *0.06* | *1.97* | *1.82* |
| Phase 2 BC/Paving/AC | *40.87* | *43.91* | *29.79* | *0.06* | *1.97* | *1.82* |
| Phase 1&2 BC/Paving/AC | *81.74* | *87.81* | *59.48* | *0.13* | *3.94* | *3.64* |
| Phase 3 BC/Paving/AC | *40.82* | *43.30* | *28.52* | *0.06* | *1.96* | *1.81* |
| Phase 4 BC/Paving/AC | *40.83* | *43.31* | *28.61* | *0.06* | *1.96* | *1.81* |
| Phase 5 BC/Paving/AC | *40.85* | *43.55* | *29.36* | *0.06* | *1.97* | *1.82* |
| Phase 6 BC/Paving/AC | *40.87* | *43.90* | *29.65* | *0.06* | *1.97* | *1.82* |
| Phase 7 BC/Paving/AC | *40.86* | *43.74* | *29.51* | *0.06* | *1.97* | *1.82* |
| Max Grading | *9* | *96* | *65* | *0* | *4* | *4* |
| Max BC | *6* | *60* | *34* | *0* | *3* | *2* |
| Max Paving | *3* | *25* | *21* | *0* | *1* | *1* |
| Max AC | *73* | *3* | *4* | *0* | *0* | *0* |
| Max BC/Paving/AC | *82* | *88* | *59* | *0* | *4* | *4* |
| Max Daily | **82** | **96** | **65** | **0** | **4** | **4** |
| VCAPCD - Mitigation Level* | 25 | 25 | 550 | 150 | 150 | 55 |
| Mitigation Required | **Yes** | **Yes** | **No** | **No** | **No** | **No** |

* **CO, Sox, PM10, and PM2.5 thresholds are from SCAQMD**

Note: Paving and Architectural Coating will always overlap with the Building Construction Phase, therefore haul, vendor, and worker trips are accounted for in the building construction phase

## Conejo Summit Project

## Maximum Daily Unmitigated Construction Emissions

**Unmitigated Construction**

| | | ROG | $NO_X$ | CO | $SO_X$ | Exhaust PM10 | Exhaust PM2.5 |
|---|---|---|---|---|---|---|---|
| | | **Onsite Exhaust Emissions** | | | | | |
| Grading | Fugitive | | | | | | |
| | onsite | 8.4777 | 92.1663 | 60.7254 | 0.126 | 4.0074 | 3.6868 |
| Building Construction | Fugitive | | | | | | |
| | onsite | 2.703 | 28.8885 | 15.1975 | 0.0358 | 1.2854 | 1.1826 |
| Paving | Onsite | 1.1162 | 12.3124 | 10.6994 | 0.0192 | 0.5766 | 0.5305 |
| | Paving | 0.223 | | | | 0 | 0 |
| Architectural Coating | AC | 36.5232 | | | | 0 | 0 |
| | onsite | 0.2189 | 1.5268 | 1.8176 | 2.97E-03 | 0.0941 | 0.0941 |
| | | **Offsite Exhaust Emissions** | | | | | |
| Phase 1&2 Grading | Haul | 0.28 | 4.01 | 3.57 | 0.01 | 0.01 | 0.01 |
| | Vendor | 0.01 | 0.19 | 0.10 | 0.00 | 0.00 | 0.00 |
| | Worker | 0.01 | 0.06 | 0.70 | 0.00 | 0.00 | 0.00 |
| Phase 3,4&7 Grading | Haul | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.02 | 0.37 | 0.19 | 0.00 | 0.00 | 0.00 |
| | Worker | 0.02 | 0.07 | 0.84 | 0.00 | 0.00 | 0.00 |
| Phase 5&6 Grading | Haul | 0 | 0 | 0 | 0 | 0 | 0 |
| | Vendor | 0.009295461 | 0.186108075 | 0.096288451 | 0.00050836 | 0.002196332 | 0.002101256 |
| | Worker | 0.013950698 | 0.057879799 | 0.701400164 | 0.00209839 | 0.001342848 | 0.001236959 |
| Phase 1 Building Construction | Haul | 0.022239253 | 0.320622748 | 0.285941729 | 0.00055422 | 0.000704947 | 0.000674451 |
| | Vendor | 0.037181845 | 0.744432298 | 0.385153805 | 0.00203343 | 0.008785329 | 0.008405025 |
| | Worker | 0.026041302 | 0.108042291 | 1.309280307 | 0.00391699 | 0.00250665 | 0.002308989 |
| Phase 2 Building Construction | Haul | 0.022239253 | 0.320622748 | 0.285941729 | 0.00055422 | 0.000704947 | 0.000674451 |
| | Vendor | 0.037181845 | 0.744432298 | 0.385153805 | 0.00203343 | 0.008785329 | 0.008405025 |
| | Worker | 0.027901395 | 0.115759597 | 1.402800329 | 0.00419678 | 0.002685697 | 0.002473917 |
| Phase 3 Building Construction | Haul | 0.011119627 | 0.160311374 | 0.142970865 | 0.00027711 | 0.000352474 | 0.000337226 |
| | Vendor | 0.018590922 | 0.372216149 | 0.192576903 | 0.00101672 | 0.004392664 | 0.004202513 |
| | Worker | 0.009300465 | 0.038586532 | 0.46760011 | 0.00139893 | 0.000895232 | 0.000824639 |
| Phase 4 Building Construction | Haul | 0.011119627 | 0.160311374 | 0.142970865 | 0.00027711 | 0.000352474 | 0.000337226 |
| | Vendor | 0.018590922 | 0.372216149 | 0.192576903 | 0.00101672 | 0.004392664 | 0.004202513 |
| | Worker | 0.011160558 | 0.046303839 | 0.561120131 | 0.00167871 | 0.001074279 | 0.000989567 |
| Phase 5 Building Construction | Haul | 0.011119627 | 0.160311374 | 0.142970865 | 0.00027711 | 0.000352474 | 0.000337226 |
| | Vendor | 0.027886383 | 0.558324224 | 0.288865354 | 0.00152507 | 0.006588997 | 0.006303769 |
| | Worker | 0.024181209 | 0.100324984 | 1.215760285 | 0.00363721 | 0.002327604 | 0.002144062 |
| Phase 6 Building Construction | Haul | 0.022239253 | 0.320622748 | 0.285941729 | 0.00055422 | 0.000704947 | 0.000674451 |
| | Vendor | 0.037181845 | 0.744432298 | 0.385153805 | 0.00203343 | 0.008785329 | 0.008405025 |
| | Worker | 0.025111256 | 0.104183637 | 1.262520296 | 0.0037771 | 0.002417127 | 0.002226526 |
| Phase 7 Building Construction | Haul | 0.011119627 | 0.160311374 | 0.142970865 | 0.00027711 | 0.000352474 | 0.000337226 |
| | Vendor | 0.037181845 | 0.744432298 | 0.385153805 | 0.00203343 | 0.008785329 | 0.008405025 |
| | Worker | 0.025111256 | 0.104183637 | 1.262520296 | 0.0037771 | 0.002417127 | 0.002226526 |

## 2. Construction Summary
## b. Mitigated Construction

## Conejo Summit Project
## Maximum Daily Mitigated Construction Emissions

| | | | |
|---|---|---|---|
| CalEEMod | 2016.3.2 | | |
| Title: | Conejo Summit Project - Construction Only (T4F w/Low VOC) | Date: | 7/17/2020 |
| | Conejo Summit - EMFAC2017 | | 7/17/2020 |

**Unmitigated Construction**

| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | ***Maximum Daily Emissions (lbs/day)*** | | | | | |
| Phase 1&2 Grading | *1.85* | *10.96* | *69.86* | *0.14* | *0.22* | *0.22* |
| Phase 3,4&7 Grading | *1.58* | *7.15* | *66.52* | *0.13* | *0.21* | *0.21* |
| Phase 5&6 Grading | *1.57* | *6.95* | *66.28* | *0.13* | *0.21* | *0.21* |
| Phase 1 Building Construction | *0.52* | *3.07* | *20.59* | *0.04* | *0.07* | *0.07* |
| Phase 2 Building Construction | *0.53* | *3.08* | *20.69* | *0.04* | *0.07* | *0.07* |
| Phase 1&2 BC | *1.05* | *6.16* | *41.28* | *0.08* | *0.14* | *0.14* |
| Phase 3 Building Construction | *0.48* | *2.47* | *19.42* | *0.04* | *0.06* | *0.06* |
| Phase 4 Building Construction | *0.48* | *2.48* | *19.51* | *0.04* | *0.06* | *0.06* |
| Phase 5 Building Construction | *0.50* | *2.72* | *20.26* | *0.04* | *0.07* | *0.07* |
| Phase 6 Building Construction | *0.52* | *3.07* | *20.55* | *0.04* | *0.07* | *0.07* |
| Phase 7 Building Construction | *0.51* | *2.91* | *20.40* | *0.04* | *0.07* | *0.07* |
| Phase 1 BC/Paving/AC | *23.98* | *5.28* | *35.24* | *0.06* | *0.11* | *0.11* |
| Phase 2 BC/Paving/AC | *23.99* | *5.29* | *35.34* | *0.06* | *0.11* | *0.11* |
| Phase 1&2 BC/Paving/AC | *47.97* | *10.57* | *70.58* | *0.13* | *0.21* | *0.21* |
| Phase 3 BC/Paving/AC | *23.94* | *4.68* | *34.06* | *0.06* | *0.10* | *0.10* |
| Phase 4 BC/Paving/AC | *23.94* | *4.69* | *34.16* | *0.06* | *0.10* | *0.10* |
| Phase 5 BC/Paving/AC | *23.96* | *4.93* | *34.91* | *0.06* | *0.10* | *0.10* |
| Phase 6 BC/Paving/AC | *23.98* | *5.28* | *35.20* | *0.06* | *0.11* | *0.11* |
| Phase 7 BC/Paving/AC | *23.97* | *5.12* | *35.05* | *0.06* | *0.11* | *0.10* |
| Max Grading | *2* | *11* | *70* | *0* | *0* | *0* |
| Max BC | *1* | *6* | *41* | *0* | *0* | *0* |
| Max Paving | *1* | *4* | *26* | *0* | *0* | *0* |
| Max AC | *46* | *0* | *4* | *0* | *0* | *0* |
| Max BC/Paving/AC | *48* | *11* | *71* | *0* | *0* | *0* |
| Max Daily | **48** | **11** | **71** | **0** | **0** | **0** |
| VCAPCD - Mitigation Level* | 25 | 25 | 550 | 150 | 150 | 55 |
| Mitigation Required | **Yes** | **No** | **No** | **No** | **No** | **No** |

| | | | | | |
|---|---|---|---|---|---|
| Mitigation: | | | | | |
| 1 | Tier 4F | **0.00** | | | |
| 2a. | Low VOC | 150.00 | gr/l | | |
| 2b. | Increase coating phases to | | | 140 | day for each building |
| | **20.87** | **ROG AC** | | | |
| | 1 | | | | |
| | 22 | | | | |
| 2c. | For overlapping phases, further reduce VOC content of paints | | | | |
| | Low VOC | 75.00 | gr/l | | |
| Max AC: VOC pounds per day (Phases 1 and 2 AC Overlap) | *23* | | | | |
| Max BC/Paving/AC | 24.99 | | | | |

* **CO, Sox, PM10, and PM2.5 thresholds are from SCAQMD**

## Conejo Summit Project
## Maximum Daily Mitigated Construction Emissions

**Unmitigated Construction**

| | | ROG | $NO_X$ | CO | $SO_X$ | Exhaust PM10 | Exhaust PM2.5 |
|---|---|---|---|---|---|---|---|
| | | **Onsite Exhaust Emissions** | | | | | |
| Grading | Fugitive | | | | | | |
| | onsite | 1.5474 | 6.7055 | 65.4862 | 0.126 | 0.2063 | 0.2063 |
| Building Construction | Fugitive | | | | | | |
| | onsite | 0.4386 | 1.9007 | 18.6126 | 0.0358 | 0.0585 | 0.0585 |
| Paving | Onsite | 0.262 | 2.0771 | 12.8166 | 0.0192 | 0.0315 | 0.0315 |
| | Paving | 0.223 | | | | 0 | 0 |
| Architectural Coating | AC | 22.9452 | | | | 0 | 0 |
| | onsite | 0.0297 | 0.1288 | 1.8324 | 2.97E-03 | 3.96E-03 | 3.96E-03 |
| | | **Offsite Exhaust Emissions** | | | | | |
| Phase 1&2 Grading | Haul | 0.28 | 4.01 | 3.57 | 0.01 | 0.01 | 0.01 |
| | Vendor | 0.01 | 0.19 | 0.10 | 0.00 | 0.00 | 0.00 |
| | Worker | 0.01 | 0.06 | 0.70 | 0.00 | 0.00 | 0.00 |
| Phase 3,4&7 Grading | Haul | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.02 | 0.37 | 0.19 | 0.00 | 0.00 | 0.00 |
| | Worker | 0.02 | 0.07 | 0.84 | 0.00 | 0.00 | 0.00 |
| Phase 5&6 Grading | Haul | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.01 | 0.19 | 0.10 | 0.00 | 0.00 | 0.00 |
| | Worker | 0.01 | 0.06 | 0.70 | 0.00 | 0.00 | 0.00 |
| Phase 1 Building Construction | Haul | 0.02 | 0.32 | 0.29 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.04 | 0.74 | 0.39 | 0.00 | 0.01 | 0.01 |
| | Worker | 0.03 | 0.11 | 1.31 | 0.00 | 0.00 | 0.00 |
| Phase 2 Building Construction | Haul | 0.02 | 0.32 | 0.29 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.04 | 0.74 | 0.39 | 0.00 | 0.01 | 0.01 |
| | Worker | 0.03 | 0.12 | 1.40 | 0.00 | 0.00 | 0.00 |
| Phase 3 Building Construction | Haul | 0.01 | 0.16 | 0.14 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.02 | 0.37 | 0.19 | 0.00 | 0.00 | 0.00 |
| | Worker | 0.01 | 0.04 | 0.47 | 0.00 | 0.00 | 0.00 |
| Phase 4 Building Construction | Haul | 0.01 | 0.16 | 0.14 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.02 | 0.37 | 0.19 | 0.00 | 0.00 | 0.00 |
| | Worker | 0.01 | 0.05 | 0.56 | 0.00 | 0.00 | 0.00 |
| Phase 5 Building Construction | Haul | 0.01 | 0.16 | 0.14 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.03 | 0.56 | 0.29 | 0.00 | 0.01 | 0.01 |
| | Worker | 0.02 | 0.10 | 1.22 | 0.00 | 0.00 | 0.00 |
| Phase 6 Building Construction | Haul | 0.02 | 0.32 | 0.29 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.04 | 0.74 | 0.39 | 0.00 | 0.01 | 0.01 |
| | Worker | 0.03 | 0.10 | 1.26 | 0.00 | 0.00 | 0.00 |
| Phase 7 Building Construction | Haul | 0.01 | 0.16 | 0.14 | 0.00 | 0.00 | 0.00 |
| | Vendor | 0.04 | 0.74 | 0.39 | 0.00 | 0.01 | 0.01 |
| | Worker | 0.03 | 0.10 | 1.26 | 0.00 | 0.00 | 0.00 |

# Air Quality Analysis

## Conejo Summit Project

### 3. HCW Operational Summary

# Conejo Summit Project
# Initial Operational 2023

CalEEMod 2016.3.2
Title: Conejo Summit - Initial Operational 2023 Date: 1/19/2021

**Unmitigated Emissions - Max Daily Initial Operational 2023**

| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | Max (Lbs/day) | | | | | |
| Area | *2* | *0* | *0* | *0* | *0* | *0* |
| Energy | *0* | *0* | *0* | *0* | *0* | *0* |
| Mobile | *3* | *4* | *22* | *0* | *6* | *2* |
| Total | ***5*** | ***4*** | ***22*** | ***0*** | ***6*** | ***2*** |
| ***VCAPCD Thresholds*** | 25 | 25 | 550 | 150 | 150 | 55 |
| ***Exceed Thresholds?*** | No | **No** | No | No | No | No |

* *CO, Sox, PM10 and PM2.5 taken from SCAQMD*

# Conejo Summit Project
# Initial Operational 2023

CalEEMod 2016.3.2
Title: Conejo Summit - Initial Operational 2023 Date: 1/19/2021

| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | | | **Winter MAX** | | | |
| Area | *2* | *0.00* | *0.04* | *0.00* | *0.00* | *0.00* |
| Architectural Coating | *2.31* | | | | *0.00* | *0.00* |
| Consumer Products | *7.78* | | | | *0.00* | *0.00* |
| Landscaping | *0.00* | *0.00* | *0.04* | *0.00* | *0.00* | *0.00* |
| Energy | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* |
| Mobile | 3.18 | 4.23 | 22.14 | 0.06 | 6.03 | 1.64 |
| Total | *5.49* | *4.23* | *22.17* | *0.06* | *6.03* | *1.64* |
| | | | **Summer** | | | |
| Area | *2* | *0.00* | *0.04* | *0.00* | *0.00* | *0.00* |
| Architectural Coating | *2.31* | | | | *0.00* | *0.00* |
| Consumer Products | *7.78* | | | | *0.00* | *0.00* |
| Landscaping | *0.00* | *0.00* | *0.04* | *0.00* | *0.00* | *0.00* |
| Energy | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* |
| Mobile | 3.04 | 3.88 | 21.12 | 0.06 | 6.03 | 1.64 |
| Total | *5.35* | *3.88* | *21.15* | *0.06* | *6.03* | *1.64* |

# Conejo Summit Project
# Initial Operational 2023

| | | | |
|---|---|---|---|
| CalEEMod | 2016.3.2 | | |
| Title: | Conejo Summit - Initial Operational 2023 | Date: | 1/19/2021 |

Note: Consumer products are grossly overstated for industrial land uses. An average per square foot emission factor for all land use types is applied in CalEEMod. However VOC emissions from industrial land sues is roughly 2 percent of total VOC emissions statewide. Therefore, in order to more accurately approximate the VOC emissions from an industrial project, only 50 percent of the consumer product emissions reporeted in CalEEMod are included in the emissions estimates. This is still estimated to be a highly conservative estimate of VOC emissions.

0.5 % of CalEEMod Output Associated with Industrial Land Uses

# Conejo Summit Project
# Buildout 2027

CalEEMod 2016.3.2
Title: Conejo Summit - Buildout Operational 2027 Date: 1/19/2027

**Unmitigated Emissions - Max Daily Buildout Operational 2027**

| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | | | Max (Lbs/day) | | | |
| Area | *13* | *0* | *0* | *0* | *0* | *0* |
| Energy | *0* | *0* | *0* | *0* | *0* | *0* |
| Mobile | *5* | *7* | *38* | *0* | *13* | *3* |
| Total | ***18*** | *7* | ***38*** | ***0*** | ***13*** | ***3*** |
| ***VCAPCD Thresholds*** | 25 | 25 | 550 | 150 | 150 | 55 |
| ***Exceed Thresholds?*** | No | **No** | No | No | No | No |

* *CO, Sox, PM10 and PM2.5 taken from SCAQMD*

# Conejo Summit Project
# Buildout 2027

CalEEMod 2016.3.2
Title: Conejo Summit - Buildout Operational 2027 Date: 1/19/2027

| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | | | | **Winter MAX** | | |
| Area | *13* | *0.00* | *0.08* | *0.00* | *0.00* | *0.00* |
| Architectural Coating | *5* | | | | *0.00* | *0.00* |
| Consumer Products | *16* | | | | *0.00* | *0.00* |
| Landscaping | *0* | *0.00* | *0.08* | *0.00* | *0.00* | *0.00* |
| Energy | *0* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* |
| Mobile | *5* | 7.13 | 38.02 | 0.11 | 12.68 | 3.44 |
| Total | *18.36* | *7.13* | *38.10* | *0.11* | *12.68* | *3.44* |
| | | | | **Summer** | | |
| Area | *13* | *0.00* | *0.08* | *0.00* | *0.00* | *0.00* |
| Architectural Coating | *4.85* | | | | *0.00* | *0.00* |
| Consumer Products | *16.35* | | | | *0.00* | *0.00* |
| Landscaping | *0.01* | *0.00* | *0.08* | *0.00* | *0.00* | *0.00* |
| Energy | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* |
| Mobile | 5.09 | 6.58 | 36.05 | 0.11 | 12.68 | 3.44 |
| Total | *18.13* | *6.58* | *36.13* | *0.11* | *12.68* | *3.44* |

# Conejo Summit Project
# Buildout 2027

| | | | |
|---|---|---|---|
| CalEEMod | 2016.3.2 | | |
| Title: | Conejo Summit - Buildout Operational 2027 | Date: | 1/19/2027 |

Note: Consumer products are grossly overstated for industrial land uses. An average per square foot emission factor for all land use types is applied in CalEEMod. However VOC emissions from industrial land sues is roughly 2 percent of total VOC emissions statewide. Therefore, in order to more accurately approximate the VOC emissions from an industrial project, only 50 percent of the consumer product emissions reporeted in CalEEMod are included in the emissions estimates. This is still estimated to be a highly conservative estimate of VOC emissions.

0.5 % of CalEEMod Output Associated with Industrial Land Uses

## Conejo Summit Project
## Buildout 2040

CalEEMod 2016.3.2

Title: Conejo Summit - Buildout Operational 2040 Date: 1/19/2027

**Unmitigated Emissions - Max Daily Buildout Operational 2040**

| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | Max (Lbs/day) | | | | | |
| Area | *13* | *0* | *0* | *0* | *0* | *0* |
| Energy | *0* | *0* | *0* | *0* | *0* | *0* |
| Mobile | *3* | *5* | *29* | *0* | *13* | *3* |
| Total | ***16*** | ***5*** | ***29*** | ***0*** | ***13*** | ***3*** |
| ***VCAPCD Thresholds*** | 25 | 25 | 550 | 150 | 150 | 55 |
| ***Exceed Thresholds?*** | No | **No** | No | No | No | No |

* *CO, Sox, PM10 and PM2.5 taken from SCAQMD*

**Conejo Summit Project**
**Buildout 2040**

CalEEMod 2016.3.2
Title: Conejo Summit - Buildout Operational 2040 Date: 1/19/2027

| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | | | Winter MAX | | | |
| Area | *13* | *0.00* | *0.08* | *0.00* | *0.00* | *0.00* |
| Architectural Coating | *5* | | | | *0.00* | *0.00* |
| Consumer Products | *16* | | | | *0.00* | *0.00* |
| Landscaping | *0* | *0.00* | *0.08* | *0.00* | *0.00* | *0.00* |
| Energy | *0* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* |
| Mobile | *3* | 5.15 | 28.99 | 0.09 | 12.65 | 3.41 |
| Total | *15.99* | *5.15* | *29.07* | *0.09* | *12.65* | *3.41* |
| | | | Summer | | | |
| Area | *13* | *0.00* | *0.08* | *0.00* | *0.00* | *0.00* |
| | *4.85* | | | | *0.00* | *0.00* |
| | *16.35* | | | | *0.00* | *0.00* |
| | *0.01* | *0.00* | *0.08* | *0.00* | *0.00* | *0.00* |
| Energy | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* |
| Mobile | 2.80 | 4.77 | 27.44 | 0.09 | 12.65 | 3.41 |
| Total | *15.84* | *4.77* | *27.52* | *0.09* | *12.65* | *3.41* |

# Conejo Summit Project
# Buildout 2040

CalEEMod 2016.3.2

Title: Conejo Summit - Buildout Operational 2040 Date: 1/19/2027

Note: Consumer products are grossly overstated for industrial land uses. An average per square foot emission factor for all land use types is applied in CalEEMod. However VOC emissions from industrial land sues is roughly 2 percent of total VOC emissions statewide. Therefore, in order to more accurately approximate the VOC emissions from an industrial project, only 50 percent of the consumer product emissions reporeted in CalEEMod are included in the emissions estimates. This is still estimated to be a highly conservative estimate of VOC emissions.

0.5 % of CalEEMod Output Associated with Industrial Land Uses

# Air Quality Analysis
## Conejo Summit Project
### 4. CO Hotspot Analysis

| # | Intersection | Daily | PM | NBL | NBT | NBR | WBL | WBT | WBR | SBL | SBT | SBR | EBL | EBT | EBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Rancho Conejo Blvd at Hilcrest Drive | 37,850 | 3,785 | 182 | 289 | 242 | 311 | 199 | 64 | 292 | 1,281 | 14 | 13 | 472 | 426 |
| 2 | Camino Del Rios/Teller Rd at Hilcrest Dr | 20,910 | 2,091 | 213 | 85 | 13 | 15 | 656 | 55 | 292 | 79 | 106 | 44 | 271 | 262 |
| 3 | Ventu Park Road at Hilcrest Dr | 40,370 | 4,037 | 317 | 274 | 131 | 193 | 419 | 128 | 409 | 1,049 | 18 | 29 | 678 | 392 |
| 4 | Broadbeck Dr at Camino Dos Rios | 20,100 | 2,010 | 10 | 11 | 32 | 18 | 839 | 100 | 147 | 5 | 147 | 176 | 477 | 48 |
| | Max | **40,370** | | | | | | | | | | | | | |
| | Screening Threshold | 100,000 | | | | | | | | | | | | | |
| | Greather than Threshold? | **No** | | | | | | | | | | | | | |

# Air Quality Analysis

## Conejo Summit Project

### 5. CalEEMod Output

# Conejo Summit Project - Construction Only (T4F)

**Ventura County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 187.49 | 1000sqft | 13.47 | 187,485.00 | 0 |
| Parking Lot | 6.81 | Acre | 6.81 | 296,643.60 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2023 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 483.27 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See assumptions:

Construction Phase - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment -

Trips and VMT - See Assumptions - Onroad vehicles modeled separately

Vehicle Trips - operational emissions modeled separately

Area Coating - operations modeled separately

Energy Use - operations modeled separately

Water And Wastewater - operations modeled separately

Solid Waste - operations modeled separately

Construction Off-road Equipment Mitigation - See Assumptions

Architectural Coating - Mitigated for Low VOC

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 281,228.00 | 140,614.00 |
| tblAreaCoating | ReapplicationRatePercent | 10 | 0 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstructionPhase | NumDays | 20.00 | 80.00 |
| tblConstructionPhase | NumDays | 370.00 | 286.00 |
| tblConstructionPhase | NumDays | 35.00 | 129.00 |
| tblConstructionPhase | NumDays | 20.00 | 80.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | PhaseEndDate | 10/27/2022 | 4/3/2021 |
| tblConstructionPhase | PhaseEndDate | 9/1/2022 | 11/30/2021 |
| tblConstructionPhase | PhaseEndDate | 4/1/2021 | 5/31/2021 |
| tblConstructionPhase | PhaseEndDate | 9/29/2022 | 4/3/2021 |
| tblConstructionPhase | PhaseStartDate | 9/30/2022 | 1/1/2021 |
| tblConstructionPhase | PhaseStartDate | 4/2/2021 | 1/1/2021 |
| tblConstructionPhase | PhaseStartDate | 2/12/2021 | 1/1/2021 |
| tblConstructionPhase | PhaseStartDate | 9/2/2022 | 1/1/2021 |
| tblEnergyUse | LightingElect | 2.99 | 0.00 |
| tblEnergyUse | NT24E | 3.83 | 0.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 0.00 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblGrading | AcresOfGrading | 580.50 | 87.50 |
| tblLandUse | LotAcreage | 4.30 | 13.47 |

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Pavers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Paving Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Dozers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Cranes |
| tblOffRoadEquipment | OffRoadEquipmentType | | Skid Steer Loaders |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 3.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 4.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | UsageHours | 7.00 | 8.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 483.27 |
| tblSolidWaste | SolidWasteGenerationRate | 232.49 | 0.00 |
| tblTripsAndVMT | VendorTripNumber | 79.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 43.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 203.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 13.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 41.00 | 0.00 |
| tblVehicleTrips | ST_TR | 1.32 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 0.68 | 0.00 |
| tblVehicleTrips | WD_TR | 6.97 | 0.00 |
| tblWater | IndoorWaterUseRate | 43,357,062.50 | 0.00 |

## 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 | | | | | |
| 2021 | 49.2621 | 134.8941 | 88.4399 | 0.1840 | 12.7635 | 5.9635 | 18.7270 | 6.6981 | 5.4940 | 12.1921 | 0.0000 | 17,814.4249 | 17,814.4249 | 5.6898 | 0.0000 | 17,956.6708 |
| **Maximum** | **49.2621** | **134.8941** | **88.4399** | **0.1840** | **12.7635** | **5.9635** | **18.7270** | **6.6981** | **5.4940** | **12.1921** | **0.0000** | **17,814.4249** | **17,814.4249** | **5.6898** | **0.0000** | **17,956.6708** |

**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 | | | | | |
| 2021 | 39.0240 | 10.8121 | 98.7478 | 0.1840 | 4.7289 | 0.3003 | 5.0292 | 2.4817 | 0.3003 | 2.7820 | 0.0000 | 17,814.4249 | 17,814.4249 | 5.6898 | 0.0000 | 17,956.6708 |
| **Maximum** | **39.0240** | **10.8121** | **98.7478** | **0.1840** | **4.7289** | **0.3003** | **5.0292** | **2.4817** | **0.3003** | **2.7820** | **0.0000** | **17,814.4249** | **17,814.4249** | **5.6898** | **0.0000** | **17,956.6708** |

| | ROG | NOx | 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 | 20.78 | 91.98 | -11.66 | 0.00 | 62.95 | 94.96 | 73.14 | 62.95 | 94.53 | 77.18 | 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 | Grading | Grading | 1/1/2021 | 5/31/2021 | 6 | 129 | |
| 2 | Building Construction | Building Construction | 1/1/2021 | 11/30/2021 | 6 | 286 | |
| 3 | Paving | Paving | 1/1/2021 | 4/3/2021 | 6 | 80 | |
| 4 | Architectural Coating | Architectural Coating | 1/1/2021 | 4/3/2021 | 6 | 80 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 87.5**

**Acres of Paving: 6.81**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 140,614; Non-Residential Outdoor: 93,743; Striped Parking Area:**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Grading | Off-Highway Trucks | 2 | 4.00 | 402 | 0.38 |
| Grading | Rollers | 2 | 8.00 | 80 | 0.38 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 1 | 8.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 1 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 8.00 | 80 | 0.38 |
| Grading | Pavers | 1 | 8.00 | 130 | 0.42 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Grading | Rubber Tired Dozers | | 2 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | | 1 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | | 3 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | | 1 | 8.00 | 132 | 0.36 |
| Grading | Paving Equipment | | 1 | 8.00 | 132 | 0.36 |
| Building Construction | Excavators | | 1 | 8.00 | 158 | 0.38 |
| Grading | Scrapers | | 4 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | | 0 | 8.00 | 46 | 0.45 |
| Building Construction | Graders | | 1 | 8.00 | 187 | 0.41 |
| Building Construction | Off-Highway Trucks | | 1 | 4.00 | 402 | 0.38 |
| Building Construction | Rubber Tired Dozers | | 1 | 8.00 | 247 | 0.40 |
| Paving | Cranes | | 1 | 8.00 | 231 | 0.29 |
| Paving | Skid Steer Loaders | | 1 | 8.00 | 65 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 17 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2021

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 12.7635 | 0.0000 | 12.7635 | 6.6981 | 0.0000 | 6.6981 | | | 0.0000 | | | 0.0000 |
| Off-Road | 8.4777 | 92.1663 | 60.7254 | 0.1260 | | 4.0074 | 4.0074 | | 3.6868 | 3.6868 | | 12,207.1441 | 12,207.1441 | 3.9480 | | 12,305.8450 |
| **Total** | **8.4777** | **92.1663** | **60.7254** | **0.1260** | **12.7635** | **4.0074** | **16.7709** | **6.6981** | **3.6868** | **10.3850** | | **12,207.1441** | **12,207.1441** | **3.9480** | | **12,305.8450** |

### 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 | 0.0000 | 0.0000 | 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 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 | | | | | 4.7289 | 0.0000 | 4.7289 | 2.4817 | 0.0000 | 2.4817 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5474 | 6.7055 | 65.4862 | 0.1260 | | 0.2063 | 0.2063 | | 0.2063 | 0.2063 | 0.0000 | 12,207.1441 | 12,207.1441 | 3.9480 | | 12,305.8450 |
| **Total** | **1.5474** | **6.7055** | **65.4862** | **0.1260** | **4.7289** | **0.2063** | **4.9352** | **2.4817** | **0.2063** | **2.6880** | **0.0000** | **12,207.1441** | **12,207.1441** | **3.9480** | | **12,305.8450** |

## 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 | 0.0000 | 0.0000 | 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** |

## 3.3 Building Construction - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 2.7030 | 28.8885 | 15.1975 | 0.0358 | | 1.2854 | 1.2854 | | 1.1826 | 1.1826 | | 3,463.2902 | 3,463.2902 | 1.1201 | | 3,491.2927 |
| **Total** | **2.7030** | **28.8885** | **15.1975** | **0.0358** | | **1.2854** | **1.2854** | | **1.1826** | **1.1826** | | **3,463.2902** | **3,463.2902** | **1.1201** | | **3,491.2927** |

**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 | 0.0000 | 0.0000 | 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 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 | 0.4386 | 1.9007 | 18.6126 | 0.0358 | | 0.0585 | 0.0585 | | 0.0585 | 0.0585 | 0.0000 | 3,463.2902 | 3,463.2902 | 1.1201 | | 3,491.2927 |
| **Total** | **0.4386** | **1.9007** | **18.6126** | **0.0358** | | **0.0585** | **0.0585** | | **0.0585** | **0.0585** | **0.0000** | **3,463.2902** | **3,463.2902** | **1.1201** | | **3,491.2927** |

## 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 | 0.0000 | 0.0000 | 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** |

## 3.4 Paving - 2021

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1162 | 12.3124 | 10.6994 | 0.0192 | | 0.5766 | 0.5766 | | 0.5305 | 0.5305 | | 1,862.5426 | 1,862.5426 | 0.6024 | | 1,877.6022 |
| Paving | 0.2230 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3392** | **12.3124** | **10.6994** | **0.0192** | | **0.5766** | **0.5766** | | **0.5305** | **0.5305** | | **1,862.5426** | **1,862.5426** | **0.6024** | | **1,877.6022** |

### 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 | 0.0000 | 0.0000 | 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 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 | 0.2620 | 2.0771 | 12.8166 | 0.0192 | | 0.0315 | 0.0315 | | 0.0315 | 0.0315 | 0.0000 | 1,862.5426 | 1,862.5426 | 0.6024 | | 1,877.6022 |
| Paving | 0.2230 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.4851** | **2.0771** | **12.8166** | **0.0192** | | **0.0315** | **0.0315** | | **0.0315** | **0.0315** | **0.0000** | **1,862.5426** | **1,862.5426** | **0.6024** | | **1,877.6022** |

## 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 | 0.0000 | 0.0000 | 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** |

## 3.5 Architectural Coating - 2021

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 36.5232 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2189 | 1.5268 | 1.8176 | 2.9700e-003 | | 0.0941 | 0.0941 | | 0.0941 | 0.0941 | | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |
| **Total** | **36.7421** | **1.5268** | **1.8176** | **2.9700e-003** | | **0.0941** | **0.0941** | | **0.0941** | **0.0941** | | **281.4481** | **281.4481** | **0.0193** | | **281.9309** |

### 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 | 0.0000 | 0.0000 | 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 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 | 36.5232 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0297 | 0.1288 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |
| **Total** | **36.5529** | **0.1288** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0193** | | **281.9309** |

## 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 | 0.0000 | 0.0000 | 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** |

Conejo Summit Project - Construction Only (T4F) - Ventura County, Winter

# Conejo Summit Project - Construction Only (T4F)
**Ventura County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 187.49 | 1000sqft | 13.47 | 187,485.00 | 0 |
| Parking Lot | 6.81 | Acre | 6.81 | 296,643.60 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2023 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 483.27 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See assumptions:

Construction Phase - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment -

Trips and VMT - See Assumptions - Onroad vehicles modeled separately

Vehicle Trips - operational emissions modeled separately

Area Coating - operations modeled separately

Energy Use - operations modeled separately

Water And Wastewater - operations modeled separately

Solid Waste - operations modeled separately

Construction Off-road Equipment Mitigation - See Assumptions

Architectural Coating - Mitigated for Low VOC

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 281,228.00 | 140,614.00 |
| tblAreaCoating | ReapplicationRatePercent | 10 | 0 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstructionPhase | NumDays | 20.00 | 80.00 |
| tblConstructionPhase | NumDays | 370.00 | 286.00 |
| tblConstructionPhase | NumDays | 35.00 | 129.00 |
| tblConstructionPhase | NumDays | 20.00 | 80.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | PhaseEndDate | 10/27/2022 | 4/3/2021 |
| tblConstructionPhase | PhaseEndDate | 9/1/2022 | 11/30/2021 |
| tblConstructionPhase | PhaseEndDate | 4/1/2021 | 5/31/2021 |
| tblConstructionPhase | PhaseEndDate | 9/29/2022 | 4/3/2021 |
| tblConstructionPhase | PhaseStartDate | 9/30/2022 | 1/1/2021 |
| tblConstructionPhase | PhaseStartDate | 4/2/2021 | 1/1/2021 |
| tblConstructionPhase | PhaseStartDate | 2/12/2021 | 1/1/2021 |
| tblConstructionPhase | PhaseStartDate | 9/2/2022 | 1/1/2021 |
| tblEnergyUse | LightingElect | 2.99 | 0.00 |
| tblEnergyUse | NT24E | 3.83 | 0.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 0.00 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblGrading | AcresOfGrading | 580.50 | 87.50 |
| tblLandUse | LotAcreage | 4.30 | 13.47 |

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Pavers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Paving Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Dozers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Cranes |
| tblOffRoadEquipment | OffRoadEquipmentType | | Skid Steer Loaders |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 3.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 4.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | UsageHours | 7.00 | 8.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 483.27 |
| tblSolidWaste | SolidWasteGenerationRate | 232.49 | 0.00 |
| tblTripsAndVMT | VendorTripNumber | 79.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 43.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 203.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 13.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 41.00 | 0.00 |
| tblVehicleTrips | ST_TR | 1.32 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 0.68 | 0.00 |
| tblVehicleTrips | WD_TR | 6.97 | 0.00 |
| tblWater | IndoorWaterUseRate | 43,357,062.50 | 0.00 |

## 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 | | | | | |
| 2021 | 49.2621 | 134.8941 | 88.4399 | 0.1840 | 12.7635 | 5.9635 | 18.7270 | 6.6981 | 5.4940 | 12.1921 | 0.0000 | 17,814.4249 | 17,814.4249 | 5.6898 | 0.0000 | 17,956.6708 |
| **Maximum** | **49.2621** | **134.8941** | **88.4399** | **0.1840** | **12.7635** | **5.9635** | **18.7270** | **6.6981** | **5.4940** | **12.1921** | **0.0000** | **17,814.4249** | **17,814.4249** | **5.6898** | **0.0000** | **17,956.6708** |

**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 | | | | | |
| 2021 | 39.0240 | 10.8121 | 98.7478 | 0.1840 | 4.7289 | 0.3003 | 5.0292 | 2.4817 | 0.3003 | 2.7820 | 0.0000 | 17,814.4249 | 17,814.4249 | 5.6898 | 0.0000 | 17,956.6708 |
| **Maximum** | **39.0240** | **10.8121** | **98.7478** | **0.1840** | **4.7289** | **0.3003** | **5.0292** | **2.4817** | **0.3003** | **2.7820** | **0.0000** | **17,814.4249** | **17,814.4249** | **5.6898** | **0.0000** | **17,956.6708** |

| | ROG | NOx | 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 | 20.78 | 91.98 | -11.66 | 0.00 | 62.95 | 94.96 | 73.14 | 62.95 | 94.53 | 77.18 | 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 | Grading | Grading | 1/1/2021 | 5/31/2021 | 6 | 129 | |
| 2 | Building Construction | Building Construction | 1/1/2021 | 11/30/2021 | 6 | 286 | |
| 3 | Paving | Paving | 1/1/2021 | 4/3/2021 | 6 | 80 | |
| 4 | Architectural Coating | Architectural Coating | 1/1/2021 | 4/3/2021 | 6 | 80 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 87.5**

**Acres of Paving: 6.81**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 140,614; Non-Residential Outdoor: 93,743; Striped Parking Area:**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Grading | Off-Highway Trucks | 2 | 4.00 | 402 | 0.38 |
| Grading | Rollers | 2 | 8.00 | 80 | 0.38 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 1 | 8.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 1 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 8.00 | 80 | 0.38 |
| Grading | Pavers | 1 | 8.00 | 130 | 0.42 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Grading | Rubber Tired Dozers | | 2 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | | 1 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | | 3 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | | 1 | 8.00 | 132 | 0.36 |
| Grading | Paving Equipment | | 1 | 8.00 | 132 | 0.36 |
| Building Construction | Excavators | | 1 | 8.00 | 158 | 0.38 |
| Grading | Scrapers | | 4 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | | 0 | 8.00 | 46 | 0.45 |
| Building Construction | Graders | | 1 | 8.00 | 187 | 0.41 |
| Building Construction | Off-Highway Trucks | | 1 | 4.00 | 402 | 0.38 |
| Building Construction | Rubber Tired Dozers | | 1 | 8.00 | 247 | 0.40 |
| Paving | Cranes | | 1 | 8.00 | 231 | 0.29 |
| Paving | Skid Steer Loaders | | 1 | 8.00 | 65 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 17 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 12.7635 | 0.0000 | 12.7635 | 6.6981 | 0.0000 | 6.6981 | | | 0.0000 | | | 0.0000 |
| Off-Road | 8.4777 | 92.1663 | 60.7254 | 0.1260 | | 4.0074 | 4.0074 | | 3.6868 | 3.6868 | | 12,207.1441 | 12,207.1441 | 3.9480 | | 12,305.8450 |
| **Total** | **8.4777** | **92.1663** | **60.7254** | **0.1260** | **12.7635** | **4.0074** | **16.7709** | **6.6981** | **3.6868** | **10.3850** | | **12,207.1441** | **12,207.1441** | **3.9480** | | **12,305.8450** |

**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 | 0.0000 | 0.0000 | 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 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 | | | | | 4.7289 | 0.0000 | 4.7289 | 2.4817 | 0.0000 | 2.4817 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5474 | 6.7055 | 65.4862 | 0.1260 | | 0.2063 | 0.2063 | | 0.2063 | 0.2063 | 0.0000 | 12,207.1441 | 12,207.1441 | 3.9480 | | 12,305.8450 |
| **Total** | **1.5474** | **6.7055** | **65.4862** | **0.1260** | **4.7289** | **0.2063** | **4.9352** | **2.4817** | **0.2063** | **2.6880** | **0.0000** | **12,207.1441** | **12,207.1441** | **3.9480** | | **12,305.8450** |

## 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 | 0.0000 | 0.0000 | 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** |

## 3.3 Building Construction - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 2.7030 | 28.8885 | 15.1975 | 0.0358 | | 1.2854 | 1.2854 | | 1.1826 | 1.1826 | | 3,463.2902 | 3,463.2902 | 1.1201 | | 3,491.2927 |
| **Total** | **2.7030** | **28.8885** | **15.1975** | **0.0358** | | **1.2854** | **1.2854** | | **1.1826** | **1.1826** | | **3,463.2902** | **3,463.2902** | **1.1201** | | **3,491.2927** |

**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 | 0.0000 | 0.0000 | 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 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 | 0.4386 | 1.9007 | 18.6126 | 0.0358 | | 0.0585 | 0.0585 | | 0.0585 | 0.0585 | 0.0000 | 3,463.2902 | 3,463.2902 | 1.1201 | | 3,491.2927 |
| **Total** | **0.4386** | **1.9007** | **18.6126** | **0.0358** | | **0.0585** | **0.0585** | | **0.0585** | **0.0585** | **0.0000** | **3,463.2902** | **3,463.2902** | **1.1201** | | **3,491.2927** |

**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 | 0.0000 | 0.0000 | 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** |

### 3.4 Paving - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1162 | 12.3124 | 10.6994 | 0.0192 | | 0.5766 | 0.5766 | | 0.5305 | 0.5305 | | 1,862.542 6 | 1,862.5426 | 0.6024 | | 1,877.602 2 |
| Paving | 0.2230 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3392** | **12.3124** | **10.6994** | **0.0192** | | **0.5766** | **0.5766** | | **0.5305** | **0.5305** | | **1,862.542 6** | **1,862.5426** | **0.6024** | | **1,877.602 2** |

**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 | 0.0000 | 0.0000 | 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 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 | 0.2620 | 2.0771 | 12.8166 | 0.0192 | | 0.0315 | 0.0315 | | 0.0315 | 0.0315 | 0.0000 | 1,862.5426 | 1,862.5426 | 0.6024 | | 1,877.6022 |
| Paving | 0.2230 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.4851** | **2.0771** | **12.8166** | **0.0192** | | **0.0315** | **0.0315** | | **0.0315** | **0.0315** | **0.0000** | **1,862.5426** | **1,862.5426** | **0.6024** | | **1,877.6022** |

## 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 | 0.0000 | 0.0000 | 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** |

## 3.5 Architectural Coating - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 36.5232 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2189 | 1.5268 | 1.8176 | 2.9700e-003 | | 0.0941 | 0.0941 | | 0.0941 | 0.0941 | | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |
| **Total** | **36.7421** | **1.5268** | **1.8176** | **2.9700e-003** | | **0.0941** | **0.0941** | | **0.0941** | **0.0941** | | **281.4481** | **281.4481** | **0.0193** | | **281.9309** |

**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 | 0.0000 | 0.0000 | 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 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 | 36.5232 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0297 | 0.1288 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |
| **Total** | **36.5529** | **0.1288** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0193** | | **281.9309** |

## 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 | 0.0000 | 0.0000 | 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** |

# Conejo Summit Project - Construction Only (T4F w/Low VOC)

**Ventura County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 187.49 | 1000sqft | 13.47 | 187,485.00 | 0 |
| Parking Lot | 6.81 | Acre | 6.81 | 296,643.60 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2023 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 483.27 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See assumptions:

Construction Phase - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment -

Trips and VMT - See Assumptions - Onroad vehicles modeled separately

Vehicle Trips - operational emissions modeled separately

Area Coating - operations modeled separately

Energy Use - operations modeled separately

Water And Wastewater - operations modeled separately

Solid Waste - operations modeled separately

Construction Off-road Equipment Mitigation - See Assumptions

Architectural Coating - Mitigated for Low VOC

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 281,228.00 | 140,614.00 |
| tblArchitecturalCoating | EF_Nonresidential_Exterior | 250.00 | 150.00 |
| tblArchitecturalCoating | EF_Nonresidential_Interior | 250.00 | 150.00 |
| tblAreaCoating | ReapplicationRatePercent | 10 | 0 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstructionPhase | NumDays | 20.00 | 80.00 |
| tblConstructionPhase | NumDays | 370.00 | 286.00 |
| tblConstructionPhase | NumDays | 35.00 | 129.00 |
| tblConstructionPhase | NumDays | 20.00 | 80.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | NumDaysWeek | 5.00 | 6.00 |
| tblConstructionPhase | PhaseEndDate | 10/27/2022 | 4/3/2021 |
| tblConstructionPhase | PhaseEndDate | 9/1/2022 | 11/30/2021 |
| tblConstructionPhase | PhaseEndDate | 4/1/2021 | 5/31/2021 |
| tblConstructionPhase | PhaseEndDate | 9/29/2022 | 4/3/2021 |
| tblConstructionPhase | PhaseStartDate | 9/30/2022 | 1/1/2021 |
| tblConstructionPhase | PhaseStartDate | 4/2/2021 | 1/1/2021 |
| tblConstructionPhase | PhaseStartDate | 2/12/2021 | 1/1/2021 |
| tblConstructionPhase | PhaseStartDate | 9/2/2022 | 1/1/2021 |
| tblEnergyUse | LightingElect | 2.99 | 0.00 |
| tblEnergyUse | NT24E | 3.83 | 0.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 0.00 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |

| | | | |
|---|---|---|---|
| tblGrading | AcresOfGrading | 580.50 | 87.50 |
| tblLandUse | LotAcreage | 4.30 | 13.47 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Pavers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Paving Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Dozers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Cranes |
| tblOffRoadEquipment | OffRoadEquipmentType | | Skid Steer Loaders |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 3.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 4.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | UsageHours | 7.00 | 8.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 483.27 |
| tblSolidWaste | SolidWasteGenerationRate | 232.49 | 0.00 |
| tblTripsAndVMT | VendorTripNumber | 79.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 43.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 203.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 13.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblTripsAndVMT | WorkerTripNumber | 41.00 | 0.00 |
| tblVehicleTrips | ST_TR | 1.32 | 0.00 |
| tblVehicleTrips | SU_TR | 0.68 | 0.00 |
| tblVehicleTrips | WD_TR | 6.97 | 0.00 |
| tblWater | IndoorWaterUseRate | 43,357,062.50 | 0.00 |

## 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 | | | | | |
| 2021 | 35.6840 | 134.8941 | 88.4399 | 0.1840 | 12.7635 | 5.9635 | 18.7270 | 6.6981 | 5.4940 | 12.1921 | 0.0000 | 17,814.4249 | 17,814.4249 | 5.6898 | 0.0000 | 17,956.6708 |
| **Maximum** | **35.6840** | **134.8941** | **88.4399** | **0.1840** | **12.7635** | **5.9635** | **18.7270** | **6.6981** | **5.4940** | **12.1921** | **0.0000** | **17,814.4249** | **17,814.4249** | **5.6898** | **0.0000** | **17,956.6708** |

**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 | | | | | |
| 2021 | 25.4460 | 10.8121 | 98.7478 | 0.1840 | 4.7289 | 0.3003 | 5.0292 | 2.4817 | 0.3003 | 2.7820 | 0.0000 | 17,814.4249 | 17,814.4249 | 5.6898 | 0.0000 | 17,956.6708 |
| **Maximum** | **25.4460** | **10.8121** | **98.7478** | **0.1840** | **4.7289** | **0.3003** | **5.0292** | **2.4817** | **0.3003** | **2.7820** | **0.0000** | **17,814.4249** | **17,814.4249** | **5.6898** | **0.0000** | **17,956.6708** |

| | **ROG** | **NOx** | **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** | **28.69** | **91.98** | **-11.66** | **0.00** | **62.95** | **94.96** | **73.14** | **62.95** | **94.53** | **77.18** | **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 | Grading | Grading | 1/1/2021 | 5/31/2021 | 6 | 129 | |
| 2 | Building Construction | Building Construction | 1/1/2021 | 11/30/2021 | 6 | 286 | |
| 3 | Paving | Paving | 1/1/2021 | 4/3/2021 | 6 | 80 | |
| 4 | Architectural Coating | Architectural Coating | 1/1/2021 | 4/3/2021 | 6 | 80 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 87.5**

**Acres of Paving: 6.81**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 140,614; Non-Residential Outdoor: 93,743; Striped Parking Area:**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Grading | Off-Highway Trucks | 2 | 4.00 | 402 | 0.38 |
| Grading | Rollers | 2 | 8.00 | 80 | 0.38 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 1 | 8.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 1 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 8.00 | 80 | 0.38 |
| Grading | Pavers | 1 | 8.00 | 130 | 0.42 |
| Grading | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |

| | | | | | |
|---|---|---|---|---|---|
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Grading | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Building Construction | Excavators | 1 | 8.00 | 158 | 0.38 |
| Grading | Scrapers | 4 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |
| Building Construction | Graders | 1 | 8.00 | 187 | 0.41 |
| Building Construction | Off-Highway Trucks | 1 | 4.00 | 402 | 0.38 |
| Building Construction | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Paving | Cranes | 1 | 8.00 | 231 | 0.29 |
| Paving | Skid Steer Loaders | 1 | 8.00 | 65 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 17 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 0.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2021

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 12.7635 | 0.0000 | 12.7635 | 6.6981 | 0.0000 | 6.6981 | | | 0.0000 | | | 0.0000 |
| Off-Road | 8.4777 | 92.1663 | 60.7254 | 0.1260 | | 4.0074 | 4.0074 | | 3.6868 | 3.6868 | | 12,207.1441 | 12,207.1441 | 3.9480 | | 12,305.8450 |
| **Total** | **8.4777** | **92.1663** | **60.7254** | **0.1260** | **12.7635** | **4.0074** | **16.7709** | **6.6981** | **3.6868** | **10.3850** | | **12,207.1441** | **12,207.1441** | **3.9480** | | **12,305.8450** |

### 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 | 0.0000 | 0.0000 | 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 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 | | | | | 4.7289 | 0.0000 | 4.7289 | 2.4817 | 0.0000 | 2.4817 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5474 | 6.7055 | 65.4862 | 0.1260 | | 0.2063 | 0.2063 | | 0.2063 | 0.2063 | 0.0000 | 12,207.1441 | 12,207.1441 | 3.9480 | | 12,305.8450 |
| **Total** | **1.5474** | **6.7055** | **65.4862** | **0.1260** | **4.7289** | **0.2063** | **4.9352** | **2.4817** | **0.2063** | **2.6880** | **0.0000** | **12,207.1441** | **12,207.1441** | **3.9480** | | **12,305.8450** |

## 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 | 0.0000 | 0.0000 | 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** |

## 3.3 Building Construction - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 2.7030 | 28.8885 | 15.1975 | 0.0358 | | 1.2854 | 1.2854 | | 1.1826 | 1.1826 | | 3,463.2902 | 3,463.2902 | 1.1201 | | 3,491.2927 |
| **Total** | **2.7030** | **28.8885** | **15.1975** | **0.0358** | | **1.2854** | **1.2854** | | **1.1826** | **1.1826** | | **3,463.2902** | **3,463.2902** | **1.1201** | | **3,491.2927** |

**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 | 0.0000 | 0.0000 | 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 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 | 0.4386 | 1.9007 | 18.6126 | 0.0358 | | 0.0585 | 0.0585 | | 0.0585 | 0.0585 | 0.0000 | 3,463.2902 | 3,463.2902 | 1.1201 | | 3,491.2927 |
| **Total** | **0.4386** | **1.9007** | **18.6126** | **0.0358** | | **0.0585** | **0.0585** | | **0.0585** | **0.0585** | **0.0000** | **3,463.2902** | **3,463.2902** | **1.1201** | | **3,491.2927** |

## 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 | 0.0000 | 0.0000 | 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** |

### 3.4 Paving - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1162 | 12.3124 | 10.6994 | 0.0192 | | 0.5766 | 0.5766 | | 0.5305 | 0.5305 | | 1,862.542 6 | 1,862.5426 | 0.6024 | | 1,877.602 2 |
| Paving | 0.2230 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3392** | **12.3124** | **10.6994** | **0.0192** | | **0.5766** | **0.5766** | | **0.5305** | **0.5305** | | **1,862.542 6** | **1,862.5426** | **0.6024** | | **1,877.602 2** |

**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 | 0.0000 | 0.0000 | 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 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 | 0.2620 | 2.0771 | 12.8166 | 0.0192 | | 0.0315 | 0.0315 | | 0.0315 | 0.0315 | 0.0000 | 1,862.5426 | 1,862.5426 | 0.6024 | | 1,877.6022 |
| Paving | 0.2230 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.4851** | **2.0771** | **12.8166** | **0.0192** | | **0.0315** | **0.0315** | | **0.0315** | **0.0315** | **0.0000** | **1,862.5426** | **1,862.5426** | **0.6024** | | **1,877.6022** |

## 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 | 0.0000 | 0.0000 | 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** |

## 3.5 Architectural Coating - 2021

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 22.9452 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2189 | 1.5268 | 1.8176 | 2.9700e-003 | | 0.0941 | 0.0941 | | 0.0941 | 0.0941 | | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |
| **Total** | **23.1641** | **1.5268** | **1.8176** | **2.9700e-003** | | **0.0941** | **0.0941** | | **0.0941** | **0.0941** | | **281.4481** | **281.4481** | **0.0193** | | **281.9309** |

### 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 | 0.0000 | 0.0000 | 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 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 | 22.9452 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0297 | 0.1288 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |
| **Total** | **22.9749** | **0.1288** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0193** | | **281.9309** |

## 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 | 0.0000 | 0.0000 | 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** |

# Conejo Summit - Initial Operational 2023
**Ventura County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 363.40 | 1000sqft | 21.59 | 363,400.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2023 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 441.9 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 181,700.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 545,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 20.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.59 | 0.57 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.17 |
| tblFleetMix | LHD1 | 0.02 | 0.03 |
| tblFleetMix | LHD2 | 6.2040e-003 | 7.5217e-003 |
| tblFleetMix | MCY | 3.8570e-003 | 3.9022e-003 |
| tblFleetMix | MDV | 0.11 | 0.12 |
| tblFleetMix | MH | 1.3860e-003 | 1.6706e-003 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.1760e-003 | 8.6325e-004 |
| tblFleetMix | SBUS | 3.8400e-004 | 5.6649e-004 |
| tblFleetMix | UBUS | 1.0260e-003 | 9.6027e-004 |
| tblLandUse | LotAcreage | 8.34 | 21.59 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 441.9 |
| tblSolidWaste | SolidWasteGenerationRate | 450.62 | 252.35 |
| tblTripsAndVMT | WorkerTripNumber | 31.00 | 0.00 |
| tblVehicleEF | HHD | 0.57 | 0.03 |
| tblVehicleEF | HHD | 0.13 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.07 | 5.6462e-007 |
| tblVehicleEF | HHD | 1.64 | 6.29 |
| tblVehicleEF | HHD | 1.00 | 0.46 |
| tblVehicleEF | HHD | 3.36 | 5.3597e-003 |
| tblVehicleEF | HHD | 4,114.09 | 1,067.90 |
| tblVehicleEF | HHD | 1,546.83 | 1,359.85 |
| tblVehicleEF | HHD | 10.72 | 0.04 |
| tblVehicleEF | HHD | 14.46 | 5.61 |
| tblVehicleEF | HHD | 1.69 | 2.42 |
| tblVehicleEF | HHD | 19.48 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.6425e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 6.2450e-003 | 0.02 |
| tblVehicleEF | HHD | 9.3000e-005 | 9.7964e-007 |
| tblVehicleEF | HHD | 0.01 | 3.4849e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7150e-003 | 8.8025e-003 |
| tblVehicleEF | HHD | 5.9740e-003 | 0.02 |
| tblVehicleEF | HHD | 8.6000e-005 | 9.0075e-007 |
| tblVehicleEF | HHD | 7.4000e-005 | 2.2857e-006 |
| tblVehicleEF | HHD | 4.3520e-003 | 1.3068e-004 |
| tblVehicleEF | HHD | 0.40 | 0.43 |
| tblVehicleEF | HHD | 6.1000e-005 | 1.7367e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.3100e-004 | 6.0903e-004 |
| tblVehicleEF | HHD | 0.07 | 2.9355e-006 |
| tblVehicleEF | HHD | 0.04 | 9.8934e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6200e-004 | 4.4315e-007 |

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|---|---|---|---|
| tblVehicleEF | HHD | 7.4000e-005 | 2.2857e-006 |
| tblVehicleEF | HHD | 4.3520e-003 | 1.3068e-004 |
| tblVehicleEF | HHD | 0.48 | 0.49 |
| tblVehicleEF | HHD | 6.1000e-005 | 1.7367e-006 |
| tblVehicleEF | HHD | 0.21 | 0.12 |
| tblVehicleEF | HHD | 4.3100e-004 | 6.0903e-004 |
| tblVehicleEF | HHD | 0.08 | 3.2140e-006 |
| tblVehicleEF | HHD | 0.54 | 0.03 |
| tblVehicleEF | HHD | 0.13 | 0.09 |
| tblVehicleEF | HHD | 0.07 | 5.3365e-007 |
| tblVehicleEF | HHD | 1.19 | 6.19 |
| tblVehicleEF | HHD | 1.01 | 0.46 |
| tblVehicleEF | HHD | 3.13 | 5.0042e-003 |
| tblVehicleEF | HHD | 4,358.51 | 1,057.00 |
| tblVehicleEF | HHD | 1,546.83 | 1,359.85 |
| tblVehicleEF | HHD | 10.72 | 0.04 |
| tblVehicleEF | HHD | 14.92 | 5.38 |
| tblVehicleEF | HHD | 1.61 | 2.31 |
| tblVehicleEF | HHD | 19.47 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.1532e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 6.2450e-003 | 0.02 |
| tblVehicleEF | HHD | 9.3000e-005 | 9.7964e-007 |
| tblVehicleEF | HHD | 0.01 | 3.0168e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7150e-003 | 8.8025e-003 |
| tblVehicleEF | HHD | 5.9740e-003 | 0.02 |
| tblVehicleEF | HHD | 8.6000e-005 | 9.0075e-007 |
| tblVehicleEF | HHD | 1.1600e-004 | 3.8422e-006 |

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|---|---|---|---|
| tblVehicleEF | HHD | 4.4560e-003 | 1.3265e-004 |
| tblVehicleEF | HHD | 0.37 | 0.45 |
| tblVehicleEF | HHD | 1.0300e-004 | 3.2560e-006 |
| tblVehicleEF | HHD | 0.08 | 0.02 |
| tblVehicleEF | HHD | 4.1100e-004 | 5.9494e-004 |
| tblVehicleEF | HHD | 0.07 | 2.7847e-006 |
| tblVehicleEF | HHD | 0.04 | 9.7914e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.5900e-004 | 4.3757e-007 |
| tblVehicleEF | HHD | 1.1600e-004 | 3.8422e-006 |
| tblVehicleEF | HHD | 4.4560e-003 | 1.3265e-004 |
| tblVehicleEF | HHD | 0.45 | 0.52 |
| tblVehicleEF | HHD | 1.0300e-004 | 3.2560e-006 |
| tblVehicleEF | HHD | 0.21 | 0.12 |
| tblVehicleEF | HHD | 4.1100e-004 | 5.9494e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0489e-006 |
| tblVehicleEF | HHD | 0.61 | 0.02 |
| tblVehicleEF | HHD | 0.13 | 0.09 |
| tblVehicleEF | HHD | 0.07 | 5.8607e-007 |
| tblVehicleEF | HHD | 2.26 | 6.42 |
| tblVehicleEF | HHD | 1.00 | 0.46 |
| tblVehicleEF | HHD | 3.52 | 5.6142e-003 |
| tblVehicleEF | HHD | 3,776.56 | 1,082.94 |
| tblVehicleEF | HHD | 1,546.83 | 1,359.85 |
| tblVehicleEF | HHD | 10.72 | 0.05 |
| tblVehicleEF | HHD | 13.82 | 5.92 |
| tblVehicleEF | HHD | 1.68 | 2.40 |
| tblVehicleEF | HHD | 19.49 | 2.54 |
| tblVehicleEF | HHD | 0.02 | 4.3182e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 6.2450e-003 | 0.02 |
| tblVehicleEF | HHD | 9.3000e-005 | 9.7964e-007 |
| tblVehicleEF | HHD | 0.02 | 4.1314e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7150e-003 | 8.8025e-003 |
| tblVehicleEF | HHD | 5.9740e-003 | 0.02 |
| tblVehicleEF | HHD | 8.6000e-005 | 9.0075e-007 |
| tblVehicleEF | HHD | 5.2000e-005 | 1.5186e-006 |
| tblVehicleEF | HHD | 4.5240e-003 | 1.4644e-004 |
| tblVehicleEF | HHD | 0.43 | 0.39 |
| tblVehicleEF | HHD | 4.3000e-005 | 1.1294e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.8200e-004 | 6.5384e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0397e-006 |
| tblVehicleEF | HHD | 0.03 | 0.01 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6500e-004 | 4.4715e-007 |
| tblVehicleEF | HHD | 5.2000e-005 | 1.5186e-006 |
| tblVehicleEF | HHD | 4.5240e-003 | 1.4644e-004 |
| tblVehicleEF | HHD | 0.52 | 0.45 |
| tblVehicleEF | HHD | 4.3000e-005 | 1.1294e-006 |
| tblVehicleEF | HHD | 0.21 | 0.12 |
| tblVehicleEF | HHD | 4.8200e-004 | 6.5384e-004 |
| tblVehicleEF | HHD | 0.08 | 3.3281e-006 |
| tblVehicleEF | LDA | 3.8180e-003 | 2.1750e-003 |
| tblVehicleEF | LDA | 4.8970e-003 | 0.05 |
| tblVehicleEF | LDA | 0.53 | 0.59 |
| tblVehicleEF | LDA | 1.09 | 2.17 |
| tblVehicleEF | LDA | 239.61 | 248.23 |

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|---|---|---|---|
| tblVehicleEF | LDA | 54.62 | 52.23 |
| tblVehicleEF | LDA | 0.04 | 0.03 |
| tblVehicleEF | LDA | 0.06 | 0.18 |
| tblVehicleEF | LDA | 0.04 | 0.04 |
| tblVehicleEF | LDA | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDA | 1.8470e-003 | 1.4990e-003 |
| tblVehicleEF | LDA | 2.3110e-003 | 1.8057e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDA | 1.7020e-003 | 1.3812e-003 |
| tblVehicleEF | LDA | 2.1250e-003 | 1.6603e-003 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 9.6550e-003 | 8.3278e-003 |
| tblVehicleEF | LDA | 0.04 | 0.21 |
| tblVehicleEF | LDA | 0.07 | 0.22 |
| tblVehicleEF | LDA | 2.3990e-003 | 2.4554e-003 |
| tblVehicleEF | LDA | 5.6400e-004 | 5.1686e-004 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.01 |
| tblVehicleEF | LDA | 0.04 | 0.21 |
| tblVehicleEF | LDA | 0.07 | 0.24 |
| tblVehicleEF | LDA | 4.0540e-003 | 2.3375e-003 |
| tblVehicleEF | LDA | 4.2420e-003 | 0.04 |
| tblVehicleEF | LDA | 0.58 | 0.65 |
| tblVehicleEF | LDA | 0.90 | 1.78 |
| tblVehicleEF | LDA | 250.17 | 258.92 |

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|---|---|---|---|
| tblVehicleEF | LDA | 54.62 | 51.52 |
| tblVehicleEF | LDA | 0.04 | 0.03 |
| tblVehicleEF | LDA | 0.06 | 0.16 |
| tblVehicleEF | LDA | 0.04 | 0.04 |
| tblVehicleEF | LDA | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDA | 1.8470e-003 | 1.4990e-003 |
| tblVehicleEF | LDA | 2.3110e-003 | 1.8057e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDA | 1.7020e-003 | 1.3812e-003 |
| tblVehicleEF | LDA | 2.1250e-003 | 1.6603e-003 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.01 | 8.8405e-003 |
| tblVehicleEF | LDA | 0.03 | 0.20 |
| tblVehicleEF | LDA | 0.06 | 0.19 |
| tblVehicleEF | LDA | 2.5050e-003 | 2.5612e-003 |
| tblVehicleEF | LDA | 5.6100e-004 | 5.0982e-004 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.01 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.20 |
| tblVehicleEF | LDA | 0.06 | 0.21 |
| tblVehicleEF | LDA | 3.7490e-003 | 2.1188e-003 |
| tblVehicleEF | LDA | 5.2950e-003 | 0.05 |
| tblVehicleEF | LDA | 0.52 | 0.58 |
| tblVehicleEF | LDA | 1.21 | 2.42 |
| tblVehicleEF | LDA | 237.61 | 246.20 |

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|---|---|---|---|
| tblVehicleEF | LDA | 54.62 | 52.68 |
| tblVehicleEF | LDA | 0.05 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.19 |
| tblVehicleEF | LDA | 0.04 | 0.04 |
| tblVehicleEF | LDA | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDA | 1.8470e-003 | 1.4990e-003 |
| tblVehicleEF | LDA | 2.3110e-003 | 1.8057e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDA | 1.7020e-003 | 1.3812e-003 |
| tblVehicleEF | LDA | 2.1250e-003 | 1.6603e-003 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.10 | 0.10 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 9.4870e-003 | 8.1740e-003 |
| tblVehicleEF | LDA | 0.04 | 0.25 |
| tblVehicleEF | LDA | 0.07 | 0.24 |
| tblVehicleEF | LDA | 2.3790e-003 | 2.4353e-003 |
| tblVehicleEF | LDA | 5.6700e-004 | 5.2130e-004 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.10 | 0.10 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.01 | 0.01 |
| tblVehicleEF | LDA | 0.04 | 0.25 |
| tblVehicleEF | LDA | 0.08 | 0.26 |
| tblVehicleEF | LDT1 | 9.7010e-003 | 6.0730e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.16 | 1.23 |
| tblVehicleEF | LDT1 | 3.06 | 2.41 |
| tblVehicleEF | LDT1 | 301.33 | 299.05 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 69.45 | 64.07 |
| tblVehicleEF | LDT1 | 0.11 | 0.11 |
| tblVehicleEF | LDT1 | 0.17 | 0.28 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT1 | 2.5790e-003 | 2.1525e-003 |
| tblVehicleEF | LDT1 | 3.3970e-003 | 2.5889e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT1 | 2.3740e-003 | 1.9814e-003 |
| tblVehicleEF | LDT1 | 3.1230e-003 | 2.3805e-003 |
| tblVehicleEF | LDT1 | 0.11 | 0.12 |
| tblVehicleEF | LDT1 | 0.29 | 0.23 |
| tblVehicleEF | LDT1 | 0.10 | 0.11 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.19 | 0.82 |
| tblVehicleEF | LDT1 | 0.21 | 0.40 |
| tblVehicleEF | LDT1 | 3.0270e-003 | 2.9593e-003 |
| tblVehicleEF | LDT1 | 7.4800e-004 | 6.3398e-004 |
| tblVehicleEF | LDT1 | 0.11 | 0.12 |
| tblVehicleEF | LDT1 | 0.29 | 0.23 |
| tblVehicleEF | LDT1 | 0.10 | 0.11 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 0.19 | 0.82 |
| tblVehicleEF | LDT1 | 0.23 | 0.44 |
| tblVehicleEF | LDT1 | 0.01 | 6.4713e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.07 |
| tblVehicleEF | LDT1 | 1.26 | 1.33 |
| tblVehicleEF | LDT1 | 2.50 | 1.98 |
| tblVehicleEF | LDT1 | 314.06 | 310.19 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 69.45 | 63.19 |
| tblVehicleEF | LDT1 | 0.10 | 0.09 |
| tblVehicleEF | LDT1 | 0.16 | 0.25 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT1 | 2.5790e-003 | 2.1525e-003 |
| tblVehicleEF | LDT1 | 3.3970e-003 | 2.5889e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT1 | 2.3740e-003 | 1.9814e-003 |
| tblVehicleEF | LDT1 | 3.1230e-003 | 2.3805e-003 |
| tblVehicleEF | LDT1 | 0.18 | 0.19 |
| tblVehicleEF | LDT1 | 0.30 | 0.24 |
| tblVehicleEF | LDT1 | 0.17 | 0.18 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 0.17 | 0.74 |
| tblVehicleEF | LDT1 | 0.18 | 0.34 |
| tblVehicleEF | LDT1 | 3.1560e-003 | 3.0695e-003 |
| tblVehicleEF | LDT1 | 7.3800e-004 | 6.2533e-004 |
| tblVehicleEF | LDT1 | 0.18 | 0.19 |
| tblVehicleEF | LDT1 | 0.30 | 0.24 |
| tblVehicleEF | LDT1 | 0.17 | 0.18 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 0.17 | 0.74 |
| tblVehicleEF | LDT1 | 0.20 | 0.38 |
| tblVehicleEF | LDT1 | 9.5550e-003 | 5.9366e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.15 | 1.22 |
| tblVehicleEF | LDT1 | 3.40 | 2.69 |
| tblVehicleEF | LDT1 | 298.92 | 296.94 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 69.45 | 64.62 |
| tblVehicleEF | LDT1 | 0.12 | 0.11 |
| tblVehicleEF | LDT1 | 0.18 | 0.30 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT1 | 2.5790e-003 | 2.1525e-003 |
| tblVehicleEF | LDT1 | 3.3970e-003 | 2.5889e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT1 | 2.3740e-003 | 1.9814e-003 |
| tblVehicleEF | LDT1 | 3.1230e-003 | 2.3805e-003 |
| tblVehicleEF | LDT1 | 0.07 | 0.08 |
| tblVehicleEF | LDT1 | 0.32 | 0.25 |
| tblVehicleEF | LDT1 | 0.07 | 0.07 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.23 | 1.00 |
| tblVehicleEF | LDT1 | 0.23 | 0.43 |
| tblVehicleEF | LDT1 | 3.0030e-003 | 2.9384e-003 |
| tblVehicleEF | LDT1 | 7.5400e-004 | 6.3943e-004 |
| tblVehicleEF | LDT1 | 0.07 | 0.08 |
| tblVehicleEF | LDT1 | 0.32 | 0.25 |
| tblVehicleEF | LDT1 | 0.07 | 0.07 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |
| tblVehicleEF | LDT1 | 0.23 | 1.00 |
| tblVehicleEF | LDT1 | 0.25 | 0.47 |
| tblVehicleEF | LDT2 | 5.0670e-003 | 3.7891e-003 |
| tblVehicleEF | LDT2 | 6.4470e-003 | 0.07 |
| tblVehicleEF | LDT2 | 0.67 | 0.85 |
| tblVehicleEF | LDT2 | 1.40 | 2.77 |
| tblVehicleEF | LDT2 | 334.96 | 319.04 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 76.82 | 68.46 |
| tblVehicleEF | LDT2 | 0.06 | 0.07 |
| tblVehicleEF | LDT2 | 0.10 | 0.28 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT2 | 1.8050e-003 | 1.5273e-003 |
| tblVehicleEF | LDT2 | 2.3270e-003 | 1.7823e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT2 | 1.6600e-003 | 1.4062e-003 |
| tblVehicleEF | LDT2 | 2.1400e-003 | 1.6388e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.10 | 0.14 |
| tblVehicleEF | LDT2 | 0.04 | 0.07 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.46 |
| tblVehicleEF | LDT2 | 0.09 | 0.32 |
| tblVehicleEF | LDT2 | 3.3540e-003 | 3.1562e-003 |
| tblVehicleEF | LDT2 | 7.9200e-004 | 6.7743e-004 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.10 | 0.14 |
| tblVehicleEF | LDT2 | 0.04 | 0.07 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.46 |
| tblVehicleEF | LDT2 | 0.10 | 0.36 |
| tblVehicleEF | LDT2 | 5.3810e-003 | 4.0566e-003 |
| tblVehicleEF | LDT2 | 5.5910e-003 | 0.06 |
| tblVehicleEF | LDT2 | 0.73 | 0.93 |
| tblVehicleEF | LDT2 | 1.16 | 2.27 |
| tblVehicleEF | LDT2 | 349.43 | 329.81 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 76.82 | 67.52 |
| tblVehicleEF | LDT2 | 0.06 | 0.07 |
| tblVehicleEF | LDT2 | 0.10 | 0.26 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT2 | 1.8050e-003 | 1.5273e-003 |
| tblVehicleEF | LDT2 | 2.3270e-003 | 1.7823e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT2 | 1.6600e-003 | 1.4062e-003 |
| tblVehicleEF | LDT2 | 2.1400e-003 | 1.6388e-003 |
| tblVehicleEF | LDT2 | 0.06 | 0.10 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.07 | 0.12 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.42 |
| tblVehicleEF | LDT2 | 0.08 | 0.28 |
| tblVehicleEF | LDT2 | 3.5000e-003 | 3.2628e-003 |
| tblVehicleEF | LDT2 | 7.8700e-004 | 6.6820e-004 |
| tblVehicleEF | LDT2 | 0.06 | 0.10 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.07 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.42 |
| tblVehicleEF | LDT2 | 0.08 | 0.31 |
| tblVehicleEF | LDT2 | 4.9740e-003 | 3.6965e-003 |
| tblVehicleEF | LDT2 | 6.9660e-003 | 0.07 |
| tblVehicleEF | LDT2 | 0.66 | 0.84 |
| tblVehicleEF | LDT2 | 1.56 | 3.08 |
| tblVehicleEF | LDT2 | 332.22 | 316.99 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 76.82 | 69.04 |
| tblVehicleEF | LDT2 | 0.07 | 0.08 |
| tblVehicleEF | LDT2 | 0.11 | 0.30 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT2 | 1.8050e-003 | 1.5273e-003 |
| tblVehicleEF | LDT2 | 2.3270e-003 | 1.7823e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT2 | 1.6600e-003 | 1.4062e-003 |
| tblVehicleEF | LDT2 | 2.1400e-003 | 1.6388e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.07 | 0.56 |
| tblVehicleEF | LDT2 | 0.09 | 0.35 |
| tblVehicleEF | LDT2 | 3.3270e-003 | 3.1360e-003 |
| tblVehicleEF | LDT2 | 7.9400e-004 | 6.8324e-004 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.07 | 0.56 |
| tblVehicleEF | LDT2 | 0.10 | 0.38 |
| tblVehicleEF | LHD1 | 4.9370e-003 | 4.6112e-003 |
| tblVehicleEF | LHD1 | 0.01 | 5.8134e-003 |
| tblVehicleEF | LHD1 | 0.02 | 0.01 |
| tblVehicleEF | LHD1 | 0.14 | 0.17 |
| tblVehicleEF | LHD1 | 0.89 | 0.72 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 2.46 | 0.98 |
| tblVehicleEF | LHD1 | 9.24 | 9.34 |
| tblVehicleEF | LHD1 | 594.50 | 630.59 |
| tblVehicleEF | LHD1 | 29.36 | 10.26 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 1.76 | 1.34 |
| tblVehicleEF | LHD1 | 0.93 | 0.29 |
| tblVehicleEF | LHD1 | 9.7800e-004 | 1.0028e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.9600e-004 | 2.4591e-004 |
| tblVehicleEF | LHD1 | 9.3500e-004 | 9.5939e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.03 |
| tblVehicleEF | LHD1 | 2.5610e-003 | 2.5138e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.2300e-004 | 2.2610e-004 |
| tblVehicleEF | LHD1 | 2.3310e-003 | 1.9407e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.5510e-003 | 1.2754e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.06 |
| tblVehicleEF | LHD1 | 0.33 | 0.57 |
| tblVehicleEF | LHD1 | 0.24 | 0.07 |
| tblVehicleEF | LHD1 | 9.2000e-005 | 9.0201e-005 |
| tblVehicleEF | LHD1 | 5.8250e-003 | 6.1318e-003 |
| tblVehicleEF | LHD1 | 3.4000e-004 | 1.0153e-004 |
| tblVehicleEF | LHD1 | 2.3310e-003 | 1.9407e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 1.5510e-003 | 1.2754e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 0.33 | 0.57 |
| tblVehicleEF | LHD1 | 0.27 | 0.08 |
| tblVehicleEF | LHD1 | 4.9370e-003 | 4.6252e-003 |
| tblVehicleEF | LHD1 | 0.01 | 5.9393e-003 |
| tblVehicleEF | LHD1 | 0.02 | 0.01 |
| tblVehicleEF | LHD1 | 0.14 | 0.17 |
| tblVehicleEF | LHD1 | 0.91 | 0.74 |
| tblVehicleEF | LHD1 | 2.31 | 0.92 |
| tblVehicleEF | LHD1 | 9.24 | 9.34 |
| tblVehicleEF | LHD1 | 594.50 | 630.61 |
| tblVehicleEF | LHD1 | 29.36 | 10.15 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 1.68 | 1.28 |
| tblVehicleEF | LHD1 | 0.87 | 0.27 |
| tblVehicleEF | LHD1 | 9.7800e-004 | 1.0028e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.9600e-004 | 2.4591e-004 |
| tblVehicleEF | LHD1 | 9.3500e-004 | 9.5939e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.03 |
| tblVehicleEF | LHD1 | 2.5610e-003 | 2.5138e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.2300e-004 | 2.2610e-004 |
| tblVehicleEF | LHD1 | 3.6270e-003 | 3.0317e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 2.5770e-003 | 2.1332e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.08 | 0.06 |
| tblVehicleEF | LHD1 | 0.31 | 0.55 |
| tblVehicleEF | LHD1 | 0.23 | 0.07 |
| tblVehicleEF | LHD1 | 9.2000e-005 | 9.0201e-005 |
| tblVehicleEF | LHD1 | 5.8250e-003 | 6.1320e-003 |
| tblVehicleEF | LHD1 | 3.3700e-004 | 1.0049e-004 |
| tblVehicleEF | LHD1 | 3.6270e-003 | 3.0317e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.03 |
| tblVehicleEF | LHD1 | 2.5770e-003 | 2.1332e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.31 | 0.55 |
| tblVehicleEF | LHD1 | 0.25 | 0.08 |
| tblVehicleEF | LHD1 | 4.9370e-003 | 4.6017e-003 |
| tblVehicleEF | LHD1 | 0.01 | 5.7328e-003 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 0.14 | 0.17 |
| tblVehicleEF | LHD1 | 0.88 | 0.71 |
| tblVehicleEF | LHD1 | 2.57 | 1.02 |
| tblVehicleEF | LHD1 | 9.24 | 9.34 |
| tblVehicleEF | LHD1 | 594.50 | 630.57 |
| tblVehicleEF | LHD1 | 29.36 | 10.34 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 1.75 | 1.34 |
| tblVehicleEF | LHD1 | 0.97 | 0.30 |
| tblVehicleEF | LHD1 | 9.7800e-004 | 1.0028e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.9600e-004 | 2.4591e-004 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 9.3500e-004 | 9.5939e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.03 |
| tblVehicleEF | LHD1 | 2.5610e-003 | 2.5138e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.2300e-004 | 2.2610e-004 |
| tblVehicleEF | LHD1 | 1.6050e-003 | 1.3295e-003 |
| tblVehicleEF | LHD1 | 0.11 | 0.09 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.0860e-003 | 8.8957e-004 |
| tblVehicleEF | LHD1 | 0.08 | 0.06 |
| tblVehicleEF | LHD1 | 0.36 | 0.63 |
| tblVehicleEF | LHD1 | 0.25 | 0.08 |
| tblVehicleEF | LHD1 | 9.2000e-005 | 9.0201e-005 |
| tblVehicleEF | LHD1 | 5.8250e-003 | 6.1316e-003 |
| tblVehicleEF | LHD1 | 3.4200e-004 | 1.0228e-004 |
| tblVehicleEF | LHD1 | 1.6050e-003 | 1.3295e-003 |
| tblVehicleEF | LHD1 | 0.11 | 0.09 |
| tblVehicleEF | LHD1 | 0.02 | 0.03 |
| tblVehicleEF | LHD1 | 1.0860e-003 | 8.8957e-004 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 0.36 | 0.63 |
| tblVehicleEF | LHD1 | 0.28 | 0.08 |
| tblVehicleEF | LHD2 | 3.7440e-003 | 3.3444e-003 |
| tblVehicleEF | LHD2 | 3.9330e-003 | 3.8421e-003 |
| tblVehicleEF | LHD2 | 7.9340e-003 | 9.4194e-003 |
| tblVehicleEF | LHD2 | 0.13 | 0.14 |
| tblVehicleEF | LHD2 | 0.38 | 0.47 |
| tblVehicleEF | LHD2 | 1.22 | 0.62 |
| tblVehicleEF | LHD2 | 13.88 | 14.34 |
| tblVehicleEF | LHD2 | 610.70 | 644.38 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 26.49 | 7.93 |
| tblVehicleEF | LHD2 | 0.10 | 0.11 |
| tblVehicleEF | LHD2 | 1.05 | 1.33 |
| tblVehicleEF | LHD2 | 0.56 | 0.20 |
| tblVehicleEF | LHD2 | 1.1870e-003 | 1.3895e-003 |
| tblVehicleEF | LHD2 | 0.09 | 0.09 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.9100e-004 | 1.2193e-004 |
| tblVehicleEF | LHD2 | 1.1350e-003 | 1.3294e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.6867e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.6000e-004 | 1.1211e-004 |
| tblVehicleEF | LHD2 | 8.5500e-004 | 1.0186e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.1053e-004 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.08 | 0.28 |
| tblVehicleEF | LHD2 | 0.11 | 0.05 |
| tblVehicleEF | LHD2 | 1.3600e-004 | 1.3705e-004 |
| tblVehicleEF | LHD2 | 5.9470e-003 | 6.2181e-003 |
| tblVehicleEF | LHD2 | 2.8700e-004 | 7.8477e-005 |
| tblVehicleEF | LHD2 | 8.5500e-004 | 1.0186e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.1053e-004 |
| tblVehicleEF | LHD2 | 0.06 | 0.07 |
| tblVehicleEF | LHD2 | 0.08 | 0.28 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.12 | 0.05 |
| tblVehicleEF | LHD2 | 3.7440e-003 | 3.3544e-003 |
| tblVehicleEF | LHD2 | 3.9880e-003 | 3.8830e-003 |
| tblVehicleEF | LHD2 | 7.5730e-003 | 8.9934e-003 |
| tblVehicleEF | LHD2 | 0.13 | 0.14 |
| tblVehicleEF | LHD2 | 0.38 | 0.47 |
| tblVehicleEF | LHD2 | 1.15 | 0.59 |
| tblVehicleEF | LHD2 | 13.88 | 14.34 |
| tblVehicleEF | LHD2 | 610.70 | 644.39 |
| tblVehicleEF | LHD2 | 26.49 | 7.86 |
| tblVehicleEF | LHD2 | 0.10 | 0.11 |
| tblVehicleEF | LHD2 | 1.00 | 1.27 |
| tblVehicleEF | LHD2 | 0.53 | 0.19 |
| tblVehicleEF | LHD2 | 1.1870e-003 | 1.3895e-003 |
| tblVehicleEF | LHD2 | 0.09 | 0.09 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.9100e-004 | 1.2193e-004 |
| tblVehicleEF | LHD2 | 1.1350e-003 | 1.3294e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.6867e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.6000e-004 | 1.1211e-004 |
| tblVehicleEF | LHD2 | 1.3220e-003 | 1.5812e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 1.0510e-003 | 1.1802e-003 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.08 | 0.27 |
| tblVehicleEF | LHD2 | 0.10 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 1.3600e-004 | 1.3705e-004 |
| tblVehicleEF | LHD2 | 5.9470e-003 | 6.2181e-003 |
| tblVehicleEF | LHD2 | 2.8600e-004 | 7.7822e-005 |
| tblVehicleEF | LHD2 | 1.3220e-003 | 1.5812e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 1.0510e-003 | 1.1802e-003 |
| tblVehicleEF | LHD2 | 0.06 | 0.07 |
| tblVehicleEF | LHD2 | 0.08 | 0.27 |
| tblVehicleEF | LHD2 | 0.11 | 0.05 |
| tblVehicleEF | LHD2 | 3.7440e-003 | 3.3375e-003 |
| tblVehicleEF | LHD2 | 3.8980e-003 | 3.8156e-003 |
| tblVehicleEF | LHD2 | 8.1850e-003 | 9.7140e-003 |
| tblVehicleEF | LHD2 | 0.13 | 0.14 |
| tblVehicleEF | LHD2 | 0.38 | 0.46 |
| tblVehicleEF | LHD2 | 1.27 | 0.65 |
| tblVehicleEF | LHD2 | 13.88 | 14.34 |
| tblVehicleEF | LHD2 | 610.70 | 644.37 |
| tblVehicleEF | LHD2 | 26.49 | 7.98 |
| tblVehicleEF | LHD2 | 0.10 | 0.11 |
| tblVehicleEF | LHD2 | 1.04 | 1.33 |
| tblVehicleEF | LHD2 | 0.58 | 0.21 |
| tblVehicleEF | LHD2 | 1.1870e-003 | 1.3895e-003 |
| tblVehicleEF | LHD2 | 0.09 | 0.09 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.9100e-004 | 1.2193e-004 |
| tblVehicleEF | LHD2 | 1.1350e-003 | 1.3294e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.6867e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.6000e-004 | 1.1211e-004 |
| tblVehicleEF | LHD2 | 5.9900e-004 | 7.0943e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 4.5200e-004 | 5.0222e-004 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.09 | 0.31 |
| tblVehicleEF | LHD2 | 0.11 | 0.05 |
| tblVehicleEF | LHD2 | 1.3600e-004 | 1.3705e-004 |
| tblVehicleEF | LHD2 | 5.9470e-003 | 6.2180e-003 |
| tblVehicleEF | LHD2 | 2.8800e-004 | 7.8944e-005 |
| tblVehicleEF | LHD2 | 5.9900e-004 | 7.0943e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 4.5200e-004 | 5.0222e-004 |
| tblVehicleEF | LHD2 | 0.06 | 0.07 |
| tblVehicleEF | LHD2 | 0.09 | 0.31 |
| tblVehicleEF | LHD2 | 0.12 | 0.05 |
| tblVehicleEF | MCY | 0.47 | 0.35 |
| tblVehicleEF | MCY | 0.16 | 0.25 |
| tblVehicleEF | MCY | 19.34 | 19.66 |
| tblVehicleEF | MCY | 9.92 | 8.77 |
| tblVehicleEF | MCY | 174.45 | 213.87 |
| tblVehicleEF | MCY | 46.35 | 61.79 |
| tblVehicleEF | MCY | 1.14 | 1.15 |
| tblVehicleEF | MCY | 0.32 | 0.27 |
| tblVehicleEF | MCY | 0.01 | 0.01 |
| tblVehicleEF | MCY | 4.0000e-003 | 4.0000e-003 |
| tblVehicleEF | MCY | 2.1560e-003 | 2.0850e-003 |

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|---|---|---|---|
| tblVehicleEF | MCY | 3.9760e-003 | 3.2555e-003 |
| tblVehicleEF | MCY | 5.0400e-003 | 5.0400e-003 |
| tblVehicleEF | MCY | 1.0000e-003 | 1.0000e-003 |
| tblVehicleEF | MCY | 2.0170e-003 | 1.9515e-003 |
| tblVehicleEF | MCY | 3.7510e-003 | 3.0707e-003 |
| tblVehicleEF | MCY | 0.91 | 0.93 |
| tblVehicleEF | MCY | 0.78 | 0.80 |
| tblVehicleEF | MCY | 0.60 | 0.61 |
| tblVehicleEF | MCY | 2.38 | 2.40 |
| tblVehicleEF | MCY | 1.03 | 2.28 |
| tblVehicleEF | MCY | 2.20 | 1.94 |
| tblVehicleEF | MCY | 2.1310e-003 | 2.1164e-003 |
| tblVehicleEF | MCY | 6.9000e-004 | 6.1144e-004 |
| tblVehicleEF | MCY | 0.91 | 0.93 |
| tblVehicleEF | MCY | 0.78 | 0.80 |
| tblVehicleEF | MCY | 0.60 | 0.61 |
| tblVehicleEF | MCY | 2.93 | 2.95 |
| tblVehicleEF | MCY | 1.03 | 2.28 |
| tblVehicleEF | MCY | 2.39 | 2.11 |
| tblVehicleEF | MCY | 0.45 | 0.34 |
| tblVehicleEF | MCY | 0.14 | 0.21 |
| tblVehicleEF | MCY | 18.10 | 18.38 |
| tblVehicleEF | MCY | 8.79 | 7.74 |
| tblVehicleEF | MCY | 174.45 | 211.51 |
| tblVehicleEF | MCY | 46.35 | 59.17 |
| tblVehicleEF | MCY | 1.01 | 1.01 |
| tblVehicleEF | MCY | 0.30 | 0.25 |
| tblVehicleEF | MCY | 0.01 | 0.01 |
| tblVehicleEF | MCY | 4.0000e-003 | 4.0000e-003 |
| tblVehicleEF | MCY | 2.1560e-003 | 2.0850e-003 |

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|---|---|---|---|
| tblVehicleEF | MCY | 3.9760e-003 | 3.2555e-003 |
| tblVehicleEF | MCY | 5.0400e-003 | 5.0400e-003 |
| tblVehicleEF | MCY | 1.0000e-003 | 1.0000e-003 |
| tblVehicleEF | MCY | 2.0170e-003 | 1.9515e-003 |
| tblVehicleEF | MCY | 3.7510e-003 | 3.0707e-003 |
| tblVehicleEF | MCY | 1.59 | 1.61 |
| tblVehicleEF | MCY | 0.85 | 0.87 |
| tblVehicleEF | MCY | 1.23 | 1.24 |
| tblVehicleEF | MCY | 2.29 | 2.30 |
| tblVehicleEF | MCY | 0.96 | 2.10 |
| tblVehicleEF | MCY | 1.88 | 1.65 |
| tblVehicleEF | MCY | 2.1080e-003 | 2.0930e-003 |
| tblVehicleEF | MCY | 6.6200e-004 | 5.8549e-004 |
| tblVehicleEF | MCY | 1.59 | 1.61 |
| tblVehicleEF | MCY | 0.85 | 0.87 |
| tblVehicleEF | MCY | 1.23 | 1.24 |
| tblVehicleEF | MCY | 2.82 | 2.84 |
| tblVehicleEF | MCY | 0.96 | 2.10 |
| tblVehicleEF | MCY | 2.04 | 1.79 |
| tblVehicleEF | MCY | 0.48 | 0.35 |
| tblVehicleEF | MCY | 0.18 | 0.27 |
| tblVehicleEF | MCY | 20.36 | 20.72 |
| tblVehicleEF | MCY | 10.73 | 9.54 |
| tblVehicleEF | MCY | 174.45 | 215.80 |
| tblVehicleEF | MCY | 46.35 | 63.69 |
| tblVehicleEF | MCY | 1.17 | 1.17 |
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 0.01 | 0.01 |
| tblVehicleEF | MCY | 4.0000e-003 | 4.0000e-003 |
| tblVehicleEF | MCY | 2.1560e-003 | 2.0850e-003 |

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|---|---|---|---|
| tblVehicleEF | MCY | 3.9760e-003 | 3.2555e-003 |
| tblVehicleEF | MCY | 5.0400e-003 | 5.0400e-003 |
| tblVehicleEF | MCY | 1.0000e-003 | 1.0000e-003 |
| tblVehicleEF | MCY | 2.0170e-003 | 1.9515e-003 |
| tblVehicleEF | MCY | 3.7510e-003 | 3.0707e-003 |
| tblVehicleEF | MCY | 0.58 | 0.60 |
| tblVehicleEF | MCY | 0.98 | 0.99 |
| tblVehicleEF | MCY | 0.35 | 0.36 |
| tblVehicleEF | MCY | 2.44 | 2.47 |
| tblVehicleEF | MCY | 1.21 | 2.67 |
| tblVehicleEF | MCY | 2.42 | 2.15 |
| tblVehicleEF | MCY | 2.1490e-003 | 2.1355e-003 |
| tblVehicleEF | MCY | 7.1000e-004 | 6.3023e-004 |
| tblVehicleEF | MCY | 0.58 | 0.60 |
| tblVehicleEF | MCY | 0.98 | 0.99 |
| tblVehicleEF | MCY | 0.35 | 0.36 |
| tblVehicleEF | MCY | 3.01 | 3.03 |
| tblVehicleEF | MCY | 1.21 | 2.67 |
| tblVehicleEF | MCY | 2.63 | 2.34 |
| tblVehicleEF | MDV | 9.8100e-003 | 4.7720e-003 |
| tblVehicleEF | MDV | 0.02 | 0.09 |
| tblVehicleEF | MDV | 1.08 | 0.98 |
| tblVehicleEF | MDV | 2.76 | 3.29 |
| tblVehicleEF | MDV | 460.13 | 396.01 |
| tblVehicleEF | MDV | 104.17 | 84.70 |
| tblVehicleEF | MDV | 0.12 | 0.10 |
| tblVehicleEF | MDV | 0.25 | 0.37 |
| tblVehicleEF | MDV | 0.04 | 0.04 |
| tblVehicleEF | MDV | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | MDV | 1.8790e-003 | 1.6314e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.3940e-003 | 1.9008e-003 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | MDV | 1.7320e-003 | 1.5053e-003 |
| tblVehicleEF | MDV | 2.2010e-003 | 1.7480e-003 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.18 | 0.16 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.11 | 0.50 |
| tblVehicleEF | MDV | 0.21 | 0.43 |
| tblVehicleEF | MDV | 4.6070e-003 | 3.9145e-003 |
| tblVehicleEF | MDV | 1.0900e-003 | 8.3815e-004 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.18 | 0.16 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.04 | 0.03 |
| tblVehicleEF | MDV | 0.11 | 0.50 |
| tblVehicleEF | MDV | 0.23 | 0.47 |
| tblVehicleEF | MDV | 0.01 | 5.1014e-003 |
| tblVehicleEF | MDV | 0.01 | 0.08 |
| tblVehicleEF | MDV | 1.17 | 1.06 |
| tblVehicleEF | MDV | 2.27 | 2.69 |
| tblVehicleEF | MDV | 479.42 | 407.34 |
| tblVehicleEF | MDV | 104.17 | 83.55 |
| tblVehicleEF | MDV | 0.11 | 0.08 |
| tblVehicleEF | MDV | 0.22 | 0.33 |
| tblVehicleEF | MDV | 0.04 | 0.04 |
| tblVehicleEF | MDV | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | MDV | 1.8790e-003 | 1.6314e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.3940e-003 | 1.9008e-003 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | MDV | 1.7320e-003 | 1.5053e-003 |
| tblVehicleEF | MDV | 2.2010e-003 | 1.7480e-003 |
| tblVehicleEF | MDV | 0.09 | 0.12 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.11 | 0.15 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.10 | 0.46 |
| tblVehicleEF | MDV | 0.18 | 0.37 |
| tblVehicleEF | MDV | 4.8010e-003 | 4.0267e-003 |
| tblVehicleEF | MDV | 1.0810e-003 | 8.2684e-004 |
| tblVehicleEF | MDV | 0.09 | 0.12 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.11 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.03 |
| tblVehicleEF | MDV | 0.10 | 0.46 |
| tblVehicleEF | MDV | 0.20 | 0.41 |
| tblVehicleEF | MDV | 9.6530e-003 | 4.6634e-003 |
| tblVehicleEF | MDV | 0.02 | 0.09 |
| tblVehicleEF | MDV | 1.07 | 0.97 |
| tblVehicleEF | MDV | 3.07 | 3.67 |
| tblVehicleEF | MDV | 456.48 | 393.86 |
| tblVehicleEF | MDV | 104.17 | 85.42 |
| tblVehicleEF | MDV | 0.13 | 0.10 |
| tblVehicleEF | MDV | 0.26 | 0.39 |
| tblVehicleEF | MDV | 0.04 | 0.04 |
| tblVehicleEF | MDV | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | MDV | 1.8790e-003 | 1.6314e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.3940e-003 | 1.9008e-003 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | MDV | 1.7320e-003 | 1.5053e-003 |
| tblVehicleEF | MDV | 2.2010e-003 | 1.7480e-003 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.05 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.13 | 0.61 |
| tblVehicleEF | MDV | 0.22 | 0.46 |
| tblVehicleEF | MDV | 4.5700e-003 | 3.8933e-003 |
| tblVehicleEF | MDV | 1.0950e-003 | 8.4527e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.05 | 0.06 |
| tblVehicleEF | MDV | 0.04 | 0.03 |
| tblVehicleEF | MDV | 0.13 | 0.61 |
| tblVehicleEF | MDV | 0.25 | 0.51 |
| tblVehicleEF | MH | 0.03 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 2.35 | 1.23 |
| tblVehicleEF | MH | 5.87 | 2.09 |
| tblVehicleEF | MH | 1,089.54 | 1,486.99 |
| tblVehicleEF | MH | 58.99 | 19.05 |
| tblVehicleEF | MH | 1.50 | 1.49 |
| tblVehicleEF | MH | 0.87 | 0.25 |
| tblVehicleEF | MH | 0.13 | 0.13 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MH | 1.0640e-003 | 2.4477e-004 |
| tblVehicleEF | MH | 0.06 | 0.06 |
| tblVehicleEF | MH | 3.2290e-003 | 3.2754e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.7800e-004 | 2.2506e-004 |
| tblVehicleEF | MH | 0.91 | 0.74 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.43 | 0.36 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.54 |
| tblVehicleEF | MH | 0.34 | 0.10 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.9200e-004 | 1.8851e-004 |
| tblVehicleEF | MH | 0.91 | 0.74 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.43 | 0.36 |
| tblVehicleEF | MH | 0.13 | 0.08 |
| tblVehicleEF | MH | 0.03 | 1.54 |
| tblVehicleEF | MH | 0.37 | 0.11 |
| tblVehicleEF | MH | 0.03 | 0.01 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 2.44 | 1.27 |
| tblVehicleEF | MH | 5.42 | 1.94 |
| tblVehicleEF | MH | 1,089.54 | 1,487.06 |
| tblVehicleEF | MH | 58.99 | 18.79 |
| tblVehicleEF | MH | 1.40 | 1.40 |
| tblVehicleEF | MH | 0.82 | 0.24 |
| tblVehicleEF | MH | 0.13 | 0.13 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MH | 1.0640e-003 | 2.4477e-004 |
| tblVehicleEF | MH | 0.06 | 0.06 |
| tblVehicleEF | MH | 3.2290e-003 | 3.2754e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.7800e-004 | 2.2506e-004 |
| tblVehicleEF | MH | 1.36 | 1.10 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.71 | 0.59 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.50 |
| tblVehicleEF | MH | 0.32 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.8500e-004 | 1.8593e-004 |
| tblVehicleEF | MH | 1.36 | 1.10 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.71 | 0.59 |
| tblVehicleEF | MH | 0.13 | 0.08 |
| tblVehicleEF | MH | 0.03 | 1.50 |
| tblVehicleEF | MH | 0.35 | 0.10 |
| tblVehicleEF | MH | 0.03 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 2.30 | 1.21 |
| tblVehicleEF | MH | 6.13 | 2.18 |
| tblVehicleEF | MH | 1,089.54 | 1,486.95 |
| tblVehicleEF | MH | 58.99 | 19.20 |
| tblVehicleEF | MH | 1.50 | 1.48 |
| tblVehicleEF | MH | 0.90 | 0.26 |
| tblVehicleEF | MH | 0.13 | 0.13 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MH | 1.0640e-003 | 2.4477e-004 |
| tblVehicleEF | MH | 0.06 | 0.06 |
| tblVehicleEF | MH | 3.2290e-003 | 3.2754e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.7800e-004 | 2.2506e-004 |
| tblVehicleEF | MH | 0.65 | 0.53 |
| tblVehicleEF | MH | 0.10 | 0.08 |
| tblVehicleEF | MH | 0.30 | 0.25 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.66 |
| tblVehicleEF | MH | 0.35 | 0.10 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.9700e-004 | 1.9004e-004 |
| tblVehicleEF | MH | 0.65 | 0.53 |
| tblVehicleEF | MH | 0.10 | 0.08 |
| tblVehicleEF | MH | 0.30 | 0.25 |
| tblVehicleEF | MH | 0.12 | 0.08 |
| tblVehicleEF | MH | 0.03 | 1.66 |
| tblVehicleEF | MH | 0.39 | 0.11 |
| tblVehicleEF | MHD | 0.02 | 2.9438e-003 |
| tblVehicleEF | MHD | 3.1660e-003 | 1.3420e-003 |
| tblVehicleEF | MHD | 0.05 | 8.0151e-003 |
| tblVehicleEF | MHD | 0.32 | 0.34 |
| tblVehicleEF | MHD | 0.27 | 0.19 |
| tblVehicleEF | MHD | 5.74 | 0.94 |
| tblVehicleEF | MHD | 148.81 | 68.40 |
| tblVehicleEF | MHD | 1,108.13 | 950.57 |
| tblVehicleEF | MHD | 54.44 | 7.84 |
| tblVehicleEF | MHD | 0.40 | 0.40 |
| tblVehicleEF | MHD | 0.66 | 1.01 |

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| tblVehicleEF | MHD | 11.56 | 1.78 |
| tblVehicleEF | MHD | 1.1900e-004 | 3.6707e-004 |
| tblVehicleEF | MHD | 0.13 | 0.13 |
| tblVehicleEF | MHD | 0.01 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-003 | 7.3550e-003 |
| tblVehicleEF | MHD | 7.8600e-004 | 9.4742e-005 |
| tblVehicleEF | MHD | 1.1400e-004 | 3.5119e-004 |
| tblVehicleEF | MHD | 0.06 | 0.06 |
| tblVehicleEF | MHD | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | MHD | 2.7130e-003 | 7.0330e-003 |
| tblVehicleEF | MHD | 7.2300e-004 | 8.7112e-005 |
| tblVehicleEF | MHD | 8.0000e-004 | 3.2663e-004 |
| tblVehicleEF | MHD | 0.04 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 5.6300e-004 | 2.2475e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.34 | 0.04 |
| tblVehicleEF | MHD | 1.4310e-003 | 6.4864e-004 |
| tblVehicleEF | MHD | 0.01 | 9.0489e-003 |
| tblVehicleEF | MHD | 6.4500e-004 | 7.7553e-005 |
| tblVehicleEF | MHD | 8.0000e-004 | 3.2663e-004 |
| tblVehicleEF | MHD | 0.04 | 0.02 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 5.6300e-004 | 2.2475e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.37 | 0.05 |
| tblVehicleEF | MHD | 0.01 | 2.8053e-003 |
| tblVehicleEF | MHD | 3.2250e-003 | 1.3745e-003 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.05 | 7.6350e-003 |
| tblVehicleEF | MHD | 0.23 | 0.30 |
| tblVehicleEF | MHD | 0.27 | 0.19 |
| tblVehicleEF | MHD | 5.36 | 0.88 |
| tblVehicleEF | MHD | 157.62 | 68.37 |
| tblVehicleEF | MHD | 1,108.13 | 950.57 |
| tblVehicleEF | MHD | 54.44 | 7.73 |
| tblVehicleEF | MHD | 0.42 | 0.39 |
| tblVehicleEF | MHD | 0.63 | 0.97 |
| tblVehicleEF | MHD | 11.51 | 1.78 |
| tblVehicleEF | MHD | 1.0000e-004 | 3.1246e-004 |
| tblVehicleEF | MHD | 0.13 | 0.13 |
| tblVehicleEF | MHD | 0.01 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-003 | 7.3550e-003 |
| tblVehicleEF | MHD | 7.8600e-004 | 9.4742e-005 |
| tblVehicleEF | MHD | 9.6000e-005 | 2.9894e-004 |
| tblVehicleEF | MHD | 0.06 | 0.06 |
| tblVehicleEF | MHD | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | MHD | 2.7130e-003 | 7.0330e-003 |
| tblVehicleEF | MHD | 7.2300e-004 | 8.7112e-005 |
| tblVehicleEF | MHD | 1.2610e-003 | 5.1678e-004 |
| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 9.5700e-004 | 3.8510e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.32 | 0.04 |
| tblVehicleEF | MHD | 1.5140e-003 | 6.4846e-004 |
| tblVehicleEF | MHD | 0.01 | 9.0489e-003 |
| tblVehicleEF | MHD | 6.3800e-004 | 7.6502e-005 |

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| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 9.5700e-004 | 3.8510e-004 |
| tblVehicleEF | MHD | 0.04 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.35 | 0.04 |
| tblVehicleEF | MHD | 0.02 | 3.1420e-003 |
| tblVehicleEF | MHD | 3.1280e-003 | 1.3207e-003 |
| tblVehicleEF | MHD | 0.05 | 8.2677e-003 |
| tblVehicleEF | MHD | 0.44 | 0.40 |
| tblVehicleEF | MHD | 0.27 | 0.19 |
| tblVehicleEF | MHD | 6.01 | 0.98 |
| tblVehicleEF | MHD | 136.63 | 68.44 |
| tblVehicleEF | MHD | 1,108.13 | 950.56 |
| tblVehicleEF | MHD | 54.44 | 7.91 |
| tblVehicleEF | MHD | 0.39 | 0.41 |
| tblVehicleEF | MHD | 0.65 | 1.01 |
| tblVehicleEF | MHD | 11.60 | 1.79 |
| tblVehicleEF | MHD | 1.4400e-004 | 4.4249e-004 |
| tblVehicleEF | MHD | 0.13 | 0.13 |
| tblVehicleEF | MHD | 0.01 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-003 | 7.3550e-003 |
| tblVehicleEF | MHD | 7.8600e-004 | 9.4742e-005 |
| tblVehicleEF | MHD | 1.3800e-004 | 4.2335e-004 |
| tblVehicleEF | MHD | 0.06 | 0.06 |
| tblVehicleEF | MHD | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | MHD | 2.7130e-003 | 7.0330e-003 |
| tblVehicleEF | MHD | 7.2300e-004 | 8.7112e-005 |
| tblVehicleEF | MHD | 5.5100e-004 | 2.2345e-004 |

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|---|---|---|---|
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| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 3.9100e-004 | 1.5547e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.10 |
| tblVehicleEF | MHD | 0.35 | 0.04 |
| tblVehicleEF | MHD | 1.3160e-003 | 6.4885e-004 |
| tblVehicleEF | MHD | 0.01 | 9.0488e-003 |
| tblVehicleEF | MHD | 6.4900e-004 | 7.8304e-005 |
| tblVehicleEF | MHD | 5.5100e-004 | 2.2345e-004 |
| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.9100e-004 | 1.5547e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.10 |
| tblVehicleEF | MHD | 0.39 | 0.05 |
| tblVehicleEF | OBUS | 0.01 | 8.0320e-003 |
| tblVehicleEF | OBUS | 7.8920e-003 | 7.0086e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.38 |
| tblVehicleEF | OBUS | 0.54 | 0.88 |
| tblVehicleEF | OBUS | 5.86 | 2.80 |
| tblVehicleEF | OBUS | 45.17 | 48.22 |
| tblVehicleEF | OBUS | 1,143.07 | 1,333.27 |
| tblVehicleEF | OBUS | 71.14 | 21.22 |
| tblVehicleEF | OBUS | 0.07 | 0.15 |
| tblVehicleEF | OBUS | 0.43 | 0.96 |
| tblVehicleEF | OBUS | 1.65 | 0.73 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.7635e-005 |
| tblVehicleEF | OBUS | 0.13 | 0.13 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 1.8390e-003 | 6.0663e-003 |
| tblVehicleEF | OBUS | 9.1000e-004 | 2.1200e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.5574e-005 |
| tblVehicleEF | OBUS | 0.06 | 0.06 |
| tblVehicleEF | OBUS | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | OBUS | 1.7360e-003 | 5.7873e-003 |
| tblVehicleEF | OBUS | 8.3700e-004 | 1.9493e-004 |
| tblVehicleEF | OBUS | 1.2150e-003 | 1.6978e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 7.0800e-004 | 9.7565e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.30 |
| tblVehicleEF | OBUS | 0.36 | 0.13 |
| tblVehicleEF | OBUS | 4.4400e-004 | 4.6226e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 8.1400e-004 | 2.1000e-004 |
| tblVehicleEF | OBUS | 1.2150e-003 | 1.6978e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 7.0800e-004 | 9.7565e-004 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 0.06 | 0.30 |
| tblVehicleEF | OBUS | 0.39 | 0.14 |
| tblVehicleEF | OBUS | 0.01 | 8.0812e-003 |
| tblVehicleEF | OBUS | 8.1100e-003 | 7.2186e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.38 |
| tblVehicleEF | OBUS | 0.55 | 0.90 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 5.43 | 2.59 |
| tblVehicleEF | OBUS | 46.82 | 47.76 |
| tblVehicleEF | OBUS | 1,143.07 | 1,333.31 |
| tblVehicleEF | OBUS | 71.14 | 20.87 |
| tblVehicleEF | OBUS | 0.07 | 0.15 |
| tblVehicleEF | OBUS | 0.40 | 0.90 |
| tblVehicleEF | OBUS | 1.60 | 0.71 |
| tblVehicleEF | OBUS | 5.0000e-006 | 4.2327e-005 |
| tblVehicleEF | OBUS | 0.13 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 1.8390e-003 | 6.0663e-003 |
| tblVehicleEF | OBUS | 9.1000e-004 | 2.1200e-004 |
| tblVehicleEF | OBUS | 5.0000e-006 | 4.0496e-005 |
| tblVehicleEF | OBUS | 0.06 | 0.06 |
| tblVehicleEF | OBUS | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | OBUS | 1.7360e-003 | 5.7873e-003 |
| tblVehicleEF | OBUS | 8.3700e-004 | 1.9493e-004 |
| tblVehicleEF | OBUS | 1.8320e-003 | 2.5402e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.1930e-003 | 1.6284e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.34 | 0.12 |
| tblVehicleEF | OBUS | 4.5900e-004 | 4.5789e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 8.0700e-004 | 2.0657e-004 |
| tblVehicleEF | OBUS | 1.8320e-003 | 2.5402e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | OBUS | 1.1930e-003 | 1.6284e-003 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.37 | 0.14 |
| tblVehicleEF | OBUS | 0.01 | 7.9838e-003 |
| tblVehicleEF | OBUS | 7.7530e-003 | 6.8757e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.25 | 0.39 |
| tblVehicleEF | OBUS | 0.53 | 0.87 |
| tblVehicleEF | OBUS | 6.11 | 2.92 |
| tblVehicleEF | OBUS | 42.90 | 48.86 |
| tblVehicleEF | OBUS | 1,143.07 | 1,333.24 |
| tblVehicleEF | OBUS | 71.14 | 21.43 |
| tblVehicleEF | OBUS | 0.07 | 0.16 |
| tblVehicleEF | OBUS | 0.43 | 0.96 |
| tblVehicleEF | OBUS | 1.69 | 0.74 |
| tblVehicleEF | OBUS | 8.0000e-006 | 5.4965e-005 |
| tblVehicleEF | OBUS | 0.13 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 1.8390e-003 | 6.0663e-003 |
| tblVehicleEF | OBUS | 9.1000e-004 | 2.1200e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.2587e-005 |
| tblVehicleEF | OBUS | 0.06 | 0.06 |
| tblVehicleEF | OBUS | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | OBUS | 1.7360e-003 | 5.7873e-003 |
| tblVehicleEF | OBUS | 8.3700e-004 | 1.9493e-004 |
| tblVehicleEF | OBUS | 8.7900e-004 | 1.2355e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 5.0000e-004 | 6.8970e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.37 | 0.14 |
| tblVehicleEF | OBUS | 4.2200e-004 | 4.6829e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 8.1800e-004 | 2.1204e-004 |
| tblVehicleEF | OBUS | 8.7900e-004 | 1.2355e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 5.0000e-004 | 6.8970e-004 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.41 | 0.15 |
| tblVehicleEF | SBUS | 0.85 | 0.05 |
| tblVehicleEF | SBUS | 9.9160e-003 | 0.01 |
| tblVehicleEF | SBUS | 0.06 | 5.4132e-003 |
| tblVehicleEF | SBUS | 8.86 | 2.04 |
| tblVehicleEF | SBUS | 0.59 | 0.97 |
| tblVehicleEF | SBUS | 7.78 | 0.83 |
| tblVehicleEF | SBUS | 1,077.03 | 351.47 |
| tblVehicleEF | SBUS | 1,061.21 | 1,162.54 |
| tblVehicleEF | SBUS | 59.15 | 4.08 |
| tblVehicleEF | SBUS | 8.20 | 3.71 |
| tblVehicleEF | SBUS | 3.80 | 6.27 |
| tblVehicleEF | SBUS | 11.25 | 0.56 |
| tblVehicleEF | SBUS | 7.8510e-003 | 4.6090e-003 |
| tblVehicleEF | SBUS | 0.74 | 0.74 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 1.0800e-003 | 5.1408e-005 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 7.5120e-003 | 4.4096e-003 |
| tblVehicleEF | SBUS | 0.32 | 0.32 |
| tblVehicleEF | SBUS | 2.6470e-003 | 2.7572e-003 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 9.9300e-004 | 4.7268e-005 |
| tblVehicleEF | SBUS | 2.4650e-003 | 7.6204e-004 |
| tblVehicleEF | SBUS | 0.02 | 8.7447e-003 |
| tblVehicleEF | SBUS | 1.06 | 0.24 |
| tblVehicleEF | SBUS | 1.3190e-003 | 3.8868e-004 |
| tblVehicleEF | SBUS | 0.10 | 0.15 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |
| tblVehicleEF | SBUS | 0.38 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.3433e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 7.2500e-004 | 4.0401e-005 |
| tblVehicleEF | SBUS | 2.4650e-003 | 7.6204e-004 |
| tblVehicleEF | SBUS | 0.02 | 8.7447e-003 |
| tblVehicleEF | SBUS | 1.54 | 0.34 |
| tblVehicleEF | SBUS | 1.3190e-003 | 3.8868e-004 |
| tblVehicleEF | SBUS | 0.11 | 0.18 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |
| tblVehicleEF | SBUS | 0.42 | 0.04 |
| tblVehicleEF | SBUS | 0.85 | 0.05 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.05 | 4.6952e-003 |
| tblVehicleEF | SBUS | 8.76 | 1.99 |
| tblVehicleEF | SBUS | 0.60 | 0.99 |
| tblVehicleEF | SBUS | 6.05 | 0.64 |
| tblVehicleEF | SBUS | 1,123.69 | 363.73 |
| tblVehicleEF | SBUS | 1,061.21 | 1,162.57 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 59.15 | 3.78 |
| tblVehicleEF | SBUS | 8.46 | 3.81 |
| tblVehicleEF | SBUS | 3.63 | 5.99 |
| tblVehicleEF | SBUS | 11.22 | 0.56 |
| tblVehicleEF | SBUS | 6.6190e-003 | 3.8928e-003 |
| tblVehicleEF | SBUS | 0.74 | 0.74 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 1.0800e-003 | 5.1408e-005 |
| tblVehicleEF | SBUS | 6.3320e-003 | 3.7244e-003 |
| tblVehicleEF | SBUS | 0.32 | 0.32 |
| tblVehicleEF | SBUS | 2.6470e-003 | 2.7572e-003 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 9.9300e-004 | 4.7268e-005 |
| tblVehicleEF | SBUS | 3.7610e-003 | 1.1454e-003 |
| tblVehicleEF | SBUS | 0.02 | 8.9865e-003 |
| tblVehicleEF | SBUS | 1.06 | 0.23 |
| tblVehicleEF | SBUS | 2.2720e-003 | 6.6170e-004 |
| tblVehicleEF | SBUS | 0.10 | 0.15 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |
| tblVehicleEF | SBUS | 0.33 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.4591e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 6.9600e-004 | 3.7375e-005 |
| tblVehicleEF | SBUS | 3.7610e-003 | 1.1454e-003 |
| tblVehicleEF | SBUS | 0.02 | 8.9865e-003 |
| tblVehicleEF | SBUS | 1.54 | 0.33 |
| tblVehicleEF | SBUS | 2.2720e-003 | 6.6170e-004 |
| tblVehicleEF | SBUS | 0.11 | 0.18 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 0.37 | 0.03 |
| tblVehicleEF | SBUS | 0.85 | 0.05 |
| tblVehicleEF | SBUS | 9.8040e-003 | 0.01 |
| tblVehicleEF | SBUS | 0.06 | 5.7989e-003 |
| tblVehicleEF | SBUS | 9.00 | 2.11 |
| tblVehicleEF | SBUS | 0.58 | 0.96 |
| tblVehicleEF | SBUS | 8.73 | 0.93 |
| tblVehicleEF | SBUS | 1,012.61 | 334.54 |
| tblVehicleEF | SBUS | 1,061.21 | 1,162.52 |
| tblVehicleEF | SBUS | 59.15 | 4.25 |
| tblVehicleEF | SBUS | 7.84 | 3.57 |
| tblVehicleEF | SBUS | 3.78 | 6.23 |
| tblVehicleEF | SBUS | 11.27 | 0.56 |
| tblVehicleEF | SBUS | 9.5530e-003 | 5.5980e-003 |
| tblVehicleEF | SBUS | 0.74 | 0.74 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 1.0800e-003 | 5.1408e-005 |
| tblVehicleEF | SBUS | 9.1400e-003 | 5.3558e-003 |
| tblVehicleEF | SBUS | 0.32 | 0.32 |
| tblVehicleEF | SBUS | 2.6470e-003 | 2.7572e-003 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 9.9300e-004 | 4.7268e-005 |
| tblVehicleEF | SBUS | 1.7660e-003 | 5.5432e-004 |
| tblVehicleEF | SBUS | 0.02 | 9.1896e-003 |
| tblVehicleEF | SBUS | 1.07 | 0.24 |
| tblVehicleEF | SBUS | 9.2600e-004 | 2.7406e-004 |
| tblVehicleEF | SBUS | 0.10 | 0.15 |
| tblVehicleEF | SBUS | 0.02 | 0.07 |
| tblVehicleEF | SBUS | 0.41 | 0.03 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 9.9660e-003 | 3.1833e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 7.4100e-004 | 4.2067e-005 |
| tblVehicleEF | SBUS | 1.7660e-003 | 5.5432e-004 |
| tblVehicleEF | SBUS | 0.02 | 9.1896e-003 |
| tblVehicleEF | SBUS | 1.54 | 0.34 |
| tblVehicleEF | SBUS | 9.2600e-004 | 2.7406e-004 |
| tblVehicleEF | SBUS | 0.11 | 0.18 |
| tblVehicleEF | SBUS | 0.02 | 0.07 |
| tblVehicleEF | SBUS | 0.45 | 0.04 |
| tblVehicleEF | UBUS | 1.74 | 2.90 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 7.10 | 22.23 |
| tblVehicleEF | UBUS | 9.59 | 1.69 |
| tblVehicleEF | UBUS | 1,797.09 | 1,600.97 |
| tblVehicleEF | UBUS | 129.74 | 19.53 |
| tblVehicleEF | UBUS | 3.37 | 0.39 |
| tblVehicleEF | UBUS | 13.14 | 0.19 |
| tblVehicleEF | UBUS | 0.53 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.03 | 3.6752e-003 |
| tblVehicleEF | UBUS | 1.2290e-003 | 1.6392e-004 |
| tblVehicleEF | UBUS | 0.23 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.03 | 3.5044e-003 |
| tblVehicleEF | UBUS | 1.1300e-003 | 1.5072e-004 |
| tblVehicleEF | UBUS | 2.2290e-003 | 8.3852e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.6920e-003 | 7.0686e-004 |
| tblVehicleEF | UBUS | 0.31 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 9.5050e-003 | 0.08 |
| tblVehicleEF | UBUS | 0.73 | 0.10 |
| tblVehicleEF | UBUS | 8.3470e-003 | 5.6654e-003 |
| tblVehicleEF | UBUS | 1.4700e-003 | 1.9329e-004 |
| tblVehicleEF | UBUS | 2.2290e-003 | 8.3852e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.6920e-003 | 7.0686e-004 |
| tblVehicleEF | UBUS | 2.10 | 2.97 |
| tblVehicleEF | UBUS | 9.5050e-003 | 0.08 |
| tblVehicleEF | UBUS | 0.80 | 0.11 |
| tblVehicleEF | UBUS | 1.74 | 2.90 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 7.12 | 22.23 |
| tblVehicleEF | UBUS | 8.10 | 1.43 |
| tblVehicleEF | UBUS | 1,797.09 | 1,600.77 |
| tblVehicleEF | UBUS | 129.74 | 19.08 |
| tblVehicleEF | UBUS | 3.21 | 0.38 |
| tblVehicleEF | UBUS | 13.06 | 0.18 |
| tblVehicleEF | UBUS | 0.53 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.03 | 3.6747e-003 |
| tblVehicleEF | UBUS | 1.2290e-003 | 1.6384e-004 |
| tblVehicleEF | UBUS | 0.23 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6971e-003 |
| tblVehicleEF | UBUS | 0.03 | 3.5040e-003 |
| tblVehicleEF | UBUS | 1.1300e-003 | 1.5064e-004 |
| tblVehicleEF | UBUS | 3.1570e-003 | 1.2277e-003 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 2.9330e-003 | 1.2125e-003 |
| tblVehicleEF | UBUS | 0.31 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 8.3410e-003 | 0.07 |
| tblVehicleEF | UBUS | 0.66 | 0.09 |
| tblVehicleEF | UBUS | 8.3480e-003 | 5.6647e-003 |
| tblVehicleEF | UBUS | 1.4440e-003 | 1.8884e-004 |
| tblVehicleEF | UBUS | 3.1570e-003 | 1.2277e-003 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 2.9330e-003 | 1.2125e-003 |
| tblVehicleEF | UBUS | 2.10 | 2.97 |
| tblVehicleEF | UBUS | 8.3410e-003 | 0.07 |
| tblVehicleEF | UBUS | 0.72 | 0.10 |
| tblVehicleEF | UBUS | 1.74 | 2.90 |
| tblVehicleEF | UBUS | 0.06 | 0.03 |
| tblVehicleEF | UBUS | 7.08 | 22.23 |
| tblVehicleEF | UBUS | 10.59 | 1.86 |
| tblVehicleEF | UBUS | 1,797.09 | 1,600.77 |
| tblVehicleEF | UBUS | 129.74 | 19.81 |
| tblVehicleEF | UBUS | 3.36 | 0.39 |
| tblVehicleEF | UBUS | 13.19 | 0.20 |
| tblVehicleEF | UBUS | 0.53 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.03 | 3.6747e-003 |
| tblVehicleEF | UBUS | 1.2290e-003 | 1.6384e-004 |
| tblVehicleEF | UBUS | 0.23 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6971e-003 |
| tblVehicleEF | UBUS | 0.03 | 3.5040e-003 |
| tblVehicleEF | UBUS | 1.1300e-003 | 1.5064e-004 |
| tblVehicleEF | UBUS | 1.6980e-003 | 6.1593e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.1710e-003 | 4.9160e-004 |
| tblVehicleEF | UBUS | 0.31 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.09 |
| tblVehicleEF | UBUS | 0.78 | 0.11 |
| tblVehicleEF | UBUS | 8.3470e-003 | 5.6646e-003 |
| tblVehicleEF | UBUS | 1.4870e-003 | 1.9606e-004 |
| tblVehicleEF | UBUS | 1.6980e-003 | 6.1593e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.1710e-003 | 4.9160e-004 |
| tblVehicleEF | UBUS | 2.10 | 2.97 |
| tblVehicleEF | UBUS | 0.01 | 0.09 |
| tblVehicleEF | UBUS | 0.85 | 0.12 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |
| tblWater | IndoorWaterUseRate | 84,036,250.00 | 67,229,000.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

## 2.0 Emissions Summary

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 1.8407 | 3.0000e-005 | 3.3400e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 6.4900e-003 | 6.4900e-003 | 2.0000e-005 | 0.0000 | 6.9200e-003 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 603.1218 | 603.1218 | 0.0396 | 8.1900e-003 | 606.5516 |
| Mobile | 0.5457 | 0.7547 | 3.8950 | 0.0105 | 1.0699 | 8.5100e-003 | 1.0784 | 0.2862 | 7.9500e-003 | 0.2941 | 0.0000 | 976.2784 | 976.2784 | 0.0539 | 0.0000 | 977.6260 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 51.2248 | 0.0000 | 51.2248 | 3.0273 | 0.0000 | 126.9072 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 23.7857 | 175.4651 | 199.2508 | 0.6944 | 0.0541 | 232.7348 |
| **Total** | **2.3864** | **0.7548** | **3.8983** | **0.0105** | **1.0699** | **8.5200e-003** | **1.0784** | **0.2862** | **7.9600e-003** | **0.2941** | **75.0105** | **1,754.8718** | **1,829.8823** | **3.8152** | **0.0623** | **1,943.8266** |

## 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 | 1.8407 | 3.0000e-005 | 3.3400e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 6.4900e-003 | 6.4900e-003 | 2.0000e-005 | 0.0000 | 6.9200e-003 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 507.4090 | 507.4090 | 0.0333 | 6.8900e-003 | 510.2945 |
| Mobile | 0.5457 | 0.7547 | 3.8950 | 0.0105 | 1.0699 | 8.5100e-003 | 1.0784 | 0.2862 | 7.9500e-003 | 0.2941 | 0.0000 | 976.2784 | 976.2784 | 0.0539 | 0.0000 | 977.6260 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 51.2248 | 0.0000 | 51.2248 | 3.0273 | 0.0000 | 126.9072 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 20.2179 | 149.1453 | 169.3632 | 0.5902 | 0.0460 | 197.8246 |
| **Total** | **2.3864** | **0.7548** | **3.8983** | **0.0105** | **1.0699** | **8.5200e-003** | **1.0784** | **0.2862** | **7.9600e-003** | **0.2941** | **71.4426** | **1,632.8392** | **1,704.2819** | **3.7048** | **0.0529** | **1,812.6592** |

| | ROG | NOx | 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** | **4.76** | **6.95** | **6.86** | **2.89** | **15.12** | **6.75** |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | 507.4090 | 507.4090 | 0.0333 | 6.8900e-003 | 510.2945 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 603.1218 | 603.1218 | 0.0396 | 8.1900e-003 | 606.5516 |
| 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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 | | | |
| General Light Industry | 3.00895e+006 | 603.1218 | 0.0396 | 8.1900e-003 | 606.5516 |
| **Total** | | **603.1218** | **0.0396** | **8.1900e-003** | **606.5516** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| General Light Industry | 2.53144e+006 | 507.4090 | 0.0333 | 6.8900e-003 | 510.2945 |
| **Total** | | **507.4090** | **0.0333** | **6.8900e-003** | **510.2945** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.8407 | 3.0000e-005 | 3.3400e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 6.4900e-003 | 6.4900e-003 | 2.0000e-005 | 0.0000 | 6.9200e-003 |
| Unmitigated | 1.8407 | 3.0000e-005 | 3.3400e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 6.4900e-003 | 6.4900e-003 | 2.0000e-005 | 0.0000 | 6.9200e-003 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4211 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 1.4193 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 3.1000e-004 | 3.0000e-005 | 3.3400e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 6.4900e-003 | 6.4900e-003 | 2.0000e-005 | 0.0000 | 6.9200e-003 |
| **Total** | **1.8407** | **3.0000e-005** | **3.3400e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | **0.0000** | **6.4900e-003** | **6.4900e-003** | **2.0000e-005** | **0.0000** | **6.9200e-003** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4211 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 1.4193 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 3.1000e-004 | 3.0000e-005 | 3.3400e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 6.4900e-003 | 6.4900e-003 | 2.0000e-005 | 0.0000 | 6.9200e-003 |
| **Total** | **1.8407** | **3.0000e-005** | **3.3400e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | **0.0000** | **6.4900e-003** | **6.4900e-003** | **2.0000e-005** | **0.0000** | **6.9200e-003** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 169.3632 | 0.5902 | 0.0460 | 197.8246 |
| Unmitigated | 199.2508 | 0.6944 | 0.0541 | 232.7348 |

### 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 67.229 / 0 | 199.2508 | 0.6944 | 0.0541 | 232.7348 |
| **Total** | | **199.2508** | **0.6944** | **0.0541** | **232.7348** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 57.1446 / 0 | 169.3632 | 0.5902 | 0.0460 | 197.8246 |
| **Total** | | **169.3632** | **0.5902** | **0.0460** | **197.8246** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 51.2248 | 3.0273 | 0.0000 | 126.9072 |
| Unmitigated | 51.2248 | 3.0273 | 0.0000 | 126.9072 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 252.35 | 51.2248 | 3.0273 | 0.0000 | 126.9072 |
| **Total** | | **51.2248** | **3.0273** | **0.0000** | **126.9072** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 252.35 | 51.2248 | 3.0273 | 0.0000 | 126.9072 |
| **Total** | | **51.2248** | **3.0273** | **0.0000** | **126.9072** |

# 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

Conejo Summit - Initial Operational 2023 - Ventura County, Summer

# Conejo Summit - Initial Operational 2023

**Ventura County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 363.40 | 1000sqft | 21.59 | 363,400.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2023 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 441.9 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 181,700.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 545,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 20.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.59 | 0.57 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.17 |
| tblFleetMix | LHD1 | 0.02 | 0.03 |
| tblFleetMix | LHD2 | 6.2040e-003 | 7.5217e-003 |
| tblFleetMix | MCY | 3.8570e-003 | 3.9022e-003 |
| tblFleetMix | MDV | 0.11 | 0.12 |
| tblFleetMix | MH | 1.3860e-003 | 1.6706e-003 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.1760e-003 | 8.6325e-004 |
| tblFleetMix | SBUS | 3.8400e-004 | 5.6649e-004 |
| tblFleetMix | UBUS | 1.0260e-003 | 9.6027e-004 |
| tblLandUse | LotAcreage | 8.34 | 21.59 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 441.9 |
| tblSolidWaste | SolidWasteGenerationRate | 450.62 | 252.35 |
| tblTripsAndVMT | WorkerTripNumber | 31.00 | 0.00 |
| tblVehicleEF | HHD | 0.57 | 0.03 |
| tblVehicleEF | HHD | 0.13 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.07 | 5.6462e-007 |
| tblVehicleEF | HHD | 1.64 | 6.29 |
| tblVehicleEF | HHD | 1.00 | 0.46 |
| tblVehicleEF | HHD | 3.36 | 5.3597e-003 |
| tblVehicleEF | HHD | 4,114.09 | 1,067.90 |
| tblVehicleEF | HHD | 1,546.83 | 1,359.85 |
| tblVehicleEF | HHD | 10.72 | 0.04 |
| tblVehicleEF | HHD | 14.46 | 5.61 |
| tblVehicleEF | HHD | 1.69 | 2.42 |
| tblVehicleEF | HHD | 19.48 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.6425e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 6.2450e-003 | 0.02 |
| tblVehicleEF | HHD | 9.3000e-005 | 9.7964e-007 |
| tblVehicleEF | HHD | 0.01 | 3.4849e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7150e-003 | 8.8025e-003 |
| tblVehicleEF | HHD | 5.9740e-003 | 0.02 |
| tblVehicleEF | HHD | 8.6000e-005 | 9.0075e-007 |
| tblVehicleEF | HHD | 7.4000e-005 | 2.2857e-006 |
| tblVehicleEF | HHD | 4.3520e-003 | 1.3068e-004 |
| tblVehicleEF | HHD | 0.40 | 0.43 |
| tblVehicleEF | HHD | 6.1000e-005 | 1.7367e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.3100e-004 | 6.0903e-004 |
| tblVehicleEF | HHD | 0.07 | 2.9355e-006 |
| tblVehicleEF | HHD | 0.04 | 9.8934e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6200e-004 | 4.4315e-007 |

| | | | |
|---|---|---|---|
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| tblVehicleEF | HHD | 4.3520e-003 | 1.3068e-004 |
| tblVehicleEF | HHD | 0.48 | 0.49 |
| tblVehicleEF | HHD | 6.1000e-005 | 1.7367e-006 |
| tblVehicleEF | HHD | 0.21 | 0.12 |
| tblVehicleEF | HHD | 4.3100e-004 | 6.0903e-004 |
| tblVehicleEF | HHD | 0.08 | 3.2140e-006 |
| tblVehicleEF | HHD | 0.54 | 0.03 |
| tblVehicleEF | HHD | 0.13 | 0.09 |
| tblVehicleEF | HHD | 0.07 | 5.3365e-007 |
| tblVehicleEF | HHD | 1.19 | 6.19 |
| tblVehicleEF | HHD | 1.01 | 0.46 |
| tblVehicleEF | HHD | 3.13 | 5.0042e-003 |
| tblVehicleEF | HHD | 4,358.51 | 1,057.00 |
| tblVehicleEF | HHD | 1,546.83 | 1,359.85 |
| tblVehicleEF | HHD | 10.72 | 0.04 |
| tblVehicleEF | HHD | 14.92 | 5.38 |
| tblVehicleEF | HHD | 1.61 | 2.31 |
| tblVehicleEF | HHD | 19.47 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.1532e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 6.2450e-003 | 0.02 |
| tblVehicleEF | HHD | 9.3000e-005 | 9.7964e-007 |
| tblVehicleEF | HHD | 0.01 | 3.0168e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7150e-003 | 8.8025e-003 |
| tblVehicleEF | HHD | 5.9740e-003 | 0.02 |
| tblVehicleEF | HHD | 8.6000e-005 | 9.0075e-007 |
| tblVehicleEF | HHD | 1.1600e-004 | 3.8422e-006 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 4.4560e-003 | 1.3265e-004 |
| tblVehicleEF | HHD | 0.37 | 0.45 |
| tblVehicleEF | HHD | 1.0300e-004 | 3.2560e-006 |
| tblVehicleEF | HHD | 0.08 | 0.02 |
| tblVehicleEF | HHD | 4.1100e-004 | 5.9494e-004 |
| tblVehicleEF | HHD | 0.07 | 2.7847e-006 |
| tblVehicleEF | HHD | 0.04 | 9.7914e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.5900e-004 | 4.3757e-007 |
| tblVehicleEF | HHD | 1.1600e-004 | 3.8422e-006 |
| tblVehicleEF | HHD | 4.4560e-003 | 1.3265e-004 |
| tblVehicleEF | HHD | 0.45 | 0.52 |
| tblVehicleEF | HHD | 1.0300e-004 | 3.2560e-006 |
| tblVehicleEF | HHD | 0.21 | 0.12 |
| tblVehicleEF | HHD | 4.1100e-004 | 5.9494e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0489e-006 |
| tblVehicleEF | HHD | 0.61 | 0.02 |
| tblVehicleEF | HHD | 0.13 | 0.09 |
| tblVehicleEF | HHD | 0.07 | 5.8607e-007 |
| tblVehicleEF | HHD | 2.26 | 6.42 |
| tblVehicleEF | HHD | 1.00 | 0.46 |
| tblVehicleEF | HHD | 3.52 | 5.6142e-003 |
| tblVehicleEF | HHD | 3,776.56 | 1,082.94 |
| tblVehicleEF | HHD | 1,546.83 | 1,359.85 |
| tblVehicleEF | HHD | 10.72 | 0.05 |
| tblVehicleEF | HHD | 13.82 | 5.92 |
| tblVehicleEF | HHD | 1.68 | 2.40 |
| tblVehicleEF | HHD | 19.49 | 2.54 |
| tblVehicleEF | HHD | 0.02 | 4.3182e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 6.2450e-003 | 0.02 |
| tblVehicleEF | HHD | 9.3000e-005 | 9.7964e-007 |
| tblVehicleEF | HHD | 0.02 | 4.1314e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7150e-003 | 8.8025e-003 |
| tblVehicleEF | HHD | 5.9740e-003 | 0.02 |
| tblVehicleEF | HHD | 8.6000e-005 | 9.0075e-007 |
| tblVehicleEF | HHD | 5.2000e-005 | 1.5186e-006 |
| tblVehicleEF | HHD | 4.5240e-003 | 1.4644e-004 |
| tblVehicleEF | HHD | 0.43 | 0.39 |
| tblVehicleEF | HHD | 4.3000e-005 | 1.1294e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.8200e-004 | 6.5384e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0397e-006 |
| tblVehicleEF | HHD | 0.03 | 0.01 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6500e-004 | 4.4715e-007 |
| tblVehicleEF | HHD | 5.2000e-005 | 1.5186e-006 |
| tblVehicleEF | HHD | 4.5240e-003 | 1.4644e-004 |
| tblVehicleEF | HHD | 0.52 | 0.45 |
| tblVehicleEF | HHD | 4.3000e-005 | 1.1294e-006 |
| tblVehicleEF | HHD | 0.21 | 0.12 |
| tblVehicleEF | HHD | 4.8200e-004 | 6.5384e-004 |
| tblVehicleEF | HHD | 0.08 | 3.3281e-006 |
| tblVehicleEF | LDA | 3.8180e-003 | 2.1750e-003 |
| tblVehicleEF | LDA | 4.8970e-003 | 0.05 |
| tblVehicleEF | LDA | 0.53 | 0.59 |
| tblVehicleEF | LDA | 1.09 | 2.17 |
| tblVehicleEF | LDA | 239.61 | 248.23 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 54.62 | 52.23 |
| tblVehicleEF | LDA | 0.04 | 0.03 |
| tblVehicleEF | LDA | 0.06 | 0.18 |
| tblVehicleEF | LDA | 0.04 | 0.04 |
| tblVehicleEF | LDA | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDA | 1.8470e-003 | 1.4990e-003 |
| tblVehicleEF | LDA | 2.3110e-003 | 1.8057e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDA | 1.7020e-003 | 1.3812e-003 |
| tblVehicleEF | LDA | 2.1250e-003 | 1.6603e-003 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 9.6550e-003 | 8.3278e-003 |
| tblVehicleEF | LDA | 0.04 | 0.21 |
| tblVehicleEF | LDA | 0.07 | 0.22 |
| tblVehicleEF | LDA | 2.3990e-003 | 2.4554e-003 |
| tblVehicleEF | LDA | 5.6400e-004 | 5.1686e-004 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.01 |
| tblVehicleEF | LDA | 0.04 | 0.21 |
| tblVehicleEF | LDA | 0.07 | 0.24 |
| tblVehicleEF | LDA | 4.0540e-003 | 2.3375e-003 |
| tblVehicleEF | LDA | 4.2420e-003 | 0.04 |
| tblVehicleEF | LDA | 0.58 | 0.65 |
| tblVehicleEF | LDA | 0.90 | 1.78 |
| tblVehicleEF | LDA | 250.17 | 258.92 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 54.62 | 51.52 |
| tblVehicleEF | LDA | 0.04 | 0.03 |
| tblVehicleEF | LDA | 0.06 | 0.16 |
| tblVehicleEF | LDA | 0.04 | 0.04 |
| tblVehicleEF | LDA | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDA | 1.8470e-003 | 1.4990e-003 |
| tblVehicleEF | LDA | 2.3110e-003 | 1.8057e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDA | 1.7020e-003 | 1.3812e-003 |
| tblVehicleEF | LDA | 2.1250e-003 | 1.6603e-003 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.01 | 8.8405e-003 |
| tblVehicleEF | LDA | 0.03 | 0.20 |
| tblVehicleEF | LDA | 0.06 | 0.19 |
| tblVehicleEF | LDA | 2.5050e-003 | 2.5612e-003 |
| tblVehicleEF | LDA | 5.6100e-004 | 5.0982e-004 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.01 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.20 |
| tblVehicleEF | LDA | 0.06 | 0.21 |
| tblVehicleEF | LDA | 3.7490e-003 | 2.1188e-003 |
| tblVehicleEF | LDA | 5.2950e-003 | 0.05 |
| tblVehicleEF | LDA | 0.52 | 0.58 |
| tblVehicleEF | LDA | 1.21 | 2.42 |
| tblVehicleEF | LDA | 237.61 | 246.20 |

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|---|---|---|---|
| tblVehicleEF | LDA | 54.62 | 52.68 |
| tblVehicleEF | LDA | 0.05 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.19 |
| tblVehicleEF | LDA | 0.04 | 0.04 |
| tblVehicleEF | LDA | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDA | 1.8470e-003 | 1.4990e-003 |
| tblVehicleEF | LDA | 2.3110e-003 | 1.8057e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDA | 1.7020e-003 | 1.3812e-003 |
| tblVehicleEF | LDA | 2.1250e-003 | 1.6603e-003 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.10 | 0.10 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 9.4870e-003 | 8.1740e-003 |
| tblVehicleEF | LDA | 0.04 | 0.25 |
| tblVehicleEF | LDA | 0.07 | 0.24 |
| tblVehicleEF | LDA | 2.3790e-003 | 2.4353e-003 |
| tblVehicleEF | LDA | 5.6700e-004 | 5.2130e-004 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.10 | 0.10 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.01 | 0.01 |
| tblVehicleEF | LDA | 0.04 | 0.25 |
| tblVehicleEF | LDA | 0.08 | 0.26 |
| tblVehicleEF | LDT1 | 9.7010e-003 | 6.0730e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.16 | 1.23 |
| tblVehicleEF | LDT1 | 3.06 | 2.41 |
| tblVehicleEF | LDT1 | 301.33 | 299.05 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 69.45 | 64.07 |
| tblVehicleEF | LDT1 | 0.11 | 0.11 |
| tblVehicleEF | LDT1 | 0.17 | 0.28 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT1 | 2.5790e-003 | 2.1525e-003 |
| tblVehicleEF | LDT1 | 3.3970e-003 | 2.5889e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT1 | 2.3740e-003 | 1.9814e-003 |
| tblVehicleEF | LDT1 | 3.1230e-003 | 2.3805e-003 |
| tblVehicleEF | LDT1 | 0.11 | 0.12 |
| tblVehicleEF | LDT1 | 0.29 | 0.23 |
| tblVehicleEF | LDT1 | 0.10 | 0.11 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.19 | 0.82 |
| tblVehicleEF | LDT1 | 0.21 | 0.40 |
| tblVehicleEF | LDT1 | 3.0270e-003 | 2.9593e-003 |
| tblVehicleEF | LDT1 | 7.4800e-004 | 6.3398e-004 |
| tblVehicleEF | LDT1 | 0.11 | 0.12 |
| tblVehicleEF | LDT1 | 0.29 | 0.23 |
| tblVehicleEF | LDT1 | 0.10 | 0.11 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 0.19 | 0.82 |
| tblVehicleEF | LDT1 | 0.23 | 0.44 |
| tblVehicleEF | LDT1 | 0.01 | 6.4713e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.07 |
| tblVehicleEF | LDT1 | 1.26 | 1.33 |
| tblVehicleEF | LDT1 | 2.50 | 1.98 |
| tblVehicleEF | LDT1 | 314.06 | 310.19 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 69.45 | 63.19 |
| tblVehicleEF | LDT1 | 0.10 | 0.09 |
| tblVehicleEF | LDT1 | 0.16 | 0.25 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT1 | 2.5790e-003 | 2.1525e-003 |
| tblVehicleEF | LDT1 | 3.3970e-003 | 2.5889e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT1 | 2.3740e-003 | 1.9814e-003 |
| tblVehicleEF | LDT1 | 3.1230e-003 | 2.3805e-003 |
| tblVehicleEF | LDT1 | 0.18 | 0.19 |
| tblVehicleEF | LDT1 | 0.30 | 0.24 |
| tblVehicleEF | LDT1 | 0.17 | 0.18 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 0.17 | 0.74 |
| tblVehicleEF | LDT1 | 0.18 | 0.34 |
| tblVehicleEF | LDT1 | 3.1560e-003 | 3.0695e-003 |
| tblVehicleEF | LDT1 | 7.3800e-004 | 6.2533e-004 |
| tblVehicleEF | LDT1 | 0.18 | 0.19 |
| tblVehicleEF | LDT1 | 0.30 | 0.24 |
| tblVehicleEF | LDT1 | 0.17 | 0.18 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 0.17 | 0.74 |
| tblVehicleEF | LDT1 | 0.20 | 0.38 |
| tblVehicleEF | LDT1 | 9.5550e-003 | 5.9366e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.15 | 1.22 |
| tblVehicleEF | LDT1 | 3.40 | 2.69 |
| tblVehicleEF | LDT1 | 298.92 | 296.94 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 69.45 | 64.62 |
| tblVehicleEF | LDT1 | 0.12 | 0.11 |
| tblVehicleEF | LDT1 | 0.18 | 0.30 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT1 | 2.5790e-003 | 2.1525e-003 |
| tblVehicleEF | LDT1 | 3.3970e-003 | 2.5889e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT1 | 2.3740e-003 | 1.9814e-003 |
| tblVehicleEF | LDT1 | 3.1230e-003 | 2.3805e-003 |
| tblVehicleEF | LDT1 | 0.07 | 0.08 |
| tblVehicleEF | LDT1 | 0.32 | 0.25 |
| tblVehicleEF | LDT1 | 0.07 | 0.07 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.23 | 1.00 |
| tblVehicleEF | LDT1 | 0.23 | 0.43 |
| tblVehicleEF | LDT1 | 3.0030e-003 | 2.9384e-003 |
| tblVehicleEF | LDT1 | 7.5400e-004 | 6.3943e-004 |
| tblVehicleEF | LDT1 | 0.07 | 0.08 |
| tblVehicleEF | LDT1 | 0.32 | 0.25 |
| tblVehicleEF | LDT1 | 0.07 | 0.07 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |
| tblVehicleEF | LDT1 | 0.23 | 1.00 |
| tblVehicleEF | LDT1 | 0.25 | 0.47 |
| tblVehicleEF | LDT2 | 5.0670e-003 | 3.7891e-003 |
| tblVehicleEF | LDT2 | 6.4470e-003 | 0.07 |
| tblVehicleEF | LDT2 | 0.67 | 0.85 |
| tblVehicleEF | LDT2 | 1.40 | 2.77 |
| tblVehicleEF | LDT2 | 334.96 | 319.04 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 76.82 | 68.46 |
| tblVehicleEF | LDT2 | 0.06 | 0.07 |
| tblVehicleEF | LDT2 | 0.10 | 0.28 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT2 | 1.8050e-003 | 1.5273e-003 |
| tblVehicleEF | LDT2 | 2.3270e-003 | 1.7823e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT2 | 1.6600e-003 | 1.4062e-003 |
| tblVehicleEF | LDT2 | 2.1400e-003 | 1.6388e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.10 | 0.14 |
| tblVehicleEF | LDT2 | 0.04 | 0.07 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.46 |
| tblVehicleEF | LDT2 | 0.09 | 0.32 |
| tblVehicleEF | LDT2 | 3.3540e-003 | 3.1562e-003 |
| tblVehicleEF | LDT2 | 7.9200e-004 | 6.7743e-004 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.10 | 0.14 |
| tblVehicleEF | LDT2 | 0.04 | 0.07 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.46 |
| tblVehicleEF | LDT2 | 0.10 | 0.36 |
| tblVehicleEF | LDT2 | 5.3810e-003 | 4.0566e-003 |
| tblVehicleEF | LDT2 | 5.5910e-003 | 0.06 |
| tblVehicleEF | LDT2 | 0.73 | 0.93 |
| tblVehicleEF | LDT2 | 1.16 | 2.27 |
| tblVehicleEF | LDT2 | 349.43 | 329.81 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 76.82 | 67.52 |
| tblVehicleEF | LDT2 | 0.06 | 0.07 |
| tblVehicleEF | LDT2 | 0.10 | 0.26 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT2 | 1.8050e-003 | 1.5273e-003 |
| tblVehicleEF | LDT2 | 2.3270e-003 | 1.7823e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT2 | 1.6600e-003 | 1.4062e-003 |
| tblVehicleEF | LDT2 | 2.1400e-003 | 1.6388e-003 |
| tblVehicleEF | LDT2 | 0.06 | 0.10 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.07 | 0.12 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.42 |
| tblVehicleEF | LDT2 | 0.08 | 0.28 |
| tblVehicleEF | LDT2 | 3.5000e-003 | 3.2628e-003 |
| tblVehicleEF | LDT2 | 7.8700e-004 | 6.6820e-004 |
| tblVehicleEF | LDT2 | 0.06 | 0.10 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.07 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.42 |
| tblVehicleEF | LDT2 | 0.08 | 0.31 |
| tblVehicleEF | LDT2 | 4.9740e-003 | 3.6965e-003 |
| tblVehicleEF | LDT2 | 6.9660e-003 | 0.07 |
| tblVehicleEF | LDT2 | 0.66 | 0.84 |
| tblVehicleEF | LDT2 | 1.56 | 3.08 |
| tblVehicleEF | LDT2 | 332.22 | 316.99 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 76.82 | 69.04 |
| tblVehicleEF | LDT2 | 0.07 | 0.08 |
| tblVehicleEF | LDT2 | 0.11 | 0.30 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT2 | 1.8050e-003 | 1.5273e-003 |
| tblVehicleEF | LDT2 | 2.3270e-003 | 1.7823e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT2 | 1.6600e-003 | 1.4062e-003 |
| tblVehicleEF | LDT2 | 2.1400e-003 | 1.6388e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.07 | 0.56 |
| tblVehicleEF | LDT2 | 0.09 | 0.35 |
| tblVehicleEF | LDT2 | 3.3270e-003 | 3.1360e-003 |
| tblVehicleEF | LDT2 | 7.9400e-004 | 6.8324e-004 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.07 | 0.56 |
| tblVehicleEF | LDT2 | 0.10 | 0.38 |
| tblVehicleEF | LHD1 | 4.9370e-003 | 4.6112e-003 |
| tblVehicleEF | LHD1 | 0.01 | 5.8134e-003 |
| tblVehicleEF | LHD1 | 0.02 | 0.01 |
| tblVehicleEF | LHD1 | 0.14 | 0.17 |
| tblVehicleEF | LHD1 | 0.89 | 0.72 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 2.46 | 0.98 |
| tblVehicleEF | LHD1 | 9.24 | 9.34 |
| tblVehicleEF | LHD1 | 594.50 | 630.59 |
| tblVehicleEF | LHD1 | 29.36 | 10.26 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 1.76 | 1.34 |
| tblVehicleEF | LHD1 | 0.93 | 0.29 |
| tblVehicleEF | LHD1 | 9.7800e-004 | 1.0028e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.9600e-004 | 2.4591e-004 |
| tblVehicleEF | LHD1 | 9.3500e-004 | 9.5939e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.03 |
| tblVehicleEF | LHD1 | 2.5610e-003 | 2.5138e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.2300e-004 | 2.2610e-004 |
| tblVehicleEF | LHD1 | 2.3310e-003 | 1.9407e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.5510e-003 | 1.2754e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.06 |
| tblVehicleEF | LHD1 | 0.33 | 0.57 |
| tblVehicleEF | LHD1 | 0.24 | 0.07 |
| tblVehicleEF | LHD1 | 9.2000e-005 | 9.0201e-005 |
| tblVehicleEF | LHD1 | 5.8250e-003 | 6.1318e-003 |
| tblVehicleEF | LHD1 | 3.4000e-004 | 1.0153e-004 |
| tblVehicleEF | LHD1 | 2.3310e-003 | 1.9407e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 1.5510e-003 | 1.2754e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 0.33 | 0.57 |
| tblVehicleEF | LHD1 | 0.27 | 0.08 |
| tblVehicleEF | LHD1 | 4.9370e-003 | 4.6252e-003 |
| tblVehicleEF | LHD1 | 0.01 | 5.9393e-003 |
| tblVehicleEF | LHD1 | 0.02 | 0.01 |
| tblVehicleEF | LHD1 | 0.14 | 0.17 |
| tblVehicleEF | LHD1 | 0.91 | 0.74 |
| tblVehicleEF | LHD1 | 2.31 | 0.92 |
| tblVehicleEF | LHD1 | 9.24 | 9.34 |
| tblVehicleEF | LHD1 | 594.50 | 630.61 |
| tblVehicleEF | LHD1 | 29.36 | 10.15 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 1.68 | 1.28 |
| tblVehicleEF | LHD1 | 0.87 | 0.27 |
| tblVehicleEF | LHD1 | 9.7800e-004 | 1.0028e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.9600e-004 | 2.4591e-004 |
| tblVehicleEF | LHD1 | 9.3500e-004 | 9.5939e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.03 |
| tblVehicleEF | LHD1 | 2.5610e-003 | 2.5138e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.2300e-004 | 2.2610e-004 |
| tblVehicleEF | LHD1 | 3.6270e-003 | 3.0317e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 2.5770e-003 | 2.1332e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.08 | 0.06 |
| tblVehicleEF | LHD1 | 0.31 | 0.55 |
| tblVehicleEF | LHD1 | 0.23 | 0.07 |
| tblVehicleEF | LHD1 | 9.2000e-005 | 9.0201e-005 |
| tblVehicleEF | LHD1 | 5.8250e-003 | 6.1320e-003 |
| tblVehicleEF | LHD1 | 3.3700e-004 | 1.0049e-004 |
| tblVehicleEF | LHD1 | 3.6270e-003 | 3.0317e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.03 |
| tblVehicleEF | LHD1 | 2.5770e-003 | 2.1332e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.31 | 0.55 |
| tblVehicleEF | LHD1 | 0.25 | 0.08 |
| tblVehicleEF | LHD1 | 4.9370e-003 | 4.6017e-003 |
| tblVehicleEF | LHD1 | 0.01 | 5.7328e-003 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 0.14 | 0.17 |
| tblVehicleEF | LHD1 | 0.88 | 0.71 |
| tblVehicleEF | LHD1 | 2.57 | 1.02 |
| tblVehicleEF | LHD1 | 9.24 | 9.34 |
| tblVehicleEF | LHD1 | 594.50 | 630.57 |
| tblVehicleEF | LHD1 | 29.36 | 10.34 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 1.75 | 1.34 |
| tblVehicleEF | LHD1 | 0.97 | 0.30 |
| tblVehicleEF | LHD1 | 9.7800e-004 | 1.0028e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.9600e-004 | 2.4591e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LHD1 | 9.3500e-004 | 9.5939e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.03 |
| tblVehicleEF | LHD1 | 2.5610e-003 | 2.5138e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.2300e-004 | 2.2610e-004 |
| tblVehicleEF | LHD1 | 1.6050e-003 | 1.3295e-003 |
| tblVehicleEF | LHD1 | 0.11 | 0.09 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.0860e-003 | 8.8957e-004 |
| tblVehicleEF | LHD1 | 0.08 | 0.06 |
| tblVehicleEF | LHD1 | 0.36 | 0.63 |
| tblVehicleEF | LHD1 | 0.25 | 0.08 |
| tblVehicleEF | LHD1 | 9.2000e-005 | 9.0201e-005 |
| tblVehicleEF | LHD1 | 5.8250e-003 | 6.1316e-003 |
| tblVehicleEF | LHD1 | 3.4200e-004 | 1.0228e-004 |
| tblVehicleEF | LHD1 | 1.6050e-003 | 1.3295e-003 |
| tblVehicleEF | LHD1 | 0.11 | 0.09 |
| tblVehicleEF | LHD1 | 0.02 | 0.03 |
| tblVehicleEF | LHD1 | 1.0860e-003 | 8.8957e-004 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 0.36 | 0.63 |
| tblVehicleEF | LHD1 | 0.28 | 0.08 |
| tblVehicleEF | LHD2 | 3.7440e-003 | 3.3444e-003 |
| tblVehicleEF | LHD2 | 3.9330e-003 | 3.8421e-003 |
| tblVehicleEF | LHD2 | 7.9340e-003 | 9.4194e-003 |
| tblVehicleEF | LHD2 | 0.13 | 0.14 |
| tblVehicleEF | LHD2 | 0.38 | 0.47 |
| tblVehicleEF | LHD2 | 1.22 | 0.62 |
| tblVehicleEF | LHD2 | 13.88 | 14.34 |
| tblVehicleEF | LHD2 | 610.70 | 644.38 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 26.49 | 7.93 |
| tblVehicleEF | LHD2 | 0.10 | 0.11 |
| tblVehicleEF | LHD2 | 1.05 | 1.33 |
| tblVehicleEF | LHD2 | 0.56 | 0.20 |
| tblVehicleEF | LHD2 | 1.1870e-003 | 1.3895e-003 |
| tblVehicleEF | LHD2 | 0.09 | 0.09 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.9100e-004 | 1.2193e-004 |
| tblVehicleEF | LHD2 | 1.1350e-003 | 1.3294e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.6867e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.6000e-004 | 1.1211e-004 |
| tblVehicleEF | LHD2 | 8.5500e-004 | 1.0186e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.1053e-004 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.08 | 0.28 |
| tblVehicleEF | LHD2 | 0.11 | 0.05 |
| tblVehicleEF | LHD2 | 1.3600e-004 | 1.3705e-004 |
| tblVehicleEF | LHD2 | 5.9470e-003 | 6.2181e-003 |
| tblVehicleEF | LHD2 | 2.8700e-004 | 7.8477e-005 |
| tblVehicleEF | LHD2 | 8.5500e-004 | 1.0186e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.1053e-004 |
| tblVehicleEF | LHD2 | 0.06 | 0.07 |
| tblVehicleEF | LHD2 | 0.08 | 0.28 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.12 | 0.05 |
| tblVehicleEF | LHD2 | 3.7440e-003 | 3.3544e-003 |
| tblVehicleEF | LHD2 | 3.9880e-003 | 3.8830e-003 |
| tblVehicleEF | LHD2 | 7.5730e-003 | 8.9934e-003 |
| tblVehicleEF | LHD2 | 0.13 | 0.14 |
| tblVehicleEF | LHD2 | 0.38 | 0.47 |
| tblVehicleEF | LHD2 | 1.15 | 0.59 |
| tblVehicleEF | LHD2 | 13.88 | 14.34 |
| tblVehicleEF | LHD2 | 610.70 | 644.39 |
| tblVehicleEF | LHD2 | 26.49 | 7.86 |
| tblVehicleEF | LHD2 | 0.10 | 0.11 |
| tblVehicleEF | LHD2 | 1.00 | 1.27 |
| tblVehicleEF | LHD2 | 0.53 | 0.19 |
| tblVehicleEF | LHD2 | 1.1870e-003 | 1.3895e-003 |
| tblVehicleEF | LHD2 | 0.09 | 0.09 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.9100e-004 | 1.2193e-004 |
| tblVehicleEF | LHD2 | 1.1350e-003 | 1.3294e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.6867e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.6000e-004 | 1.1211e-004 |
| tblVehicleEF | LHD2 | 1.3220e-003 | 1.5812e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 1.0510e-003 | 1.1802e-003 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.08 | 0.27 |
| tblVehicleEF | LHD2 | 0.10 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 1.3600e-004 | 1.3705e-004 |
| tblVehicleEF | LHD2 | 5.9470e-003 | 6.2181e-003 |
| tblVehicleEF | LHD2 | 2.8600e-004 | 7.7822e-005 |
| tblVehicleEF | LHD2 | 1.3220e-003 | 1.5812e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 1.0510e-003 | 1.1802e-003 |
| tblVehicleEF | LHD2 | 0.06 | 0.07 |
| tblVehicleEF | LHD2 | 0.08 | 0.27 |
| tblVehicleEF | LHD2 | 0.11 | 0.05 |
| tblVehicleEF | LHD2 | 3.7440e-003 | 3.3375e-003 |
| tblVehicleEF | LHD2 | 3.8980e-003 | 3.8156e-003 |
| tblVehicleEF | LHD2 | 8.1850e-003 | 9.7140e-003 |
| tblVehicleEF | LHD2 | 0.13 | 0.14 |
| tblVehicleEF | LHD2 | 0.38 | 0.46 |
| tblVehicleEF | LHD2 | 1.27 | 0.65 |
| tblVehicleEF | LHD2 | 13.88 | 14.34 |
| tblVehicleEF | LHD2 | 610.70 | 644.37 |
| tblVehicleEF | LHD2 | 26.49 | 7.98 |
| tblVehicleEF | LHD2 | 0.10 | 0.11 |
| tblVehicleEF | LHD2 | 1.04 | 1.33 |
| tblVehicleEF | LHD2 | 0.58 | 0.21 |
| tblVehicleEF | LHD2 | 1.1870e-003 | 1.3895e-003 |
| tblVehicleEF | LHD2 | 0.09 | 0.09 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.9100e-004 | 1.2193e-004 |
| tblVehicleEF | LHD2 | 1.1350e-003 | 1.3294e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.6867e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.6000e-004 | 1.1211e-004 |
| tblVehicleEF | LHD2 | 5.9900e-004 | 7.0943e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 4.5200e-004 | 5.0222e-004 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.09 | 0.31 |
| tblVehicleEF | LHD2 | 0.11 | 0.05 |
| tblVehicleEF | LHD2 | 1.3600e-004 | 1.3705e-004 |
| tblVehicleEF | LHD2 | 5.9470e-003 | 6.2180e-003 |
| tblVehicleEF | LHD2 | 2.8800e-004 | 7.8944e-005 |
| tblVehicleEF | LHD2 | 5.9900e-004 | 7.0943e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 4.5200e-004 | 5.0222e-004 |
| tblVehicleEF | LHD2 | 0.06 | 0.07 |
| tblVehicleEF | LHD2 | 0.09 | 0.31 |
| tblVehicleEF | LHD2 | 0.12 | 0.05 |
| tblVehicleEF | MCY | 0.47 | 0.35 |
| tblVehicleEF | MCY | 0.16 | 0.25 |
| tblVehicleEF | MCY | 19.34 | 19.66 |
| tblVehicleEF | MCY | 9.92 | 8.77 |
| tblVehicleEF | MCY | 174.45 | 213.87 |
| tblVehicleEF | MCY | 46.35 | 61.79 |
| tblVehicleEF | MCY | 1.14 | 1.15 |
| tblVehicleEF | MCY | 0.32 | 0.27 |
| tblVehicleEF | MCY | 0.01 | 0.01 |
| tblVehicleEF | MCY | 4.0000e-003 | 4.0000e-003 |
| tblVehicleEF | MCY | 2.1560e-003 | 2.0850e-003 |

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|---|---|---|---|
| tblVehicleEF | MCY | 3.9760e-003 | 3.2555e-003 |
| tblVehicleEF | MCY | 5.0400e-003 | 5.0400e-003 |
| tblVehicleEF | MCY | 1.0000e-003 | 1.0000e-003 |
| tblVehicleEF | MCY | 2.0170e-003 | 1.9515e-003 |
| tblVehicleEF | MCY | 3.7510e-003 | 3.0707e-003 |
| tblVehicleEF | MCY | 0.91 | 0.93 |
| tblVehicleEF | MCY | 0.78 | 0.80 |
| tblVehicleEF | MCY | 0.60 | 0.61 |
| tblVehicleEF | MCY | 2.38 | 2.40 |
| tblVehicleEF | MCY | 1.03 | 2.28 |
| tblVehicleEF | MCY | 2.20 | 1.94 |
| tblVehicleEF | MCY | 2.1310e-003 | 2.1164e-003 |
| tblVehicleEF | MCY | 6.9000e-004 | 6.1144e-004 |
| tblVehicleEF | MCY | 0.91 | 0.93 |
| tblVehicleEF | MCY | 0.78 | 0.80 |
| tblVehicleEF | MCY | 0.60 | 0.61 |
| tblVehicleEF | MCY | 2.93 | 2.95 |
| tblVehicleEF | MCY | 1.03 | 2.28 |
| tblVehicleEF | MCY | 2.39 | 2.11 |
| tblVehicleEF | MCY | 0.45 | 0.34 |
| tblVehicleEF | MCY | 0.14 | 0.21 |
| tblVehicleEF | MCY | 18.10 | 18.38 |
| tblVehicleEF | MCY | 8.79 | 7.74 |
| tblVehicleEF | MCY | 174.45 | 211.51 |
| tblVehicleEF | MCY | 46.35 | 59.17 |
| tblVehicleEF | MCY | 1.01 | 1.01 |
| tblVehicleEF | MCY | 0.30 | 0.25 |
| tblVehicleEF | MCY | 0.01 | 0.01 |
| tblVehicleEF | MCY | 4.0000e-003 | 4.0000e-003 |
| tblVehicleEF | MCY | 2.1560e-003 | 2.0850e-003 |

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|---|---|---|---|
| tblVehicleEF | MCY | 3.9760e-003 | 3.2555e-003 |
| tblVehicleEF | MCY | 5.0400e-003 | 5.0400e-003 |
| tblVehicleEF | MCY | 1.0000e-003 | 1.0000e-003 |
| tblVehicleEF | MCY | 2.0170e-003 | 1.9515e-003 |
| tblVehicleEF | MCY | 3.7510e-003 | 3.0707e-003 |
| tblVehicleEF | MCY | 1.59 | 1.61 |
| tblVehicleEF | MCY | 0.85 | 0.87 |
| tblVehicleEF | MCY | 1.23 | 1.24 |
| tblVehicleEF | MCY | 2.29 | 2.30 |
| tblVehicleEF | MCY | 0.96 | 2.10 |
| tblVehicleEF | MCY | 1.88 | 1.65 |
| tblVehicleEF | MCY | 2.1080e-003 | 2.0930e-003 |
| tblVehicleEF | MCY | 6.6200e-004 | 5.8549e-004 |
| tblVehicleEF | MCY | 1.59 | 1.61 |
| tblVehicleEF | MCY | 0.85 | 0.87 |
| tblVehicleEF | MCY | 1.23 | 1.24 |
| tblVehicleEF | MCY | 2.82 | 2.84 |
| tblVehicleEF | MCY | 0.96 | 2.10 |
| tblVehicleEF | MCY | 2.04 | 1.79 |
| tblVehicleEF | MCY | 0.48 | 0.35 |
| tblVehicleEF | MCY | 0.18 | 0.27 |
| tblVehicleEF | MCY | 20.36 | 20.72 |
| tblVehicleEF | MCY | 10.73 | 9.54 |
| tblVehicleEF | MCY | 174.45 | 215.80 |
| tblVehicleEF | MCY | 46.35 | 63.69 |
| tblVehicleEF | MCY | 1.17 | 1.17 |
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 0.01 | 0.01 |
| tblVehicleEF | MCY | 4.0000e-003 | 4.0000e-003 |
| tblVehicleEF | MCY | 2.1560e-003 | 2.0850e-003 |

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|---|---|---|---|
| tblVehicleEF | MCY | 3.9760e-003 | 3.2555e-003 |
| tblVehicleEF | MCY | 5.0400e-003 | 5.0400e-003 |
| tblVehicleEF | MCY | 1.0000e-003 | 1.0000e-003 |
| tblVehicleEF | MCY | 2.0170e-003 | 1.9515e-003 |
| tblVehicleEF | MCY | 3.7510e-003 | 3.0707e-003 |
| tblVehicleEF | MCY | 0.58 | 0.60 |
| tblVehicleEF | MCY | 0.98 | 0.99 |
| tblVehicleEF | MCY | 0.35 | 0.36 |
| tblVehicleEF | MCY | 2.44 | 2.47 |
| tblVehicleEF | MCY | 1.21 | 2.67 |
| tblVehicleEF | MCY | 2.42 | 2.15 |
| tblVehicleEF | MCY | 2.1490e-003 | 2.1355e-003 |
| tblVehicleEF | MCY | 7.1000e-004 | 6.3023e-004 |
| tblVehicleEF | MCY | 0.58 | 0.60 |
| tblVehicleEF | MCY | 0.98 | 0.99 |
| tblVehicleEF | MCY | 0.35 | 0.36 |
| tblVehicleEF | MCY | 3.01 | 3.03 |
| tblVehicleEF | MCY | 1.21 | 2.67 |
| tblVehicleEF | MCY | 2.63 | 2.34 |
| tblVehicleEF | MDV | 9.8100e-003 | 4.7720e-003 |
| tblVehicleEF | MDV | 0.02 | 0.09 |
| tblVehicleEF | MDV | 1.08 | 0.98 |
| tblVehicleEF | MDV | 2.76 | 3.29 |
| tblVehicleEF | MDV | 460.13 | 396.01 |
| tblVehicleEF | MDV | 104.17 | 84.70 |
| tblVehicleEF | MDV | 0.12 | 0.10 |
| tblVehicleEF | MDV | 0.25 | 0.37 |
| tblVehicleEF | MDV | 0.04 | 0.04 |
| tblVehicleEF | MDV | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | MDV | 1.8790e-003 | 1.6314e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.3940e-003 | 1.9008e-003 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | MDV | 1.7320e-003 | 1.5053e-003 |
| tblVehicleEF | MDV | 2.2010e-003 | 1.7480e-003 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.18 | 0.16 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.11 | 0.50 |
| tblVehicleEF | MDV | 0.21 | 0.43 |
| tblVehicleEF | MDV | 4.6070e-003 | 3.9145e-003 |
| tblVehicleEF | MDV | 1.0900e-003 | 8.3815e-004 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.18 | 0.16 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.04 | 0.03 |
| tblVehicleEF | MDV | 0.11 | 0.50 |
| tblVehicleEF | MDV | 0.23 | 0.47 |
| tblVehicleEF | MDV | 0.01 | 5.1014e-003 |
| tblVehicleEF | MDV | 0.01 | 0.08 |
| tblVehicleEF | MDV | 1.17 | 1.06 |
| tblVehicleEF | MDV | 2.27 | 2.69 |
| tblVehicleEF | MDV | 479.42 | 407.34 |
| tblVehicleEF | MDV | 104.17 | 83.55 |
| tblVehicleEF | MDV | 0.11 | 0.08 |
| tblVehicleEF | MDV | 0.22 | 0.33 |
| tblVehicleEF | MDV | 0.04 | 0.04 |
| tblVehicleEF | MDV | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | MDV | 1.8790e-003 | 1.6314e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.3940e-003 | 1.9008e-003 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | MDV | 1.7320e-003 | 1.5053e-003 |
| tblVehicleEF | MDV | 2.2010e-003 | 1.7480e-003 |
| tblVehicleEF | MDV | 0.09 | 0.12 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.11 | 0.15 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.10 | 0.46 |
| tblVehicleEF | MDV | 0.18 | 0.37 |
| tblVehicleEF | MDV | 4.8010e-003 | 4.0267e-003 |
| tblVehicleEF | MDV | 1.0810e-003 | 8.2684e-004 |
| tblVehicleEF | MDV | 0.09 | 0.12 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.11 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.03 |
| tblVehicleEF | MDV | 0.10 | 0.46 |
| tblVehicleEF | MDV | 0.20 | 0.41 |
| tblVehicleEF | MDV | 9.6530e-003 | 4.6634e-003 |
| tblVehicleEF | MDV | 0.02 | 0.09 |
| tblVehicleEF | MDV | 1.07 | 0.97 |
| tblVehicleEF | MDV | 3.07 | 3.67 |
| tblVehicleEF | MDV | 456.48 | 393.86 |
| tblVehicleEF | MDV | 104.17 | 85.42 |
| tblVehicleEF | MDV | 0.13 | 0.10 |
| tblVehicleEF | MDV | 0.26 | 0.39 |
| tblVehicleEF | MDV | 0.04 | 0.04 |
| tblVehicleEF | MDV | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | MDV | 1.8790e-003 | 1.6314e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.3940e-003 | 1.9008e-003 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | MDV | 1.7320e-003 | 1.5053e-003 |
| tblVehicleEF | MDV | 2.2010e-003 | 1.7480e-003 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.05 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.13 | 0.61 |
| tblVehicleEF | MDV | 0.22 | 0.46 |
| tblVehicleEF | MDV | 4.5700e-003 | 3.8933e-003 |
| tblVehicleEF | MDV | 1.0950e-003 | 8.4527e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.05 | 0.06 |
| tblVehicleEF | MDV | 0.04 | 0.03 |
| tblVehicleEF | MDV | 0.13 | 0.61 |
| tblVehicleEF | MDV | 0.25 | 0.51 |
| tblVehicleEF | MH | 0.03 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 2.35 | 1.23 |
| tblVehicleEF | MH | 5.87 | 2.09 |
| tblVehicleEF | MH | 1,089.54 | 1,486.99 |
| tblVehicleEF | MH | 58.99 | 19.05 |
| tblVehicleEF | MH | 1.50 | 1.49 |
| tblVehicleEF | MH | 0.87 | 0.25 |
| tblVehicleEF | MH | 0.13 | 0.13 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MH | 1.0640e-003 | 2.4477e-004 |
| tblVehicleEF | MH | 0.06 | 0.06 |
| tblVehicleEF | MH | 3.2290e-003 | 3.2754e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.7800e-004 | 2.2506e-004 |
| tblVehicleEF | MH | 0.91 | 0.74 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.43 | 0.36 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.54 |
| tblVehicleEF | MH | 0.34 | 0.10 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.9200e-004 | 1.8851e-004 |
| tblVehicleEF | MH | 0.91 | 0.74 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.43 | 0.36 |
| tblVehicleEF | MH | 0.13 | 0.08 |
| tblVehicleEF | MH | 0.03 | 1.54 |
| tblVehicleEF | MH | 0.37 | 0.11 |
| tblVehicleEF | MH | 0.03 | 0.01 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 2.44 | 1.27 |
| tblVehicleEF | MH | 5.42 | 1.94 |
| tblVehicleEF | MH | 1,089.54 | 1,487.06 |
| tblVehicleEF | MH | 58.99 | 18.79 |
| tblVehicleEF | MH | 1.40 | 1.40 |
| tblVehicleEF | MH | 0.82 | 0.24 |
| tblVehicleEF | MH | 0.13 | 0.13 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MH | 1.0640e-003 | 2.4477e-004 |
| tblVehicleEF | MH | 0.06 | 0.06 |
| tblVehicleEF | MH | 3.2290e-003 | 3.2754e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.7800e-004 | 2.2506e-004 |
| tblVehicleEF | MH | 1.36 | 1.10 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.71 | 0.59 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.50 |
| tblVehicleEF | MH | 0.32 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.8500e-004 | 1.8593e-004 |
| tblVehicleEF | MH | 1.36 | 1.10 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.71 | 0.59 |
| tblVehicleEF | MH | 0.13 | 0.08 |
| tblVehicleEF | MH | 0.03 | 1.50 |
| tblVehicleEF | MH | 0.35 | 0.10 |
| tblVehicleEF | MH | 0.03 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 2.30 | 1.21 |
| tblVehicleEF | MH | 6.13 | 2.18 |
| tblVehicleEF | MH | 1,089.54 | 1,486.95 |
| tblVehicleEF | MH | 58.99 | 19.20 |
| tblVehicleEF | MH | 1.50 | 1.48 |
| tblVehicleEF | MH | 0.90 | 0.26 |
| tblVehicleEF | MH | 0.13 | 0.13 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MH | 1.0640e-003 | 2.4477e-004 |
| tblVehicleEF | MH | 0.06 | 0.06 |
| tblVehicleEF | MH | 3.2290e-003 | 3.2754e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.7800e-004 | 2.2506e-004 |
| tblVehicleEF | MH | 0.65 | 0.53 |
| tblVehicleEF | MH | 0.10 | 0.08 |
| tblVehicleEF | MH | 0.30 | 0.25 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.66 |
| tblVehicleEF | MH | 0.35 | 0.10 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.9700e-004 | 1.9004e-004 |
| tblVehicleEF | MH | 0.65 | 0.53 |
| tblVehicleEF | MH | 0.10 | 0.08 |
| tblVehicleEF | MH | 0.30 | 0.25 |
| tblVehicleEF | MH | 0.12 | 0.08 |
| tblVehicleEF | MH | 0.03 | 1.66 |
| tblVehicleEF | MH | 0.39 | 0.11 |
| tblVehicleEF | MHD | 0.02 | 2.9438e-003 |
| tblVehicleEF | MHD | 3.1660e-003 | 1.3420e-003 |
| tblVehicleEF | MHD | 0.05 | 8.0151e-003 |
| tblVehicleEF | MHD | 0.32 | 0.34 |
| tblVehicleEF | MHD | 0.27 | 0.19 |
| tblVehicleEF | MHD | 5.74 | 0.94 |
| tblVehicleEF | MHD | 148.81 | 68.40 |
| tblVehicleEF | MHD | 1,108.13 | 950.57 |
| tblVehicleEF | MHD | 54.44 | 7.84 |
| tblVehicleEF | MHD | 0.40 | 0.40 |
| tblVehicleEF | MHD | 0.66 | 1.01 |

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| tblVehicleEF | MHD | 11.56 | 1.78 |
| tblVehicleEF | MHD | 1.1900e-004 | 3.6707e-004 |
| tblVehicleEF | MHD | 0.13 | 0.13 |
| tblVehicleEF | MHD | 0.01 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-003 | 7.3550e-003 |
| tblVehicleEF | MHD | 7.8600e-004 | 9.4742e-005 |
| tblVehicleEF | MHD | 1.1400e-004 | 3.5119e-004 |
| tblVehicleEF | MHD | 0.06 | 0.06 |
| tblVehicleEF | MHD | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | MHD | 2.7130e-003 | 7.0330e-003 |
| tblVehicleEF | MHD | 7.2300e-004 | 8.7112e-005 |
| tblVehicleEF | MHD | 8.0000e-004 | 3.2663e-004 |
| tblVehicleEF | MHD | 0.04 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 5.6300e-004 | 2.2475e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.34 | 0.04 |
| tblVehicleEF | MHD | 1.4310e-003 | 6.4864e-004 |
| tblVehicleEF | MHD | 0.01 | 9.0489e-003 |
| tblVehicleEF | MHD | 6.4500e-004 | 7.7553e-005 |
| tblVehicleEF | MHD | 8.0000e-004 | 3.2663e-004 |
| tblVehicleEF | MHD | 0.04 | 0.02 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 5.6300e-004 | 2.2475e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.37 | 0.05 |
| tblVehicleEF | MHD | 0.01 | 2.8053e-003 |
| tblVehicleEF | MHD | 3.2250e-003 | 1.3745e-003 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.05 | 7.6350e-003 |
| tblVehicleEF | MHD | 0.23 | 0.30 |
| tblVehicleEF | MHD | 0.27 | 0.19 |
| tblVehicleEF | MHD | 5.36 | 0.88 |
| tblVehicleEF | MHD | 157.62 | 68.37 |
| tblVehicleEF | MHD | 1,108.13 | 950.57 |
| tblVehicleEF | MHD | 54.44 | 7.73 |
| tblVehicleEF | MHD | 0.42 | 0.39 |
| tblVehicleEF | MHD | 0.63 | 0.97 |
| tblVehicleEF | MHD | 11.51 | 1.78 |
| tblVehicleEF | MHD | 1.0000e-004 | 3.1246e-004 |
| tblVehicleEF | MHD | 0.13 | 0.13 |
| tblVehicleEF | MHD | 0.01 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-003 | 7.3550e-003 |
| tblVehicleEF | MHD | 7.8600e-004 | 9.4742e-005 |
| tblVehicleEF | MHD | 9.6000e-005 | 2.9894e-004 |
| tblVehicleEF | MHD | 0.06 | 0.06 |
| tblVehicleEF | MHD | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | MHD | 2.7130e-003 | 7.0330e-003 |
| tblVehicleEF | MHD | 7.2300e-004 | 8.7112e-005 |
| tblVehicleEF | MHD | 1.2610e-003 | 5.1678e-004 |
| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 9.5700e-004 | 3.8510e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.32 | 0.04 |
| tblVehicleEF | MHD | 1.5140e-003 | 6.4846e-004 |
| tblVehicleEF | MHD | 0.01 | 9.0489e-003 |
| tblVehicleEF | MHD | 6.3800e-004 | 7.6502e-005 |

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|---|---|---|---|
| tblVehicleEF | MHD | 1.2610e-003 | 5.1678e-004 |
| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 9.5700e-004 | 3.8510e-004 |
| tblVehicleEF | MHD | 0.04 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.35 | 0.04 |
| tblVehicleEF | MHD | 0.02 | 3.1420e-003 |
| tblVehicleEF | MHD | 3.1280e-003 | 1.3207e-003 |
| tblVehicleEF | MHD | 0.05 | 8.2677e-003 |
| tblVehicleEF | MHD | 0.44 | 0.40 |
| tblVehicleEF | MHD | 0.27 | 0.19 |
| tblVehicleEF | MHD | 6.01 | 0.98 |
| tblVehicleEF | MHD | 136.63 | 68.44 |
| tblVehicleEF | MHD | 1,108.13 | 950.56 |
| tblVehicleEF | MHD | 54.44 | 7.91 |
| tblVehicleEF | MHD | 0.39 | 0.41 |
| tblVehicleEF | MHD | 0.65 | 1.01 |
| tblVehicleEF | MHD | 11.60 | 1.79 |
| tblVehicleEF | MHD | 1.4400e-004 | 4.4249e-004 |
| tblVehicleEF | MHD | 0.13 | 0.13 |
| tblVehicleEF | MHD | 0.01 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-003 | 7.3550e-003 |
| tblVehicleEF | MHD | 7.8600e-004 | 9.4742e-005 |
| tblVehicleEF | MHD | 1.3800e-004 | 4.2335e-004 |
| tblVehicleEF | MHD | 0.06 | 0.06 |
| tblVehicleEF | MHD | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | MHD | 2.7130e-003 | 7.0330e-003 |
| tblVehicleEF | MHD | 7.2300e-004 | 8.7112e-005 |
| tblVehicleEF | MHD | 5.5100e-004 | 2.2345e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 3.9100e-004 | 1.5547e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.10 |
| tblVehicleEF | MHD | 0.35 | 0.04 |
| tblVehicleEF | MHD | 1.3160e-003 | 6.4885e-004 |
| tblVehicleEF | MHD | 0.01 | 9.0488e-003 |
| tblVehicleEF | MHD | 6.4900e-004 | 7.8304e-005 |
| tblVehicleEF | MHD | 5.5100e-004 | 2.2345e-004 |
| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.9100e-004 | 1.5547e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.10 |
| tblVehicleEF | MHD | 0.39 | 0.05 |
| tblVehicleEF | OBUS | 0.01 | 8.0320e-003 |
| tblVehicleEF | OBUS | 7.8920e-003 | 7.0086e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.38 |
| tblVehicleEF | OBUS | 0.54 | 0.88 |
| tblVehicleEF | OBUS | 5.86 | 2.80 |
| tblVehicleEF | OBUS | 45.17 | 48.22 |
| tblVehicleEF | OBUS | 1,143.07 | 1,333.27 |
| tblVehicleEF | OBUS | 71.14 | 21.22 |
| tblVehicleEF | OBUS | 0.07 | 0.15 |
| tblVehicleEF | OBUS | 0.43 | 0.96 |
| tblVehicleEF | OBUS | 1.65 | 0.73 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.7635e-005 |
| tblVehicleEF | OBUS | 0.13 | 0.13 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 1.8390e-003 | 6.0663e-003 |
| tblVehicleEF | OBUS | 9.1000e-004 | 2.1200e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.5574e-005 |
| tblVehicleEF | OBUS | 0.06 | 0.06 |
| tblVehicleEF | OBUS | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | OBUS | 1.7360e-003 | 5.7873e-003 |
| tblVehicleEF | OBUS | 8.3700e-004 | 1.9493e-004 |
| tblVehicleEF | OBUS | 1.2150e-003 | 1.6978e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 7.0800e-004 | 9.7565e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.30 |
| tblVehicleEF | OBUS | 0.36 | 0.13 |
| tblVehicleEF | OBUS | 4.4400e-004 | 4.6226e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 8.1400e-004 | 2.1000e-004 |
| tblVehicleEF | OBUS | 1.2150e-003 | 1.6978e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 7.0800e-004 | 9.7565e-004 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 0.06 | 0.30 |
| tblVehicleEF | OBUS | 0.39 | 0.14 |
| tblVehicleEF | OBUS | 0.01 | 8.0812e-003 |
| tblVehicleEF | OBUS | 8.1100e-003 | 7.2186e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.38 |
| tblVehicleEF | OBUS | 0.55 | 0.90 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 5.43 | 2.59 |
| tblVehicleEF | OBUS | 46.82 | 47.76 |
| tblVehicleEF | OBUS | 1,143.07 | 1,333.31 |
| tblVehicleEF | OBUS | 71.14 | 20.87 |
| tblVehicleEF | OBUS | 0.07 | 0.15 |
| tblVehicleEF | OBUS | 0.40 | 0.90 |
| tblVehicleEF | OBUS | 1.60 | 0.71 |
| tblVehicleEF | OBUS | 5.0000e-006 | 4.2327e-005 |
| tblVehicleEF | OBUS | 0.13 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 1.8390e-003 | 6.0663e-003 |
| tblVehicleEF | OBUS | 9.1000e-004 | 2.1200e-004 |
| tblVehicleEF | OBUS | 5.0000e-006 | 4.0496e-005 |
| tblVehicleEF | OBUS | 0.06 | 0.06 |
| tblVehicleEF | OBUS | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | OBUS | 1.7360e-003 | 5.7873e-003 |
| tblVehicleEF | OBUS | 8.3700e-004 | 1.9493e-004 |
| tblVehicleEF | OBUS | 1.8320e-003 | 2.5402e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.1930e-003 | 1.6284e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.34 | 0.12 |
| tblVehicleEF | OBUS | 4.5900e-004 | 4.5789e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 8.0700e-004 | 2.0657e-004 |
| tblVehicleEF | OBUS | 1.8320e-003 | 2.5402e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 1.1930e-003 | 1.6284e-003 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.37 | 0.14 |
| tblVehicleEF | OBUS | 0.01 | 7.9838e-003 |
| tblVehicleEF | OBUS | 7.7530e-003 | 6.8757e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.25 | 0.39 |
| tblVehicleEF | OBUS | 0.53 | 0.87 |
| tblVehicleEF | OBUS | 6.11 | 2.92 |
| tblVehicleEF | OBUS | 42.90 | 48.86 |
| tblVehicleEF | OBUS | 1,143.07 | 1,333.24 |
| tblVehicleEF | OBUS | 71.14 | 21.43 |
| tblVehicleEF | OBUS | 0.07 | 0.16 |
| tblVehicleEF | OBUS | 0.43 | 0.96 |
| tblVehicleEF | OBUS | 1.69 | 0.74 |
| tblVehicleEF | OBUS | 8.0000e-006 | 5.4965e-005 |
| tblVehicleEF | OBUS | 0.13 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 1.8390e-003 | 6.0663e-003 |
| tblVehicleEF | OBUS | 9.1000e-004 | 2.1200e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.2587e-005 |
| tblVehicleEF | OBUS | 0.06 | 0.06 |
| tblVehicleEF | OBUS | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | OBUS | 1.7360e-003 | 5.7873e-003 |
| tblVehicleEF | OBUS | 8.3700e-004 | 1.9493e-004 |
| tblVehicleEF | OBUS | 8.7900e-004 | 1.2355e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 5.0000e-004 | 6.8970e-004 |

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| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.37 | 0.14 |
| tblVehicleEF | OBUS | 4.2200e-004 | 4.6829e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 8.1800e-004 | 2.1204e-004 |
| tblVehicleEF | OBUS | 8.7900e-004 | 1.2355e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 5.0000e-004 | 6.8970e-004 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.41 | 0.15 |
| tblVehicleEF | SBUS | 0.85 | 0.05 |
| tblVehicleEF | SBUS | 9.9160e-003 | 0.01 |
| tblVehicleEF | SBUS | 0.06 | 5.4132e-003 |
| tblVehicleEF | SBUS | 8.86 | 2.04 |
| tblVehicleEF | SBUS | 0.59 | 0.97 |
| tblVehicleEF | SBUS | 7.78 | 0.83 |
| tblVehicleEF | SBUS | 1,077.03 | 351.47 |
| tblVehicleEF | SBUS | 1,061.21 | 1,162.54 |
| tblVehicleEF | SBUS | 59.15 | 4.08 |
| tblVehicleEF | SBUS | 8.20 | 3.71 |
| tblVehicleEF | SBUS | 3.80 | 6.27 |
| tblVehicleEF | SBUS | 11.25 | 0.56 |
| tblVehicleEF | SBUS | 7.8510e-003 | 4.6090e-003 |
| tblVehicleEF | SBUS | 0.74 | 0.74 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 1.0800e-003 | 5.1408e-005 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 7.5120e-003 | 4.4096e-003 |
| tblVehicleEF | SBUS | 0.32 | 0.32 |
| tblVehicleEF | SBUS | 2.6470e-003 | 2.7572e-003 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 9.9300e-004 | 4.7268e-005 |
| tblVehicleEF | SBUS | 2.4650e-003 | 7.6204e-004 |
| tblVehicleEF | SBUS | 0.02 | 8.7447e-003 |
| tblVehicleEF | SBUS | 1.06 | 0.24 |
| tblVehicleEF | SBUS | 1.3190e-003 | 3.8868e-004 |
| tblVehicleEF | SBUS | 0.10 | 0.15 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |
| tblVehicleEF | SBUS | 0.38 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.3433e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 7.2500e-004 | 4.0401e-005 |
| tblVehicleEF | SBUS | 2.4650e-003 | 7.6204e-004 |
| tblVehicleEF | SBUS | 0.02 | 8.7447e-003 |
| tblVehicleEF | SBUS | 1.54 | 0.34 |
| tblVehicleEF | SBUS | 1.3190e-003 | 3.8868e-004 |
| tblVehicleEF | SBUS | 0.11 | 0.18 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |
| tblVehicleEF | SBUS | 0.42 | 0.04 |
| tblVehicleEF | SBUS | 0.85 | 0.05 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.05 | 4.6952e-003 |
| tblVehicleEF | SBUS | 8.76 | 1.99 |
| tblVehicleEF | SBUS | 0.60 | 0.99 |
| tblVehicleEF | SBUS | 6.05 | 0.64 |
| tblVehicleEF | SBUS | 1,123.69 | 363.73 |
| tblVehicleEF | SBUS | 1,061.21 | 1,162.57 |

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| tblVehicleEF | SBUS | 59.15 | 3.78 |
| tblVehicleEF | SBUS | 8.46 | 3.81 |
| tblVehicleEF | SBUS | 3.63 | 5.99 |
| tblVehicleEF | SBUS | 11.22 | 0.56 |
| tblVehicleEF | SBUS | 6.6190e-003 | 3.8928e-003 |
| tblVehicleEF | SBUS | 0.74 | 0.74 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 1.0800e-003 | 5.1408e-005 |
| tblVehicleEF | SBUS | 6.3320e-003 | 3.7244e-003 |
| tblVehicleEF | SBUS | 0.32 | 0.32 |
| tblVehicleEF | SBUS | 2.6470e-003 | 2.7572e-003 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 9.9300e-004 | 4.7268e-005 |
| tblVehicleEF | SBUS | 3.7610e-003 | 1.1454e-003 |
| tblVehicleEF | SBUS | 0.02 | 8.9865e-003 |
| tblVehicleEF | SBUS | 1.06 | 0.23 |
| tblVehicleEF | SBUS | 2.2720e-003 | 6.6170e-004 |
| tblVehicleEF | SBUS | 0.10 | 0.15 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |
| tblVehicleEF | SBUS | 0.33 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.4591e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 6.9600e-004 | 3.7375e-005 |
| tblVehicleEF | SBUS | 3.7610e-003 | 1.1454e-003 |
| tblVehicleEF | SBUS | 0.02 | 8.9865e-003 |
| tblVehicleEF | SBUS | 1.54 | 0.33 |
| tblVehicleEF | SBUS | 2.2720e-003 | 6.6170e-004 |
| tblVehicleEF | SBUS | 0.11 | 0.18 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 0.37 | 0.03 |
| tblVehicleEF | SBUS | 0.85 | 0.05 |
| tblVehicleEF | SBUS | 9.8040e-003 | 0.01 |
| tblVehicleEF | SBUS | 0.06 | 5.7989e-003 |
| tblVehicleEF | SBUS | 9.00 | 2.11 |
| tblVehicleEF | SBUS | 0.58 | 0.96 |
| tblVehicleEF | SBUS | 8.73 | 0.93 |
| tblVehicleEF | SBUS | 1,012.61 | 334.54 |
| tblVehicleEF | SBUS | 1,061.21 | 1,162.52 |
| tblVehicleEF | SBUS | 59.15 | 4.25 |
| tblVehicleEF | SBUS | 7.84 | 3.57 |
| tblVehicleEF | SBUS | 3.78 | 6.23 |
| tblVehicleEF | SBUS | 11.27 | 0.56 |
| tblVehicleEF | SBUS | 9.5530e-003 | 5.5980e-003 |
| tblVehicleEF | SBUS | 0.74 | 0.74 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 1.0800e-003 | 5.1408e-005 |
| tblVehicleEF | SBUS | 9.1400e-003 | 5.3558e-003 |
| tblVehicleEF | SBUS | 0.32 | 0.32 |
| tblVehicleEF | SBUS | 2.6470e-003 | 2.7572e-003 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 9.9300e-004 | 4.7268e-005 |
| tblVehicleEF | SBUS | 1.7660e-003 | 5.5432e-004 |
| tblVehicleEF | SBUS | 0.02 | 9.1896e-003 |
| tblVehicleEF | SBUS | 1.07 | 0.24 |
| tblVehicleEF | SBUS | 9.2600e-004 | 2.7406e-004 |
| tblVehicleEF | SBUS | 0.10 | 0.15 |
| tblVehicleEF | SBUS | 0.02 | 0.07 |
| tblVehicleEF | SBUS | 0.41 | 0.03 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 9.9660e-003 | 3.1833e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 7.4100e-004 | 4.2067e-005 |
| tblVehicleEF | SBUS | 1.7660e-003 | 5.5432e-004 |
| tblVehicleEF | SBUS | 0.02 | 9.1896e-003 |
| tblVehicleEF | SBUS | 1.54 | 0.34 |
| tblVehicleEF | SBUS | 9.2600e-004 | 2.7406e-004 |
| tblVehicleEF | SBUS | 0.11 | 0.18 |
| tblVehicleEF | SBUS | 0.02 | 0.07 |
| tblVehicleEF | SBUS | 0.45 | 0.04 |
| tblVehicleEF | UBUS | 1.74 | 2.90 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 7.10 | 22.23 |
| tblVehicleEF | UBUS | 9.59 | 1.69 |
| tblVehicleEF | UBUS | 1,797.09 | 1,600.97 |
| tblVehicleEF | UBUS | 129.74 | 19.53 |
| tblVehicleEF | UBUS | 3.37 | 0.39 |
| tblVehicleEF | UBUS | 13.14 | 0.19 |
| tblVehicleEF | UBUS | 0.53 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.03 | 3.6752e-003 |
| tblVehicleEF | UBUS | 1.2290e-003 | 1.6392e-004 |
| tblVehicleEF | UBUS | 0.23 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.03 | 3.5044e-003 |
| tblVehicleEF | UBUS | 1.1300e-003 | 1.5072e-004 |
| tblVehicleEF | UBUS | 2.2290e-003 | 8.3852e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.6920e-003 | 7.0686e-004 |
| tblVehicleEF | UBUS | 0.31 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 9.5050e-003 | 0.08 |
| tblVehicleEF | UBUS | 0.73 | 0.10 |
| tblVehicleEF | UBUS | 8.3470e-003 | 5.6654e-003 |
| tblVehicleEF | UBUS | 1.4700e-003 | 1.9329e-004 |
| tblVehicleEF | UBUS | 2.2290e-003 | 8.3852e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.6920e-003 | 7.0686e-004 |
| tblVehicleEF | UBUS | 2.10 | 2.97 |
| tblVehicleEF | UBUS | 9.5050e-003 | 0.08 |
| tblVehicleEF | UBUS | 0.80 | 0.11 |
| tblVehicleEF | UBUS | 1.74 | 2.90 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 7.12 | 22.23 |
| tblVehicleEF | UBUS | 8.10 | 1.43 |
| tblVehicleEF | UBUS | 1,797.09 | 1,600.77 |
| tblVehicleEF | UBUS | 129.74 | 19.08 |
| tblVehicleEF | UBUS | 3.21 | 0.38 |
| tblVehicleEF | UBUS | 13.06 | 0.18 |
| tblVehicleEF | UBUS | 0.53 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.03 | 3.6747e-003 |
| tblVehicleEF | UBUS | 1.2290e-003 | 1.6384e-004 |
| tblVehicleEF | UBUS | 0.23 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6971e-003 |
| tblVehicleEF | UBUS | 0.03 | 3.5040e-003 |
| tblVehicleEF | UBUS | 1.1300e-003 | 1.5064e-004 |
| tblVehicleEF | UBUS | 3.1570e-003 | 1.2277e-003 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 2.9330e-003 | 1.2125e-003 |
| tblVehicleEF | UBUS | 0.31 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 8.3410e-003 | 0.07 |
| tblVehicleEF | UBUS | 0.66 | 0.09 |
| tblVehicleEF | UBUS | 8.3480e-003 | 5.6647e-003 |
| tblVehicleEF | UBUS | 1.4440e-003 | 1.8884e-004 |
| tblVehicleEF | UBUS | 3.1570e-003 | 1.2277e-003 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 2.9330e-003 | 1.2125e-003 |
| tblVehicleEF | UBUS | 2.10 | 2.97 |
| tblVehicleEF | UBUS | 8.3410e-003 | 0.07 |
| tblVehicleEF | UBUS | 0.72 | 0.10 |
| tblVehicleEF | UBUS | 1.74 | 2.90 |
| tblVehicleEF | UBUS | 0.06 | 0.03 |
| tblVehicleEF | UBUS | 7.08 | 22.23 |
| tblVehicleEF | UBUS | 10.59 | 1.86 |
| tblVehicleEF | UBUS | 1,797.09 | 1,600.77 |
| tblVehicleEF | UBUS | 129.74 | 19.81 |
| tblVehicleEF | UBUS | 3.36 | 0.39 |
| tblVehicleEF | UBUS | 13.19 | 0.20 |
| tblVehicleEF | UBUS | 0.53 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.03 | 3.6747e-003 |
| tblVehicleEF | UBUS | 1.2290e-003 | 1.6384e-004 |
| tblVehicleEF | UBUS | 0.23 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6971e-003 |
| tblVehicleEF | UBUS | 0.03 | 3.5040e-003 |
| tblVehicleEF | UBUS | 1.1300e-003 | 1.5064e-004 |
| tblVehicleEF | UBUS | 1.6980e-003 | 6.1593e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.1710e-003 | 4.9160e-004 |
| tblVehicleEF | UBUS | 0.31 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.09 |
| tblVehicleEF | UBUS | 0.78 | 0.11 |
| tblVehicleEF | UBUS | 8.3470e-003 | 5.6646e-003 |
| tblVehicleEF | UBUS | 1.4870e-003 | 1.9606e-004 |
| tblVehicleEF | UBUS | 1.6980e-003 | 6.1593e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.1710e-003 | 4.9160e-004 |
| tblVehicleEF | UBUS | 2.10 | 2.97 |
| tblVehicleEF | UBUS | 0.01 | 0.09 |
| tblVehicleEF | UBUS | 0.85 | 0.12 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |
| tblWater | IndoorWaterUseRate | 84,036,250.00 | 67,229,000.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

## 2.0 Emissions Summary

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 10.0875 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| 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 | 3.0434 | 3.8772 | 21.1170 | 0.0595 | 5.9876 | 0.0468 | 6.0344 | 1.5990 | 0.0437 | 1.6427 | | 6,087.7054 | 6,087.7054 | 0.3088 | | 6,095.4241 |
| **Total** | **13.1309** | **3.8776** | **21.1541** | **0.0595** | **5.9876** | **0.0469** | **6.0346** | **1.5990** | **0.0438** | **1.6429** | | **6,087.7850** | **6,087.7850** | **0.3090** | **0.0000** | **6,095.5088** |

### 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 | 10.0875 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| 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 | 3.0434 | 3.8772 | 21.1170 | 0.0595 | 5.9876 | 0.0468 | 6.0344 | 1.5990 | 0.0437 | 1.6427 | | 6,087.7054 | 6,087.7054 | 0.3088 | | 6,095.4241 |
| **Total** | **13.1309** | **3.8776** | **21.1541** | **0.0595** | **5.9876** | **0.0469** | **6.0346** | **1.5990** | **0.0438** | **1.6429** | | **6,087.7850** | **6,087.7850** | **0.3090** | **0.0000** | **6,095.5088** |

| | **ROG** | **NOx** | **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** |

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 3.0434 | 3.8772 | 21.1170 | 0.0595 | 5.9876 | 0.0468 | 6.0344 | 1.5990 | 0.0437 | 1.6427 | | 6,087.705 4 | 6,087.7054 | 0.3088 | | 6,095.424 1 |
| Unmitigated | 3.0434 | 3.8772 | 21.1170 | 0.0595 | 5.9876 | 0.0468 | 6.0344 | 1.5990 | 0.0437 | 1.6427 | | 6,087.705 4 | 6,087.7054 | 0.3088 | | 6,095.424 1 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 1,388.19 | 1,388.19 | 1388.19 | 2,828,672 | 2,828,672 |
| Total | 1,388.19 | 1,388.19 | 1,388.19 | 2,828,672 | 2,828,672 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.568698 | 0.056485 | 0.174526 | 0.121269 | 0.027373 | 0.007522 | 0.019121 | 0.017044 | 0.000863 | 0.000960 | 0.003902 | 0.000566 | 0.001671 |

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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

| | ROG | NOx | CO | SO2 | Fugitive 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 | 10.0875 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| Unmitigated | 10.0875 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |

## 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 | 2.3073 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 7.7768 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 3.4400e-003 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| **Total** | **10.0875** | **3.4000e-004** | **0.0371** | **0.0000** | | **1.3000e-004** | **1.3000e-004** | | **1.3000e-004** | **1.3000e-004** | | **0.0795** | **0.0795** | **2.1000e-004** | | **0.0848** |

**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 | 2.3073 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 7.7768 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 3.4400e-003 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| **Total** | **10.0875** | **3.4000e-004** | **0.0371** | **0.0000** | | **1.3000e-004** | **1.3000e-004** | | **1.3000e-004** | **1.3000e-004** | | **0.0795** | **0.0795** | **2.1000e-004** | | **0.0848** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

## 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

Conejo Summit - Initial Operational 2023 - Ventura County, Winter

# Conejo Summit - Initial Operational 2023
**Ventura County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 363.40 | 1000sqft | 21.59 | 363,400.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2023 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 441.9 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 181,700.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 545,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 20.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.59 | 0.57 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.17 |
| tblFleetMix | LHD1 | 0.02 | 0.03 |
| tblFleetMix | LHD2 | 6.2040e-003 | 7.5217e-003 |
| tblFleetMix | MCY | 3.8570e-003 | 3.9022e-003 |
| tblFleetMix | MDV | 0.11 | 0.12 |
| tblFleetMix | MH | 1.3860e-003 | 1.6706e-003 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.1760e-003 | 8.6325e-004 |
| tblFleetMix | SBUS | 3.8400e-004 | 5.6649e-004 |
| tblFleetMix | UBUS | 1.0260e-003 | 9.6027e-004 |
| tblLandUse | LotAcreage | 8.34 | 21.59 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 441.9 |
| tblSolidWaste | SolidWasteGenerationRate | 450.62 | 252.35 |
| tblTripsAndVMT | WorkerTripNumber | 31.00 | 0.00 |
| tblVehicleEF | HHD | 0.57 | 0.03 |
| tblVehicleEF | HHD | 0.13 | 0.09 |

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|---|---|---|---|
| tblVehicleEF | HHD | 0.07 | 5.6462e-007 |
| tblVehicleEF | HHD | 1.64 | 6.29 |
| tblVehicleEF | HHD | 1.00 | 0.46 |
| tblVehicleEF | HHD | 3.36 | 5.3597e-003 |
| tblVehicleEF | HHD | 4,114.09 | 1,067.90 |
| tblVehicleEF | HHD | 1,546.83 | 1,359.85 |
| tblVehicleEF | HHD | 10.72 | 0.04 |
| tblVehicleEF | HHD | 14.46 | 5.61 |
| tblVehicleEF | HHD | 1.69 | 2.42 |
| tblVehicleEF | HHD | 19.48 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.6425e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 6.2450e-003 | 0.02 |
| tblVehicleEF | HHD | 9.3000e-005 | 9.7964e-007 |
| tblVehicleEF | HHD | 0.01 | 3.4849e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7150e-003 | 8.8025e-003 |
| tblVehicleEF | HHD | 5.9740e-003 | 0.02 |
| tblVehicleEF | HHD | 8.6000e-005 | 9.0075e-007 |
| tblVehicleEF | HHD | 7.4000e-005 | 2.2857e-006 |
| tblVehicleEF | HHD | 4.3520e-003 | 1.3068e-004 |
| tblVehicleEF | HHD | 0.40 | 0.43 |
| tblVehicleEF | HHD | 6.1000e-005 | 1.7367e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.3100e-004 | 6.0903e-004 |
| tblVehicleEF | HHD | 0.07 | 2.9355e-006 |
| tblVehicleEF | HHD | 0.04 | 9.8934e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6200e-004 | 4.4315e-007 |

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|---|---|---|---|
| tblVehicleEF | HHD | 7.4000e-005 | 2.2857e-006 |
| tblVehicleEF | HHD | 4.3520e-003 | 1.3068e-004 |
| tblVehicleEF | HHD | 0.48 | 0.49 |
| tblVehicleEF | HHD | 6.1000e-005 | 1.7367e-006 |
| tblVehicleEF | HHD | 0.21 | 0.12 |
| tblVehicleEF | HHD | 4.3100e-004 | 6.0903e-004 |
| tblVehicleEF | HHD | 0.08 | 3.2140e-006 |
| tblVehicleEF | HHD | 0.54 | 0.03 |
| tblVehicleEF | HHD | 0.13 | 0.09 |
| tblVehicleEF | HHD | 0.07 | 5.3365e-007 |
| tblVehicleEF | HHD | 1.19 | 6.19 |
| tblVehicleEF | HHD | 1.01 | 0.46 |
| tblVehicleEF | HHD | 3.13 | 5.0042e-003 |
| tblVehicleEF | HHD | 4,358.51 | 1,057.00 |
| tblVehicleEF | HHD | 1,546.83 | 1,359.85 |
| tblVehicleEF | HHD | 10.72 | 0.04 |
| tblVehicleEF | HHD | 14.92 | 5.38 |
| tblVehicleEF | HHD | 1.61 | 2.31 |
| tblVehicleEF | HHD | 19.47 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.1532e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 6.2450e-003 | 0.02 |
| tblVehicleEF | HHD | 9.3000e-005 | 9.7964e-007 |
| tblVehicleEF | HHD | 0.01 | 3.0168e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7150e-003 | 8.8025e-003 |
| tblVehicleEF | HHD | 5.9740e-003 | 0.02 |
| tblVehicleEF | HHD | 8.6000e-005 | 9.0075e-007 |
| tblVehicleEF | HHD | 1.1600e-004 | 3.8422e-006 |

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|---|---|---|---|
| tblVehicleEF | HHD | 4.4560e-003 | 1.3265e-004 |
| tblVehicleEF | HHD | 0.37 | 0.45 |
| tblVehicleEF | HHD | 1.0300e-004 | 3.2560e-006 |
| tblVehicleEF | HHD | 0.08 | 0.02 |
| tblVehicleEF | HHD | 4.1100e-004 | 5.9494e-004 |
| tblVehicleEF | HHD | 0.07 | 2.7847e-006 |
| tblVehicleEF | HHD | 0.04 | 9.7914e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.5900e-004 | 4.3757e-007 |
| tblVehicleEF | HHD | 1.1600e-004 | 3.8422e-006 |
| tblVehicleEF | HHD | 4.4560e-003 | 1.3265e-004 |
| tblVehicleEF | HHD | 0.45 | 0.52 |
| tblVehicleEF | HHD | 1.0300e-004 | 3.2560e-006 |
| tblVehicleEF | HHD | 0.21 | 0.12 |
| tblVehicleEF | HHD | 4.1100e-004 | 5.9494e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0489e-006 |
| tblVehicleEF | HHD | 0.61 | 0.02 |
| tblVehicleEF | HHD | 0.13 | 0.09 |
| tblVehicleEF | HHD | 0.07 | 5.8607e-007 |
| tblVehicleEF | HHD | 2.26 | 6.42 |
| tblVehicleEF | HHD | 1.00 | 0.46 |
| tblVehicleEF | HHD | 3.52 | 5.6142e-003 |
| tblVehicleEF | HHD | 3,776.56 | 1,082.94 |
| tblVehicleEF | HHD | 1,546.83 | 1,359.85 |
| tblVehicleEF | HHD | 10.72 | 0.05 |
| tblVehicleEF | HHD | 13.82 | 5.92 |
| tblVehicleEF | HHD | 1.68 | 2.40 |
| tblVehicleEF | HHD | 19.49 | 2.54 |
| tblVehicleEF | HHD | 0.02 | 4.3182e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 6.2450e-003 | 0.02 |
| tblVehicleEF | HHD | 9.3000e-005 | 9.7964e-007 |
| tblVehicleEF | HHD | 0.02 | 4.1314e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7150e-003 | 8.8025e-003 |
| tblVehicleEF | HHD | 5.9740e-003 | 0.02 |
| tblVehicleEF | HHD | 8.6000e-005 | 9.0075e-007 |
| tblVehicleEF | HHD | 5.2000e-005 | 1.5186e-006 |
| tblVehicleEF | HHD | 4.5240e-003 | 1.4644e-004 |
| tblVehicleEF | HHD | 0.43 | 0.39 |
| tblVehicleEF | HHD | 4.3000e-005 | 1.1294e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.8200e-004 | 6.5384e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0397e-006 |
| tblVehicleEF | HHD | 0.03 | 0.01 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6500e-004 | 4.4715e-007 |
| tblVehicleEF | HHD | 5.2000e-005 | 1.5186e-006 |
| tblVehicleEF | HHD | 4.5240e-003 | 1.4644e-004 |
| tblVehicleEF | HHD | 0.52 | 0.45 |
| tblVehicleEF | HHD | 4.3000e-005 | 1.1294e-006 |
| tblVehicleEF | HHD | 0.21 | 0.12 |
| tblVehicleEF | HHD | 4.8200e-004 | 6.5384e-004 |
| tblVehicleEF | HHD | 0.08 | 3.3281e-006 |
| tblVehicleEF | LDA | 3.8180e-003 | 2.1750e-003 |
| tblVehicleEF | LDA | 4.8970e-003 | 0.05 |
| tblVehicleEF | LDA | 0.53 | 0.59 |
| tblVehicleEF | LDA | 1.09 | 2.17 |
| tblVehicleEF | LDA | 239.61 | 248.23 |

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|---|---|---|---|
| tblVehicleEF | LDA | 54.62 | 52.23 |
| tblVehicleEF | LDA | 0.04 | 0.03 |
| tblVehicleEF | LDA | 0.06 | 0.18 |
| tblVehicleEF | LDA | 0.04 | 0.04 |
| tblVehicleEF | LDA | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDA | 1.8470e-003 | 1.4990e-003 |
| tblVehicleEF | LDA | 2.3110e-003 | 1.8057e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDA | 1.7020e-003 | 1.3812e-003 |
| tblVehicleEF | LDA | 2.1250e-003 | 1.6603e-003 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 9.6550e-003 | 8.3278e-003 |
| tblVehicleEF | LDA | 0.04 | 0.21 |
| tblVehicleEF | LDA | 0.07 | 0.22 |
| tblVehicleEF | LDA | 2.3990e-003 | 2.4554e-003 |
| tblVehicleEF | LDA | 5.6400e-004 | 5.1686e-004 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.01 |
| tblVehicleEF | LDA | 0.04 | 0.21 |
| tblVehicleEF | LDA | 0.07 | 0.24 |
| tblVehicleEF | LDA | 4.0540e-003 | 2.3375e-003 |
| tblVehicleEF | LDA | 4.2420e-003 | 0.04 |
| tblVehicleEF | LDA | 0.58 | 0.65 |
| tblVehicleEF | LDA | 0.90 | 1.78 |
| tblVehicleEF | LDA | 250.17 | 258.92 |

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|---|---|---|---|
| tblVehicleEF | LDA | 54.62 | 51.52 |
| tblVehicleEF | LDA | 0.04 | 0.03 |
| tblVehicleEF | LDA | 0.06 | 0.16 |
| tblVehicleEF | LDA | 0.04 | 0.04 |
| tblVehicleEF | LDA | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDA | 1.8470e-003 | 1.4990e-003 |
| tblVehicleEF | LDA | 2.3110e-003 | 1.8057e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDA | 1.7020e-003 | 1.3812e-003 |
| tblVehicleEF | LDA | 2.1250e-003 | 1.6603e-003 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.01 | 8.8405e-003 |
| tblVehicleEF | LDA | 0.03 | 0.20 |
| tblVehicleEF | LDA | 0.06 | 0.19 |
| tblVehicleEF | LDA | 2.5050e-003 | 2.5612e-003 |
| tblVehicleEF | LDA | 5.6100e-004 | 5.0982e-004 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.09 | 0.10 |
| tblVehicleEF | LDA | 0.05 | 0.07 |
| tblVehicleEF | LDA | 0.01 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.20 |
| tblVehicleEF | LDA | 0.06 | 0.21 |
| tblVehicleEF | LDA | 3.7490e-003 | 2.1188e-003 |
| tblVehicleEF | LDA | 5.2950e-003 | 0.05 |
| tblVehicleEF | LDA | 0.52 | 0.58 |
| tblVehicleEF | LDA | 1.21 | 2.42 |
| tblVehicleEF | LDA | 237.61 | 246.20 |

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|---|---|---|---|
| tblVehicleEF | LDA | 54.62 | 52.68 |
| tblVehicleEF | LDA | 0.05 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.19 |
| tblVehicleEF | LDA | 0.04 | 0.04 |
| tblVehicleEF | LDA | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDA | 1.8470e-003 | 1.4990e-003 |
| tblVehicleEF | LDA | 2.3110e-003 | 1.8057e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDA | 1.7020e-003 | 1.3812e-003 |
| tblVehicleEF | LDA | 2.1250e-003 | 1.6603e-003 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.10 | 0.10 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 9.4870e-003 | 8.1740e-003 |
| tblVehicleEF | LDA | 0.04 | 0.25 |
| tblVehicleEF | LDA | 0.07 | 0.24 |
| tblVehicleEF | LDA | 2.3790e-003 | 2.4353e-003 |
| tblVehicleEF | LDA | 5.6700e-004 | 5.2130e-004 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.10 | 0.10 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.01 | 0.01 |
| tblVehicleEF | LDA | 0.04 | 0.25 |
| tblVehicleEF | LDA | 0.08 | 0.26 |
| tblVehicleEF | LDT1 | 9.7010e-003 | 6.0730e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.16 | 1.23 |
| tblVehicleEF | LDT1 | 3.06 | 2.41 |
| tblVehicleEF | LDT1 | 301.33 | 299.05 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 69.45 | 64.07 |
| tblVehicleEF | LDT1 | 0.11 | 0.11 |
| tblVehicleEF | LDT1 | 0.17 | 0.28 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT1 | 2.5790e-003 | 2.1525e-003 |
| tblVehicleEF | LDT1 | 3.3970e-003 | 2.5889e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT1 | 2.3740e-003 | 1.9814e-003 |
| tblVehicleEF | LDT1 | 3.1230e-003 | 2.3805e-003 |
| tblVehicleEF | LDT1 | 0.11 | 0.12 |
| tblVehicleEF | LDT1 | 0.29 | 0.23 |
| tblVehicleEF | LDT1 | 0.10 | 0.11 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.19 | 0.82 |
| tblVehicleEF | LDT1 | 0.21 | 0.40 |
| tblVehicleEF | LDT1 | 3.0270e-003 | 2.9593e-003 |
| tblVehicleEF | LDT1 | 7.4800e-004 | 6.3398e-004 |
| tblVehicleEF | LDT1 | 0.11 | 0.12 |
| tblVehicleEF | LDT1 | 0.29 | 0.23 |
| tblVehicleEF | LDT1 | 0.10 | 0.11 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 0.19 | 0.82 |
| tblVehicleEF | LDT1 | 0.23 | 0.44 |
| tblVehicleEF | LDT1 | 0.01 | 6.4713e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.07 |
| tblVehicleEF | LDT1 | 1.26 | 1.33 |
| tblVehicleEF | LDT1 | 2.50 | 1.98 |
| tblVehicleEF | LDT1 | 314.06 | 310.19 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 69.45 | 63.19 |
| tblVehicleEF | LDT1 | 0.10 | 0.09 |
| tblVehicleEF | LDT1 | 0.16 | 0.25 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT1 | 2.5790e-003 | 2.1525e-003 |
| tblVehicleEF | LDT1 | 3.3970e-003 | 2.5889e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT1 | 2.3740e-003 | 1.9814e-003 |
| tblVehicleEF | LDT1 | 3.1230e-003 | 2.3805e-003 |
| tblVehicleEF | LDT1 | 0.18 | 0.19 |
| tblVehicleEF | LDT1 | 0.30 | 0.24 |
| tblVehicleEF | LDT1 | 0.17 | 0.18 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 0.17 | 0.74 |
| tblVehicleEF | LDT1 | 0.18 | 0.34 |
| tblVehicleEF | LDT1 | 3.1560e-003 | 3.0695e-003 |
| tblVehicleEF | LDT1 | 7.3800e-004 | 6.2533e-004 |
| tblVehicleEF | LDT1 | 0.18 | 0.19 |
| tblVehicleEF | LDT1 | 0.30 | 0.24 |
| tblVehicleEF | LDT1 | 0.17 | 0.18 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 0.17 | 0.74 |
| tblVehicleEF | LDT1 | 0.20 | 0.38 |
| tblVehicleEF | LDT1 | 9.5550e-003 | 5.9366e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.15 | 1.22 |
| tblVehicleEF | LDT1 | 3.40 | 2.69 |
| tblVehicleEF | LDT1 | 298.92 | 296.94 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 69.45 | 64.62 |
| tblVehicleEF | LDT1 | 0.12 | 0.11 |
| tblVehicleEF | LDT1 | 0.18 | 0.30 |
| tblVehicleEF | LDT1 | 0.04 | 0.04 |
| tblVehicleEF | LDT1 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT1 | 2.5790e-003 | 2.1525e-003 |
| tblVehicleEF | LDT1 | 3.3970e-003 | 2.5889e-003 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT1 | 2.3740e-003 | 1.9814e-003 |
| tblVehicleEF | LDT1 | 3.1230e-003 | 2.3805e-003 |
| tblVehicleEF | LDT1 | 0.07 | 0.08 |
| tblVehicleEF | LDT1 | 0.32 | 0.25 |
| tblVehicleEF | LDT1 | 0.07 | 0.07 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.23 | 1.00 |
| tblVehicleEF | LDT1 | 0.23 | 0.43 |
| tblVehicleEF | LDT1 | 3.0030e-003 | 2.9384e-003 |
| tblVehicleEF | LDT1 | 7.5400e-004 | 6.3943e-004 |
| tblVehicleEF | LDT1 | 0.07 | 0.08 |
| tblVehicleEF | LDT1 | 0.32 | 0.25 |
| tblVehicleEF | LDT1 | 0.07 | 0.07 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |
| tblVehicleEF | LDT1 | 0.23 | 1.00 |
| tblVehicleEF | LDT1 | 0.25 | 0.47 |
| tblVehicleEF | LDT2 | 5.0670e-003 | 3.7891e-003 |
| tblVehicleEF | LDT2 | 6.4470e-003 | 0.07 |
| tblVehicleEF | LDT2 | 0.67 | 0.85 |
| tblVehicleEF | LDT2 | 1.40 | 2.77 |
| tblVehicleEF | LDT2 | 334.96 | 319.04 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 76.82 | 68.46 |
| tblVehicleEF | LDT2 | 0.06 | 0.07 |
| tblVehicleEF | LDT2 | 0.10 | 0.28 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT2 | 1.8050e-003 | 1.5273e-003 |
| tblVehicleEF | LDT2 | 2.3270e-003 | 1.7823e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT2 | 1.6600e-003 | 1.4062e-003 |
| tblVehicleEF | LDT2 | 2.1400e-003 | 1.6388e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.10 | 0.14 |
| tblVehicleEF | LDT2 | 0.04 | 0.07 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.46 |
| tblVehicleEF | LDT2 | 0.09 | 0.32 |
| tblVehicleEF | LDT2 | 3.3540e-003 | 3.1562e-003 |
| tblVehicleEF | LDT2 | 7.9200e-004 | 6.7743e-004 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.10 | 0.14 |
| tblVehicleEF | LDT2 | 0.04 | 0.07 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.46 |
| tblVehicleEF | LDT2 | 0.10 | 0.36 |
| tblVehicleEF | LDT2 | 5.3810e-003 | 4.0566e-003 |
| tblVehicleEF | LDT2 | 5.5910e-003 | 0.06 |
| tblVehicleEF | LDT2 | 0.73 | 0.93 |
| tblVehicleEF | LDT2 | 1.16 | 2.27 |
| tblVehicleEF | LDT2 | 349.43 | 329.81 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 76.82 | 67.52 |
| tblVehicleEF | LDT2 | 0.06 | 0.07 |
| tblVehicleEF | LDT2 | 0.10 | 0.26 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT2 | 1.8050e-003 | 1.5273e-003 |
| tblVehicleEF | LDT2 | 2.3270e-003 | 1.7823e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT2 | 1.6600e-003 | 1.4062e-003 |
| tblVehicleEF | LDT2 | 2.1400e-003 | 1.6388e-003 |
| tblVehicleEF | LDT2 | 0.06 | 0.10 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.07 | 0.12 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.42 |
| tblVehicleEF | LDT2 | 0.08 | 0.28 |
| tblVehicleEF | LDT2 | 3.5000e-003 | 3.2628e-003 |
| tblVehicleEF | LDT2 | 7.8700e-004 | 6.6820e-004 |
| tblVehicleEF | LDT2 | 0.06 | 0.10 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.07 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.06 | 0.42 |
| tblVehicleEF | LDT2 | 0.08 | 0.31 |
| tblVehicleEF | LDT2 | 4.9740e-003 | 3.6965e-003 |
| tblVehicleEF | LDT2 | 6.9660e-003 | 0.07 |
| tblVehicleEF | LDT2 | 0.66 | 0.84 |
| tblVehicleEF | LDT2 | 1.56 | 3.08 |
| tblVehicleEF | LDT2 | 332.22 | 316.99 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 76.82 | 69.04 |
| tblVehicleEF | LDT2 | 0.07 | 0.08 |
| tblVehicleEF | LDT2 | 0.11 | 0.30 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | LDT2 | 1.8050e-003 | 1.5273e-003 |
| tblVehicleEF | LDT2 | 2.3270e-003 | 1.7823e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | LDT2 | 1.6600e-003 | 1.4062e-003 |
| tblVehicleEF | LDT2 | 2.1400e-003 | 1.6388e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.07 | 0.56 |
| tblVehicleEF | LDT2 | 0.09 | 0.35 |
| tblVehicleEF | LDT2 | 3.3270e-003 | 3.1360e-003 |
| tblVehicleEF | LDT2 | 7.9400e-004 | 6.8324e-004 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.11 | 0.14 |
| tblVehicleEF | LDT2 | 0.03 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.07 | 0.56 |
| tblVehicleEF | LDT2 | 0.10 | 0.38 |
| tblVehicleEF | LHD1 | 4.9370e-003 | 4.6112e-003 |
| tblVehicleEF | LHD1 | 0.01 | 5.8134e-003 |
| tblVehicleEF | LHD1 | 0.02 | 0.01 |
| tblVehicleEF | LHD1 | 0.14 | 0.17 |
| tblVehicleEF | LHD1 | 0.89 | 0.72 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 2.46 | 0.98 |
| tblVehicleEF | LHD1 | 9.24 | 9.34 |
| tblVehicleEF | LHD1 | 594.50 | 630.59 |
| tblVehicleEF | LHD1 | 29.36 | 10.26 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 1.76 | 1.34 |
| tblVehicleEF | LHD1 | 0.93 | 0.29 |
| tblVehicleEF | LHD1 | 9.7800e-004 | 1.0028e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.9600e-004 | 2.4591e-004 |
| tblVehicleEF | LHD1 | 9.3500e-004 | 9.5939e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.03 |
| tblVehicleEF | LHD1 | 2.5610e-003 | 2.5138e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.2300e-004 | 2.2610e-004 |
| tblVehicleEF | LHD1 | 2.3310e-003 | 1.9407e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.5510e-003 | 1.2754e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.06 |
| tblVehicleEF | LHD1 | 0.33 | 0.57 |
| tblVehicleEF | LHD1 | 0.24 | 0.07 |
| tblVehicleEF | LHD1 | 9.2000e-005 | 9.0201e-005 |
| tblVehicleEF | LHD1 | 5.8250e-003 | 6.1318e-003 |
| tblVehicleEF | LHD1 | 3.4000e-004 | 1.0153e-004 |
| tblVehicleEF | LHD1 | 2.3310e-003 | 1.9407e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 1.5510e-003 | 1.2754e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 0.33 | 0.57 |
| tblVehicleEF | LHD1 | 0.27 | 0.08 |
| tblVehicleEF | LHD1 | 4.9370e-003 | 4.6252e-003 |
| tblVehicleEF | LHD1 | 0.01 | 5.9393e-003 |
| tblVehicleEF | LHD1 | 0.02 | 0.01 |
| tblVehicleEF | LHD1 | 0.14 | 0.17 |
| tblVehicleEF | LHD1 | 0.91 | 0.74 |
| tblVehicleEF | LHD1 | 2.31 | 0.92 |
| tblVehicleEF | LHD1 | 9.24 | 9.34 |
| tblVehicleEF | LHD1 | 594.50 | 630.61 |
| tblVehicleEF | LHD1 | 29.36 | 10.15 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 1.68 | 1.28 |
| tblVehicleEF | LHD1 | 0.87 | 0.27 |
| tblVehicleEF | LHD1 | 9.7800e-004 | 1.0028e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.9600e-004 | 2.4591e-004 |
| tblVehicleEF | LHD1 | 9.3500e-004 | 9.5939e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.03 |
| tblVehicleEF | LHD1 | 2.5610e-003 | 2.5138e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.2300e-004 | 2.2610e-004 |
| tblVehicleEF | LHD1 | 3.6270e-003 | 3.0317e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 2.5770e-003 | 2.1332e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.08 | 0.06 |
| tblVehicleEF | LHD1 | 0.31 | 0.55 |
| tblVehicleEF | LHD1 | 0.23 | 0.07 |
| tblVehicleEF | LHD1 | 9.2000e-005 | 9.0201e-005 |
| tblVehicleEF | LHD1 | 5.8250e-003 | 6.1320e-003 |
| tblVehicleEF | LHD1 | 3.3700e-004 | 1.0049e-004 |
| tblVehicleEF | LHD1 | 3.6270e-003 | 3.0317e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.03 |
| tblVehicleEF | LHD1 | 2.5770e-003 | 2.1332e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.31 | 0.55 |
| tblVehicleEF | LHD1 | 0.25 | 0.08 |
| tblVehicleEF | LHD1 | 4.9370e-003 | 4.6017e-003 |
| tblVehicleEF | LHD1 | 0.01 | 5.7328e-003 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 0.14 | 0.17 |
| tblVehicleEF | LHD1 | 0.88 | 0.71 |
| tblVehicleEF | LHD1 | 2.57 | 1.02 |
| tblVehicleEF | LHD1 | 9.24 | 9.34 |
| tblVehicleEF | LHD1 | 594.50 | 630.57 |
| tblVehicleEF | LHD1 | 29.36 | 10.34 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 1.75 | 1.34 |
| tblVehicleEF | LHD1 | 0.97 | 0.30 |
| tblVehicleEF | LHD1 | 9.7800e-004 | 1.0028e-003 |
| tblVehicleEF | LHD1 | 0.08 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.9600e-004 | 2.4591e-004 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 9.3500e-004 | 9.5939e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.03 |
| tblVehicleEF | LHD1 | 2.5610e-003 | 2.5138e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 8.2300e-004 | 2.2610e-004 |
| tblVehicleEF | LHD1 | 1.6050e-003 | 1.3295e-003 |
| tblVehicleEF | LHD1 | 0.11 | 0.09 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.0860e-003 | 8.8957e-004 |
| tblVehicleEF | LHD1 | 0.08 | 0.06 |
| tblVehicleEF | LHD1 | 0.36 | 0.63 |
| tblVehicleEF | LHD1 | 0.25 | 0.08 |
| tblVehicleEF | LHD1 | 9.2000e-005 | 9.0201e-005 |
| tblVehicleEF | LHD1 | 5.8250e-003 | 6.1316e-003 |
| tblVehicleEF | LHD1 | 3.4200e-004 | 1.0228e-004 |
| tblVehicleEF | LHD1 | 1.6050e-003 | 1.3295e-003 |
| tblVehicleEF | LHD1 | 0.11 | 0.09 |
| tblVehicleEF | LHD1 | 0.02 | 0.03 |
| tblVehicleEF | LHD1 | 1.0860e-003 | 8.8957e-004 |
| tblVehicleEF | LHD1 | 0.09 | 0.08 |
| tblVehicleEF | LHD1 | 0.36 | 0.63 |
| tblVehicleEF | LHD1 | 0.28 | 0.08 |
| tblVehicleEF | LHD2 | 3.7440e-003 | 3.3444e-003 |
| tblVehicleEF | LHD2 | 3.9330e-003 | 3.8421e-003 |
| tblVehicleEF | LHD2 | 7.9340e-003 | 9.4194e-003 |
| tblVehicleEF | LHD2 | 0.13 | 0.14 |
| tblVehicleEF | LHD2 | 0.38 | 0.47 |
| tblVehicleEF | LHD2 | 1.22 | 0.62 |
| tblVehicleEF | LHD2 | 13.88 | 14.34 |
| tblVehicleEF | LHD2 | 610.70 | 644.38 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 26.49 | 7.93 |
| tblVehicleEF | LHD2 | 0.10 | 0.11 |
| tblVehicleEF | LHD2 | 1.05 | 1.33 |
| tblVehicleEF | LHD2 | 0.56 | 0.20 |
| tblVehicleEF | LHD2 | 1.1870e-003 | 1.3895e-003 |
| tblVehicleEF | LHD2 | 0.09 | 0.09 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.9100e-004 | 1.2193e-004 |
| tblVehicleEF | LHD2 | 1.1350e-003 | 1.3294e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.6867e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.6000e-004 | 1.1211e-004 |
| tblVehicleEF | LHD2 | 8.5500e-004 | 1.0186e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.1053e-004 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.08 | 0.28 |
| tblVehicleEF | LHD2 | 0.11 | 0.05 |
| tblVehicleEF | LHD2 | 1.3600e-004 | 1.3705e-004 |
| tblVehicleEF | LHD2 | 5.9470e-003 | 6.2181e-003 |
| tblVehicleEF | LHD2 | 2.8700e-004 | 7.8477e-005 |
| tblVehicleEF | LHD2 | 8.5500e-004 | 1.0186e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.1053e-004 |
| tblVehicleEF | LHD2 | 0.06 | 0.07 |
| tblVehicleEF | LHD2 | 0.08 | 0.28 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.12 | 0.05 |
| tblVehicleEF | LHD2 | 3.7440e-003 | 3.3544e-003 |
| tblVehicleEF | LHD2 | 3.9880e-003 | 3.8830e-003 |
| tblVehicleEF | LHD2 | 7.5730e-003 | 8.9934e-003 |
| tblVehicleEF | LHD2 | 0.13 | 0.14 |
| tblVehicleEF | LHD2 | 0.38 | 0.47 |
| tblVehicleEF | LHD2 | 1.15 | 0.59 |
| tblVehicleEF | LHD2 | 13.88 | 14.34 |
| tblVehicleEF | LHD2 | 610.70 | 644.39 |
| tblVehicleEF | LHD2 | 26.49 | 7.86 |
| tblVehicleEF | LHD2 | 0.10 | 0.11 |
| tblVehicleEF | LHD2 | 1.00 | 1.27 |
| tblVehicleEF | LHD2 | 0.53 | 0.19 |
| tblVehicleEF | LHD2 | 1.1870e-003 | 1.3895e-003 |
| tblVehicleEF | LHD2 | 0.09 | 0.09 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.9100e-004 | 1.2193e-004 |
| tblVehicleEF | LHD2 | 1.1350e-003 | 1.3294e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.6867e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.6000e-004 | 1.1211e-004 |
| tblVehicleEF | LHD2 | 1.3220e-003 | 1.5812e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 1.0510e-003 | 1.1802e-003 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.08 | 0.27 |
| tblVehicleEF | LHD2 | 0.10 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 1.3600e-004 | 1.3705e-004 |
| tblVehicleEF | LHD2 | 5.9470e-003 | 6.2181e-003 |
| tblVehicleEF | LHD2 | 2.8600e-004 | 7.7822e-005 |
| tblVehicleEF | LHD2 | 1.3220e-003 | 1.5812e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 1.0510e-003 | 1.1802e-003 |
| tblVehicleEF | LHD2 | 0.06 | 0.07 |
| tblVehicleEF | LHD2 | 0.08 | 0.27 |
| tblVehicleEF | LHD2 | 0.11 | 0.05 |
| tblVehicleEF | LHD2 | 3.7440e-003 | 3.3375e-003 |
| tblVehicleEF | LHD2 | 3.8980e-003 | 3.8156e-003 |
| tblVehicleEF | LHD2 | 8.1850e-003 | 9.7140e-003 |
| tblVehicleEF | LHD2 | 0.13 | 0.14 |
| tblVehicleEF | LHD2 | 0.38 | 0.46 |
| tblVehicleEF | LHD2 | 1.27 | 0.65 |
| tblVehicleEF | LHD2 | 13.88 | 14.34 |
| tblVehicleEF | LHD2 | 610.70 | 644.37 |
| tblVehicleEF | LHD2 | 26.49 | 7.98 |
| tblVehicleEF | LHD2 | 0.10 | 0.11 |
| tblVehicleEF | LHD2 | 1.04 | 1.33 |
| tblVehicleEF | LHD2 | 0.58 | 0.21 |
| tblVehicleEF | LHD2 | 1.1870e-003 | 1.3895e-003 |
| tblVehicleEF | LHD2 | 0.09 | 0.09 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.9100e-004 | 1.2193e-004 |
| tblVehicleEF | LHD2 | 1.1350e-003 | 1.3294e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.04 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.6867e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.6000e-004 | 1.1211e-004 |
| tblVehicleEF | LHD2 | 5.9900e-004 | 7.0943e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 4.5200e-004 | 5.0222e-004 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.09 | 0.31 |
| tblVehicleEF | LHD2 | 0.11 | 0.05 |
| tblVehicleEF | LHD2 | 1.3600e-004 | 1.3705e-004 |
| tblVehicleEF | LHD2 | 5.9470e-003 | 6.2180e-003 |
| tblVehicleEF | LHD2 | 2.8800e-004 | 7.8944e-005 |
| tblVehicleEF | LHD2 | 5.9900e-004 | 7.0943e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 4.5200e-004 | 5.0222e-004 |
| tblVehicleEF | LHD2 | 0.06 | 0.07 |
| tblVehicleEF | LHD2 | 0.09 | 0.31 |
| tblVehicleEF | LHD2 | 0.12 | 0.05 |
| tblVehicleEF | MCY | 0.47 | 0.35 |
| tblVehicleEF | MCY | 0.16 | 0.25 |
| tblVehicleEF | MCY | 19.34 | 19.66 |
| tblVehicleEF | MCY | 9.92 | 8.77 |
| tblVehicleEF | MCY | 174.45 | 213.87 |
| tblVehicleEF | MCY | 46.35 | 61.79 |
| tblVehicleEF | MCY | 1.14 | 1.15 |
| tblVehicleEF | MCY | 0.32 | 0.27 |
| tblVehicleEF | MCY | 0.01 | 0.01 |
| tblVehicleEF | MCY | 4.0000e-003 | 4.0000e-003 |
| tblVehicleEF | MCY | 2.1560e-003 | 2.0850e-003 |

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|---|---|---|---|
| tblVehicleEF | MCY | 3.9760e-003 | 3.2555e-003 |
| tblVehicleEF | MCY | 5.0400e-003 | 5.0400e-003 |
| tblVehicleEF | MCY | 1.0000e-003 | 1.0000e-003 |
| tblVehicleEF | MCY | 2.0170e-003 | 1.9515e-003 |
| tblVehicleEF | MCY | 3.7510e-003 | 3.0707e-003 |
| tblVehicleEF | MCY | 0.91 | 0.93 |
| tblVehicleEF | MCY | 0.78 | 0.80 |
| tblVehicleEF | MCY | 0.60 | 0.61 |
| tblVehicleEF | MCY | 2.38 | 2.40 |
| tblVehicleEF | MCY | 1.03 | 2.28 |
| tblVehicleEF | MCY | 2.20 | 1.94 |
| tblVehicleEF | MCY | 2.1310e-003 | 2.1164e-003 |
| tblVehicleEF | MCY | 6.9000e-004 | 6.1144e-004 |
| tblVehicleEF | MCY | 0.91 | 0.93 |
| tblVehicleEF | MCY | 0.78 | 0.80 |
| tblVehicleEF | MCY | 0.60 | 0.61 |
| tblVehicleEF | MCY | 2.93 | 2.95 |
| tblVehicleEF | MCY | 1.03 | 2.28 |
| tblVehicleEF | MCY | 2.39 | 2.11 |
| tblVehicleEF | MCY | 0.45 | 0.34 |
| tblVehicleEF | MCY | 0.14 | 0.21 |
| tblVehicleEF | MCY | 18.10 | 18.38 |
| tblVehicleEF | MCY | 8.79 | 7.74 |
| tblVehicleEF | MCY | 174.45 | 211.51 |
| tblVehicleEF | MCY | 46.35 | 59.17 |
| tblVehicleEF | MCY | 1.01 | 1.01 |
| tblVehicleEF | MCY | 0.30 | 0.25 |
| tblVehicleEF | MCY | 0.01 | 0.01 |
| tblVehicleEF | MCY | 4.0000e-003 | 4.0000e-003 |
| tblVehicleEF | MCY | 2.1560e-003 | 2.0850e-003 |

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|---|---|---|---|
| tblVehicleEF | MCY | 3.9760e-003 | 3.2555e-003 |
| tblVehicleEF | MCY | 5.0400e-003 | 5.0400e-003 |
| tblVehicleEF | MCY | 1.0000e-003 | 1.0000e-003 |
| tblVehicleEF | MCY | 2.0170e-003 | 1.9515e-003 |
| tblVehicleEF | MCY | 3.7510e-003 | 3.0707e-003 |
| tblVehicleEF | MCY | 1.59 | 1.61 |
| tblVehicleEF | MCY | 0.85 | 0.87 |
| tblVehicleEF | MCY | 1.23 | 1.24 |
| tblVehicleEF | MCY | 2.29 | 2.30 |
| tblVehicleEF | MCY | 0.96 | 2.10 |
| tblVehicleEF | MCY | 1.88 | 1.65 |
| tblVehicleEF | MCY | 2.1080e-003 | 2.0930e-003 |
| tblVehicleEF | MCY | 6.6200e-004 | 5.8549e-004 |
| tblVehicleEF | MCY | 1.59 | 1.61 |
| tblVehicleEF | MCY | 0.85 | 0.87 |
| tblVehicleEF | MCY | 1.23 | 1.24 |
| tblVehicleEF | MCY | 2.82 | 2.84 |
| tblVehicleEF | MCY | 0.96 | 2.10 |
| tblVehicleEF | MCY | 2.04 | 1.79 |
| tblVehicleEF | MCY | 0.48 | 0.35 |
| tblVehicleEF | MCY | 0.18 | 0.27 |
| tblVehicleEF | MCY | 20.36 | 20.72 |
| tblVehicleEF | MCY | 10.73 | 9.54 |
| tblVehicleEF | MCY | 174.45 | 215.80 |
| tblVehicleEF | MCY | 46.35 | 63.69 |
| tblVehicleEF | MCY | 1.17 | 1.17 |
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 0.01 | 0.01 |
| tblVehicleEF | MCY | 4.0000e-003 | 4.0000e-003 |
| tblVehicleEF | MCY | 2.1560e-003 | 2.0850e-003 |

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| tblVehicleEF | MCY | 3.9760e-003 | 3.2555e-003 |
| tblVehicleEF | MCY | 5.0400e-003 | 5.0400e-003 |
| tblVehicleEF | MCY | 1.0000e-003 | 1.0000e-003 |
| tblVehicleEF | MCY | 2.0170e-003 | 1.9515e-003 |
| tblVehicleEF | MCY | 3.7510e-003 | 3.0707e-003 |
| tblVehicleEF | MCY | 0.58 | 0.60 |
| tblVehicleEF | MCY | 0.98 | 0.99 |
| tblVehicleEF | MCY | 0.35 | 0.36 |
| tblVehicleEF | MCY | 2.44 | 2.47 |
| tblVehicleEF | MCY | 1.21 | 2.67 |
| tblVehicleEF | MCY | 2.42 | 2.15 |
| tblVehicleEF | MCY | 2.1490e-003 | 2.1355e-003 |
| tblVehicleEF | MCY | 7.1000e-004 | 6.3023e-004 |
| tblVehicleEF | MCY | 0.58 | 0.60 |
| tblVehicleEF | MCY | 0.98 | 0.99 |
| tblVehicleEF | MCY | 0.35 | 0.36 |
| tblVehicleEF | MCY | 3.01 | 3.03 |
| tblVehicleEF | MCY | 1.21 | 2.67 |
| tblVehicleEF | MCY | 2.63 | 2.34 |
| tblVehicleEF | MDV | 9.8100e-003 | 4.7720e-003 |
| tblVehicleEF | MDV | 0.02 | 0.09 |
| tblVehicleEF | MDV | 1.08 | 0.98 |
| tblVehicleEF | MDV | 2.76 | 3.29 |
| tblVehicleEF | MDV | 460.13 | 396.01 |
| tblVehicleEF | MDV | 104.17 | 84.70 |
| tblVehicleEF | MDV | 0.12 | 0.10 |
| tblVehicleEF | MDV | 0.25 | 0.37 |
| tblVehicleEF | MDV | 0.04 | 0.04 |
| tblVehicleEF | MDV | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | MDV | 1.8790e-003 | 1.6314e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.3940e-003 | 1.9008e-003 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | MDV | 1.7320e-003 | 1.5053e-003 |
| tblVehicleEF | MDV | 2.2010e-003 | 1.7480e-003 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.18 | 0.16 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.11 | 0.50 |
| tblVehicleEF | MDV | 0.21 | 0.43 |
| tblVehicleEF | MDV | 4.6070e-003 | 3.9145e-003 |
| tblVehicleEF | MDV | 1.0900e-003 | 8.3815e-004 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.18 | 0.16 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.04 | 0.03 |
| tblVehicleEF | MDV | 0.11 | 0.50 |
| tblVehicleEF | MDV | 0.23 | 0.47 |
| tblVehicleEF | MDV | 0.01 | 5.1014e-003 |
| tblVehicleEF | MDV | 0.01 | 0.08 |
| tblVehicleEF | MDV | 1.17 | 1.06 |
| tblVehicleEF | MDV | 2.27 | 2.69 |
| tblVehicleEF | MDV | 479.42 | 407.34 |
| tblVehicleEF | MDV | 104.17 | 83.55 |
| tblVehicleEF | MDV | 0.11 | 0.08 |
| tblVehicleEF | MDV | 0.22 | 0.33 |
| tblVehicleEF | MDV | 0.04 | 0.04 |
| tblVehicleEF | MDV | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | MDV | 1.8790e-003 | 1.6314e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.3940e-003 | 1.9008e-003 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | MDV | 1.7320e-003 | 1.5053e-003 |
| tblVehicleEF | MDV | 2.2010e-003 | 1.7480e-003 |
| tblVehicleEF | MDV | 0.09 | 0.12 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.11 | 0.15 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.10 | 0.46 |
| tblVehicleEF | MDV | 0.18 | 0.37 |
| tblVehicleEF | MDV | 4.8010e-003 | 4.0267e-003 |
| tblVehicleEF | MDV | 1.0810e-003 | 8.2684e-004 |
| tblVehicleEF | MDV | 0.09 | 0.12 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.11 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.03 |
| tblVehicleEF | MDV | 0.10 | 0.46 |
| tblVehicleEF | MDV | 0.20 | 0.41 |
| tblVehicleEF | MDV | 9.6530e-003 | 4.6634e-003 |
| tblVehicleEF | MDV | 0.02 | 0.09 |
| tblVehicleEF | MDV | 1.07 | 0.97 |
| tblVehicleEF | MDV | 3.07 | 3.67 |
| tblVehicleEF | MDV | 456.48 | 393.86 |
| tblVehicleEF | MDV | 104.17 | 85.42 |
| tblVehicleEF | MDV | 0.13 | 0.10 |
| tblVehicleEF | MDV | 0.26 | 0.39 |
| tblVehicleEF | MDV | 0.04 | 0.04 |
| tblVehicleEF | MDV | 8.0000e-003 | 8.0000e-003 |
| tblVehicleEF | MDV | 1.8790e-003 | 1.6314e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.3940e-003 | 1.9008e-003 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 2.0000e-003 | 2.0000e-003 |
| tblVehicleEF | MDV | 1.7320e-003 | 1.5053e-003 |
| tblVehicleEF | MDV | 2.2010e-003 | 1.7480e-003 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.05 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.13 | 0.61 |
| tblVehicleEF | MDV | 0.22 | 0.46 |
| tblVehicleEF | MDV | 4.5700e-003 | 3.8933e-003 |
| tblVehicleEF | MDV | 1.0950e-003 | 8.4527e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.18 | 0.17 |
| tblVehicleEF | MDV | 0.05 | 0.06 |
| tblVehicleEF | MDV | 0.04 | 0.03 |
| tblVehicleEF | MDV | 0.13 | 0.61 |
| tblVehicleEF | MDV | 0.25 | 0.51 |
| tblVehicleEF | MH | 0.03 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 2.35 | 1.23 |
| tblVehicleEF | MH | 5.87 | 2.09 |
| tblVehicleEF | MH | 1,089.54 | 1,486.99 |
| tblVehicleEF | MH | 58.99 | 19.05 |
| tblVehicleEF | MH | 1.50 | 1.49 |
| tblVehicleEF | MH | 0.87 | 0.25 |
| tblVehicleEF | MH | 0.13 | 0.13 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MH | 1.0640e-003 | 2.4477e-004 |
| tblVehicleEF | MH | 0.06 | 0.06 |
| tblVehicleEF | MH | 3.2290e-003 | 3.2754e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.7800e-004 | 2.2506e-004 |
| tblVehicleEF | MH | 0.91 | 0.74 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.43 | 0.36 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.54 |
| tblVehicleEF | MH | 0.34 | 0.10 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.9200e-004 | 1.8851e-004 |
| tblVehicleEF | MH | 0.91 | 0.74 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.43 | 0.36 |
| tblVehicleEF | MH | 0.13 | 0.08 |
| tblVehicleEF | MH | 0.03 | 1.54 |
| tblVehicleEF | MH | 0.37 | 0.11 |
| tblVehicleEF | MH | 0.03 | 0.01 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 2.44 | 1.27 |
| tblVehicleEF | MH | 5.42 | 1.94 |
| tblVehicleEF | MH | 1,089.54 | 1,487.06 |
| tblVehicleEF | MH | 58.99 | 18.79 |
| tblVehicleEF | MH | 1.40 | 1.40 |
| tblVehicleEF | MH | 0.82 | 0.24 |
| tblVehicleEF | MH | 0.13 | 0.13 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MH | 1.0640e-003 | 2.4477e-004 |
| tblVehicleEF | MH | 0.06 | 0.06 |
| tblVehicleEF | MH | 3.2290e-003 | 3.2754e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.7800e-004 | 2.2506e-004 |
| tblVehicleEF | MH | 1.36 | 1.10 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.71 | 0.59 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.50 |
| tblVehicleEF | MH | 0.32 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.8500e-004 | 1.8593e-004 |
| tblVehicleEF | MH | 1.36 | 1.10 |
| tblVehicleEF | MH | 0.08 | 0.07 |
| tblVehicleEF | MH | 0.71 | 0.59 |
| tblVehicleEF | MH | 0.13 | 0.08 |
| tblVehicleEF | MH | 0.03 | 1.50 |
| tblVehicleEF | MH | 0.35 | 0.10 |
| tblVehicleEF | MH | 0.03 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 2.30 | 1.21 |
| tblVehicleEF | MH | 6.13 | 2.18 |
| tblVehicleEF | MH | 1,089.54 | 1,486.95 |
| tblVehicleEF | MH | 58.99 | 19.20 |
| tblVehicleEF | MH | 1.50 | 1.48 |
| tblVehicleEF | MH | 0.90 | 0.26 |
| tblVehicleEF | MH | 0.13 | 0.13 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MH | 1.0640e-003 | 2.4477e-004 |
| tblVehicleEF | MH | 0.06 | 0.06 |
| tblVehicleEF | MH | 3.2290e-003 | 3.2754e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.7800e-004 | 2.2506e-004 |
| tblVehicleEF | MH | 0.65 | 0.53 |
| tblVehicleEF | MH | 0.10 | 0.08 |
| tblVehicleEF | MH | 0.30 | 0.25 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.66 |
| tblVehicleEF | MH | 0.35 | 0.10 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.9700e-004 | 1.9004e-004 |
| tblVehicleEF | MH | 0.65 | 0.53 |
| tblVehicleEF | MH | 0.10 | 0.08 |
| tblVehicleEF | MH | 0.30 | 0.25 |
| tblVehicleEF | MH | 0.12 | 0.08 |
| tblVehicleEF | MH | 0.03 | 1.66 |
| tblVehicleEF | MH | 0.39 | 0.11 |
| tblVehicleEF | MHD | 0.02 | 2.9438e-003 |
| tblVehicleEF | MHD | 3.1660e-003 | 1.3420e-003 |
| tblVehicleEF | MHD | 0.05 | 8.0151e-003 |
| tblVehicleEF | MHD | 0.32 | 0.34 |
| tblVehicleEF | MHD | 0.27 | 0.19 |
| tblVehicleEF | MHD | 5.74 | 0.94 |
| tblVehicleEF | MHD | 148.81 | 68.40 |
| tblVehicleEF | MHD | 1,108.13 | 950.57 |
| tblVehicleEF | MHD | 54.44 | 7.84 |
| tblVehicleEF | MHD | 0.40 | 0.40 |
| tblVehicleEF | MHD | 0.66 | 1.01 |

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| tblVehicleEF | MHD | 11.56 | 1.78 |
| tblVehicleEF | MHD | 1.1900e-004 | 3.6707e-004 |
| tblVehicleEF | MHD | 0.13 | 0.13 |
| tblVehicleEF | MHD | 0.01 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-003 | 7.3550e-003 |
| tblVehicleEF | MHD | 7.8600e-004 | 9.4742e-005 |
| tblVehicleEF | MHD | 1.1400e-004 | 3.5119e-004 |
| tblVehicleEF | MHD | 0.06 | 0.06 |
| tblVehicleEF | MHD | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | MHD | 2.7130e-003 | 7.0330e-003 |
| tblVehicleEF | MHD | 7.2300e-004 | 8.7112e-005 |
| tblVehicleEF | MHD | 8.0000e-004 | 3.2663e-004 |
| tblVehicleEF | MHD | 0.04 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 5.6300e-004 | 2.2475e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.34 | 0.04 |
| tblVehicleEF | MHD | 1.4310e-003 | 6.4864e-004 |
| tblVehicleEF | MHD | 0.01 | 9.0489e-003 |
| tblVehicleEF | MHD | 6.4500e-004 | 7.7553e-005 |
| tblVehicleEF | MHD | 8.0000e-004 | 3.2663e-004 |
| tblVehicleEF | MHD | 0.04 | 0.02 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 5.6300e-004 | 2.2475e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.37 | 0.05 |
| tblVehicleEF | MHD | 0.01 | 2.8053e-003 |
| tblVehicleEF | MHD | 3.2250e-003 | 1.3745e-003 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.05 | 7.6350e-003 |
| tblVehicleEF | MHD | 0.23 | 0.30 |
| tblVehicleEF | MHD | 0.27 | 0.19 |
| tblVehicleEF | MHD | 5.36 | 0.88 |
| tblVehicleEF | MHD | 157.62 | 68.37 |
| tblVehicleEF | MHD | 1,108.13 | 950.57 |
| tblVehicleEF | MHD | 54.44 | 7.73 |
| tblVehicleEF | MHD | 0.42 | 0.39 |
| tblVehicleEF | MHD | 0.63 | 0.97 |
| tblVehicleEF | MHD | 11.51 | 1.78 |
| tblVehicleEF | MHD | 1.0000e-004 | 3.1246e-004 |
| tblVehicleEF | MHD | 0.13 | 0.13 |
| tblVehicleEF | MHD | 0.01 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-003 | 7.3550e-003 |
| tblVehicleEF | MHD | 7.8600e-004 | 9.4742e-005 |
| tblVehicleEF | MHD | 9.6000e-005 | 2.9894e-004 |
| tblVehicleEF | MHD | 0.06 | 0.06 |
| tblVehicleEF | MHD | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | MHD | 2.7130e-003 | 7.0330e-003 |
| tblVehicleEF | MHD | 7.2300e-004 | 8.7112e-005 |
| tblVehicleEF | MHD | 1.2610e-003 | 5.1678e-004 |
| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 9.5700e-004 | 3.8510e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.32 | 0.04 |
| tblVehicleEF | MHD | 1.5140e-003 | 6.4846e-004 |
| tblVehicleEF | MHD | 0.01 | 9.0489e-003 |
| tblVehicleEF | MHD | 6.3800e-004 | 7.6502e-005 |

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|---|---|---|---|
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| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 9.5700e-004 | 3.8510e-004 |
| tblVehicleEF | MHD | 0.04 | 0.02 |
| tblVehicleEF | MHD | 0.02 | 0.09 |
| tblVehicleEF | MHD | 0.35 | 0.04 |
| tblVehicleEF | MHD | 0.02 | 3.1420e-003 |
| tblVehicleEF | MHD | 3.1280e-003 | 1.3207e-003 |
| tblVehicleEF | MHD | 0.05 | 8.2677e-003 |
| tblVehicleEF | MHD | 0.44 | 0.40 |
| tblVehicleEF | MHD | 0.27 | 0.19 |
| tblVehicleEF | MHD | 6.01 | 0.98 |
| tblVehicleEF | MHD | 136.63 | 68.44 |
| tblVehicleEF | MHD | 1,108.13 | 950.56 |
| tblVehicleEF | MHD | 54.44 | 7.91 |
| tblVehicleEF | MHD | 0.39 | 0.41 |
| tblVehicleEF | MHD | 0.65 | 1.01 |
| tblVehicleEF | MHD | 11.60 | 1.79 |
| tblVehicleEF | MHD | 1.4400e-004 | 4.4249e-004 |
| tblVehicleEF | MHD | 0.13 | 0.13 |
| tblVehicleEF | MHD | 0.01 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-003 | 7.3550e-003 |
| tblVehicleEF | MHD | 7.8600e-004 | 9.4742e-005 |
| tblVehicleEF | MHD | 1.3800e-004 | 4.2335e-004 |
| tblVehicleEF | MHD | 0.06 | 0.06 |
| tblVehicleEF | MHD | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | MHD | 2.7130e-003 | 7.0330e-003 |
| tblVehicleEF | MHD | 7.2300e-004 | 8.7112e-005 |
| tblVehicleEF | MHD | 5.5100e-004 | 2.2345e-004 |

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|---|---|---|---|
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| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 3.9100e-004 | 1.5547e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.10 |
| tblVehicleEF | MHD | 0.35 | 0.04 |
| tblVehicleEF | MHD | 1.3160e-003 | 6.4885e-004 |
| tblVehicleEF | MHD | 0.01 | 9.0488e-003 |
| tblVehicleEF | MHD | 6.4900e-004 | 7.8304e-005 |
| tblVehicleEF | MHD | 5.5100e-004 | 2.2345e-004 |
| tblVehicleEF | MHD | 0.05 | 0.02 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.9100e-004 | 1.5547e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.10 |
| tblVehicleEF | MHD | 0.39 | 0.05 |
| tblVehicleEF | OBUS | 0.01 | 8.0320e-003 |
| tblVehicleEF | OBUS | 7.8920e-003 | 7.0086e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.38 |
| tblVehicleEF | OBUS | 0.54 | 0.88 |
| tblVehicleEF | OBUS | 5.86 | 2.80 |
| tblVehicleEF | OBUS | 45.17 | 48.22 |
| tblVehicleEF | OBUS | 1,143.07 | 1,333.27 |
| tblVehicleEF | OBUS | 71.14 | 21.22 |
| tblVehicleEF | OBUS | 0.07 | 0.15 |
| tblVehicleEF | OBUS | 0.43 | 0.96 |
| tblVehicleEF | OBUS | 1.65 | 0.73 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.7635e-005 |
| tblVehicleEF | OBUS | 0.13 | 0.13 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 1.8390e-003 | 6.0663e-003 |
| tblVehicleEF | OBUS | 9.1000e-004 | 2.1200e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.5574e-005 |
| tblVehicleEF | OBUS | 0.06 | 0.06 |
| tblVehicleEF | OBUS | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | OBUS | 1.7360e-003 | 5.7873e-003 |
| tblVehicleEF | OBUS | 8.3700e-004 | 1.9493e-004 |
| tblVehicleEF | OBUS | 1.2150e-003 | 1.6978e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 7.0800e-004 | 9.7565e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.30 |
| tblVehicleEF | OBUS | 0.36 | 0.13 |
| tblVehicleEF | OBUS | 4.4400e-004 | 4.6226e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 8.1400e-004 | 2.1000e-004 |
| tblVehicleEF | OBUS | 1.2150e-003 | 1.6978e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 7.0800e-004 | 9.7565e-004 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 0.06 | 0.30 |
| tblVehicleEF | OBUS | 0.39 | 0.14 |
| tblVehicleEF | OBUS | 0.01 | 8.0812e-003 |
| tblVehicleEF | OBUS | 8.1100e-003 | 7.2186e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.38 |
| tblVehicleEF | OBUS | 0.55 | 0.90 |

| | | | |
|---|---|---|---|
| tblVehicleEF | OBUS | 5.43 | 2.59 |
| tblVehicleEF | OBUS | 46.82 | 47.76 |
| tblVehicleEF | OBUS | 1,143.07 | 1,333.31 |
| tblVehicleEF | OBUS | 71.14 | 20.87 |
| tblVehicleEF | OBUS | 0.07 | 0.15 |
| tblVehicleEF | OBUS | 0.40 | 0.90 |
| tblVehicleEF | OBUS | 1.60 | 0.71 |
| tblVehicleEF | OBUS | 5.0000e-006 | 4.2327e-005 |
| tblVehicleEF | OBUS | 0.13 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 1.8390e-003 | 6.0663e-003 |
| tblVehicleEF | OBUS | 9.1000e-004 | 2.1200e-004 |
| tblVehicleEF | OBUS | 5.0000e-006 | 4.0496e-005 |
| tblVehicleEF | OBUS | 0.06 | 0.06 |
| tblVehicleEF | OBUS | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | OBUS | 1.7360e-003 | 5.7873e-003 |
| tblVehicleEF | OBUS | 8.3700e-004 | 1.9493e-004 |
| tblVehicleEF | OBUS | 1.8320e-003 | 2.5402e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.1930e-003 | 1.6284e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.34 | 0.12 |
| tblVehicleEF | OBUS | 4.5900e-004 | 4.5789e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 8.0700e-004 | 2.0657e-004 |
| tblVehicleEF | OBUS | 1.8320e-003 | 2.5402e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | OBUS | 1.1930e-003 | 1.6284e-003 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.37 | 0.14 |
| tblVehicleEF | OBUS | 0.01 | 7.9838e-003 |
| tblVehicleEF | OBUS | 7.7530e-003 | 6.8757e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.25 | 0.39 |
| tblVehicleEF | OBUS | 0.53 | 0.87 |
| tblVehicleEF | OBUS | 6.11 | 2.92 |
| tblVehicleEF | OBUS | 42.90 | 48.86 |
| tblVehicleEF | OBUS | 1,143.07 | 1,333.24 |
| tblVehicleEF | OBUS | 71.14 | 21.43 |
| tblVehicleEF | OBUS | 0.07 | 0.16 |
| tblVehicleEF | OBUS | 0.43 | 0.96 |
| tblVehicleEF | OBUS | 1.69 | 0.74 |
| tblVehicleEF | OBUS | 8.0000e-006 | 5.4965e-005 |
| tblVehicleEF | OBUS | 0.13 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 1.8390e-003 | 6.0663e-003 |
| tblVehicleEF | OBUS | 9.1000e-004 | 2.1200e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.2587e-005 |
| tblVehicleEF | OBUS | 0.06 | 0.06 |
| tblVehicleEF | OBUS | 3.0000e-003 | 3.0000e-003 |
| tblVehicleEF | OBUS | 1.7360e-003 | 5.7873e-003 |
| tblVehicleEF | OBUS | 8.3700e-004 | 1.9493e-004 |
| tblVehicleEF | OBUS | 8.7900e-004 | 1.2355e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 5.0000e-004 | 6.8970e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.37 | 0.14 |
| tblVehicleEF | OBUS | 4.2200e-004 | 4.6829e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 8.1800e-004 | 2.1204e-004 |
| tblVehicleEF | OBUS | 8.7900e-004 | 1.2355e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 5.0000e-004 | 6.8970e-004 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.41 | 0.15 |
| tblVehicleEF | SBUS | 0.85 | 0.05 |
| tblVehicleEF | SBUS | 9.9160e-003 | 0.01 |
| tblVehicleEF | SBUS | 0.06 | 5.4132e-003 |
| tblVehicleEF | SBUS | 8.86 | 2.04 |
| tblVehicleEF | SBUS | 0.59 | 0.97 |
| tblVehicleEF | SBUS | 7.78 | 0.83 |
| tblVehicleEF | SBUS | 1,077.03 | 351.47 |
| tblVehicleEF | SBUS | 1,061.21 | 1,162.54 |
| tblVehicleEF | SBUS | 59.15 | 4.08 |
| tblVehicleEF | SBUS | 8.20 | 3.71 |
| tblVehicleEF | SBUS | 3.80 | 6.27 |
| tblVehicleEF | SBUS | 11.25 | 0.56 |
| tblVehicleEF | SBUS | 7.8510e-003 | 4.6090e-003 |
| tblVehicleEF | SBUS | 0.74 | 0.74 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 1.0800e-003 | 5.1408e-005 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 7.5120e-003 | 4.4096e-003 |
| tblVehicleEF | SBUS | 0.32 | 0.32 |
| tblVehicleEF | SBUS | 2.6470e-003 | 2.7572e-003 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 9.9300e-004 | 4.7268e-005 |
| tblVehicleEF | SBUS | 2.4650e-003 | 7.6204e-004 |
| tblVehicleEF | SBUS | 0.02 | 8.7447e-003 |
| tblVehicleEF | SBUS | 1.06 | 0.24 |
| tblVehicleEF | SBUS | 1.3190e-003 | 3.8868e-004 |
| tblVehicleEF | SBUS | 0.10 | 0.15 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |
| tblVehicleEF | SBUS | 0.38 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.3433e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 7.2500e-004 | 4.0401e-005 |
| tblVehicleEF | SBUS | 2.4650e-003 | 7.6204e-004 |
| tblVehicleEF | SBUS | 0.02 | 8.7447e-003 |
| tblVehicleEF | SBUS | 1.54 | 0.34 |
| tblVehicleEF | SBUS | 1.3190e-003 | 3.8868e-004 |
| tblVehicleEF | SBUS | 0.11 | 0.18 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |
| tblVehicleEF | SBUS | 0.42 | 0.04 |
| tblVehicleEF | SBUS | 0.85 | 0.05 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.05 | 4.6952e-003 |
| tblVehicleEF | SBUS | 8.76 | 1.99 |
| tblVehicleEF | SBUS | 0.60 | 0.99 |
| tblVehicleEF | SBUS | 6.05 | 0.64 |
| tblVehicleEF | SBUS | 1,123.69 | 363.73 |
| tblVehicleEF | SBUS | 1,061.21 | 1,162.57 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 59.15 | 3.78 |
| tblVehicleEF | SBUS | 8.46 | 3.81 |
| tblVehicleEF | SBUS | 3.63 | 5.99 |
| tblVehicleEF | SBUS | 11.22 | 0.56 |
| tblVehicleEF | SBUS | 6.6190e-003 | 3.8928e-003 |
| tblVehicleEF | SBUS | 0.74 | 0.74 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 1.0800e-003 | 5.1408e-005 |
| tblVehicleEF | SBUS | 6.3320e-003 | 3.7244e-003 |
| tblVehicleEF | SBUS | 0.32 | 0.32 |
| tblVehicleEF | SBUS | 2.6470e-003 | 2.7572e-003 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 9.9300e-004 | 4.7268e-005 |
| tblVehicleEF | SBUS | 3.7610e-003 | 1.1454e-003 |
| tblVehicleEF | SBUS | 0.02 | 8.9865e-003 |
| tblVehicleEF | SBUS | 1.06 | 0.23 |
| tblVehicleEF | SBUS | 2.2720e-003 | 6.6170e-004 |
| tblVehicleEF | SBUS | 0.10 | 0.15 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |
| tblVehicleEF | SBUS | 0.33 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.4591e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 6.9600e-004 | 3.7375e-005 |
| tblVehicleEF | SBUS | 3.7610e-003 | 1.1454e-003 |
| tblVehicleEF | SBUS | 0.02 | 8.9865e-003 |
| tblVehicleEF | SBUS | 1.54 | 0.33 |
| tblVehicleEF | SBUS | 2.2720e-003 | 6.6170e-004 |
| tblVehicleEF | SBUS | 0.11 | 0.18 |
| tblVehicleEF | SBUS | 0.01 | 0.05 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 0.37 | 0.03 |
| tblVehicleEF | SBUS | 0.85 | 0.05 |
| tblVehicleEF | SBUS | 9.8040e-003 | 0.01 |
| tblVehicleEF | SBUS | 0.06 | 5.7989e-003 |
| tblVehicleEF | SBUS | 9.00 | 2.11 |
| tblVehicleEF | SBUS | 0.58 | 0.96 |
| tblVehicleEF | SBUS | 8.73 | 0.93 |
| tblVehicleEF | SBUS | 1,012.61 | 334.54 |
| tblVehicleEF | SBUS | 1,061.21 | 1,162.52 |
| tblVehicleEF | SBUS | 59.15 | 4.25 |
| tblVehicleEF | SBUS | 7.84 | 3.57 |
| tblVehicleEF | SBUS | 3.78 | 6.23 |
| tblVehicleEF | SBUS | 11.27 | 0.56 |
| tblVehicleEF | SBUS | 9.5530e-003 | 5.5980e-003 |
| tblVehicleEF | SBUS | 0.74 | 0.74 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 1.0800e-003 | 5.1408e-005 |
| tblVehicleEF | SBUS | 9.1400e-003 | 5.3558e-003 |
| tblVehicleEF | SBUS | 0.32 | 0.32 |
| tblVehicleEF | SBUS | 2.6470e-003 | 2.7572e-003 |
| tblVehicleEF | SBUS | 0.02 | 0.04 |
| tblVehicleEF | SBUS | 9.9300e-004 | 4.7268e-005 |
| tblVehicleEF | SBUS | 1.7660e-003 | 5.5432e-004 |
| tblVehicleEF | SBUS | 0.02 | 9.1896e-003 |
| tblVehicleEF | SBUS | 1.07 | 0.24 |
| tblVehicleEF | SBUS | 9.2600e-004 | 2.7406e-004 |
| tblVehicleEF | SBUS | 0.10 | 0.15 |
| tblVehicleEF | SBUS | 0.02 | 0.07 |
| tblVehicleEF | SBUS | 0.41 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 9.9660e-003 | 3.1833e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 7.4100e-004 | 4.2067e-005 |
| tblVehicleEF | SBUS | 1.7660e-003 | 5.5432e-004 |
| tblVehicleEF | SBUS | 0.02 | 9.1896e-003 |
| tblVehicleEF | SBUS | 1.54 | 0.34 |
| tblVehicleEF | SBUS | 9.2600e-004 | 2.7406e-004 |
| tblVehicleEF | SBUS | 0.11 | 0.18 |
| tblVehicleEF | SBUS | 0.02 | 0.07 |
| tblVehicleEF | SBUS | 0.45 | 0.04 |
| tblVehicleEF | UBUS | 1.74 | 2.90 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 7.10 | 22.23 |
| tblVehicleEF | UBUS | 9.59 | 1.69 |
| tblVehicleEF | UBUS | 1,797.09 | 1,600.97 |
| tblVehicleEF | UBUS | 129.74 | 19.53 |
| tblVehicleEF | UBUS | 3.37 | 0.39 |
| tblVehicleEF | UBUS | 13.14 | 0.19 |
| tblVehicleEF | UBUS | 0.53 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.03 | 3.6752e-003 |
| tblVehicleEF | UBUS | 1.2290e-003 | 1.6392e-004 |
| tblVehicleEF | UBUS | 0.23 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.03 | 3.5044e-003 |
| tblVehicleEF | UBUS | 1.1300e-003 | 1.5072e-004 |
| tblVehicleEF | UBUS | 2.2290e-003 | 8.3852e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.6920e-003 | 7.0686e-004 |
| tblVehicleEF | UBUS | 0.31 | 0.05 |

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|---|---|---|---|
| tblVehicleEF | UBUS | 9.5050e-003 | 0.08 |
| tblVehicleEF | UBUS | 0.73 | 0.10 |
| tblVehicleEF | UBUS | 8.3470e-003 | 5.6654e-003 |
| tblVehicleEF | UBUS | 1.4700e-003 | 1.9329e-004 |
| tblVehicleEF | UBUS | 2.2290e-003 | 8.3852e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.6920e-003 | 7.0686e-004 |
| tblVehicleEF | UBUS | 2.10 | 2.97 |
| tblVehicleEF | UBUS | 9.5050e-003 | 0.08 |
| tblVehicleEF | UBUS | 0.80 | 0.11 |
| tblVehicleEF | UBUS | 1.74 | 2.90 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 7.12 | 22.23 |
| tblVehicleEF | UBUS | 8.10 | 1.43 |
| tblVehicleEF | UBUS | 1,797.09 | 1,600.77 |
| tblVehicleEF | UBUS | 129.74 | 19.08 |
| tblVehicleEF | UBUS | 3.21 | 0.38 |
| tblVehicleEF | UBUS | 13.06 | 0.18 |
| tblVehicleEF | UBUS | 0.53 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.03 | 3.6747e-003 |
| tblVehicleEF | UBUS | 1.2290e-003 | 1.6384e-004 |
| tblVehicleEF | UBUS | 0.23 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6971e-003 |
| tblVehicleEF | UBUS | 0.03 | 3.5040e-003 |
| tblVehicleEF | UBUS | 1.1300e-003 | 1.5064e-004 |
| tblVehicleEF | UBUS | 3.1570e-003 | 1.2277e-003 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 2.9330e-003 | 1.2125e-003 |
| tblVehicleEF | UBUS | 0.31 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 8.3410e-003 | 0.07 |
| tblVehicleEF | UBUS | 0.66 | 0.09 |
| tblVehicleEF | UBUS | 8.3480e-003 | 5.6647e-003 |
| tblVehicleEF | UBUS | 1.4440e-003 | 1.8884e-004 |
| tblVehicleEF | UBUS | 3.1570e-003 | 1.2277e-003 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 2.9330e-003 | 1.2125e-003 |
| tblVehicleEF | UBUS | 2.10 | 2.97 |
| tblVehicleEF | UBUS | 8.3410e-003 | 0.07 |
| tblVehicleEF | UBUS | 0.72 | 0.10 |
| tblVehicleEF | UBUS | 1.74 | 2.90 |
| tblVehicleEF | UBUS | 0.06 | 0.03 |
| tblVehicleEF | UBUS | 7.08 | 22.23 |
| tblVehicleEF | UBUS | 10.59 | 1.86 |
| tblVehicleEF | UBUS | 1,797.09 | 1,600.77 |
| tblVehicleEF | UBUS | 129.74 | 19.81 |
| tblVehicleEF | UBUS | 3.36 | 0.39 |
| tblVehicleEF | UBUS | 13.19 | 0.20 |
| tblVehicleEF | UBUS | 0.53 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.03 | 3.6747e-003 |
| tblVehicleEF | UBUS | 1.2290e-003 | 1.6384e-004 |
| tblVehicleEF | UBUS | 0.23 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6971e-003 |
| tblVehicleEF | UBUS | 0.03 | 3.5040e-003 |
| tblVehicleEF | UBUS | 1.1300e-003 | 1.5064e-004 |
| tblVehicleEF | UBUS | 1.6980e-003 | 6.1593e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.1710e-003 | 4.9160e-004 |
| tblVehicleEF | UBUS | 0.31 | 0.05 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.09 |
| tblVehicleEF | UBUS | 0.78 | 0.11 |
| tblVehicleEF | UBUS | 8.3470e-003 | 5.6646e-003 |
| tblVehicleEF | UBUS | 1.4870e-003 | 1.9606e-004 |
| tblVehicleEF | UBUS | 1.6980e-003 | 6.1593e-004 |
| tblVehicleEF | UBUS | 0.04 | 0.01 |
| tblVehicleEF | UBUS | 1.1710e-003 | 4.9160e-004 |
| tblVehicleEF | UBUS | 2.10 | 2.97 |
| tblVehicleEF | UBUS | 0.01 | 0.09 |
| tblVehicleEF | UBUS | 0.85 | 0.12 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |
| tblWater | IndoorWaterUseRate | 84,036,250.00 | 67,229,000.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

## 2.0 Emissions Summary

### 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 10.0875 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| 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 | 3.1825 | 4.2257 | 22.1363 | 0.0575 | 5.9876 | 0.0469 | 6.0345 | 1.5990 | 0.0438 | 1.6428 | | 5,890.0221 | 5,890.0221 | 0.3388 | | 5,898.4922 |
| **Total** | **13.2701** | **4.2261** | **22.1734** | **0.0575** | **5.9876** | **0.0470** | **6.0346** | **1.5990** | **0.0439** | **1.6429** | | **5,890.1016** | **5,890.1016** | **0.3390** | **0.0000** | **5,898.5770** |

**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 | 10.0875 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| 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 | 3.1825 | 4.2257 | 22.1363 | 0.0575 | 5.9876 | 0.0469 | 6.0345 | 1.5990 | 0.0438 | 1.6428 | | 5,890.0221 | 5,890.0221 | 0.3388 | | 5,898.4922 |
| **Total** | **13.2701** | **4.2261** | **22.1734** | **0.0575** | **5.9876** | **0.0470** | **6.0346** | **1.5990** | **0.0439** | **1.6429** | | **5,890.1016** | **5,890.1016** | **0.3390** | **0.0000** | **5,898.5770** |

| | ROG | NOx | 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** |

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 3.1825 | 4.2257 | 22.1363 | 0.0575 | 5.9876 | 0.0469 | 6.0345 | 1.5990 | 0.0438 | 1.6428 | | 5,890.022 1 | 5,890.0221 | 0.3388 | | 5,898.492 2 |
| Unmitigated | 3.1825 | 4.2257 | 22.1363 | 0.0575 | 5.9876 | 0.0469 | 6.0345 | 1.5990 | 0.0438 | 1.6428 | | 5,890.022 1 | 5,890.0221 | 0.3388 | | 5,898.492 2 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 1,388.19 | 1,388.19 | 1388.19 | 2,828,672 | 2,828,672 |
| Total | 1,388.19 | 1,388.19 | 1,388.19 | 2,828,672 | 2,828,672 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.568698 | 0.056485 | 0.174526 | 0.121269 | 0.027373 | 0.007522 | 0.019121 | 0.017044 | 0.000863 | 0.000960 | 0.003902 | 0.000566 | 0.001671 |

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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

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### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 10.0875 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| Unmitigated | 10.0875 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |

### 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 | 2.3073 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 7.7768 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 3.4400e-003 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| **Total** | **10.0875** | **3.4000e-004** | **0.0371** | **0.0000** | | **1.3000e-004** | **1.3000e-004** | | **1.3000e-004** | **1.3000e-004** | | **0.0795** | **0.0795** | **2.1000e-004** | | **0.0848** |

**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 | 2.3073 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 7.7768 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 3.4400e-003 | 3.4000e-004 | 0.0371 | 0.0000 | | 1.3000e-004 | 1.3000e-004 | | 1.3000e-004 | 1.3000e-004 | | 0.0795 | 0.0795 | 2.1000e-004 | | 0.0848 |
| **Total** | **10.0875** | **3.4000e-004** | **0.0371** | **0.0000** | | **1.3000e-004** | **1.3000e-004** | | **1.3000e-004** | **1.3000e-004** | | **0.0795** | **0.0795** | **2.1000e-004** | | **0.0848** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

# 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

# Conejo Summit - Buildout Operational 2027

**Ventura County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 764.22 | 1000sqft | 49.64 | 764,220.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2027 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 361.04 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 382,110.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 1,146,330.00 | 0.00 |
| tblConstructionPhase | NumDays | 55.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.61 | 0.58 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.17 |
| tblFleetMix | LHD1 | 0.01 | 0.03 |
| tblFleetMix | LHD2 | 5.7550e-003 | 7.2790e-003 |
| tblFleetMix | MCY | 3.7200e-003 | 3.7080e-003 |
| tblFleetMix | MDV | 0.10 | 0.11 |
| tblFleetMix | MH | 1.0730e-003 | 1.3760e-003 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.1980e-003 | 8.0100e-004 |
| tblFleetMix | SBUS | 4.0400e-004 | 5.5900e-004 |
| tblFleetMix | UBUS | 1.0750e-003 | 9.5900e-004 |
| tblLandUse | LotAcreage | 17.54 | 49.64 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 361.04 |
| tblSolidWaste | SolidWasteGenerationRate | 947.63 | 530.67 |
| tblTripsAndVMT | WorkerTripNumber | 64.00 | 0.00 |
| tblVehicleEF | HHD | 0.45 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.48 | 6.33 |
| tblVehicleEF | HHD | 1.10 | 0.53 |
| tblVehicleEF | HHD | 3.56 | 6.4740e-003 |
| tblVehicleEF | HHD | 3,896.24 | 1,002.87 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.61 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 12.85 | 5.45 |
| tblVehicleEF | HHD | 1.43 | 2.25 |
| tblVehicleEF | HHD | 19.34 | 2.54 |
| tblVehicleEF | HHD | 8.6360e-003 | 2.9490e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 8.2630e-003 | 2.8220e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 7.5000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 3.9950e-003 | 3.9000e-005 |
| tblVehicleEF | HHD | 0.36 | 0.43 |
| tblVehicleEF | HHD | 6.3000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.2200e-004 | 1.4900e-004 |
| tblVehicleEF | HHD | 0.06 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 9.2560e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.7000e-004 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 7.5000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 3.9950e-003 | 3.9000e-005 |
| tblVehicleEF | HHD | 0.44 | 0.49 |
| tblVehicleEF | HHD | 6.3000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.2200e-004 | 1.4900e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.43 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |
| tblVehicleEF | HHD | 0.05 | 0.00 |
| tblVehicleEF | HHD | 1.07 | 6.24 |
| tblVehicleEF | HHD | 1.11 | 0.53 |
| tblVehicleEF | HHD | 3.32 | 6.0450e-003 |
| tblVehicleEF | HHD | 4,127.72 | 991.81 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.62 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 13.27 | 5.22 |
| tblVehicleEF | HHD | 1.37 | 2.15 |
| tblVehicleEF | HHD | 19.33 | 2.54 |
| tblVehicleEF | HHD | 7.2810e-003 | 2.5700e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 6.9660e-003 | 2.4580e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 1.1700e-004 | 1.0000e-006 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 4.0950e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.34 | 0.45 |
| tblVehicleEF | HHD | 1.0300e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.0100e-004 | 1.4200e-004 |
| tblVehicleEF | HHD | 0.06 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 9.1530e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6700e-004 | 0.00 |
| tblVehicleEF | HHD | 1.1700e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 4.0950e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.41 | 0.52 |
| tblVehicleEF | HHD | 1.0300e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.0100e-004 | 1.4200e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.49 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.04 | 6.46 |
| tblVehicleEF | HHD | 1.09 | 0.53 |
| tblVehicleEF | HHD | 3.73 | 6.7820e-003 |
| tblVehicleEF | HHD | 3,576.57 | 1,018.14 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.61 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 12.28 | 5.78 |
| tblVehicleEF | HHD | 1.43 | 2.23 |
| tblVehicleEF | HHD | 19.35 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.4740e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 0.01 | 3.3240e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 5.3000e-005 | 0.00 |
| tblVehicleEF | HHD | 4.1270e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.39 | 0.39 |
| tblVehicleEF | HHD | 4.5000e-005 | 0.00 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.7500e-004 | 1.6700e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 9.3980e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.7300e-004 | 0.00 |
| tblVehicleEF | HHD | 5.3000e-005 | 0.00 |
| tblVehicleEF | HHD | 4.1270e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.47 | 0.45 |
| tblVehicleEF | HHD | 4.5000e-005 | 0.00 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.7500e-004 | 1.6700e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | LDA | 2.7190e-003 | 1.3890e-003 |
| tblVehicleEF | LDA | 3.0880e-003 | 0.04 |
| tblVehicleEF | LDA | 0.41 | 0.47 |
| tblVehicleEF | LDA | 0.79 | 1.87 |
| tblVehicleEF | LDA | 204.34 | 218.76 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 46.66 | 46.02 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.14 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 6.8430e-003 | 4.9460e-003 |
| tblVehicleEF | LDA | 0.03 | 0.19 |
| tblVehicleEF | LDA | 0.04 | 0.16 |
| tblVehicleEF | LDA | 2.0450e-003 | 2.1640e-003 |
| tblVehicleEF | LDA | 4.8000e-004 | 4.5500e-004 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 9.9450e-003 | 7.1840e-003 |
| tblVehicleEF | LDA | 0.03 | 0.19 |
| tblVehicleEF | LDA | 0.05 | 0.17 |
| tblVehicleEF | LDA | 2.8930e-003 | 1.4950e-003 |
| tblVehicleEF | LDA | 2.6830e-003 | 0.03 |
| tblVehicleEF | LDA | 0.45 | 0.52 |
| tblVehicleEF | LDA | 0.65 | 1.54 |
| tblVehicleEF | LDA | 213.33 | 228.15 |
| tblVehicleEF | LDA | 46.66 | 45.43 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.13 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.04 | 0.05 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.04 | 0.06 |
| tblVehicleEF | LDA | 7.2720e-003 | 5.2550e-003 |
| tblVehicleEF | LDA | 0.03 | 0.17 |
| tblVehicleEF | LDA | 0.04 | 0.14 |
| tblVehicleEF | LDA | 2.1360e-003 | 2.2570e-003 |
| tblVehicleEF | LDA | 4.7700e-004 | 4.5000e-004 |
| tblVehicleEF | LDA | 0.04 | 0.05 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.04 | 0.06 |
| tblVehicleEF | LDA | 0.01 | 7.6340e-003 |
| tblVehicleEF | LDA | 0.03 | 0.17 |
| tblVehicleEF | LDA | 0.04 | 0.15 |
| tblVehicleEF | LDA | 2.6670e-003 | 1.3520e-003 |
| tblVehicleEF | LDA | 3.3340e-003 | 0.04 |
| tblVehicleEF | LDA | 0.41 | 0.47 |
| tblVehicleEF | LDA | 0.88 | 2.08 |
| tblVehicleEF | LDA | 202.64 | 216.98 |
| tblVehicleEF | LDA | 46.66 | 46.39 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.15 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |

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|---|---|---|---|
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 6.7130e-003 | 4.8520e-003 |
| tblVehicleEF | LDA | 0.04 | 0.22 |
| tblVehicleEF | LDA | 0.04 | 0.17 |
| tblVehicleEF | LDA | 2.0280e-003 | 2.1460e-003 |
| tblVehicleEF | LDA | 4.8100e-004 | 4.5900e-004 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 9.7540e-003 | 7.0470e-003 |
| tblVehicleEF | LDA | 0.04 | 0.22 |
| tblVehicleEF | LDA | 0.05 | 0.18 |
| tblVehicleEF | LDT1 | 6.5100e-003 | 3.6460e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.06 |
| tblVehicleEF | LDT1 | 0.83 | 0.85 |
| tblVehicleEF | LDT1 | 2.12 | 2.06 |
| tblVehicleEF | LDT1 | 263.27 | 266.81 |
| tblVehicleEF | LDT1 | 61.51 | 57.01 |
| tblVehicleEF | LDT1 | 0.08 | 0.07 |
| tblVehicleEF | LDT1 | 0.12 | 0.21 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.09 | 0.09 |
| tblVehicleEF | LDT1 | 0.23 | 0.17 |
| tblVehicleEF | LDT1 | 0.08 | 0.08 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.16 | 0.64 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.14 | 0.27 |
| tblVehicleEF | LDT1 | 2.6410e-003 | 2.6400e-003 |
| tblVehicleEF | LDT1 | 6.5200e-004 | 5.6400e-004 |
| tblVehicleEF | LDT1 | 0.09 | 0.09 |
| tblVehicleEF | LDT1 | 0.23 | 0.17 |
| tblVehicleEF | LDT1 | 0.08 | 0.08 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.16 | 0.64 |
| tblVehicleEF | LDT1 | 0.15 | 0.29 |
| tblVehicleEF | LDT1 | 6.8870e-003 | 3.8950e-003 |
| tblVehicleEF | LDT1 | 8.8250e-003 | 0.05 |
| tblVehicleEF | LDT1 | 0.89 | 0.92 |
| tblVehicleEF | LDT1 | 1.73 | 1.69 |
| tblVehicleEF | LDT1 | 274.46 | 276.65 |
| tblVehicleEF | LDT1 | 61.51 | 56.32 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.11 | 0.19 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.14 | 0.14 |
| tblVehicleEF | LDT1 | 0.24 | 0.18 |
| tblVehicleEF | LDT1 | 0.13 | 0.14 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.14 | 0.57 |
| tblVehicleEF | LDT1 | 0.12 | 0.23 |
| tblVehicleEF | LDT1 | 2.7540e-003 | 2.7380e-003 |
| tblVehicleEF | LDT1 | 6.4500e-004 | 5.5700e-004 |
| tblVehicleEF | LDT1 | 0.14 | 0.14 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.24 | 0.18 |
| tblVehicleEF | LDT1 | 0.13 | 0.14 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.14 | 0.57 |
| tblVehicleEF | LDT1 | 0.13 | 0.25 |
| tblVehicleEF | LDT1 | 6.3960e-003 | 3.5590e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.06 |
| tblVehicleEF | LDT1 | 0.82 | 0.84 |
| tblVehicleEF | LDT1 | 2.36 | 2.30 |
| tblVehicleEF | LDT1 | 261.15 | 264.94 |
| tblVehicleEF | LDT1 | 61.51 | 57.45 |
| tblVehicleEF | LDT1 | 0.08 | 0.07 |
| tblVehicleEF | LDT1 | 0.12 | 0.22 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.25 | 0.19 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.20 | 0.78 |
| tblVehicleEF | LDT1 | 0.15 | 0.29 |
| tblVehicleEF | LDT1 | 2.6200e-003 | 2.6220e-003 |
| tblVehicleEF | LDT1 | 6.5600e-004 | 5.6900e-004 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.25 | 0.19 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.20 | 0.78 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.16 | 0.32 |
| tblVehicleEF | LDT2 | 3.7240e-003 | 2.5850e-003 |
| tblVehicleEF | LDT2 | 4.2360e-003 | 0.05 |
| tblVehicleEF | LDT2 | 0.55 | 0.67 |
| tblVehicleEF | LDT2 | 1.04 | 2.43 |
| tblVehicleEF | LDT2 | 289.62 | 276.40 |
| tblVehicleEF | LDT2 | 66.47 | 59.18 |
| tblVehicleEF | LDT2 | 0.05 | 0.05 |
| tblVehicleEF | LDT2 | 0.07 | 0.21 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.08 | 0.11 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 9.2470e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.41 |
| tblVehicleEF | LDT2 | 0.06 | 0.24 |
| tblVehicleEF | LDT2 | 2.9000e-003 | 2.7340e-003 |
| tblVehicleEF | LDT2 | 6.8200e-004 | 5.8600e-004 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.08 | 0.11 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.41 |
| tblVehicleEF | LDT2 | 0.06 | 0.26 |
| tblVehicleEF | LDT2 | 3.9580e-003 | 2.7720e-003 |
| tblVehicleEF | LDT2 | 3.6880e-003 | 0.05 |
| tblVehicleEF | LDT2 | 0.60 | 0.73 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.87 | 1.99 |
| tblVehicleEF | LDT2 | 302.13 | 285.62 |
| tblVehicleEF | LDT2 | 66.47 | 58.40 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 0.06 | 0.19 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.05 | 0.09 |
| tblVehicleEF | LDT2 | 0.08 | 0.12 |
| tblVehicleEF | LDT2 | 0.06 | 0.11 |
| tblVehicleEF | LDT2 | 9.8270e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.37 |
| tblVehicleEF | LDT2 | 0.05 | 0.21 |
| tblVehicleEF | LDT2 | 3.0250e-003 | 2.8250e-003 |
| tblVehicleEF | LDT2 | 6.7900e-004 | 5.7800e-004 |
| tblVehicleEF | LDT2 | 0.05 | 0.09 |
| tblVehicleEF | LDT2 | 0.08 | 0.12 |
| tblVehicleEF | LDT2 | 0.06 | 0.11 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.05 | 0.37 |
| tblVehicleEF | LDT2 | 0.05 | 0.23 |
| tblVehicleEF | LDT2 | 3.6520e-003 | 2.5200e-003 |
| tblVehicleEF | LDT2 | 4.5670e-003 | 0.06 |
| tblVehicleEF | LDT2 | 0.54 | 0.66 |
| tblVehicleEF | LDT2 | 1.15 | 2.70 |
| tblVehicleEF | LDT2 | 287.25 | 274.65 |
| tblVehicleEF | LDT2 | 66.47 | 59.68 |
| tblVehicleEF | LDT2 | 0.05 | 0.05 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.07 | 0.22 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 0.09 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 9.0700e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.07 | 0.50 |
| tblVehicleEF | LDT2 | 0.06 | 0.26 |
| tblVehicleEF | LDT2 | 2.8760e-003 | 2.7170e-003 |
| tblVehicleEF | LDT2 | 6.8400e-004 | 5.9100e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 0.09 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.01 | 0.01 |
| tblVehicleEF | LDT2 | 0.07 | 0.50 |
| tblVehicleEF | LDT2 | 0.07 | 0.28 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1330e-003 |
| tblVehicleEF | LHD1 | 7.1770e-003 | 3.9640e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |
| tblVehicleEF | LHD1 | 0.62 | 0.49 |
| tblVehicleEF | LHD1 | 1.95 | 0.87 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.31 |
| tblVehicleEF | LHD1 | 26.54 | 9.45 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.25 | 0.88 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.77 | 0.24 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 2.0040e-003 | 1.5820e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 1.3860e-003 | 1.0850e-003 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.31 | 0.51 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5760e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 3.0200e-004 | 9.4000e-005 |
| tblVehicleEF | LHD1 | 2.0040e-003 | 1.5820e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.3860e-003 | 1.0850e-003 |
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.31 | 0.51 |
| tblVehicleEF | LHD1 | 0.20 | 0.06 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1450e-003 |
| tblVehicleEF | LHD1 | 7.3220e-003 | 4.0310e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.63 | 0.50 |
| tblVehicleEF | LHD1 | 1.83 | 0.82 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.32 |
| tblVehicleEF | LHD1 | 26.54 | 9.36 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.19 | 0.84 |
| tblVehicleEF | LHD1 | 0.72 | 0.23 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 3.0980e-003 | 2.4560e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 2.2730e-003 | 1.7890e-003 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.29 | 0.48 |
| tblVehicleEF | LHD1 | 0.18 | 0.05 |
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5760e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 2.9900e-004 | 9.3000e-005 |
| tblVehicleEF | LHD1 | 3.0980e-003 | 2.4560e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 2.2730e-003 | 1.7890e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.29 | 0.48 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1240e-003 |
| tblVehicleEF | LHD1 | 7.0840e-003 | 3.9210e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |
| tblVehicleEF | LHD1 | 0.61 | 0.49 |
| tblVehicleEF | LHD1 | 2.04 | 0.91 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.30 |
| tblVehicleEF | LHD1 | 26.54 | 9.51 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.24 | 0.87 |
| tblVehicleEF | LHD1 | 0.80 | 0.25 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 1.3920e-003 | 1.0920e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 9.8100e-004 | 7.6500e-004 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.34 | 0.56 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5750e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 3.0300e-004 | 9.4000e-005 |
| tblVehicleEF | LHD1 | 1.3920e-003 | 1.0920e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 9.8100e-004 | 7.6500e-004 |
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.34 | 0.56 |
| tblVehicleEF | LHD1 | 0.21 | 0.06 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9660e-003 |
| tblVehicleEF | LHD2 | 2.6840e-003 | 2.9100e-003 |
| tblVehicleEF | LHD2 | 5.2320e-003 | 7.1760e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 1.01 | 0.53 |
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.16 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.53 | 0.88 |
| tblVehicleEF | LHD2 | 0.41 | 0.17 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 6.7200e-004 | 8.2900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 5.2900e-004 | 6.2200e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.06 | 0.21 |
| tblVehicleEF | LHD2 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7330e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6100e-004 | 7.1000e-005 |
| tblVehicleEF | LHD2 | 6.7200e-004 | 8.2900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 5.2900e-004 | 6.2200e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.21 |
| tblVehicleEF | LHD2 | 0.08 | 0.04 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9750e-003 |
| tblVehicleEF | LHD2 | 2.7140e-003 | 2.9350e-003 |
| tblVehicleEF | LHD2 | 5.0210e-003 | 6.8530e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 0.95 | 0.50 |
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.10 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.51 | 0.84 |
| tblVehicleEF | LHD2 | 0.39 | 0.16 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |
| tblVehicleEF | LHD2 | 1.0350e-003 | 1.2770e-003 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 8.6400e-004 | 1.0180e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.06 | 0.20 |
| tblVehicleEF | LHD2 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7340e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6000e-004 | 7.0000e-005 |
| tblVehicleEF | LHD2 | 1.0350e-003 | 1.2770e-003 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 8.6400e-004 | 1.0180e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.20 |
| tblVehicleEF | LHD2 | 0.07 | 0.04 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9600e-003 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.8930e-003 |
| tblVehicleEF | LHD2 | 5.3780e-003 | 7.3980e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 1.05 | 0.55 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.20 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.53 | 0.87 |
| tblVehicleEF | LHD2 | 0.42 | 0.18 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |
| tblVehicleEF | LHD2 | 4.7300e-004 | 5.8300e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 3.7900e-004 | 4.4400e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.07 | 0.24 |
| tblVehicleEF | LHD2 | 0.07 | 0.04 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7330e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6100e-004 | 7.1000e-005 |
| tblVehicleEF | LHD2 | 4.7300e-004 | 5.8300e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 3.7900e-004 | 4.4400e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.07 | 0.24 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.08 | 0.04 |
| tblVehicleEF | MCY | 0.48 | 0.34 |
| tblVehicleEF | MCY | 0.16 | 0.24 |
| tblVehicleEF | MCY | 18.38 | 18.68 |
| tblVehicleEF | MCY | 10.02 | 8.87 |
| tblVehicleEF | MCY | 176.71 | 214.21 |
| tblVehicleEF | MCY | 44.77 | 60.65 |
| tblVehicleEF | MCY | 1.14 | 1.14 |
| tblVehicleEF | MCY | 0.32 | 0.27 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 0.89 | 0.93 |
| tblVehicleEF | MCY | 0.71 | 0.76 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 2.33 | 2.35 |
| tblVehicleEF | MCY | 0.85 | 1.90 |
| tblVehicleEF | MCY | 2.14 | 1.90 |
| tblVehicleEF | MCY | 2.1370e-003 | 2.1200e-003 |
| tblVehicleEF | MCY | 6.7400e-004 | 6.0000e-004 |
| tblVehicleEF | MCY | 0.89 | 0.93 |
| tblVehicleEF | MCY | 0.71 | 0.76 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 2.90 | 2.92 |
| tblVehicleEF | MCY | 0.85 | 1.90 |
| tblVehicleEF | MCY | 2.33 | 2.07 |
| tblVehicleEF | MCY | 0.47 | 0.33 |
| tblVehicleEF | MCY | 0.13 | 0.21 |
| tblVehicleEF | MCY | 17.28 | 17.54 |

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|---|---|---|---|
| tblVehicleEF | MCY | 8.85 | 7.80 |
| tblVehicleEF | MCY | 176.71 | 212.11 |
| tblVehicleEF | MCY | 44.77 | 58.01 |
| tblVehicleEF | MCY | 1.00 | 1.01 |
| tblVehicleEF | MCY | 0.30 | 0.25 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 1.54 | 1.60 |
| tblVehicleEF | MCY | 0.78 | 0.83 |
| tblVehicleEF | MCY | 1.16 | 1.20 |
| tblVehicleEF | MCY | 2.25 | 2.27 |
| tblVehicleEF | MCY | 0.79 | 1.75 |
| tblVehicleEF | MCY | 1.84 | 1.62 |
| tblVehicleEF | MCY | 2.1170e-003 | 2.0990e-003 |
| tblVehicleEF | MCY | 6.4600e-004 | 5.7400e-004 |
| tblVehicleEF | MCY | 1.54 | 1.60 |
| tblVehicleEF | MCY | 0.78 | 0.83 |
| tblVehicleEF | MCY | 1.16 | 1.20 |
| tblVehicleEF | MCY | 2.80 | 2.82 |
| tblVehicleEF | MCY | 0.79 | 1.75 |
| tblVehicleEF | MCY | 2.00 | 1.76 |
| tblVehicleEF | MCY | 0.49 | 0.35 |
| tblVehicleEF | MCY | 0.17 | 0.27 |
| tblVehicleEF | MCY | 19.30 | 19.64 |
| tblVehicleEF | MCY | 10.86 | 9.66 |
| tblVehicleEF | MCY | 176.71 | 215.94 |
| tblVehicleEF | MCY | 44.77 | 62.55 |
| tblVehicleEF | MCY | 1.16 | 1.16 |

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|---|---|---|---|
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 0.88 | 0.93 |
| tblVehicleEF | MCY | 0.33 | 0.36 |
| tblVehicleEF | MCY | 2.39 | 2.41 |
| tblVehicleEF | MCY | 1.01 | 2.26 |
| tblVehicleEF | MCY | 2.34 | 2.10 |
| tblVehicleEF | MCY | 2.1540e-003 | 2.1370e-003 |
| tblVehicleEF | MCY | 6.9400e-004 | 6.1900e-004 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 0.88 | 0.93 |
| tblVehicleEF | MCY | 0.33 | 0.36 |
| tblVehicleEF | MCY | 2.97 | 2.99 |
| tblVehicleEF | MCY | 1.01 | 2.26 |
| tblVehicleEF | MCY | 2.55 | 2.28 |
| tblVehicleEF | MDV | 6.5670e-003 | 3.0130e-003 |
| tblVehicleEF | MDV | 9.8130e-003 | 0.06 |
| tblVehicleEF | MDV | 0.79 | 0.72 |
| tblVehicleEF | MDV | 1.90 | 2.70 |
| tblVehicleEF | MDV | 398.72 | 343.92 |
| tblVehicleEF | MDV | 91.05 | 73.25 |
| tblVehicleEF | MDV | 0.08 | 0.06 |
| tblVehicleEF | MDV | 0.16 | 0.26 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.05 | 0.07 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.10 | 0.45 |
| tblVehicleEF | MDV | 0.13 | 0.30 |
| tblVehicleEF | MDV | 3.9890e-003 | 3.3990e-003 |
| tblVehicleEF | MDV | 9.4300e-004 | 7.2500e-004 |
| tblVehicleEF | MDV | 0.05 | 0.07 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.10 | 0.45 |
| tblVehicleEF | MDV | 0.14 | 0.32 |
| tblVehicleEF | MDV | 6.9690e-003 | 3.2320e-003 |
| tblVehicleEF | MDV | 8.5180e-003 | 0.05 |
| tblVehicleEF | MDV | 0.86 | 0.79 |
| tblVehicleEF | MDV | 1.57 | 2.21 |
| tblVehicleEF | MDV | 415.42 | 353.45 |
| tblVehicleEF | MDV | 91.05 | 72.36 |
| tblVehicleEF | MDV | 0.07 | 0.05 |
| tblVehicleEF | MDV | 0.14 | 0.23 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.09 | 0.11 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.10 | 0.14 |

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|---|---|---|---|
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.09 | 0.41 |
| tblVehicleEF | MDV | 0.11 | 0.26 |
| tblVehicleEF | MDV | 4.1570e-003 | 3.4930e-003 |
| tblVehicleEF | MDV | 9.3700e-004 | 7.1600e-004 |
| tblVehicleEF | MDV | 0.09 | 0.11 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.10 | 0.14 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.09 | 0.41 |
| tblVehicleEF | MDV | 0.13 | 0.28 |
| tblVehicleEF | MDV | 6.4470e-003 | 2.9380e-003 |
| tblVehicleEF | MDV | 0.01 | 0.07 |
| tblVehicleEF | MDV | 0.78 | 0.71 |
| tblVehicleEF | MDV | 2.10 | 3.00 |
| tblVehicleEF | MDV | 395.55 | 342.11 |
| tblVehicleEF | MDV | 91.05 | 73.82 |
| tblVehicleEF | MDV | 0.08 | 0.06 |
| tblVehicleEF | MDV | 0.16 | 0.27 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.16 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.12 | 0.54 |
| tblVehicleEF | MDV | 0.14 | 0.32 |
| tblVehicleEF | MDV | 3.9570e-003 | 3.3810e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 9.4700e-004 | 7.3000e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.16 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.12 | 0.54 |
| tblVehicleEF | MDV | 0.16 | 0.35 |
| tblVehicleEF | MH | 0.02 | 7.0410e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.48 | 0.73 |
| tblVehicleEF | MH | 4.93 | 1.80 |
| tblVehicleEF | MH | 1,080.16 | 1,404.14 |
| tblVehicleEF | MH | 58.00 | 17.35 |
| tblVehicleEF | MH | 1.21 | 1.37 |
| tblVehicleEF | MH | 0.78 | 0.26 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 0.77 | 0.58 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.38 | 0.30 |
| tblVehicleEF | MH | 0.06 | 0.05 |
| tblVehicleEF | MH | 0.02 | 1.14 |
| tblVehicleEF | MH | 0.29 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.6600e-004 | 1.7200e-004 |
| tblVehicleEF | MH | 0.77 | 0.58 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.38 | 0.30 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.02 | 1.14 |
| tblVehicleEF | MH | 0.32 | 0.09 |
| tblVehicleEF | MH | 0.02 | 7.2150e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.53 | 0.75 |
| tblVehicleEF | MH | 4.56 | 1.67 |
| tblVehicleEF | MH | 1,080.16 | 1,404.18 |
| tblVehicleEF | MH | 58.00 | 17.13 |
| tblVehicleEF | MH | 1.13 | 1.30 |
| tblVehicleEF | MH | 0.73 | 0.24 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 1.14 | 0.86 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.62 | 0.50 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.02 | 1.10 |
| tblVehicleEF | MH | 0.28 | 0.08 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.6000e-004 | 1.7000e-004 |
| tblVehicleEF | MH | 1.14 | 0.86 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.62 | 0.50 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.02 | 1.10 |
| tblVehicleEF | MH | 0.30 | 0.09 |
| tblVehicleEF | MH | 0.02 | 6.9300e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.45 | 0.72 |
| tblVehicleEF | MH | 5.14 | 1.88 |
| tblVehicleEF | MH | 1,080.16 | 1,404.12 |
| tblVehicleEF | MH | 58.00 | 17.49 |
| tblVehicleEF | MH | 1.21 | 1.37 |
| tblVehicleEF | MH | 0.81 | 0.27 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 0.55 | 0.42 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.27 | 0.21 |
| tblVehicleEF | MH | 0.06 | 0.05 |
| tblVehicleEF | MH | 0.03 | 1.22 |
| tblVehicleEF | MH | 0.30 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.7000e-004 | 1.7300e-004 |
| tblVehicleEF | MH | 0.55 | 0.42 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.27 | 0.21 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.22 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.33 | 0.10 |
| tblVehicleEF | MHD | 0.02 | 2.8280e-003 |
| tblVehicleEF | MHD | 2.1840e-003 | 8.4800e-004 |
| tblVehicleEF | MHD | 0.04 | 6.6450e-003 |
| tblVehicleEF | MHD | 0.30 | 0.33 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 4.03 | 0.72 |
| tblVehicleEF | MHD | 154.61 | 63.49 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.71 |
| tblVehicleEF | MHD | 0.41 | 0.34 |
| tblVehicleEF | MHD | 0.61 | 1.01 |
| tblVehicleEF | MHD | 11.96 | 1.82 |
| tblVehicleEF | MHD | 7.4000e-005 | 2.0400e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 7.1000e-005 | 1.9500e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 6.0400e-004 | 2.3400e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 4.5800e-004 | 1.7500e-004 |
| tblVehicleEF | MHD | 0.03 | 9.1100e-003 |
| tblVehicleEF | MHD | 0.01 | 0.07 |
| tblVehicleEF | MHD | 0.24 | 0.03 |
| tblVehicleEF | MHD | 1.4850e-003 | 6.0200e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.7200e-004 | 6.6000e-005 |
| tblVehicleEF | MHD | 6.0400e-004 | 2.3400e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 4.5800e-004 | 1.7500e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.01 | 0.07 |
| tblVehicleEF | MHD | 0.27 | 0.04 |
| tblVehicleEF | MHD | 0.01 | 2.6980e-003 |
| tblVehicleEF | MHD | 2.2110e-003 | 8.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 6.3360e-003 |
| tblVehicleEF | MHD | 0.22 | 0.29 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 3.76 | 0.67 |
| tblVehicleEF | MHD | 163.77 | 63.20 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.62 |
| tblVehicleEF | MHD | 0.42 | 0.33 |
| tblVehicleEF | MHD | 0.58 | 0.96 |
| tblVehicleEF | MHD | 11.92 | 1.81 |
| tblVehicleEF | MHD | 6.2000e-005 | 1.7500e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 6.0000e-005 | 1.6700e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 9.4100e-004 | 3.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 7.6300e-004 | 2.9300e-004 |
| tblVehicleEF | MHD | 0.03 | 9.1790e-003 |
| tblVehicleEF | MHD | 0.01 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.23 | 0.03 |
| tblVehicleEF | MHD | 1.5720e-003 | 5.9900e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.6800e-004 | 6.6000e-005 |
| tblVehicleEF | MHD | 9.4100e-004 | 3.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 7.6300e-004 | 2.9300e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.01 | 0.06 |
| tblVehicleEF | MHD | 0.25 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 3.0140e-003 |
| tblVehicleEF | MHD | 2.1660e-003 | 8.3700e-004 |
| tblVehicleEF | MHD | 0.04 | 6.8490e-003 |
| tblVehicleEF | MHD | 0.41 | 0.39 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 4.22 | 0.76 |
| tblVehicleEF | MHD | 141.96 | 63.89 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.76 |
| tblVehicleEF | MHD | 0.39 | 0.36 |
| tblVehicleEF | MHD | 0.60 | 1.00 |
| tblVehicleEF | MHD | 11.98 | 1.82 |
| tblVehicleEF | MHD | 9.0000e-005 | 2.4400e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 8.6000e-005 | 2.3300e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 4.2200e-004 | 1.6200e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 3.2400e-004 | 1.2300e-004 |
| tblVehicleEF | MHD | 0.03 | 9.0650e-003 |
| tblVehicleEF | MHD | 0.02 | 0.07 |
| tblVehicleEF | MHD | 0.25 | 0.03 |
| tblVehicleEF | MHD | 1.3660e-003 | 6.0600e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.7600e-004 | 6.7000e-005 |
| tblVehicleEF | MHD | 4.2200e-004 | 1.6200e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.2400e-004 | 1.2300e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.07 |
| tblVehicleEF | MHD | 0.28 | 0.04 |
| tblVehicleEF | OBUS | 0.01 | 8.0530e-003 |
| tblVehicleEF | OBUS | 5.0000e-003 | 4.5060e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |
| tblVehicleEF | OBUS | 0.34 | 0.55 |
| tblVehicleEF | OBUS | 4.91 | 2.51 |
| tblVehicleEF | OBUS | 47.43 | 50.81 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.89 |
| tblVehicleEF | OBUS | 70.06 | 19.68 |
| tblVehicleEF | OBUS | 0.08 | 0.18 |
| tblVehicleEF | OBUS | 0.39 | 0.90 |
| tblVehicleEF | OBUS | 1.53 | 0.75 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.6000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.3000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 1.1560e-003 | 1.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 6.9800e-004 | 9.6900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.06 | 0.31 |
| tblVehicleEF | OBUS | 0.31 | 0.12 |
| tblVehicleEF | OBUS | 4.6500e-004 | 4.8600e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.8700e-004 | 1.9500e-004 |
| tblVehicleEF | OBUS | 1.1560e-003 | 1.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 6.9800e-004 | 9.6900e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.06 | 0.31 |
| tblVehicleEF | OBUS | 0.34 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 8.1090e-003 |
| tblVehicleEF | OBUS | 5.1260e-003 | 4.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |
| tblVehicleEF | OBUS | 0.34 | 0.56 |
| tblVehicleEF | OBUS | 4.55 | 2.32 |
| tblVehicleEF | OBUS | 49.23 | 50.30 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.91 |
| tblVehicleEF | OBUS | 70.06 | 19.37 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.08 | 0.17 |
| tblVehicleEF | OBUS | 0.37 | 0.85 |
| tblVehicleEF | OBUS | 1.48 | 0.73 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.9000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.7000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 1.7400e-003 | 2.4430e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.1650e-003 | 1.6020e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.29 | 0.11 |
| tblVehicleEF | OBUS | 4.8200e-004 | 4.8100e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.8000e-004 | 1.9200e-004 |
| tblVehicleEF | OBUS | 1.7400e-003 | 2.4430e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 1.1650e-003 | 1.6020e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.32 | 0.12 |
| tblVehicleEF | OBUS | 0.01 | 7.9970e-003 |
| tblVehicleEF | OBUS | 4.9200e-003 | 4.4210e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.33 | 0.54 |
| tblVehicleEF | OBUS | 5.12 | 2.61 |
| tblVehicleEF | OBUS | 44.95 | 51.51 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.87 |
| tblVehicleEF | OBUS | 70.06 | 19.87 |
| tblVehicleEF | OBUS | 0.08 | 0.19 |
| tblVehicleEF | OBUS | 0.39 | 0.90 |
| tblVehicleEF | OBUS | 1.56 | 0.76 |
| tblVehicleEF | OBUS | 9.0000e-006 | 6.4000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 8.0000e-006 | 6.1000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 8.3800e-004 | 1.1970e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 4.9600e-004 | 6.8900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.32 | 0.12 |
| tblVehicleEF | OBUS | 4.4100e-004 | 4.9300e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.9000e-004 | 1.9700e-004 |
| tblVehicleEF | OBUS | 8.3800e-004 | 1.1970e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 4.9600e-004 | 6.8900e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.35 | 0.13 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.5050e-003 | 8.3830e-003 |
| tblVehicleEF | SBUS | 0.05 | 6.3100e-003 |
| tblVehicleEF | SBUS | 9.74 | 2.64 |
| tblVehicleEF | SBUS | 0.39 | 0.70 |
| tblVehicleEF | SBUS | 7.50 | 0.89 |
| tblVehicleEF | SBUS | 998.61 | 351.53 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.72 |
| tblVehicleEF | SBUS | 66.73 | 4.88 |
| tblVehicleEF | SBUS | 5.42 | 3.27 |
| tblVehicleEF | SBUS | 2.41 | 4.80 |
| tblVehicleEF | SBUS | 9.82 | 0.76 |
| tblVehicleEF | SBUS | 3.8400e-003 | 2.9550e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 3.6740e-003 | 2.8280e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 2.6140e-003 | 6.4200e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.5220e-003 |
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 1.6010e-003 | 4.0100e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.38 | 0.04 |
| tblVehicleEF | SBUS | 9.8690e-003 | 3.3500e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 7.9600e-004 | 4.8000e-005 |
| tblVehicleEF | SBUS | 2.6140e-003 | 6.4200e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.5220e-003 |
| tblVehicleEF | SBUS | 1.68 | 0.44 |
| tblVehicleEF | SBUS | 1.6010e-003 | 4.0100e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.42 | 0.04 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.6140e-003 | 8.4950e-003 |
| tblVehicleEF | SBUS | 0.04 | 5.4750e-003 |
| tblVehicleEF | SBUS | 9.67 | 2.60 |
| tblVehicleEF | SBUS | 0.40 | 0.71 |
| tblVehicleEF | SBUS | 5.83 | 0.70 |
| tblVehicleEF | SBUS | 1,038.39 | 361.49 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.75 |
| tblVehicleEF | SBUS | 66.73 | 4.55 |
| tblVehicleEF | SBUS | 5.59 | 3.35 |
| tblVehicleEF | SBUS | 2.30 | 4.59 |
| tblVehicleEF | SBUS | 9.79 | 0.76 |
| tblVehicleEF | SBUS | 3.2370e-003 | 2.5000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 3.0970e-003 | 2.3920e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 3.9560e-003 | 9.6000e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.6210e-003 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 2.6840e-003 | 6.6600e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.33 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.4440e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |
| tblVehicleEF | SBUS | 7.6900e-004 | 4.5000e-005 |
| tblVehicleEF | SBUS | 3.9560e-003 | 9.6000e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.6210e-003 |
| tblVehicleEF | SBUS | 1.68 | 0.44 |
| tblVehicleEF | SBUS | 2.6840e-003 | 6.6600e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.36 | 0.04 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.4400e-003 | 8.3160e-003 |
| tblVehicleEF | SBUS | 0.05 | 6.7580e-003 |
| tblVehicleEF | SBUS | 9.83 | 2.69 |
| tblVehicleEF | SBUS | 0.39 | 0.69 |
| tblVehicleEF | SBUS | 8.41 | 1.00 |
| tblVehicleEF | SBUS | 943.68 | 337.76 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.71 |
| tblVehicleEF | SBUS | 66.73 | 5.06 |
| tblVehicleEF | SBUS | 5.18 | 3.17 |
| tblVehicleEF | SBUS | 2.39 | 4.77 |
| tblVehicleEF | SBUS | 9.84 | 0.76 |
| tblVehicleEF | SBUS | 4.6730e-003 | 3.5840e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 4.4710e-003 | 3.4290e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 1.8830e-003 | 4.6900e-004 |
| tblVehicleEF | SBUS | 0.03 | 7.7010e-003 |
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 1.1390e-003 | 2.8700e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.02 | 0.06 |
| tblVehicleEF | SBUS | 0.41 | 0.04 |
| tblVehicleEF | SBUS | 9.3450e-003 | 3.2200e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |
| tblVehicleEF | SBUS | 8.1200e-004 | 5.0000e-005 |
| tblVehicleEF | SBUS | 1.8830e-003 | 4.6900e-004 |
| tblVehicleEF | SBUS | 0.03 | 7.7010e-003 |
| tblVehicleEF | SBUS | 1.69 | 0.44 |
| tblVehicleEF | SBUS | 1.1390e-003 | 2.8700e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.02 | 0.06 |
| tblVehicleEF | SBUS | 0.45 | 0.04 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 5.80 | 22.84 |
| tblVehicleEF | UBUS | 9.04 | 1.69 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.87 |
| tblVehicleEF | UBUS | 136.72 | 17.29 |
| tblVehicleEF | UBUS | 2.18 | 0.37 |
| tblVehicleEF | UBUS | 12.53 | 0.16 |

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|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 2.4000e-003 | 5.4900e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.5700e-003 |
| tblVehicleEF | UBUS | 1.9500e-003 | 4.1900e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 0.01 | 0.03 |
| tblVehicleEF | UBUS | 0.73 | 0.08 |
| tblVehicleEF | UBUS | 8.2430e-003 | 5.0710e-003 |
| tblVehicleEF | UBUS | 1.5310e-003 | 1.7100e-004 |
| tblVehicleEF | UBUS | 2.4000e-003 | 5.4900e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.5700e-003 |
| tblVehicleEF | UBUS | 1.9500e-003 | 4.1900e-004 |
| tblVehicleEF | UBUS | 1.55 | 3.05 |
| tblVehicleEF | UBUS | 0.01 | 0.03 |
| tblVehicleEF | UBUS | 0.80 | 0.09 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 5.82 | 22.84 |
| tblVehicleEF | UBUS | 7.63 | 1.44 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.85 |
| tblVehicleEF | UBUS | 136.72 | 16.86 |
| tblVehicleEF | UBUS | 2.07 | 0.37 |
| tblVehicleEF | UBUS | 12.46 | 0.15 |

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|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 3.3760e-003 | 8.4600e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.9950e-003 |
| tblVehicleEF | UBUS | 3.3170e-003 | 7.5700e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 9.9720e-003 | 0.03 |
| tblVehicleEF | UBUS | 0.66 | 0.08 |
| tblVehicleEF | UBUS | 8.2430e-003 | 5.0700e-003 |
| tblVehicleEF | UBUS | 1.5060e-003 | 1.6700e-004 |
| tblVehicleEF | UBUS | 3.3760e-003 | 8.4600e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.9950e-003 |
| tblVehicleEF | UBUS | 3.3170e-003 | 7.5700e-004 |
| tblVehicleEF | UBUS | 1.56 | 3.05 |
| tblVehicleEF | UBUS | 9.9720e-003 | 0.03 |
| tblVehicleEF | UBUS | 0.73 | 0.08 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 5.79 | 22.84 |
| tblVehicleEF | UBUS | 9.98 | 1.86 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.85 |
| tblVehicleEF | UBUS | 136.72 | 17.57 |
| tblVehicleEF | UBUS | 2.17 | 0.37 |
| tblVehicleEF | UBUS | 12.58 | 0.16 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 1.8300e-003 | 3.8900e-004 |
| tblVehicleEF | UBUS | 0.04 | 7.1930e-003 |
| tblVehicleEF | UBUS | 1.3630e-003 | 2.8400e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 0.01 | 0.04 |
| tblVehicleEF | UBUS | 0.78 | 0.09 |
| tblVehicleEF | UBUS | 8.2420e-003 | 5.0700e-003 |
| tblVehicleEF | UBUS | 1.5470e-003 | 1.7400e-004 |
| tblVehicleEF | UBUS | 1.8300e-003 | 3.8900e-004 |
| tblVehicleEF | UBUS | 0.04 | 7.1930e-003 |
| tblVehicleEF | UBUS | 1.3630e-003 | 2.8400e-004 |
| tblVehicleEF | UBUS | 1.55 | 3.05 |
| tblVehicleEF | UBUS | 0.01 | 0.04 |
| tblVehicleEF | UBUS | 0.85 | 0.10 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |

| | | | |
|---|---|---|---|
| tblWater | IndoorWaterUseRate | 176,725,875.00 | 141,380,700.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

## 2.0 Emissions Summary

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 3.8709 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1,036.2625 | 1,036.2625 | 0.0832 | 0.0172 | 1,043.4754 |
| Mobile | 0.9109 | 1.2748 | 6.6776 | 0.0195 | 2.2500 | 0.0154 | 2.2655 | 0.6018 | 0.0144 | 0.6162 | 0.0000 | 1,817.1814 | 1,817.1814 | 0.0923 | 0.0000 | 1,819.4892 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 107.7212 | 0.0000 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 50.0207 | 301.4779 | 351.4987 | 1.4603 | 0.1138 | 421.9145 |
| **Total** | **4.7818** | **1.2749** | **6.6846** | **0.0195** | **2.2500** | **0.0154** | **2.2655** | **0.6018** | **0.0144** | **0.6162** | **157.7419** | **3,154.9355** | **3,312.6775** | **8.0020** | **0.1310** | **3,551.7684** |

**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 | 3.8709 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 871.8122 | 871.8122 | 0.0700 | 0.0145 | 877.8804 |
| Mobile | 0.9109 | 1.2748 | 6.6776 | 0.0195 | 2.2500 | 0.0154 | 2.2655 | 0.6018 | 0.0144 | 0.6162 | 0.0000 | 1,817.1814 | 1,817.1814 | 0.0923 | 0.0000 | 1,819.4892 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 107.7212 | 0.0000 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 42.5176 | 256.2562 | 298.7739 | 1.2412 | 0.0967 | 358.6273 |
| **Total** | **4.7818** | **1.2749** | **6.6846** | **0.0195** | **2.2500** | **0.0154** | **2.2655** | **0.6018** | **0.0144** | **0.6162** | **150.2388** | **2,945.2635** | **3,095.5023** | **7.7698** | **0.1112** | **3,322.8862** |

| | **ROG** | **NOx** | **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** | **4.76** | **6.65** | **6.56** | **2.90** | **15.11** | **6.44** |

# 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 | 0.9109 | 1.2748 | 6.6776 | 0.0195 | 2.2500 | 0.0154 | 2.2655 | 0.6018 | 0.0144 | 0.6162 | 0.0000 | 1,817.1814 | 1,817.1814 | 0.0923 | 0.0000 | 1,819.4892 |
| Unmitigated | 0.9109 | 1.2748 | 6.6776 | 0.0195 | 2.2500 | 0.0154 | 2.2655 | 0.6018 | 0.0144 | 0.6162 | 0.0000 | 1,817.1814 | 1,817.1814 | 0.0923 | 0.0000 | 1,819.4892 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 2,919.32 | 2,919.32 | 2919.32 | 5,948,617 | 5,948,617 |
| Total | 2,919.32 | 2,919.32 | 2,919.32 | 5,948,617 | 5,948,617 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.583951 | 0.057343 | 0.169126 | 0.111554 | 0.025561 | 0.007279 | 0.020117 | 0.017665 | 0.000801 | 0.000959 | 0.003708 | 0.000559 | 0.001376 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | 871.8122 | 871.8122 | 0.0700 | 0.0145 | 877.8804 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1,036.2625 | 1,036.2625 | 0.0832 | 0.0172 | 1,043.4754 |
| 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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 | | | |
| General Light Industry | 6.32774e+006 | 1,036.2625 | 0.0832 | 0.0172 | 1,043.4754 |
| **Total** | | **1,036.2625** | **0.0832** | **0.0172** | **1,043.4754** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| General Light Industry | 5.32356e+006 | 871.8122 | 0.0700 | 0.0145 | 877.8804 |
| **Total** | | **871.8122** | **0.0700** | **0.0145** | **877.8804** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 3.8709 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Unmitigated | 3.8709 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |

## 6.2 Area by SubCategory

**<u>Unmitigated</u>**

| | ROG | NOx | CO | SO2 | 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 | 0.8855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 6.4000e-004 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| **Total** | **3.8708** | **6.0000e-005** | **7.0000e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **0.0137** | **0.0137** | **4.0000e-005** | **0.0000** | **0.0145** |

**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 | 0.8855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 6.4000e-004 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| **Total** | **3.8708** | **6.0000e-005** | **7.0000e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **0.0137** | **0.0137** | **4.0000e-005** | **0.0000** | **0.0145** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 298.7739 | 1.2412 | 0.0967 | 358.6273 |
| Unmitigated | 351.4987 | 1.4603 | 0.1138 | 421.9145 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 141.381 / 0 | 351.4987 | 1.4603 | 0.1138 | 421.9145 |
| **Total** | | **351.4987** | **1.4603** | **0.1138** | **421.9145** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 120.174 / 0 | 298.7739 | 1.2412 | 0.0967 | 358.6273 |
| **Total** | | **298.7739** | **1.2412** | **0.0967** | **358.6273** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Unmitigated | 107.7212 | 6.3661 | 0.0000 | 266.8748 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 530.67 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| **Total** | | **107.7212** | **6.3661** | **0.0000** | **266.8748** |

**Mitigated**

| Land Use | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| | tons | MT/yr | | | |
| General Light Industry | 530.67 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| **Total** | | **107.7212** | **6.3661** | **0.0000** | **266.8748** |

## 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

# Conejo Summit - Buildout Operational 2027

**Ventura County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 764.22 | 1000sqft | 49.64 | 764,220.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2027 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 361.04 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 382,110.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 1,146,330.00 | 0.00 |
| tblConstructionPhase | NumDays | 55.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.61 | 0.58 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.17 |
| tblFleetMix | LHD1 | 0.01 | 0.03 |
| tblFleetMix | LHD2 | 5.7550e-003 | 7.2790e-003 |
| tblFleetMix | MCY | 3.7200e-003 | 3.7080e-003 |
| tblFleetMix | MDV | 0.10 | 0.11 |
| tblFleetMix | MH | 1.0730e-003 | 1.3760e-003 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.1980e-003 | 8.0100e-004 |
| tblFleetMix | SBUS | 4.0400e-004 | 5.5900e-004 |
| tblFleetMix | UBUS | 1.0750e-003 | 9.5900e-004 |
| tblLandUse | LotAcreage | 17.54 | 49.64 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 361.04 |
| tblSolidWaste | SolidWasteGenerationRate | 947.63 | 530.67 |
| tblTripsAndVMT | WorkerTripNumber | 64.00 | 0.00 |
| tblVehicleEF | HHD | 0.45 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.48 | 6.33 |
| tblVehicleEF | HHD | 1.10 | 0.53 |
| tblVehicleEF | HHD | 3.56 | 6.4740e-003 |
| tblVehicleEF | HHD | 3,896.24 | 1,002.87 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.61 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 12.85 | 5.45 |
| tblVehicleEF | HHD | 1.43 | 2.25 |
| tblVehicleEF | HHD | 19.34 | 2.54 |
| tblVehicleEF | HHD | 8.6360e-003 | 2.9490e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 8.2630e-003 | 2.8220e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 7.5000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 3.9950e-003 | 3.9000e-005 |
| tblVehicleEF | HHD | 0.36 | 0.43 |
| tblVehicleEF | HHD | 6.3000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.2200e-004 | 1.4900e-004 |
| tblVehicleEF | HHD | 0.06 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 9.2560e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.7000e-004 | 0.00 |

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|---|---|---|---|
| tblVehicleEF | HHD | 7.5000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 3.9950e-003 | 3.9000e-005 |
| tblVehicleEF | HHD | 0.44 | 0.49 |
| tblVehicleEF | HHD | 6.3000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.2200e-004 | 1.4900e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.43 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |
| tblVehicleEF | HHD | 0.05 | 0.00 |
| tblVehicleEF | HHD | 1.07 | 6.24 |
| tblVehicleEF | HHD | 1.11 | 0.53 |
| tblVehicleEF | HHD | 3.32 | 6.0450e-003 |
| tblVehicleEF | HHD | 4,127.72 | 991.81 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.62 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 13.27 | 5.22 |
| tblVehicleEF | HHD | 1.37 | 2.15 |
| tblVehicleEF | HHD | 19.33 | 2.54 |
| tblVehicleEF | HHD | 7.2810e-003 | 2.5700e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 6.9660e-003 | 2.4580e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 1.1700e-004 | 1.0000e-006 |

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|---|---|---|---|
| tblVehicleEF | HHD | 4.0950e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.34 | 0.45 |
| tblVehicleEF | HHD | 1.0300e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.0100e-004 | 1.4200e-004 |
| tblVehicleEF | HHD | 0.06 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 9.1530e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6700e-004 | 0.00 |
| tblVehicleEF | HHD | 1.1700e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 4.0950e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.41 | 0.52 |
| tblVehicleEF | HHD | 1.0300e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.0100e-004 | 1.4200e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.49 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.04 | 6.46 |
| tblVehicleEF | HHD | 1.09 | 0.53 |
| tblVehicleEF | HHD | 3.73 | 6.7820e-003 |
| tblVehicleEF | HHD | 3,576.57 | 1,018.14 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.61 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 12.28 | 5.78 |
| tblVehicleEF | HHD | 1.43 | 2.23 |
| tblVehicleEF | HHD | 19.35 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.4740e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 0.01 | 3.3240e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 5.3000e-005 | 0.00 |
| tblVehicleEF | HHD | 4.1270e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.39 | 0.39 |
| tblVehicleEF | HHD | 4.5000e-005 | 0.00 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.7500e-004 | 1.6700e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 9.3980e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.7300e-004 | 0.00 |
| tblVehicleEF | HHD | 5.3000e-005 | 0.00 |
| tblVehicleEF | HHD | 4.1270e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.47 | 0.45 |
| tblVehicleEF | HHD | 4.5000e-005 | 0.00 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.7500e-004 | 1.6700e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | LDA | 2.7190e-003 | 1.3890e-003 |
| tblVehicleEF | LDA | 3.0880e-003 | 0.04 |
| tblVehicleEF | LDA | 0.41 | 0.47 |
| tblVehicleEF | LDA | 0.79 | 1.87 |
| tblVehicleEF | LDA | 204.34 | 218.76 |

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|---|---|---|---|
| tblVehicleEF | LDA | 46.66 | 46.02 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.14 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 6.8430e-003 | 4.9460e-003 |
| tblVehicleEF | LDA | 0.03 | 0.19 |
| tblVehicleEF | LDA | 0.04 | 0.16 |
| tblVehicleEF | LDA | 2.0450e-003 | 2.1640e-003 |
| tblVehicleEF | LDA | 4.8000e-004 | 4.5500e-004 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 9.9450e-003 | 7.1840e-003 |
| tblVehicleEF | LDA | 0.03 | 0.19 |
| tblVehicleEF | LDA | 0.05 | 0.17 |
| tblVehicleEF | LDA | 2.8930e-003 | 1.4950e-003 |
| tblVehicleEF | LDA | 2.6830e-003 | 0.03 |
| tblVehicleEF | LDA | 0.45 | 0.52 |
| tblVehicleEF | LDA | 0.65 | 1.54 |
| tblVehicleEF | LDA | 213.33 | 228.15 |
| tblVehicleEF | LDA | 46.66 | 45.43 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.13 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |

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|---|---|---|---|
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.04 | 0.05 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.04 | 0.06 |
| tblVehicleEF | LDA | 7.2720e-003 | 5.2550e-003 |
| tblVehicleEF | LDA | 0.03 | 0.17 |
| tblVehicleEF | LDA | 0.04 | 0.14 |
| tblVehicleEF | LDA | 2.1360e-003 | 2.2570e-003 |
| tblVehicleEF | LDA | 4.7700e-004 | 4.5000e-004 |
| tblVehicleEF | LDA | 0.04 | 0.05 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.04 | 0.06 |
| tblVehicleEF | LDA | 0.01 | 7.6340e-003 |
| tblVehicleEF | LDA | 0.03 | 0.17 |
| tblVehicleEF | LDA | 0.04 | 0.15 |
| tblVehicleEF | LDA | 2.6670e-003 | 1.3520e-003 |
| tblVehicleEF | LDA | 3.3340e-003 | 0.04 |
| tblVehicleEF | LDA | 0.41 | 0.47 |
| tblVehicleEF | LDA | 0.88 | 2.08 |
| tblVehicleEF | LDA | 202.64 | 216.98 |
| tblVehicleEF | LDA | 46.66 | 46.39 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.15 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |

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|---|---|---|---|
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 6.7130e-003 | 4.8520e-003 |
| tblVehicleEF | LDA | 0.04 | 0.22 |
| tblVehicleEF | LDA | 0.04 | 0.17 |
| tblVehicleEF | LDA | 2.0280e-003 | 2.1460e-003 |
| tblVehicleEF | LDA | 4.8100e-004 | 4.5900e-004 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 9.7540e-003 | 7.0470e-003 |
| tblVehicleEF | LDA | 0.04 | 0.22 |
| tblVehicleEF | LDA | 0.05 | 0.18 |
| tblVehicleEF | LDT1 | 6.5100e-003 | 3.6460e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.06 |
| tblVehicleEF | LDT1 | 0.83 | 0.85 |
| tblVehicleEF | LDT1 | 2.12 | 2.06 |
| tblVehicleEF | LDT1 | 263.27 | 266.81 |
| tblVehicleEF | LDT1 | 61.51 | 57.01 |
| tblVehicleEF | LDT1 | 0.08 | 0.07 |
| tblVehicleEF | LDT1 | 0.12 | 0.21 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.09 | 0.09 |
| tblVehicleEF | LDT1 | 0.23 | 0.17 |
| tblVehicleEF | LDT1 | 0.08 | 0.08 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.16 | 0.64 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.14 | 0.27 |
| tblVehicleEF | LDT1 | 2.6410e-003 | 2.6400e-003 |
| tblVehicleEF | LDT1 | 6.5200e-004 | 5.6400e-004 |
| tblVehicleEF | LDT1 | 0.09 | 0.09 |
| tblVehicleEF | LDT1 | 0.23 | 0.17 |
| tblVehicleEF | LDT1 | 0.08 | 0.08 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.16 | 0.64 |
| tblVehicleEF | LDT1 | 0.15 | 0.29 |
| tblVehicleEF | LDT1 | 6.8870e-003 | 3.8950e-003 |
| tblVehicleEF | LDT1 | 8.8250e-003 | 0.05 |
| tblVehicleEF | LDT1 | 0.89 | 0.92 |
| tblVehicleEF | LDT1 | 1.73 | 1.69 |
| tblVehicleEF | LDT1 | 274.46 | 276.65 |
| tblVehicleEF | LDT1 | 61.51 | 56.32 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.11 | 0.19 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.14 | 0.14 |
| tblVehicleEF | LDT1 | 0.24 | 0.18 |
| tblVehicleEF | LDT1 | 0.13 | 0.14 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.14 | 0.57 |
| tblVehicleEF | LDT1 | 0.12 | 0.23 |
| tblVehicleEF | LDT1 | 2.7540e-003 | 2.7380e-003 |
| tblVehicleEF | LDT1 | 6.4500e-004 | 5.5700e-004 |
| tblVehicleEF | LDT1 | 0.14 | 0.14 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.24 | 0.18 |
| tblVehicleEF | LDT1 | 0.13 | 0.14 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.14 | 0.57 |
| tblVehicleEF | LDT1 | 0.13 | 0.25 |
| tblVehicleEF | LDT1 | 6.3960e-003 | 3.5590e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.06 |
| tblVehicleEF | LDT1 | 0.82 | 0.84 |
| tblVehicleEF | LDT1 | 2.36 | 2.30 |
| tblVehicleEF | LDT1 | 261.15 | 264.94 |
| tblVehicleEF | LDT1 | 61.51 | 57.45 |
| tblVehicleEF | LDT1 | 0.08 | 0.07 |
| tblVehicleEF | LDT1 | 0.12 | 0.22 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.25 | 0.19 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.20 | 0.78 |
| tblVehicleEF | LDT1 | 0.15 | 0.29 |
| tblVehicleEF | LDT1 | 2.6200e-003 | 2.6220e-003 |
| tblVehicleEF | LDT1 | 6.5600e-004 | 5.6900e-004 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.25 | 0.19 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.20 | 0.78 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.16 | 0.32 |
| tblVehicleEF | LDT2 | 3.7240e-003 | 2.5850e-003 |
| tblVehicleEF | LDT2 | 4.2360e-003 | 0.05 |
| tblVehicleEF | LDT2 | 0.55 | 0.67 |
| tblVehicleEF | LDT2 | 1.04 | 2.43 |
| tblVehicleEF | LDT2 | 289.62 | 276.40 |
| tblVehicleEF | LDT2 | 66.47 | 59.18 |
| tblVehicleEF | LDT2 | 0.05 | 0.05 |
| tblVehicleEF | LDT2 | 0.07 | 0.21 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.08 | 0.11 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 9.2470e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.41 |
| tblVehicleEF | LDT2 | 0.06 | 0.24 |
| tblVehicleEF | LDT2 | 2.9000e-003 | 2.7340e-003 |
| tblVehicleEF | LDT2 | 6.8200e-004 | 5.8600e-004 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.08 | 0.11 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.41 |
| tblVehicleEF | LDT2 | 0.06 | 0.26 |
| tblVehicleEF | LDT2 | 3.9580e-003 | 2.7720e-003 |
| tblVehicleEF | LDT2 | 3.6880e-003 | 0.05 |
| tblVehicleEF | LDT2 | 0.60 | 0.73 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.87 | 1.99 |
| tblVehicleEF | LDT2 | 302.13 | 285.62 |
| tblVehicleEF | LDT2 | 66.47 | 58.40 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 0.06 | 0.19 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.05 | 0.09 |
| tblVehicleEF | LDT2 | 0.08 | 0.12 |
| tblVehicleEF | LDT2 | 0.06 | 0.11 |
| tblVehicleEF | LDT2 | 9.8270e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.37 |
| tblVehicleEF | LDT2 | 0.05 | 0.21 |
| tblVehicleEF | LDT2 | 3.0250e-003 | 2.8250e-003 |
| tblVehicleEF | LDT2 | 6.7900e-004 | 5.7800e-004 |
| tblVehicleEF | LDT2 | 0.05 | 0.09 |
| tblVehicleEF | LDT2 | 0.08 | 0.12 |
| tblVehicleEF | LDT2 | 0.06 | 0.11 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.05 | 0.37 |
| tblVehicleEF | LDT2 | 0.05 | 0.23 |
| tblVehicleEF | LDT2 | 3.6520e-003 | 2.5200e-003 |
| tblVehicleEF | LDT2 | 4.5670e-003 | 0.06 |
| tblVehicleEF | LDT2 | 0.54 | 0.66 |
| tblVehicleEF | LDT2 | 1.15 | 2.70 |
| tblVehicleEF | LDT2 | 287.25 | 274.65 |
| tblVehicleEF | LDT2 | 66.47 | 59.68 |
| tblVehicleEF | LDT2 | 0.05 | 0.05 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.07 | 0.22 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 0.09 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 9.0700e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.07 | 0.50 |
| tblVehicleEF | LDT2 | 0.06 | 0.26 |
| tblVehicleEF | LDT2 | 2.8760e-003 | 2.7170e-003 |
| tblVehicleEF | LDT2 | 6.8400e-004 | 5.9100e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 0.09 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.01 | 0.01 |
| tblVehicleEF | LDT2 | 0.07 | 0.50 |
| tblVehicleEF | LDT2 | 0.07 | 0.28 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1330e-003 |
| tblVehicleEF | LHD1 | 7.1770e-003 | 3.9640e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |
| tblVehicleEF | LHD1 | 0.62 | 0.49 |
| tblVehicleEF | LHD1 | 1.95 | 0.87 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.31 |
| tblVehicleEF | LHD1 | 26.54 | 9.45 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.25 | 0.88 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.77 | 0.24 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 2.0040e-003 | 1.5820e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 1.3860e-003 | 1.0850e-003 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.31 | 0.51 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5760e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 3.0200e-004 | 9.4000e-005 |
| tblVehicleEF | LHD1 | 2.0040e-003 | 1.5820e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.3860e-003 | 1.0850e-003 |
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.31 | 0.51 |
| tblVehicleEF | LHD1 | 0.20 | 0.06 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1450e-003 |
| tblVehicleEF | LHD1 | 7.3220e-003 | 4.0310e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.63 | 0.50 |
| tblVehicleEF | LHD1 | 1.83 | 0.82 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.32 |
| tblVehicleEF | LHD1 | 26.54 | 9.36 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.19 | 0.84 |
| tblVehicleEF | LHD1 | 0.72 | 0.23 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 3.0980e-003 | 2.4560e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 2.2730e-003 | 1.7890e-003 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.29 | 0.48 |
| tblVehicleEF | LHD1 | 0.18 | 0.05 |
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5760e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 2.9900e-004 | 9.3000e-005 |
| tblVehicleEF | LHD1 | 3.0980e-003 | 2.4560e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 2.2730e-003 | 1.7890e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.29 | 0.48 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1240e-003 |
| tblVehicleEF | LHD1 | 7.0840e-003 | 3.9210e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |
| tblVehicleEF | LHD1 | 0.61 | 0.49 |
| tblVehicleEF | LHD1 | 2.04 | 0.91 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.30 |
| tblVehicleEF | LHD1 | 26.54 | 9.51 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.24 | 0.87 |
| tblVehicleEF | LHD1 | 0.80 | 0.25 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 1.3920e-003 | 1.0920e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 9.8100e-004 | 7.6500e-004 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.34 | 0.56 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5750e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 3.0300e-004 | 9.4000e-005 |
| tblVehicleEF | LHD1 | 1.3920e-003 | 1.0920e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 9.8100e-004 | 7.6500e-004 |
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.34 | 0.56 |
| tblVehicleEF | LHD1 | 0.21 | 0.06 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9660e-003 |
| tblVehicleEF | LHD2 | 2.6840e-003 | 2.9100e-003 |
| tblVehicleEF | LHD2 | 5.2320e-003 | 7.1760e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 1.01 | 0.53 |
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.16 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.53 | 0.88 |
| tblVehicleEF | LHD2 | 0.41 | 0.17 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 6.7200e-004 | 8.2900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 5.2900e-004 | 6.2200e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.06 | 0.21 |
| tblVehicleEF | LHD2 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7330e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6100e-004 | 7.1000e-005 |
| tblVehicleEF | LHD2 | 6.7200e-004 | 8.2900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 5.2900e-004 | 6.2200e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.21 |
| tblVehicleEF | LHD2 | 0.08 | 0.04 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9750e-003 |
| tblVehicleEF | LHD2 | 2.7140e-003 | 2.9350e-003 |
| tblVehicleEF | LHD2 | 5.0210e-003 | 6.8530e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 0.95 | 0.50 |
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.10 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.51 | 0.84 |
| tblVehicleEF | LHD2 | 0.39 | 0.16 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |
| tblVehicleEF | LHD2 | 1.0350e-003 | 1.2770e-003 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 8.6400e-004 | 1.0180e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.06 | 0.20 |
| tblVehicleEF | LHD2 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7340e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6000e-004 | 7.0000e-005 |
| tblVehicleEF | LHD2 | 1.0350e-003 | 1.2770e-003 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 8.6400e-004 | 1.0180e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.20 |
| tblVehicleEF | LHD2 | 0.07 | 0.04 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9600e-003 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.8930e-003 |
| tblVehicleEF | LHD2 | 5.3780e-003 | 7.3980e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 1.05 | 0.55 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.20 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.53 | 0.87 |
| tblVehicleEF | LHD2 | 0.42 | 0.18 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |
| tblVehicleEF | LHD2 | 4.7300e-004 | 5.8300e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 3.7900e-004 | 4.4400e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.07 | 0.24 |
| tblVehicleEF | LHD2 | 0.07 | 0.04 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7330e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6100e-004 | 7.1000e-005 |
| tblVehicleEF | LHD2 | 4.7300e-004 | 5.8300e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 3.7900e-004 | 4.4400e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.07 | 0.24 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.08 | 0.04 |
| tblVehicleEF | MCY | 0.48 | 0.34 |
| tblVehicleEF | MCY | 0.16 | 0.24 |
| tblVehicleEF | MCY | 18.38 | 18.68 |
| tblVehicleEF | MCY | 10.02 | 8.87 |
| tblVehicleEF | MCY | 176.71 | 214.21 |
| tblVehicleEF | MCY | 44.77 | 60.65 |
| tblVehicleEF | MCY | 1.14 | 1.14 |
| tblVehicleEF | MCY | 0.32 | 0.27 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 0.89 | 0.93 |
| tblVehicleEF | MCY | 0.71 | 0.76 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 2.33 | 2.35 |
| tblVehicleEF | MCY | 0.85 | 1.90 |
| tblVehicleEF | MCY | 2.14 | 1.90 |
| tblVehicleEF | MCY | 2.1370e-003 | 2.1200e-003 |
| tblVehicleEF | MCY | 6.7400e-004 | 6.0000e-004 |
| tblVehicleEF | MCY | 0.89 | 0.93 |
| tblVehicleEF | MCY | 0.71 | 0.76 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 2.90 | 2.92 |
| tblVehicleEF | MCY | 0.85 | 1.90 |
| tblVehicleEF | MCY | 2.33 | 2.07 |
| tblVehicleEF | MCY | 0.47 | 0.33 |
| tblVehicleEF | MCY | 0.13 | 0.21 |
| tblVehicleEF | MCY | 17.28 | 17.54 |

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|---|---|---|---|
| tblVehicleEF | MCY | 8.85 | 7.80 |
| tblVehicleEF | MCY | 176.71 | 212.11 |
| tblVehicleEF | MCY | 44.77 | 58.01 |
| tblVehicleEF | MCY | 1.00 | 1.01 |
| tblVehicleEF | MCY | 0.30 | 0.25 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 1.54 | 1.60 |
| tblVehicleEF | MCY | 0.78 | 0.83 |
| tblVehicleEF | MCY | 1.16 | 1.20 |
| tblVehicleEF | MCY | 2.25 | 2.27 |
| tblVehicleEF | MCY | 0.79 | 1.75 |
| tblVehicleEF | MCY | 1.84 | 1.62 |
| tblVehicleEF | MCY | 2.1170e-003 | 2.0990e-003 |
| tblVehicleEF | MCY | 6.4600e-004 | 5.7400e-004 |
| tblVehicleEF | MCY | 1.54 | 1.60 |
| tblVehicleEF | MCY | 0.78 | 0.83 |
| tblVehicleEF | MCY | 1.16 | 1.20 |
| tblVehicleEF | MCY | 2.80 | 2.82 |
| tblVehicleEF | MCY | 0.79 | 1.75 |
| tblVehicleEF | MCY | 2.00 | 1.76 |
| tblVehicleEF | MCY | 0.49 | 0.35 |
| tblVehicleEF | MCY | 0.17 | 0.27 |
| tblVehicleEF | MCY | 19.30 | 19.64 |
| tblVehicleEF | MCY | 10.86 | 9.66 |
| tblVehicleEF | MCY | 176.71 | 215.94 |
| tblVehicleEF | MCY | 44.77 | 62.55 |
| tblVehicleEF | MCY | 1.16 | 1.16 |

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|---|---|---|---|
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 0.88 | 0.93 |
| tblVehicleEF | MCY | 0.33 | 0.36 |
| tblVehicleEF | MCY | 2.39 | 2.41 |
| tblVehicleEF | MCY | 1.01 | 2.26 |
| tblVehicleEF | MCY | 2.34 | 2.10 |
| tblVehicleEF | MCY | 2.1540e-003 | 2.1370e-003 |
| tblVehicleEF | MCY | 6.9400e-004 | 6.1900e-004 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 0.88 | 0.93 |
| tblVehicleEF | MCY | 0.33 | 0.36 |
| tblVehicleEF | MCY | 2.97 | 2.99 |
| tblVehicleEF | MCY | 1.01 | 2.26 |
| tblVehicleEF | MCY | 2.55 | 2.28 |
| tblVehicleEF | MDV | 6.5670e-003 | 3.0130e-003 |
| tblVehicleEF | MDV | 9.8130e-003 | 0.06 |
| tblVehicleEF | MDV | 0.79 | 0.72 |
| tblVehicleEF | MDV | 1.90 | 2.70 |
| tblVehicleEF | MDV | 398.72 | 343.92 |
| tblVehicleEF | MDV | 91.05 | 73.25 |
| tblVehicleEF | MDV | 0.08 | 0.06 |
| tblVehicleEF | MDV | 0.16 | 0.26 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.05 | 0.07 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.10 | 0.45 |
| tblVehicleEF | MDV | 0.13 | 0.30 |
| tblVehicleEF | MDV | 3.9890e-003 | 3.3990e-003 |
| tblVehicleEF | MDV | 9.4300e-004 | 7.2500e-004 |
| tblVehicleEF | MDV | 0.05 | 0.07 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.10 | 0.45 |
| tblVehicleEF | MDV | 0.14 | 0.32 |
| tblVehicleEF | MDV | 6.9690e-003 | 3.2320e-003 |
| tblVehicleEF | MDV | 8.5180e-003 | 0.05 |
| tblVehicleEF | MDV | 0.86 | 0.79 |
| tblVehicleEF | MDV | 1.57 | 2.21 |
| tblVehicleEF | MDV | 415.42 | 353.45 |
| tblVehicleEF | MDV | 91.05 | 72.36 |
| tblVehicleEF | MDV | 0.07 | 0.05 |
| tblVehicleEF | MDV | 0.14 | 0.23 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.09 | 0.11 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.10 | 0.14 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.09 | 0.41 |
| tblVehicleEF | MDV | 0.11 | 0.26 |
| tblVehicleEF | MDV | 4.1570e-003 | 3.4930e-003 |
| tblVehicleEF | MDV | 9.3700e-004 | 7.1600e-004 |
| tblVehicleEF | MDV | 0.09 | 0.11 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.10 | 0.14 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.09 | 0.41 |
| tblVehicleEF | MDV | 0.13 | 0.28 |
| tblVehicleEF | MDV | 6.4470e-003 | 2.9380e-003 |
| tblVehicleEF | MDV | 0.01 | 0.07 |
| tblVehicleEF | MDV | 0.78 | 0.71 |
| tblVehicleEF | MDV | 2.10 | 3.00 |
| tblVehicleEF | MDV | 395.55 | 342.11 |
| tblVehicleEF | MDV | 91.05 | 73.82 |
| tblVehicleEF | MDV | 0.08 | 0.06 |
| tblVehicleEF | MDV | 0.16 | 0.27 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.16 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.12 | 0.54 |
| tblVehicleEF | MDV | 0.14 | 0.32 |
| tblVehicleEF | MDV | 3.9570e-003 | 3.3810e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 9.4700e-004 | 7.3000e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.16 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.12 | 0.54 |
| tblVehicleEF | MDV | 0.16 | 0.35 |
| tblVehicleEF | MH | 0.02 | 7.0410e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.48 | 0.73 |
| tblVehicleEF | MH | 4.93 | 1.80 |
| tblVehicleEF | MH | 1,080.16 | 1,404.14 |
| tblVehicleEF | MH | 58.00 | 17.35 |
| tblVehicleEF | MH | 1.21 | 1.37 |
| tblVehicleEF | MH | 0.78 | 0.26 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 0.77 | 0.58 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.38 | 0.30 |
| tblVehicleEF | MH | 0.06 | 0.05 |
| tblVehicleEF | MH | 0.02 | 1.14 |
| tblVehicleEF | MH | 0.29 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.6600e-004 | 1.7200e-004 |
| tblVehicleEF | MH | 0.77 | 0.58 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.38 | 0.30 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.02 | 1.14 |
| tblVehicleEF | MH | 0.32 | 0.09 |
| tblVehicleEF | MH | 0.02 | 7.2150e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.53 | 0.75 |
| tblVehicleEF | MH | 4.56 | 1.67 |
| tblVehicleEF | MH | 1,080.16 | 1,404.18 |
| tblVehicleEF | MH | 58.00 | 17.13 |
| tblVehicleEF | MH | 1.13 | 1.30 |
| tblVehicleEF | MH | 0.73 | 0.24 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 1.14 | 0.86 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.62 | 0.50 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.02 | 1.10 |
| tblVehicleEF | MH | 0.28 | 0.08 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.6000e-004 | 1.7000e-004 |
| tblVehicleEF | MH | 1.14 | 0.86 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.62 | 0.50 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.02 | 1.10 |
| tblVehicleEF | MH | 0.30 | 0.09 |
| tblVehicleEF | MH | 0.02 | 6.9300e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.45 | 0.72 |
| tblVehicleEF | MH | 5.14 | 1.88 |
| tblVehicleEF | MH | 1,080.16 | 1,404.12 |
| tblVehicleEF | MH | 58.00 | 17.49 |
| tblVehicleEF | MH | 1.21 | 1.37 |
| tblVehicleEF | MH | 0.81 | 0.27 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 0.55 | 0.42 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.27 | 0.21 |
| tblVehicleEF | MH | 0.06 | 0.05 |
| tblVehicleEF | MH | 0.03 | 1.22 |
| tblVehicleEF | MH | 0.30 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.7000e-004 | 1.7300e-004 |
| tblVehicleEF | MH | 0.55 | 0.42 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.27 | 0.21 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.22 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.33 | 0.10 |
| tblVehicleEF | MHD | 0.02 | 2.8280e-003 |
| tblVehicleEF | MHD | 2.1840e-003 | 8.4800e-004 |
| tblVehicleEF | MHD | 0.04 | 6.6450e-003 |
| tblVehicleEF | MHD | 0.30 | 0.33 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 4.03 | 0.72 |
| tblVehicleEF | MHD | 154.61 | 63.49 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.71 |
| tblVehicleEF | MHD | 0.41 | 0.34 |
| tblVehicleEF | MHD | 0.61 | 1.01 |
| tblVehicleEF | MHD | 11.96 | 1.82 |
| tblVehicleEF | MHD | 7.4000e-005 | 2.0400e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 7.1000e-005 | 1.9500e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 6.0400e-004 | 2.3400e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 4.5800e-004 | 1.7500e-004 |
| tblVehicleEF | MHD | 0.03 | 9.1100e-003 |
| tblVehicleEF | MHD | 0.01 | 0.07 |
| tblVehicleEF | MHD | 0.24 | 0.03 |
| tblVehicleEF | MHD | 1.4850e-003 | 6.0200e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.7200e-004 | 6.6000e-005 |
| tblVehicleEF | MHD | 6.0400e-004 | 2.3400e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 4.5800e-004 | 1.7500e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.01 | 0.07 |
| tblVehicleEF | MHD | 0.27 | 0.04 |
| tblVehicleEF | MHD | 0.01 | 2.6980e-003 |
| tblVehicleEF | MHD | 2.2110e-003 | 8.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 6.3360e-003 |
| tblVehicleEF | MHD | 0.22 | 0.29 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 3.76 | 0.67 |
| tblVehicleEF | MHD | 163.77 | 63.20 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.62 |
| tblVehicleEF | MHD | 0.42 | 0.33 |
| tblVehicleEF | MHD | 0.58 | 0.96 |
| tblVehicleEF | MHD | 11.92 | 1.81 |
| tblVehicleEF | MHD | 6.2000e-005 | 1.7500e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 6.0000e-005 | 1.6700e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 9.4100e-004 | 3.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 7.6300e-004 | 2.9300e-004 |
| tblVehicleEF | MHD | 0.03 | 9.1790e-003 |
| tblVehicleEF | MHD | 0.01 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.23 | 0.03 |
| tblVehicleEF | MHD | 1.5720e-003 | 5.9900e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.6800e-004 | 6.6000e-005 |
| tblVehicleEF | MHD | 9.4100e-004 | 3.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 7.6300e-004 | 2.9300e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.01 | 0.06 |
| tblVehicleEF | MHD | 0.25 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 3.0140e-003 |
| tblVehicleEF | MHD | 2.1660e-003 | 8.3700e-004 |
| tblVehicleEF | MHD | 0.04 | 6.8490e-003 |
| tblVehicleEF | MHD | 0.41 | 0.39 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 4.22 | 0.76 |
| tblVehicleEF | MHD | 141.96 | 63.89 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.76 |
| tblVehicleEF | MHD | 0.39 | 0.36 |
| tblVehicleEF | MHD | 0.60 | 1.00 |
| tblVehicleEF | MHD | 11.98 | 1.82 |
| tblVehicleEF | MHD | 9.0000e-005 | 2.4400e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 8.6000e-005 | 2.3300e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 4.2200e-004 | 1.6200e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 3.2400e-004 | 1.2300e-004 |
| tblVehicleEF | MHD | 0.03 | 9.0650e-003 |
| tblVehicleEF | MHD | 0.02 | 0.07 |
| tblVehicleEF | MHD | 0.25 | 0.03 |
| tblVehicleEF | MHD | 1.3660e-003 | 6.0600e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.7600e-004 | 6.7000e-005 |
| tblVehicleEF | MHD | 4.2200e-004 | 1.6200e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.2400e-004 | 1.2300e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.07 |
| tblVehicleEF | MHD | 0.28 | 0.04 |
| tblVehicleEF | OBUS | 0.01 | 8.0530e-003 |
| tblVehicleEF | OBUS | 5.0000e-003 | 4.5060e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |
| tblVehicleEF | OBUS | 0.34 | 0.55 |
| tblVehicleEF | OBUS | 4.91 | 2.51 |
| tblVehicleEF | OBUS | 47.43 | 50.81 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.89 |
| tblVehicleEF | OBUS | 70.06 | 19.68 |
| tblVehicleEF | OBUS | 0.08 | 0.18 |
| tblVehicleEF | OBUS | 0.39 | 0.90 |
| tblVehicleEF | OBUS | 1.53 | 0.75 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.6000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.3000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 1.1560e-003 | 1.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 6.9800e-004 | 9.6900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.06 | 0.31 |
| tblVehicleEF | OBUS | 0.31 | 0.12 |
| tblVehicleEF | OBUS | 4.6500e-004 | 4.8600e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.8700e-004 | 1.9500e-004 |
| tblVehicleEF | OBUS | 1.1560e-003 | 1.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 6.9800e-004 | 9.6900e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.06 | 0.31 |
| tblVehicleEF | OBUS | 0.34 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 8.1090e-003 |
| tblVehicleEF | OBUS | 5.1260e-003 | 4.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |
| tblVehicleEF | OBUS | 0.34 | 0.56 |
| tblVehicleEF | OBUS | 4.55 | 2.32 |
| tblVehicleEF | OBUS | 49.23 | 50.30 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.91 |
| tblVehicleEF | OBUS | 70.06 | 19.37 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.08 | 0.17 |
| tblVehicleEF | OBUS | 0.37 | 0.85 |
| tblVehicleEF | OBUS | 1.48 | 0.73 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.9000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.7000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 1.7400e-003 | 2.4430e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.1650e-003 | 1.6020e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.29 | 0.11 |
| tblVehicleEF | OBUS | 4.8200e-004 | 4.8100e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.8000e-004 | 1.9200e-004 |
| tblVehicleEF | OBUS | 1.7400e-003 | 2.4430e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 1.1650e-003 | 1.6020e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.32 | 0.12 |
| tblVehicleEF | OBUS | 0.01 | 7.9970e-003 |
| tblVehicleEF | OBUS | 4.9200e-003 | 4.4210e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.33 | 0.54 |
| tblVehicleEF | OBUS | 5.12 | 2.61 |
| tblVehicleEF | OBUS | 44.95 | 51.51 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.87 |
| tblVehicleEF | OBUS | 70.06 | 19.87 |
| tblVehicleEF | OBUS | 0.08 | 0.19 |
| tblVehicleEF | OBUS | 0.39 | 0.90 |
| tblVehicleEF | OBUS | 1.56 | 0.76 |
| tblVehicleEF | OBUS | 9.0000e-006 | 6.4000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 8.0000e-006 | 6.1000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 8.3800e-004 | 1.1970e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 4.9600e-004 | 6.8900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.32 | 0.12 |
| tblVehicleEF | OBUS | 4.4100e-004 | 4.9300e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.9000e-004 | 1.9700e-004 |
| tblVehicleEF | OBUS | 8.3800e-004 | 1.1970e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 4.9600e-004 | 6.8900e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.35 | 0.13 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.5050e-003 | 8.3830e-003 |
| tblVehicleEF | SBUS | 0.05 | 6.3100e-003 |
| tblVehicleEF | SBUS | 9.74 | 2.64 |
| tblVehicleEF | SBUS | 0.39 | 0.70 |
| tblVehicleEF | SBUS | 7.50 | 0.89 |
| tblVehicleEF | SBUS | 998.61 | 351.53 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.72 |
| tblVehicleEF | SBUS | 66.73 | 4.88 |
| tblVehicleEF | SBUS | 5.42 | 3.27 |
| tblVehicleEF | SBUS | 2.41 | 4.80 |
| tblVehicleEF | SBUS | 9.82 | 0.76 |
| tblVehicleEF | SBUS | 3.8400e-003 | 2.9550e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 3.6740e-003 | 2.8280e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 2.6140e-003 | 6.4200e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.5220e-003 |
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 1.6010e-003 | 4.0100e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.38 | 0.04 |
| tblVehicleEF | SBUS | 9.8690e-003 | 3.3500e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 7.9600e-004 | 4.8000e-005 |
| tblVehicleEF | SBUS | 2.6140e-003 | 6.4200e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.5220e-003 |
| tblVehicleEF | SBUS | 1.68 | 0.44 |
| tblVehicleEF | SBUS | 1.6010e-003 | 4.0100e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.42 | 0.04 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.6140e-003 | 8.4950e-003 |
| tblVehicleEF | SBUS | 0.04 | 5.4750e-003 |
| tblVehicleEF | SBUS | 9.67 | 2.60 |
| tblVehicleEF | SBUS | 0.40 | 0.71 |
| tblVehicleEF | SBUS | 5.83 | 0.70 |
| tblVehicleEF | SBUS | 1,038.39 | 361.49 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.75 |
| tblVehicleEF | SBUS | 66.73 | 4.55 |
| tblVehicleEF | SBUS | 5.59 | 3.35 |
| tblVehicleEF | SBUS | 2.30 | 4.59 |
| tblVehicleEF | SBUS | 9.79 | 0.76 |
| tblVehicleEF | SBUS | 3.2370e-003 | 2.5000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 3.0970e-003 | 2.3920e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 3.9560e-003 | 9.6000e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.6210e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 2.6840e-003 | 6.6600e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.33 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.4440e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |
| tblVehicleEF | SBUS | 7.6900e-004 | 4.5000e-005 |
| tblVehicleEF | SBUS | 3.9560e-003 | 9.6000e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.6210e-003 |
| tblVehicleEF | SBUS | 1.68 | 0.44 |
| tblVehicleEF | SBUS | 2.6840e-003 | 6.6600e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.36 | 0.04 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.4400e-003 | 8.3160e-003 |
| tblVehicleEF | SBUS | 0.05 | 6.7580e-003 |
| tblVehicleEF | SBUS | 9.83 | 2.69 |
| tblVehicleEF | SBUS | 0.39 | 0.69 |
| tblVehicleEF | SBUS | 8.41 | 1.00 |
| tblVehicleEF | SBUS | 943.68 | 337.76 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.71 |
| tblVehicleEF | SBUS | 66.73 | 5.06 |
| tblVehicleEF | SBUS | 5.18 | 3.17 |
| tblVehicleEF | SBUS | 2.39 | 4.77 |
| tblVehicleEF | SBUS | 9.84 | 0.76 |
| tblVehicleEF | SBUS | 4.6730e-003 | 3.5840e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 4.4710e-003 | 3.4290e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 1.8830e-003 | 4.6900e-004 |
| tblVehicleEF | SBUS | 0.03 | 7.7010e-003 |
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 1.1390e-003 | 2.8700e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.02 | 0.06 |
| tblVehicleEF | SBUS | 0.41 | 0.04 |
| tblVehicleEF | SBUS | 9.3450e-003 | 3.2200e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |
| tblVehicleEF | SBUS | 8.1200e-004 | 5.0000e-005 |
| tblVehicleEF | SBUS | 1.8830e-003 | 4.6900e-004 |
| tblVehicleEF | SBUS | 0.03 | 7.7010e-003 |
| tblVehicleEF | SBUS | 1.69 | 0.44 |
| tblVehicleEF | SBUS | 1.1390e-003 | 2.8700e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.02 | 0.06 |
| tblVehicleEF | SBUS | 0.45 | 0.04 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 5.80 | 22.84 |
| tblVehicleEF | UBUS | 9.04 | 1.69 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.87 |
| tblVehicleEF | UBUS | 136.72 | 17.29 |
| tblVehicleEF | UBUS | 2.18 | 0.37 |
| tblVehicleEF | UBUS | 12.53 | 0.16 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 2.4000e-003 | 5.4900e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.5700e-003 |
| tblVehicleEF | UBUS | 1.9500e-003 | 4.1900e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 0.01 | 0.03 |
| tblVehicleEF | UBUS | 0.73 | 0.08 |
| tblVehicleEF | UBUS | 8.2430e-003 | 5.0710e-003 |
| tblVehicleEF | UBUS | 1.5310e-003 | 1.7100e-004 |
| tblVehicleEF | UBUS | 2.4000e-003 | 5.4900e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.5700e-003 |
| tblVehicleEF | UBUS | 1.9500e-003 | 4.1900e-004 |
| tblVehicleEF | UBUS | 1.55 | 3.05 |
| tblVehicleEF | UBUS | 0.01 | 0.03 |
| tblVehicleEF | UBUS | 0.80 | 0.09 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 5.82 | 22.84 |
| tblVehicleEF | UBUS | 7.63 | 1.44 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.85 |
| tblVehicleEF | UBUS | 136.72 | 16.86 |
| tblVehicleEF | UBUS | 2.07 | 0.37 |
| tblVehicleEF | UBUS | 12.46 | 0.15 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 3.3760e-003 | 8.4600e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.9950e-003 |
| tblVehicleEF | UBUS | 3.3170e-003 | 7.5700e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 9.9720e-003 | 0.03 |
| tblVehicleEF | UBUS | 0.66 | 0.08 |
| tblVehicleEF | UBUS | 8.2430e-003 | 5.0700e-003 |
| tblVehicleEF | UBUS | 1.5060e-003 | 1.6700e-004 |
| tblVehicleEF | UBUS | 3.3760e-003 | 8.4600e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.9950e-003 |
| tblVehicleEF | UBUS | 3.3170e-003 | 7.5700e-004 |
| tblVehicleEF | UBUS | 1.56 | 3.05 |
| tblVehicleEF | UBUS | 9.9720e-003 | 0.03 |
| tblVehicleEF | UBUS | 0.73 | 0.08 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 5.79 | 22.84 |
| tblVehicleEF | UBUS | 9.98 | 1.86 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.85 |
| tblVehicleEF | UBUS | 136.72 | 17.57 |
| tblVehicleEF | UBUS | 2.17 | 0.37 |
| tblVehicleEF | UBUS | 12.58 | 0.16 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 1.8300e-003 | 3.8900e-004 |
| tblVehicleEF | UBUS | 0.04 | 7.1930e-003 |
| tblVehicleEF | UBUS | 1.3630e-003 | 2.8400e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 0.01 | 0.04 |
| tblVehicleEF | UBUS | 0.78 | 0.09 |
| tblVehicleEF | UBUS | 8.2420e-003 | 5.0700e-003 |
| tblVehicleEF | UBUS | 1.5470e-003 | 1.7400e-004 |
| tblVehicleEF | UBUS | 1.8300e-003 | 3.8900e-004 |
| tblVehicleEF | UBUS | 0.04 | 7.1930e-003 |
| tblVehicleEF | UBUS | 1.3630e-003 | 2.8400e-004 |
| tblVehicleEF | UBUS | 1.55 | 3.05 |
| tblVehicleEF | UBUS | 0.01 | 0.04 |
| tblVehicleEF | UBUS | 0.85 | 0.10 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |

| | | | |
|---|---|---|---|
| tblWater | IndoorWaterUseRate | 176,725,875.00 | 141,380,700.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

## 2.0 Emissions Summary

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 21.2138 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| 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 | 5.0939 | 6.5807 | 36.0481 | 0.1104 | 12.5922 | 0.0848 | 12.6770 | 3.3628 | 0.0792 | 3.4420 | | 11,325.9489 | 11,325.9489 | 0.5315 | | 11,339.2372 |
| **Total** | **26.3076** | **6.5814** | **36.1259** | **0.1104** | **12.5922** | **0.0851** | **12.6773** | **3.3628** | **0.0795** | **3.4422** | | **11,326.1162** | **11,326.1162** | **0.5320** | **0.0000** | **11,339.4154** |

**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 | 21.2138 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| 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 | 5.0939 | 6.5807 | 36.0481 | 0.1104 | 12.5922 | 0.0848 | 12.6770 | 3.3628 | 0.0792 | 3.4420 | | 11,325.9489 | 11,325.9489 | 0.5315 | | 11,339.2372 |
| **Total** | **26.3076** | **6.5814** | **36.1259** | **0.1104** | **12.5922** | **0.0851** | **12.6773** | **3.3628** | **0.0795** | **3.4422** | | **11,326.1162** | **11,326.1162** | **0.5320** | **0.0000** | **11,339.4154** |

| | **ROG** | **NOx** | **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** |

# 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 | 5.0939 | 6.5807 | 36.0481 | 0.1104 | 12.5922 | 0.0848 | 12.6770 | 3.3628 | 0.0792 | 3.4420 | | 11,325.9489 | 11,325.9489 | 0.5315 | | 11,339.2372 |
| Unmitigated | 5.0939 | 6.5807 | 36.0481 | 0.1104 | 12.5922 | 0.0848 | 12.6770 | 3.3628 | 0.0792 | 3.4420 | | 11,325.9489 | 11,325.9489 | 0.5315 | | 11,339.2372 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 2,919.32 | 2,919.32 | 2919.32 | 5,948,617 | 5,948,617 |
| Total | 2,919.32 | 2,919.32 | 2,919.32 | 5,948,617 | 5,948,617 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.583951 | 0.057343 | 0.169126 | 0.111554 | 0.025561 | 0.007279 | 0.020117 | 0.017665 | 0.000801 | 0.000959 | 0.003708 | 0.000559 | 0.001376 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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

| | ROG | NOx | CO | SO2 | Fugitive 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 | 21.2138 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| Unmitigated | 21.2138 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |

## 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 | 4.8523 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 16.3543 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 7.1700e-003 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| **Total** | **21.2138** | **7.1000e-004** | **0.0778** | **1.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | | **0.1673** | **0.1673** | **4.4000e-004** | | **0.1781** |

**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 | 4.8523 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 16.3543 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 7.1700e-003 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| **Total** | **21.2138** | **7.1000e-004** | **0.0778** | **1.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | | **0.1673** | **0.1673** | **4.4000e-004** | | **0.1781** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

## 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

Conejo Summit - Buildout Operational 2027 - Ventura County, Winter

# Conejo Summit - Buildout Operational 2027

**Ventura County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 764.22 | 1000sqft | 49.64 | 764,220.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2027 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 361.04 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 382,110.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 1,146,330.00 | 0.00 |
| tblConstructionPhase | NumDays | 55.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.61 | 0.58 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.17 |
| tblFleetMix | LHD1 | 0.01 | 0.03 |
| tblFleetMix | LHD2 | 5.7550e-003 | 7.2790e-003 |
| tblFleetMix | MCY | 3.7200e-003 | 3.7080e-003 |
| tblFleetMix | MDV | 0.10 | 0.11 |
| tblFleetMix | MH | 1.0730e-003 | 1.3760e-003 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.1980e-003 | 8.0100e-004 |
| tblFleetMix | SBUS | 4.0400e-004 | 5.5900e-004 |
| tblFleetMix | UBUS | 1.0750e-003 | 9.5900e-004 |
| tblLandUse | LotAcreage | 17.54 | 49.64 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 361.04 |
| tblSolidWaste | SolidWasteGenerationRate | 947.63 | 530.67 |
| tblTripsAndVMT | WorkerTripNumber | 64.00 | 0.00 |
| tblVehicleEF | HHD | 0.45 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.48 | 6.33 |
| tblVehicleEF | HHD | 1.10 | 0.53 |
| tblVehicleEF | HHD | 3.56 | 6.4740e-003 |
| tblVehicleEF | HHD | 3,896.24 | 1,002.87 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.61 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 12.85 | 5.45 |
| tblVehicleEF | HHD | 1.43 | 2.25 |
| tblVehicleEF | HHD | 19.34 | 2.54 |
| tblVehicleEF | HHD | 8.6360e-003 | 2.9490e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 8.2630e-003 | 2.8220e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 7.5000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 3.9950e-003 | 3.9000e-005 |
| tblVehicleEF | HHD | 0.36 | 0.43 |
| tblVehicleEF | HHD | 6.3000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.2200e-004 | 1.4900e-004 |
| tblVehicleEF | HHD | 0.06 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 9.2560e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.7000e-004 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 7.5000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 3.9950e-003 | 3.9000e-005 |
| tblVehicleEF | HHD | 0.44 | 0.49 |
| tblVehicleEF | HHD | 6.3000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.2200e-004 | 1.4900e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.43 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |
| tblVehicleEF | HHD | 0.05 | 0.00 |
| tblVehicleEF | HHD | 1.07 | 6.24 |
| tblVehicleEF | HHD | 1.11 | 0.53 |
| tblVehicleEF | HHD | 3.32 | 6.0450e-003 |
| tblVehicleEF | HHD | 4,127.72 | 991.81 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.62 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 13.27 | 5.22 |
| tblVehicleEF | HHD | 1.37 | 2.15 |
| tblVehicleEF | HHD | 19.33 | 2.54 |
| tblVehicleEF | HHD | 7.2810e-003 | 2.5700e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 6.9660e-003 | 2.4580e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 1.1700e-004 | 1.0000e-006 |

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|---|---|---|---|
| tblVehicleEF | HHD | 4.0950e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.34 | 0.45 |
| tblVehicleEF | HHD | 1.0300e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.0100e-004 | 1.4200e-004 |
| tblVehicleEF | HHD | 0.06 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 9.1530e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6700e-004 | 0.00 |
| tblVehicleEF | HHD | 1.1700e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 4.0950e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.41 | 0.52 |
| tblVehicleEF | HHD | 1.0300e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.0100e-004 | 1.4200e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.49 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.04 | 6.46 |
| tblVehicleEF | HHD | 1.09 | 0.53 |
| tblVehicleEF | HHD | 3.73 | 6.7820e-003 |
| tblVehicleEF | HHD | 3,576.57 | 1,018.14 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.61 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 12.28 | 5.78 |
| tblVehicleEF | HHD | 1.43 | 2.23 |
| tblVehicleEF | HHD | 19.35 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.4740e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 0.01 | 3.3240e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 5.3000e-005 | 0.00 |
| tblVehicleEF | HHD | 4.1270e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.39 | 0.39 |
| tblVehicleEF | HHD | 4.5000e-005 | 0.00 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.7500e-004 | 1.6700e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 9.3980e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.7300e-004 | 0.00 |
| tblVehicleEF | HHD | 5.3000e-005 | 0.00 |
| tblVehicleEF | HHD | 4.1270e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.47 | 0.45 |
| tblVehicleEF | HHD | 4.5000e-005 | 0.00 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.7500e-004 | 1.6700e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | LDA | 2.7190e-003 | 1.3890e-003 |
| tblVehicleEF | LDA | 3.0880e-003 | 0.04 |
| tblVehicleEF | LDA | 0.41 | 0.47 |
| tblVehicleEF | LDA | 0.79 | 1.87 |
| tblVehicleEF | LDA | 204.34 | 218.76 |

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|---|---|---|---|
| tblVehicleEF | LDA | 46.66 | 46.02 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.14 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 6.8430e-003 | 4.9460e-003 |
| tblVehicleEF | LDA | 0.03 | 0.19 |
| tblVehicleEF | LDA | 0.04 | 0.16 |
| tblVehicleEF | LDA | 2.0450e-003 | 2.1640e-003 |
| tblVehicleEF | LDA | 4.8000e-004 | 4.5500e-004 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 9.9450e-003 | 7.1840e-003 |
| tblVehicleEF | LDA | 0.03 | 0.19 |
| tblVehicleEF | LDA | 0.05 | 0.17 |
| tblVehicleEF | LDA | 2.8930e-003 | 1.4950e-003 |
| tblVehicleEF | LDA | 2.6830e-003 | 0.03 |
| tblVehicleEF | LDA | 0.45 | 0.52 |
| tblVehicleEF | LDA | 0.65 | 1.54 |
| tblVehicleEF | LDA | 213.33 | 228.15 |
| tblVehicleEF | LDA | 46.66 | 45.43 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.13 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |

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|---|---|---|---|
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.04 | 0.05 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.04 | 0.06 |
| tblVehicleEF | LDA | 7.2720e-003 | 5.2550e-003 |
| tblVehicleEF | LDA | 0.03 | 0.17 |
| tblVehicleEF | LDA | 0.04 | 0.14 |
| tblVehicleEF | LDA | 2.1360e-003 | 2.2570e-003 |
| tblVehicleEF | LDA | 4.7700e-004 | 4.5000e-004 |
| tblVehicleEF | LDA | 0.04 | 0.05 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.04 | 0.06 |
| tblVehicleEF | LDA | 0.01 | 7.6340e-003 |
| tblVehicleEF | LDA | 0.03 | 0.17 |
| tblVehicleEF | LDA | 0.04 | 0.15 |
| tblVehicleEF | LDA | 2.6670e-003 | 1.3520e-003 |
| tblVehicleEF | LDA | 3.3340e-003 | 0.04 |
| tblVehicleEF | LDA | 0.41 | 0.47 |
| tblVehicleEF | LDA | 0.88 | 2.08 |
| tblVehicleEF | LDA | 202.64 | 216.98 |
| tblVehicleEF | LDA | 46.66 | 46.39 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.15 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 6.7130e-003 | 4.8520e-003 |
| tblVehicleEF | LDA | 0.04 | 0.22 |
| tblVehicleEF | LDA | 0.04 | 0.17 |
| tblVehicleEF | LDA | 2.0280e-003 | 2.1460e-003 |
| tblVehicleEF | LDA | 4.8100e-004 | 4.5900e-004 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 9.7540e-003 | 7.0470e-003 |
| tblVehicleEF | LDA | 0.04 | 0.22 |
| tblVehicleEF | LDA | 0.05 | 0.18 |
| tblVehicleEF | LDT1 | 6.5100e-003 | 3.6460e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.06 |
| tblVehicleEF | LDT1 | 0.83 | 0.85 |
| tblVehicleEF | LDT1 | 2.12 | 2.06 |
| tblVehicleEF | LDT1 | 263.27 | 266.81 |
| tblVehicleEF | LDT1 | 61.51 | 57.01 |
| tblVehicleEF | LDT1 | 0.08 | 0.07 |
| tblVehicleEF | LDT1 | 0.12 | 0.21 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.09 | 0.09 |
| tblVehicleEF | LDT1 | 0.23 | 0.17 |
| tblVehicleEF | LDT1 | 0.08 | 0.08 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.16 | 0.64 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDT1 | 0.14 | 0.27 |
| tblVehicleEF | LDT1 | 2.6410e-003 | 2.6400e-003 |
| tblVehicleEF | LDT1 | 6.5200e-004 | 5.6400e-004 |
| tblVehicleEF | LDT1 | 0.09 | 0.09 |
| tblVehicleEF | LDT1 | 0.23 | 0.17 |
| tblVehicleEF | LDT1 | 0.08 | 0.08 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.16 | 0.64 |
| tblVehicleEF | LDT1 | 0.15 | 0.29 |
| tblVehicleEF | LDT1 | 6.8870e-003 | 3.8950e-003 |
| tblVehicleEF | LDT1 | 8.8250e-003 | 0.05 |
| tblVehicleEF | LDT1 | 0.89 | 0.92 |
| tblVehicleEF | LDT1 | 1.73 | 1.69 |
| tblVehicleEF | LDT1 | 274.46 | 276.65 |
| tblVehicleEF | LDT1 | 61.51 | 56.32 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.11 | 0.19 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.14 | 0.14 |
| tblVehicleEF | LDT1 | 0.24 | 0.18 |
| tblVehicleEF | LDT1 | 0.13 | 0.14 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.14 | 0.57 |
| tblVehicleEF | LDT1 | 0.12 | 0.23 |
| tblVehicleEF | LDT1 | 2.7540e-003 | 2.7380e-003 |
| tblVehicleEF | LDT1 | 6.4500e-004 | 5.5700e-004 |
| tblVehicleEF | LDT1 | 0.14 | 0.14 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDT1 | 0.24 | 0.18 |
| tblVehicleEF | LDT1 | 0.13 | 0.14 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.14 | 0.57 |
| tblVehicleEF | LDT1 | 0.13 | 0.25 |
| tblVehicleEF | LDT1 | 6.3960e-003 | 3.5590e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.06 |
| tblVehicleEF | LDT1 | 0.82 | 0.84 |
| tblVehicleEF | LDT1 | 2.36 | 2.30 |
| tblVehicleEF | LDT1 | 261.15 | 264.94 |
| tblVehicleEF | LDT1 | 61.51 | 57.45 |
| tblVehicleEF | LDT1 | 0.08 | 0.07 |
| tblVehicleEF | LDT1 | 0.12 | 0.22 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.25 | 0.19 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.20 | 0.78 |
| tblVehicleEF | LDT1 | 0.15 | 0.29 |
| tblVehicleEF | LDT1 | 2.6200e-003 | 2.6220e-003 |
| tblVehicleEF | LDT1 | 6.5600e-004 | 5.6900e-004 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.25 | 0.19 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.20 | 0.78 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDT1 | 0.16 | 0.32 |
| tblVehicleEF | LDT2 | 3.7240e-003 | 2.5850e-003 |
| tblVehicleEF | LDT2 | 4.2360e-003 | 0.05 |
| tblVehicleEF | LDT2 | 0.55 | 0.67 |
| tblVehicleEF | LDT2 | 1.04 | 2.43 |
| tblVehicleEF | LDT2 | 289.62 | 276.40 |
| tblVehicleEF | LDT2 | 66.47 | 59.18 |
| tblVehicleEF | LDT2 | 0.05 | 0.05 |
| tblVehicleEF | LDT2 | 0.07 | 0.21 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.08 | 0.11 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 9.2470e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.41 |
| tblVehicleEF | LDT2 | 0.06 | 0.24 |
| tblVehicleEF | LDT2 | 2.9000e-003 | 2.7340e-003 |
| tblVehicleEF | LDT2 | 6.8200e-004 | 5.8600e-004 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.08 | 0.11 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.41 |
| tblVehicleEF | LDT2 | 0.06 | 0.26 |
| tblVehicleEF | LDT2 | 3.9580e-003 | 2.7720e-003 |
| tblVehicleEF | LDT2 | 3.6880e-003 | 0.05 |
| tblVehicleEF | LDT2 | 0.60 | 0.73 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDT2 | 0.87 | 1.99 |
| tblVehicleEF | LDT2 | 302.13 | 285.62 |
| tblVehicleEF | LDT2 | 66.47 | 58.40 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 0.06 | 0.19 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.05 | 0.09 |
| tblVehicleEF | LDT2 | 0.08 | 0.12 |
| tblVehicleEF | LDT2 | 0.06 | 0.11 |
| tblVehicleEF | LDT2 | 9.8270e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.37 |
| tblVehicleEF | LDT2 | 0.05 | 0.21 |
| tblVehicleEF | LDT2 | 3.0250e-003 | 2.8250e-003 |
| tblVehicleEF | LDT2 | 6.7900e-004 | 5.7800e-004 |
| tblVehicleEF | LDT2 | 0.05 | 0.09 |
| tblVehicleEF | LDT2 | 0.08 | 0.12 |
| tblVehicleEF | LDT2 | 0.06 | 0.11 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.05 | 0.37 |
| tblVehicleEF | LDT2 | 0.05 | 0.23 |
| tblVehicleEF | LDT2 | 3.6520e-003 | 2.5200e-003 |
| tblVehicleEF | LDT2 | 4.5670e-003 | 0.06 |
| tblVehicleEF | LDT2 | 0.54 | 0.66 |
| tblVehicleEF | LDT2 | 1.15 | 2.70 |
| tblVehicleEF | LDT2 | 287.25 | 274.65 |
| tblVehicleEF | LDT2 | 66.47 | 59.68 |
| tblVehicleEF | LDT2 | 0.05 | 0.05 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.07 | 0.22 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 0.09 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 9.0700e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.07 | 0.50 |
| tblVehicleEF | LDT2 | 0.06 | 0.26 |
| tblVehicleEF | LDT2 | 2.8760e-003 | 2.7170e-003 |
| tblVehicleEF | LDT2 | 6.8400e-004 | 5.9100e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 0.09 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.01 | 0.01 |
| tblVehicleEF | LDT2 | 0.07 | 0.50 |
| tblVehicleEF | LDT2 | 0.07 | 0.28 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1330e-003 |
| tblVehicleEF | LHD1 | 7.1770e-003 | 3.9640e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |
| tblVehicleEF | LHD1 | 0.62 | 0.49 |
| tblVehicleEF | LHD1 | 1.95 | 0.87 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.31 |
| tblVehicleEF | LHD1 | 26.54 | 9.45 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.25 | 0.88 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.77 | 0.24 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 2.0040e-003 | 1.5820e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 1.3860e-003 | 1.0850e-003 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.31 | 0.51 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5760e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 3.0200e-004 | 9.4000e-005 |
| tblVehicleEF | LHD1 | 2.0040e-003 | 1.5820e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.3860e-003 | 1.0850e-003 |
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.31 | 0.51 |
| tblVehicleEF | LHD1 | 0.20 | 0.06 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1450e-003 |
| tblVehicleEF | LHD1 | 7.3220e-003 | 4.0310e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.63 | 0.50 |
| tblVehicleEF | LHD1 | 1.83 | 0.82 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.32 |
| tblVehicleEF | LHD1 | 26.54 | 9.36 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.19 | 0.84 |
| tblVehicleEF | LHD1 | 0.72 | 0.23 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 3.0980e-003 | 2.4560e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 2.2730e-003 | 1.7890e-003 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.29 | 0.48 |
| tblVehicleEF | LHD1 | 0.18 | 0.05 |
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5760e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 2.9900e-004 | 9.3000e-005 |
| tblVehicleEF | LHD1 | 3.0980e-003 | 2.4560e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 2.2730e-003 | 1.7890e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.29 | 0.48 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1240e-003 |
| tblVehicleEF | LHD1 | 7.0840e-003 | 3.9210e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |
| tblVehicleEF | LHD1 | 0.61 | 0.49 |
| tblVehicleEF | LHD1 | 2.04 | 0.91 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.30 |
| tblVehicleEF | LHD1 | 26.54 | 9.51 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.24 | 0.87 |
| tblVehicleEF | LHD1 | 0.80 | 0.25 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 1.3920e-003 | 1.0920e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 9.8100e-004 | 7.6500e-004 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.34 | 0.56 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5750e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 3.0300e-004 | 9.4000e-005 |
| tblVehicleEF | LHD1 | 1.3920e-003 | 1.0920e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 9.8100e-004 | 7.6500e-004 |
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.34 | 0.56 |
| tblVehicleEF | LHD1 | 0.21 | 0.06 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9660e-003 |
| tblVehicleEF | LHD2 | 2.6840e-003 | 2.9100e-003 |
| tblVehicleEF | LHD2 | 5.2320e-003 | 7.1760e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 1.01 | 0.53 |
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.16 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.53 | 0.88 |
| tblVehicleEF | LHD2 | 0.41 | 0.17 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 6.7200e-004 | 8.2900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 5.2900e-004 | 6.2200e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.06 | 0.21 |
| tblVehicleEF | LHD2 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7330e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6100e-004 | 7.1000e-005 |
| tblVehicleEF | LHD2 | 6.7200e-004 | 8.2900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 5.2900e-004 | 6.2200e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.21 |
| tblVehicleEF | LHD2 | 0.08 | 0.04 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9750e-003 |
| tblVehicleEF | LHD2 | 2.7140e-003 | 2.9350e-003 |
| tblVehicleEF | LHD2 | 5.0210e-003 | 6.8530e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 0.95 | 0.50 |
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.10 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.51 | 0.84 |
| tblVehicleEF | LHD2 | 0.39 | 0.16 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |
| tblVehicleEF | LHD2 | 1.0350e-003 | 1.2770e-003 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 8.6400e-004 | 1.0180e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.06 | 0.20 |
| tblVehicleEF | LHD2 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7340e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6000e-004 | 7.0000e-005 |
| tblVehicleEF | LHD2 | 1.0350e-003 | 1.2770e-003 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 8.6400e-004 | 1.0180e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.20 |
| tblVehicleEF | LHD2 | 0.07 | 0.04 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9600e-003 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.8930e-003 |
| tblVehicleEF | LHD2 | 5.3780e-003 | 7.3980e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 1.05 | 0.55 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.20 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.53 | 0.87 |
| tblVehicleEF | LHD2 | 0.42 | 0.18 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |
| tblVehicleEF | LHD2 | 4.7300e-004 | 5.8300e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 3.7900e-004 | 4.4400e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.07 | 0.24 |
| tblVehicleEF | LHD2 | 0.07 | 0.04 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7330e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6100e-004 | 7.1000e-005 |
| tblVehicleEF | LHD2 | 4.7300e-004 | 5.8300e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 3.7900e-004 | 4.4400e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.07 | 0.24 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.08 | 0.04 |
| tblVehicleEF | MCY | 0.48 | 0.34 |
| tblVehicleEF | MCY | 0.16 | 0.24 |
| tblVehicleEF | MCY | 18.38 | 18.68 |
| tblVehicleEF | MCY | 10.02 | 8.87 |
| tblVehicleEF | MCY | 176.71 | 214.21 |
| tblVehicleEF | MCY | 44.77 | 60.65 |
| tblVehicleEF | MCY | 1.14 | 1.14 |
| tblVehicleEF | MCY | 0.32 | 0.27 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 0.89 | 0.93 |
| tblVehicleEF | MCY | 0.71 | 0.76 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 2.33 | 2.35 |
| tblVehicleEF | MCY | 0.85 | 1.90 |
| tblVehicleEF | MCY | 2.14 | 1.90 |
| tblVehicleEF | MCY | 2.1370e-003 | 2.1200e-003 |
| tblVehicleEF | MCY | 6.7400e-004 | 6.0000e-004 |
| tblVehicleEF | MCY | 0.89 | 0.93 |
| tblVehicleEF | MCY | 0.71 | 0.76 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 2.90 | 2.92 |
| tblVehicleEF | MCY | 0.85 | 1.90 |
| tblVehicleEF | MCY | 2.33 | 2.07 |
| tblVehicleEF | MCY | 0.47 | 0.33 |
| tblVehicleEF | MCY | 0.13 | 0.21 |
| tblVehicleEF | MCY | 17.28 | 17.54 |

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|---|---|---|---|
| tblVehicleEF | MCY | 8.85 | 7.80 |
| tblVehicleEF | MCY | 176.71 | 212.11 |
| tblVehicleEF | MCY | 44.77 | 58.01 |
| tblVehicleEF | MCY | 1.00 | 1.01 |
| tblVehicleEF | MCY | 0.30 | 0.25 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 1.54 | 1.60 |
| tblVehicleEF | MCY | 0.78 | 0.83 |
| tblVehicleEF | MCY | 1.16 | 1.20 |
| tblVehicleEF | MCY | 2.25 | 2.27 |
| tblVehicleEF | MCY | 0.79 | 1.75 |
| tblVehicleEF | MCY | 1.84 | 1.62 |
| tblVehicleEF | MCY | 2.1170e-003 | 2.0990e-003 |
| tblVehicleEF | MCY | 6.4600e-004 | 5.7400e-004 |
| tblVehicleEF | MCY | 1.54 | 1.60 |
| tblVehicleEF | MCY | 0.78 | 0.83 |
| tblVehicleEF | MCY | 1.16 | 1.20 |
| tblVehicleEF | MCY | 2.80 | 2.82 |
| tblVehicleEF | MCY | 0.79 | 1.75 |
| tblVehicleEF | MCY | 2.00 | 1.76 |
| tblVehicleEF | MCY | 0.49 | 0.35 |
| tblVehicleEF | MCY | 0.17 | 0.27 |
| tblVehicleEF | MCY | 19.30 | 19.64 |
| tblVehicleEF | MCY | 10.86 | 9.66 |
| tblVehicleEF | MCY | 176.71 | 215.94 |
| tblVehicleEF | MCY | 44.77 | 62.55 |
| tblVehicleEF | MCY | 1.16 | 1.16 |

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|---|---|---|---|
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 0.88 | 0.93 |
| tblVehicleEF | MCY | 0.33 | 0.36 |
| tblVehicleEF | MCY | 2.39 | 2.41 |
| tblVehicleEF | MCY | 1.01 | 2.26 |
| tblVehicleEF | MCY | 2.34 | 2.10 |
| tblVehicleEF | MCY | 2.1540e-003 | 2.1370e-003 |
| tblVehicleEF | MCY | 6.9400e-004 | 6.1900e-004 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 0.88 | 0.93 |
| tblVehicleEF | MCY | 0.33 | 0.36 |
| tblVehicleEF | MCY | 2.97 | 2.99 |
| tblVehicleEF | MCY | 1.01 | 2.26 |
| tblVehicleEF | MCY | 2.55 | 2.28 |
| tblVehicleEF | MDV | 6.5670e-003 | 3.0130e-003 |
| tblVehicleEF | MDV | 9.8130e-003 | 0.06 |
| tblVehicleEF | MDV | 0.79 | 0.72 |
| tblVehicleEF | MDV | 1.90 | 2.70 |
| tblVehicleEF | MDV | 398.72 | 343.92 |
| tblVehicleEF | MDV | 91.05 | 73.25 |
| tblVehicleEF | MDV | 0.08 | 0.06 |
| tblVehicleEF | MDV | 0.16 | 0.26 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.05 | 0.07 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.10 | 0.45 |
| tblVehicleEF | MDV | 0.13 | 0.30 |
| tblVehicleEF | MDV | 3.9890e-003 | 3.3990e-003 |
| tblVehicleEF | MDV | 9.4300e-004 | 7.2500e-004 |
| tblVehicleEF | MDV | 0.05 | 0.07 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.10 | 0.45 |
| tblVehicleEF | MDV | 0.14 | 0.32 |
| tblVehicleEF | MDV | 6.9690e-003 | 3.2320e-003 |
| tblVehicleEF | MDV | 8.5180e-003 | 0.05 |
| tblVehicleEF | MDV | 0.86 | 0.79 |
| tblVehicleEF | MDV | 1.57 | 2.21 |
| tblVehicleEF | MDV | 415.42 | 353.45 |
| tblVehicleEF | MDV | 91.05 | 72.36 |
| tblVehicleEF | MDV | 0.07 | 0.05 |
| tblVehicleEF | MDV | 0.14 | 0.23 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.09 | 0.11 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.10 | 0.14 |

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|---|---|---|---|
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.09 | 0.41 |
| tblVehicleEF | MDV | 0.11 | 0.26 |
| tblVehicleEF | MDV | 4.1570e-003 | 3.4930e-003 |
| tblVehicleEF | MDV | 9.3700e-004 | 7.1600e-004 |
| tblVehicleEF | MDV | 0.09 | 0.11 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.10 | 0.14 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.09 | 0.41 |
| tblVehicleEF | MDV | 0.13 | 0.28 |
| tblVehicleEF | MDV | 6.4470e-003 | 2.9380e-003 |
| tblVehicleEF | MDV | 0.01 | 0.07 |
| tblVehicleEF | MDV | 0.78 | 0.71 |
| tblVehicleEF | MDV | 2.10 | 3.00 |
| tblVehicleEF | MDV | 395.55 | 342.11 |
| tblVehicleEF | MDV | 91.05 | 73.82 |
| tblVehicleEF | MDV | 0.08 | 0.06 |
| tblVehicleEF | MDV | 0.16 | 0.27 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.16 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.12 | 0.54 |
| tblVehicleEF | MDV | 0.14 | 0.32 |
| tblVehicleEF | MDV | 3.9570e-003 | 3.3810e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 9.4700e-004 | 7.3000e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.16 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.12 | 0.54 |
| tblVehicleEF | MDV | 0.16 | 0.35 |
| tblVehicleEF | MH | 0.02 | 7.0410e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.48 | 0.73 |
| tblVehicleEF | MH | 4.93 | 1.80 |
| tblVehicleEF | MH | 1,080.16 | 1,404.14 |
| tblVehicleEF | MH | 58.00 | 17.35 |
| tblVehicleEF | MH | 1.21 | 1.37 |
| tblVehicleEF | MH | 0.78 | 0.26 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 0.77 | 0.58 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.38 | 0.30 |
| tblVehicleEF | MH | 0.06 | 0.05 |
| tblVehicleEF | MH | 0.02 | 1.14 |
| tblVehicleEF | MH | 0.29 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.6600e-004 | 1.7200e-004 |
| tblVehicleEF | MH | 0.77 | 0.58 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.38 | 0.30 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.02 | 1.14 |
| tblVehicleEF | MH | 0.32 | 0.09 |
| tblVehicleEF | MH | 0.02 | 7.2150e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.53 | 0.75 |
| tblVehicleEF | MH | 4.56 | 1.67 |
| tblVehicleEF | MH | 1,080.16 | 1,404.18 |
| tblVehicleEF | MH | 58.00 | 17.13 |
| tblVehicleEF | MH | 1.13 | 1.30 |
| tblVehicleEF | MH | 0.73 | 0.24 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 1.14 | 0.86 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.62 | 0.50 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.02 | 1.10 |
| tblVehicleEF | MH | 0.28 | 0.08 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.6000e-004 | 1.7000e-004 |
| tblVehicleEF | MH | 1.14 | 0.86 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.62 | 0.50 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.02 | 1.10 |
| tblVehicleEF | MH | 0.30 | 0.09 |
| tblVehicleEF | MH | 0.02 | 6.9300e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.45 | 0.72 |
| tblVehicleEF | MH | 5.14 | 1.88 |
| tblVehicleEF | MH | 1,080.16 | 1,404.12 |
| tblVehicleEF | MH | 58.00 | 17.49 |
| tblVehicleEF | MH | 1.21 | 1.37 |
| tblVehicleEF | MH | 0.81 | 0.27 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 0.55 | 0.42 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.27 | 0.21 |
| tblVehicleEF | MH | 0.06 | 0.05 |
| tblVehicleEF | MH | 0.03 | 1.22 |
| tblVehicleEF | MH | 0.30 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.7000e-004 | 1.7300e-004 |
| tblVehicleEF | MH | 0.55 | 0.42 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.27 | 0.21 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.22 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.33 | 0.10 |
| tblVehicleEF | MHD | 0.02 | 2.8280e-003 |
| tblVehicleEF | MHD | 2.1840e-003 | 8.4800e-004 |
| tblVehicleEF | MHD | 0.04 | 6.6450e-003 |
| tblVehicleEF | MHD | 0.30 | 0.33 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 4.03 | 0.72 |
| tblVehicleEF | MHD | 154.61 | 63.49 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.71 |
| tblVehicleEF | MHD | 0.41 | 0.34 |
| tblVehicleEF | MHD | 0.61 | 1.01 |
| tblVehicleEF | MHD | 11.96 | 1.82 |
| tblVehicleEF | MHD | 7.4000e-005 | 2.0400e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 7.1000e-005 | 1.9500e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 6.0400e-004 | 2.3400e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 4.5800e-004 | 1.7500e-004 |
| tblVehicleEF | MHD | 0.03 | 9.1100e-003 |
| tblVehicleEF | MHD | 0.01 | 0.07 |
| tblVehicleEF | MHD | 0.24 | 0.03 |
| tblVehicleEF | MHD | 1.4850e-003 | 6.0200e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.7200e-004 | 6.6000e-005 |
| tblVehicleEF | MHD | 6.0400e-004 | 2.3400e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 4.5800e-004 | 1.7500e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.01 | 0.07 |
| tblVehicleEF | MHD | 0.27 | 0.04 |
| tblVehicleEF | MHD | 0.01 | 2.6980e-003 |
| tblVehicleEF | MHD | 2.2110e-003 | 8.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 6.3360e-003 |
| tblVehicleEF | MHD | 0.22 | 0.29 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 3.76 | 0.67 |
| tblVehicleEF | MHD | 163.77 | 63.20 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.62 |
| tblVehicleEF | MHD | 0.42 | 0.33 |
| tblVehicleEF | MHD | 0.58 | 0.96 |
| tblVehicleEF | MHD | 11.92 | 1.81 |
| tblVehicleEF | MHD | 6.2000e-005 | 1.7500e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 6.0000e-005 | 1.6700e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 9.4100e-004 | 3.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 7.6300e-004 | 2.9300e-004 |
| tblVehicleEF | MHD | 0.03 | 9.1790e-003 |
| tblVehicleEF | MHD | 0.01 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.23 | 0.03 |
| tblVehicleEF | MHD | 1.5720e-003 | 5.9900e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.6800e-004 | 6.6000e-005 |
| tblVehicleEF | MHD | 9.4100e-004 | 3.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 7.6300e-004 | 2.9300e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.01 | 0.06 |
| tblVehicleEF | MHD | 0.25 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 3.0140e-003 |
| tblVehicleEF | MHD | 2.1660e-003 | 8.3700e-004 |
| tblVehicleEF | MHD | 0.04 | 6.8490e-003 |
| tblVehicleEF | MHD | 0.41 | 0.39 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 4.22 | 0.76 |
| tblVehicleEF | MHD | 141.96 | 63.89 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.76 |
| tblVehicleEF | MHD | 0.39 | 0.36 |
| tblVehicleEF | MHD | 0.60 | 1.00 |
| tblVehicleEF | MHD | 11.98 | 1.82 |
| tblVehicleEF | MHD | 9.0000e-005 | 2.4400e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 8.6000e-005 | 2.3300e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 4.2200e-004 | 1.6200e-004 |

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| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 3.2400e-004 | 1.2300e-004 |
| tblVehicleEF | MHD | 0.03 | 9.0650e-003 |
| tblVehicleEF | MHD | 0.02 | 0.07 |
| tblVehicleEF | MHD | 0.25 | 0.03 |
| tblVehicleEF | MHD | 1.3660e-003 | 6.0600e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.7600e-004 | 6.7000e-005 |
| tblVehicleEF | MHD | 4.2200e-004 | 1.6200e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.2400e-004 | 1.2300e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.07 |
| tblVehicleEF | MHD | 0.28 | 0.04 |
| tblVehicleEF | OBUS | 0.01 | 8.0530e-003 |
| tblVehicleEF | OBUS | 5.0000e-003 | 4.5060e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |
| tblVehicleEF | OBUS | 0.34 | 0.55 |
| tblVehicleEF | OBUS | 4.91 | 2.51 |
| tblVehicleEF | OBUS | 47.43 | 50.81 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.89 |
| tblVehicleEF | OBUS | 70.06 | 19.68 |
| tblVehicleEF | OBUS | 0.08 | 0.18 |
| tblVehicleEF | OBUS | 0.39 | 0.90 |
| tblVehicleEF | OBUS | 1.53 | 0.75 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.6000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.3000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 1.1560e-003 | 1.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 6.9800e-004 | 9.6900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.06 | 0.31 |
| tblVehicleEF | OBUS | 0.31 | 0.12 |
| tblVehicleEF | OBUS | 4.6500e-004 | 4.8600e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.8700e-004 | 1.9500e-004 |
| tblVehicleEF | OBUS | 1.1560e-003 | 1.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 6.9800e-004 | 9.6900e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.06 | 0.31 |
| tblVehicleEF | OBUS | 0.34 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 8.1090e-003 |
| tblVehicleEF | OBUS | 5.1260e-003 | 4.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |
| tblVehicleEF | OBUS | 0.34 | 0.56 |
| tblVehicleEF | OBUS | 4.55 | 2.32 |
| tblVehicleEF | OBUS | 49.23 | 50.30 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.91 |
| tblVehicleEF | OBUS | 70.06 | 19.37 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.08 | 0.17 |
| tblVehicleEF | OBUS | 0.37 | 0.85 |
| tblVehicleEF | OBUS | 1.48 | 0.73 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.9000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.7000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 1.7400e-003 | 2.4430e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.1650e-003 | 1.6020e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.29 | 0.11 |
| tblVehicleEF | OBUS | 4.8200e-004 | 4.8100e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.8000e-004 | 1.9200e-004 |
| tblVehicleEF | OBUS | 1.7400e-003 | 2.4430e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 1.1650e-003 | 1.6020e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.32 | 0.12 |
| tblVehicleEF | OBUS | 0.01 | 7.9970e-003 |
| tblVehicleEF | OBUS | 4.9200e-003 | 4.4210e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.33 | 0.54 |
| tblVehicleEF | OBUS | 5.12 | 2.61 |
| tblVehicleEF | OBUS | 44.95 | 51.51 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.87 |
| tblVehicleEF | OBUS | 70.06 | 19.87 |
| tblVehicleEF | OBUS | 0.08 | 0.19 |
| tblVehicleEF | OBUS | 0.39 | 0.90 |
| tblVehicleEF | OBUS | 1.56 | 0.76 |
| tblVehicleEF | OBUS | 9.0000e-006 | 6.4000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 8.0000e-006 | 6.1000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 8.3800e-004 | 1.1970e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 4.9600e-004 | 6.8900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.32 | 0.12 |
| tblVehicleEF | OBUS | 4.4100e-004 | 4.9300e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.9000e-004 | 1.9700e-004 |
| tblVehicleEF | OBUS | 8.3800e-004 | 1.1970e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 4.9600e-004 | 6.8900e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |

| | | | |
|---|---|---|---|
| tblVehicleEF | OBUS | 0.35 | 0.13 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.5050e-003 | 8.3830e-003 |
| tblVehicleEF | SBUS | 0.05 | 6.3100e-003 |
| tblVehicleEF | SBUS | 9.74 | 2.64 |
| tblVehicleEF | SBUS | 0.39 | 0.70 |
| tblVehicleEF | SBUS | 7.50 | 0.89 |
| tblVehicleEF | SBUS | 998.61 | 351.53 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.72 |
| tblVehicleEF | SBUS | 66.73 | 4.88 |
| tblVehicleEF | SBUS | 5.42 | 3.27 |
| tblVehicleEF | SBUS | 2.41 | 4.80 |
| tblVehicleEF | SBUS | 9.82 | 0.76 |
| tblVehicleEF | SBUS | 3.8400e-003 | 2.9550e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 3.6740e-003 | 2.8280e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 2.6140e-003 | 6.4200e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.5220e-003 |
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 1.6010e-003 | 4.0100e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.38 | 0.04 |
| tblVehicleEF | SBUS | 9.8690e-003 | 3.3500e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 7.9600e-004 | 4.8000e-005 |
| tblVehicleEF | SBUS | 2.6140e-003 | 6.4200e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.5220e-003 |
| tblVehicleEF | SBUS | 1.68 | 0.44 |
| tblVehicleEF | SBUS | 1.6010e-003 | 4.0100e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.42 | 0.04 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.6140e-003 | 8.4950e-003 |
| tblVehicleEF | SBUS | 0.04 | 5.4750e-003 |
| tblVehicleEF | SBUS | 9.67 | 2.60 |
| tblVehicleEF | SBUS | 0.40 | 0.71 |
| tblVehicleEF | SBUS | 5.83 | 0.70 |
| tblVehicleEF | SBUS | 1,038.39 | 361.49 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.75 |
| tblVehicleEF | SBUS | 66.73 | 4.55 |
| tblVehicleEF | SBUS | 5.59 | 3.35 |
| tblVehicleEF | SBUS | 2.30 | 4.59 |
| tblVehicleEF | SBUS | 9.79 | 0.76 |
| tblVehicleEF | SBUS | 3.2370e-003 | 2.5000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 3.0970e-003 | 2.3920e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 3.9560e-003 | 9.6000e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.6210e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 2.6840e-003 | 6.6600e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.33 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.4440e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |
| tblVehicleEF | SBUS | 7.6900e-004 | 4.5000e-005 |
| tblVehicleEF | SBUS | 3.9560e-003 | 9.6000e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.6210e-003 |
| tblVehicleEF | SBUS | 1.68 | 0.44 |
| tblVehicleEF | SBUS | 2.6840e-003 | 6.6600e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.36 | 0.04 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.4400e-003 | 8.3160e-003 |
| tblVehicleEF | SBUS | 0.05 | 6.7580e-003 |
| tblVehicleEF | SBUS | 9.83 | 2.69 |
| tblVehicleEF | SBUS | 0.39 | 0.69 |
| tblVehicleEF | SBUS | 8.41 | 1.00 |
| tblVehicleEF | SBUS | 943.68 | 337.76 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.71 |
| tblVehicleEF | SBUS | 66.73 | 5.06 |
| tblVehicleEF | SBUS | 5.18 | 3.17 |
| tblVehicleEF | SBUS | 2.39 | 4.77 |
| tblVehicleEF | SBUS | 9.84 | 0.76 |
| tblVehicleEF | SBUS | 4.6730e-003 | 3.5840e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 4.4710e-003 | 3.4290e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 1.8830e-003 | 4.6900e-004 |
| tblVehicleEF | SBUS | 0.03 | 7.7010e-003 |
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 1.1390e-003 | 2.8700e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.02 | 0.06 |
| tblVehicleEF | SBUS | 0.41 | 0.04 |
| tblVehicleEF | SBUS | 9.3450e-003 | 3.2200e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |
| tblVehicleEF | SBUS | 8.1200e-004 | 5.0000e-005 |
| tblVehicleEF | SBUS | 1.8830e-003 | 4.6900e-004 |
| tblVehicleEF | SBUS | 0.03 | 7.7010e-003 |
| tblVehicleEF | SBUS | 1.69 | 0.44 |
| tblVehicleEF | SBUS | 1.1390e-003 | 2.8700e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.02 | 0.06 |
| tblVehicleEF | SBUS | 0.45 | 0.04 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 5.80 | 22.84 |
| tblVehicleEF | UBUS | 9.04 | 1.69 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.87 |
| tblVehicleEF | UBUS | 136.72 | 17.29 |
| tblVehicleEF | UBUS | 2.18 | 0.37 |
| tblVehicleEF | UBUS | 12.53 | 0.16 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 2.4000e-003 | 5.4900e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.5700e-003 |
| tblVehicleEF | UBUS | 1.9500e-003 | 4.1900e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 0.01 | 0.03 |
| tblVehicleEF | UBUS | 0.73 | 0.08 |
| tblVehicleEF | UBUS | 8.2430e-003 | 5.0710e-003 |
| tblVehicleEF | UBUS | 1.5310e-003 | 1.7100e-004 |
| tblVehicleEF | UBUS | 2.4000e-003 | 5.4900e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.5700e-003 |
| tblVehicleEF | UBUS | 1.9500e-003 | 4.1900e-004 |
| tblVehicleEF | UBUS | 1.55 | 3.05 |
| tblVehicleEF | UBUS | 0.01 | 0.03 |
| tblVehicleEF | UBUS | 0.80 | 0.09 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 5.82 | 22.84 |
| tblVehicleEF | UBUS | 7.63 | 1.44 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.85 |
| tblVehicleEF | UBUS | 136.72 | 16.86 |
| tblVehicleEF | UBUS | 2.07 | 0.37 |
| tblVehicleEF | UBUS | 12.46 | 0.15 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 3.3760e-003 | 8.4600e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.9950e-003 |
| tblVehicleEF | UBUS | 3.3170e-003 | 7.5700e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 9.9720e-003 | 0.03 |
| tblVehicleEF | UBUS | 0.66 | 0.08 |
| tblVehicleEF | UBUS | 8.2430e-003 | 5.0700e-003 |
| tblVehicleEF | UBUS | 1.5060e-003 | 1.6700e-004 |
| tblVehicleEF | UBUS | 3.3760e-003 | 8.4600e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.9950e-003 |
| tblVehicleEF | UBUS | 3.3170e-003 | 7.5700e-004 |
| tblVehicleEF | UBUS | 1.56 | 3.05 |
| tblVehicleEF | UBUS | 9.9720e-003 | 0.03 |
| tblVehicleEF | UBUS | 0.73 | 0.08 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 5.79 | 22.84 |
| tblVehicleEF | UBUS | 9.98 | 1.86 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.85 |
| tblVehicleEF | UBUS | 136.72 | 17.57 |
| tblVehicleEF | UBUS | 2.17 | 0.37 |
| tblVehicleEF | UBUS | 12.58 | 0.16 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 1.8300e-003 | 3.8900e-004 |
| tblVehicleEF | UBUS | 0.04 | 7.1930e-003 |
| tblVehicleEF | UBUS | 1.3630e-003 | 2.8400e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 0.01 | 0.04 |
| tblVehicleEF | UBUS | 0.78 | 0.09 |
| tblVehicleEF | UBUS | 8.2420e-003 | 5.0700e-003 |
| tblVehicleEF | UBUS | 1.5470e-003 | 1.7400e-004 |
| tblVehicleEF | UBUS | 1.8300e-003 | 3.8900e-004 |
| tblVehicleEF | UBUS | 0.04 | 7.1930e-003 |
| tblVehicleEF | UBUS | 1.3630e-003 | 2.8400e-004 |
| tblVehicleEF | UBUS | 1.55 | 3.05 |
| tblVehicleEF | UBUS | 0.01 | 0.04 |
| tblVehicleEF | UBUS | 0.85 | 0.10 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |

| | | | |
|---|---|---|---|
| tblWater | IndoorWaterUseRate | 176,725,875.00 | 141,380,700.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

# 2.0 Emissions Summary

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 21.2138 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| 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 | 5.3244 | 7.1339 | 38.0189 | 0.1068 | 12.5922 | 0.0849 | 12.6771 | 3.3628 | 0.0793 | 3.4421 | | 10,964.4433 | 10,964.4433 | 0.5782 | | 10,978.8980 |
| **Total** | **26.5382** | **7.1346** | **38.0968** | **0.1068** | **12.5922** | **0.0852** | **12.6774** | **3.3628** | **0.0796** | **3.4423** | | **10,964.6106** | **10,964.6106** | **0.5786** | **0.0000** | **10,979.0761** |

**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 | 21.2138 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| 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 | 5.3244 | 7.1339 | 38.0189 | 0.1068 | 12.5922 | 0.0849 | 12.6771 | 3.3628 | 0.0793 | 3.4421 | | 10,964.4433 | 10,964.4433 | 0.5782 | | 10,978.8980 |
| **Total** | **26.5382** | **7.1346** | **38.0968** | **0.1068** | **12.5922** | **0.0852** | **12.6774** | **3.3628** | **0.0796** | **3.4423** | | **10,964.6106** | **10,964.6106** | **0.5786** | **0.0000** | **10,979.0761** |

| | **ROG** | **NOx** | **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** |

# 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 | 5.3244 | 7.1339 | 38.0189 | 0.1068 | 12.5922 | 0.0849 | 12.6771 | 3.3628 | 0.0793 | 3.4421 | | 10,964.44 33 | 10,964.443 3 | 0.5782 | | 10,978.89 80 |
| Unmitigated | 5.3244 | 7.1339 | 38.0189 | 0.1068 | 12.5922 | 0.0849 | 12.6771 | 3.3628 | 0.0793 | 3.4421 | | 10,964.44 33 | 10,964.443 3 | 0.5782 | | 10,978.89 80 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 2,919.32 | 2,919.32 | 2919.32 | 5,948,617 | 5,948,617 |
| Total | 2,919.32 | 2,919.32 | 2,919.32 | 5,948,617 | 5,948,617 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.583951 | 0.057343 | 0.169126 | 0.111554 | 0.025561 | 0.007279 | 0.020117 | 0.017665 | 0.000801 | 0.000959 | 0.003708 | 0.000559 | 0.001376 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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

| | ROG | NOx | CO | SO2 | Fugitive 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 | 21.2138 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| Unmitigated | 21.2138 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |

## 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 | 4.8523 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 16.3543 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 7.1700e-003 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| **Total** | **21.2138** | **7.1000e-004** | **0.0778** | **1.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | | **0.1673** | **0.1673** | **4.4000e-004** | | **0.1781** |

**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 | 4.8523 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 16.3543 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 7.1700e-003 | 7.1000e-004 | 0.0778 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.4000e-004 | | 0.1781 |
| **Total** | **21.2138** | **7.1000e-004** | **0.0778** | **1.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | | **0.1673** | **0.1673** | **4.4000e-004** | | **0.1781** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

## 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

Conejo Summit - Buildout Operational 2040 - Ventura County, Annual

# Conejo Summit - Buildout Operational 2040

**Ventura County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 764.22 | 1000sqft | 49.64 | 764,220.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 100.29 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 382,110.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 1,146,330.00 | 0.00 |
| tblConstructionPhase | NumDays | 55.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.62 | 0.60 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.16 |
| tblFleetMix | LHD1 | 0.01 | 0.02 |
| tblFleetMix | LHD2 | 5.4070e-003 | 6.9650e-003 |
| tblFleetMix | MCY | 3.5990e-003 | 3.4890e-003 |
| tblFleetMix | MDV | 0.09 | 0.10 |
| tblFleetMix | MH | 7.1900e-004 | 9.5100e-004 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.2370e-003 | 7.4100e-004 |
| tblFleetMix | SBUS | 4.4900e-004 | 5.4900e-004 |
| tblFleetMix | UBUS | 1.1510e-003 | 9.6700e-004 |
| tblLandUse | LotAcreage | 17.54 | 49.64 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 100.29 |
| tblSolidWaste | SolidWasteGenerationRate | 947.63 | 530.67 |
| tblTripsAndVMT | WorkerTripNumber | 64.00 | 0.00 |
| tblVehicleEF | HHD | 0.30 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.05 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.33 | 6.73 |
| tblVehicleEF | HHD | 1.22 | 0.65 |
| tblVehicleEF | HHD | 4.67 | 9.8090e-003 |
| tblVehicleEF | HHD | 3,839.29 | 881.97 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 11.17 | 5.48 |
| tblVehicleEF | HHD | 1.07 | 1.92 |
| tblVehicleEF | HHD | 18.94 | 2.53 |
| tblVehicleEF | HHD | 2.1810e-003 | 2.0920e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.0870e-003 | 2.0020e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.1200e-004 | 2.0000e-006 |
| tblVehicleEF | HHD | 5.4250e-003 | 9.7000e-005 |
| tblVehicleEF | HHD | 0.33 | 0.44 |
| tblVehicleEF | HHD | 9.5000e-005 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 6.0900e-004 | 4.8500e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 8.0770e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1500e-004 | 1.0000e-006 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 1.1200e-004 | 2.0000e-006 |
| tblVehicleEF | HHD | 5.4250e-003 | 9.7000e-005 |
| tblVehicleEF | HHD | 0.40 | 0.52 |
| tblVehicleEF | HHD | 9.5000e-005 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 6.0900e-004 | 4.8500e-004 |
| tblVehicleEF | HHD | 0.09 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.29 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |
| tblVehicleEF | HHD | 0.05 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.97 | 6.64 |
| tblVehicleEF | HHD | 1.23 | 0.65 |
| tblVehicleEF | HHD | 4.36 | 9.1590e-003 |
| tblVehicleEF | HHD | 4,067.39 | 870.89 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 11.53 | 5.21 |
| tblVehicleEF | HHD | 1.02 | 1.84 |
| tblVehicleEF | HHD | 18.92 | 2.53 |
| tblVehicleEF | HHD | 1.8390e-003 | 1.8520e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7590e-003 | 1.7720e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7200e-004 | 3.0000e-006 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 5.5440e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.31 | 0.47 |
| tblVehicleEF | HHD | 1.5500e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 5.7700e-004 | 4.5900e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 7.9760e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1000e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7200e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 5.5440e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.38 | 0.55 |
| tblVehicleEF | HHD | 1.5500e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 5.7700e-004 | 4.5900e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.33 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.84 | 6.85 |
| tblVehicleEF | HHD | 1.22 | 0.65 |
| tblVehicleEF | HHD | 4.89 | 0.01 |
| tblVehicleEF | HHD | 3,524.30 | 897.28 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 10.68 | 5.84 |
| tblVehicleEF | HHD | 1.06 | 1.91 |
| tblVehicleEF | HHD | 18.96 | 2.53 |
| tblVehicleEF | HHD | 2.6540e-003 | 2.4240e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.5390e-003 | 2.3190e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 7.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 5.5830e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.36 | 0.41 |
| tblVehicleEF | HHD | 6.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 6.8600e-004 | 5.4600e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 8.2180e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 7.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 5.5830e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.43 | 0.47 |
| tblVehicleEF | HHD | 6.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 6.8600e-004 | 5.4600e-004 |
| tblVehicleEF | HHD | 0.09 | 3.0000e-006 |
| tblVehicleEF | LDA | 1.3420e-003 | 6.5600e-004 |
| tblVehicleEF | LDA | 7.4000e-004 | 0.02 |
| tblVehicleEF | LDA | 0.25 | 0.37 |
| tblVehicleEF | LDA | 0.36 | 1.43 |
| tblVehicleEF | LDA | 165.14 | 182.34 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 35.70 | 37.05 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.01 | 0.11 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 8.8180e-003 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 3.3750e-003 | 1.9160e-003 |
| tblVehicleEF | LDA | 0.03 | 0.15 |
| tblVehicleEF | LDA | 9.9840e-003 | 0.07 |
| tblVehicleEF | LDA | 1.6520e-003 | 1.8040e-003 |
| tblVehicleEF | LDA | 3.6200e-004 | 3.6700e-004 |
| tblVehicleEF | LDA | 8.8180e-003 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 4.9050e-003 | 2.7830e-003 |
| tblVehicleEF | LDA | 0.03 | 0.15 |
| tblVehicleEF | LDA | 0.01 | 0.08 |
| tblVehicleEF | LDA | 1.4300e-003 | 7.0700e-004 |
| tblVehicleEF | LDA | 6.4400e-004 | 0.02 |
| tblVehicleEF | LDA | 0.28 | 0.41 |
| tblVehicleEF | LDA | 0.29 | 1.18 |
| tblVehicleEF | LDA | 172.45 | 190.19 |
| tblVehicleEF | LDA | 35.70 | 36.64 |
| tblVehicleEF | LDA | 0.02 | 0.01 |
| tblVehicleEF | LDA | 0.01 | 0.10 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 3.5920e-003 | 2.0370e-003 |
| tblVehicleEF | LDA | 0.02 | 0.14 |
| tblVehicleEF | LDA | 8.6840e-003 | 0.06 |
| tblVehicleEF | LDA | 1.7250e-003 | 1.8810e-003 |
| tblVehicleEF | LDA | 3.6100e-004 | 3.6300e-004 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 5.2220e-003 | 2.9610e-003 |
| tblVehicleEF | LDA | 0.02 | 0.14 |
| tblVehicleEF | LDA | 9.5080e-003 | 0.07 |
| tblVehicleEF | LDA | 1.3150e-003 | 6.3800e-004 |
| tblVehicleEF | LDA | 7.9800e-004 | 0.02 |
| tblVehicleEF | LDA | 0.25 | 0.37 |
| tblVehicleEF | LDA | 0.39 | 1.58 |
| tblVehicleEF | LDA | 163.76 | 180.85 |
| tblVehicleEF | LDA | 35.70 | 37.31 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.01 | 0.12 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 5.9570e-003 | 9.8870e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 7.0170e-003 | 0.01 |
| tblVehicleEF | LDA | 3.3090e-003 | 1.8800e-003 |
| tblVehicleEF | LDA | 0.03 | 0.18 |
| tblVehicleEF | LDA | 0.01 | 0.08 |
| tblVehicleEF | LDA | 1.6380e-003 | 1.7890e-003 |
| tblVehicleEF | LDA | 3.6300e-004 | 3.6900e-004 |
| tblVehicleEF | LDA | 5.9570e-003 | 9.8870e-003 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 7.0170e-003 | 0.01 |
| tblVehicleEF | LDA | 4.8090e-003 | 2.7300e-003 |
| tblVehicleEF | LDA | 0.03 | 0.18 |
| tblVehicleEF | LDA | 0.01 | 0.09 |
| tblVehicleEF | LDT1 | 1.9740e-003 | 8.6600e-004 |
| tblVehicleEF | LDT1 | 1.6200e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.34 | 0.41 |
| tblVehicleEF | LDT1 | 0.57 | 1.56 |
| tblVehicleEF | LDT1 | 211.58 | 219.89 |
| tblVehicleEF | LDT1 | 47.05 | 45.35 |
| tblVehicleEF | LDT1 | 0.03 | 0.02 |
| tblVehicleEF | LDT1 | 0.03 | 0.13 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 4.8930e-003 | 2.7130e-003 |
| tblVehicleEF | LDT1 | 0.05 | 0.23 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDT1 | 0.02 | 0.09 |
| tblVehicleEF | LDT1 | 2.1170e-003 | 2.1760e-003 |
| tblVehicleEF | LDT1 | 4.7900e-004 | 4.4900e-004 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 7.1370e-003 | 3.9690e-003 |
| tblVehicleEF | LDT1 | 0.05 | 0.23 |
| tblVehicleEF | LDT1 | 0.02 | 0.10 |
| tblVehicleEF | LDT1 | 2.1000e-003 | 9.3200e-004 |
| tblVehicleEF | LDT1 | 1.4080e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.37 | 0.45 |
| tblVehicleEF | LDT1 | 0.47 | 1.28 |
| tblVehicleEF | LDT1 | 220.75 | 227.96 |
| tblVehicleEF | LDT1 | 47.05 | 44.89 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.02 | 0.12 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.04 | 0.05 |
| tblVehicleEF | LDT1 | 5.2060e-003 | 2.8860e-003 |
| tblVehicleEF | LDT1 | 0.04 | 0.21 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 2.2090e-003 | 2.2560e-003 |
| tblVehicleEF | LDT1 | 4.7800e-004 | 4.4400e-004 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.04 | 0.05 |
| tblVehicleEF | LDT1 | 7.5930e-003 | 4.2220e-003 |
| tblVehicleEF | LDT1 | 0.04 | 0.21 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.9350e-003 | 8.4300e-004 |
| tblVehicleEF | LDT1 | 1.7480e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.33 | 0.41 |
| tblVehicleEF | LDT1 | 0.63 | 1.73 |
| tblVehicleEF | LDT1 | 209.84 | 218.36 |
| tblVehicleEF | LDT1 | 47.05 | 45.64 |
| tblVehicleEF | LDT1 | 0.03 | 0.02 |
| tblVehicleEF | LDT1 | 0.03 | 0.14 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.01 | 0.02 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 4.7970e-003 | 2.6600e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.28 |
| tblVehicleEF | LDT1 | 0.02 | 0.10 |
| tblVehicleEF | LDT1 | 2.1000e-003 | 2.1610e-003 |
| tblVehicleEF | LDT1 | 4.8000e-004 | 4.5200e-004 |
| tblVehicleEF | LDT1 | 0.01 | 0.02 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 6.9970e-003 | 3.8920e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.28 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.03 | 0.10 |
| tblVehicleEF | LDT2 | 1.9590e-003 | 1.0310e-003 |
| tblVehicleEF | LDT2 | 1.2530e-003 | 0.03 |
| tblVehicleEF | LDT2 | 0.37 | 0.46 |
| tblVehicleEF | LDT2 | 0.52 | 1.92 |
| tblVehicleEF | LDT2 | 240.17 | 218.56 |
| tblVehicleEF | LDT2 | 52.36 | 45.01 |
| tblVehicleEF | LDT2 | 0.03 | 0.02 |
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.03 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 4.8810e-003 | 3.3840e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.21 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 2.4030e-003 | 2.1620e-003 |
| tblVehicleEF | LDT2 | 5.3100e-004 | 4.4500e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.03 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 7.1100e-003 | 4.8950e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.21 |
| tblVehicleEF | LDT2 | 0.02 | 0.12 |
| tblVehicleEF | LDT2 | 2.0850e-003 | 1.1100e-003 |
| tblVehicleEF | LDT2 | 1.1320e-003 | 0.02 |
| tblVehicleEF | LDT2 | 0.41 | 0.51 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.46 | 1.58 |
| tblVehicleEF | LDT2 | 250.62 | 225.82 |
| tblVehicleEF | LDT2 | 52.36 | 44.44 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 5.1930e-003 | 3.5890e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.19 |
| tblVehicleEF | LDT2 | 0.02 | 0.09 |
| tblVehicleEF | LDT2 | 2.5080e-003 | 2.2340e-003 |
| tblVehicleEF | LDT2 | 5.3000e-004 | 4.4000e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 7.5660e-003 | 5.1960e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.19 |
| tblVehicleEF | LDT2 | 0.02 | 0.10 |
| tblVehicleEF | LDT2 | 1.9200e-003 | 1.0030e-003 |
| tblVehicleEF | LDT2 | 1.3260e-003 | 0.03 |
| tblVehicleEF | LDT2 | 0.37 | 0.46 |
| tblVehicleEF | LDT2 | 0.56 | 2.14 |
| tblVehicleEF | LDT2 | 238.19 | 217.18 |
| tblVehicleEF | LDT2 | 52.36 | 45.37 |
| tblVehicleEF | LDT2 | 0.03 | 0.02 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.03 |
| tblVehicleEF | LDT2 | 4.7850e-003 | 3.3210e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.25 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 2.3830e-003 | 2.1480e-003 |
| tblVehicleEF | LDT2 | 5.3200e-004 | 4.4900e-004 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.03 |
| tblVehicleEF | LDT2 | 6.9710e-003 | 4.8030e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.25 |
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2390e-003 |
| tblVehicleEF | LHD1 | 1.9640e-003 | 1.5690e-003 |
| tblVehicleEF | LHD1 | 4.6510e-003 | 5.7480e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.94 | 0.69 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.88 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.27 | 0.15 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.35 | 0.15 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 8.0400e-004 | 8.0900e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 6.8300e-004 | 6.7600e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.08 | 0.16 |
| tblVehicleEF | LHD1 | 0.06 | 0.03 |
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2100e-004 | 7.8000e-005 |
| tblVehicleEF | LHD1 | 8.0400e-004 | 8.0900e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 6.8300e-004 | 6.7600e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.08 | 0.16 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2480e-003 |
| tblVehicleEF | LHD1 | 1.9790e-003 | 1.5840e-003 |
| tblVehicleEF | LHD1 | 4.4260e-003 | 5.4920e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.88 | 0.65 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.82 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.26 | 0.14 |
| tblVehicleEF | LHD1 | 0.33 | 0.14 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 1.2220e-003 | 1.2390e-003 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 1.0950e-003 | 1.0940e-003 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.07 | 0.15 |
| tblVehicleEF | LHD1 | 0.06 | 0.02 |
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2000e-004 | 7.7000e-005 |
| tblVehicleEF | LHD1 | 1.2220e-003 | 1.2390e-003 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.0950e-003 | 1.0940e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.07 | 0.15 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2320e-003 |
| tblVehicleEF | LHD1 | 1.9550e-003 | 1.5580e-003 |
| tblVehicleEF | LHD1 | 4.8070e-003 | 5.9240e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.98 | 0.71 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.93 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.27 | 0.15 |
| tblVehicleEF | LHD1 | 0.36 | 0.16 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 5.7700e-004 | 5.7500e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 4.9500e-004 | 4.8800e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.08 | 0.18 |
| tblVehicleEF | LHD1 | 0.06 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2200e-004 | 7.8000e-005 |
| tblVehicleEF | LHD1 | 5.7700e-004 | 5.7500e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 4.9500e-004 | 4.8800e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.08 | 0.18 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1760e-003 |
| tblVehicleEF | LHD2 | 1.6160e-003 | 1.7890e-003 |
| tblVehicleEF | LHD2 | 2.1080e-003 | 3.3070e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.82 | 0.42 |
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.59 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.25 |
| tblVehicleEF | LHD2 | 0.19 | 0.10 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 4.1300e-004 | 4.9000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.4900e-004 | 4.2200e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4720e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2500e-004 | 5.5000e-005 |
| tblVehicleEF | LHD2 | 4.1300e-004 | 4.9000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 3.4900e-004 | 4.2200e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.02 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1820e-003 |
| tblVehicleEF | LHD2 | 1.6260e-003 | 1.7980e-003 |
| tblVehicleEF | LHD2 | 2.0870e-003 | 3.1600e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.77 | 0.40 |
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.55 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.24 |
| tblVehicleEF | LHD2 | 0.19 | 0.09 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.5000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.6900e-004 | 6.7900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4730e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2400e-004 | 5.5000e-005 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.5000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 5.6900e-004 | 6.7900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1720e-003 |
| tblVehicleEF | LHD2 | 1.6090e-003 | 1.7830e-003 |
| tblVehicleEF | LHD2 | 2.1220e-003 | 3.4080e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.85 | 0.44 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.61 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.24 |
| tblVehicleEF | LHD2 | 0.19 | 0.10 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |
| tblVehicleEF | LHD2 | 2.9200e-004 | 3.4900e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 2.5100e-004 | 3.0500e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.10 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4720e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2500e-004 | 5.6000e-005 |
| tblVehicleEF | LHD2 | 2.9200e-004 | 3.4900e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 2.5100e-004 | 3.0500e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.10 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.03 | 0.02 |
| tblVehicleEF | MCY | 0.49 | 0.34 |
| tblVehicleEF | MCY | 0.15 | 0.24 |
| tblVehicleEF | MCY | 17.36 | 17.45 |
| tblVehicleEF | MCY | 10.23 | 9.09 |
| tblVehicleEF | MCY | 179.13 | 214.53 |
| tblVehicleEF | MCY | 42.15 | 58.51 |
| tblVehicleEF | MCY | 1.13 | 1.13 |
| tblVehicleEF | MCY | 0.31 | 0.27 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 0.87 | 0.92 |
| tblVehicleEF | MCY | 0.63 | 0.69 |
| tblVehicleEF | MCY | 0.53 | 0.56 |
| tblVehicleEF | MCY | 2.28 | 2.29 |
| tblVehicleEF | MCY | 0.58 | 1.23 |
| tblVehicleEF | MCY | 2.06 | 1.83 |
| tblVehicleEF | MCY | 2.1450e-003 | 2.1230e-003 |
| tblVehicleEF | MCY | 6.4900e-004 | 5.7900e-004 |
| tblVehicleEF | MCY | 0.87 | 0.92 |
| tblVehicleEF | MCY | 0.63 | 0.69 |
| tblVehicleEF | MCY | 0.53 | 0.56 |
| tblVehicleEF | MCY | 2.87 | 2.87 |
| tblVehicleEF | MCY | 0.58 | 1.23 |
| tblVehicleEF | MCY | 2.24 | 2.00 |
| tblVehicleEF | MCY | 0.48 | 0.33 |
| tblVehicleEF | MCY | 0.13 | 0.20 |
| tblVehicleEF | MCY | 16.41 | 16.49 |

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|---|---|---|---|
| tblVehicleEF | MCY | 8.97 | 7.93 |
| tblVehicleEF | MCY | 179.13 | 212.76 |
| tblVehicleEF | MCY | 42.15 | 55.82 |
| tblVehicleEF | MCY | 1.00 | 1.00 |
| tblVehicleEF | MCY | 0.29 | 0.25 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 1.50 | 1.58 |
| tblVehicleEF | MCY | 0.71 | 0.78 |
| tblVehicleEF | MCY | 1.07 | 1.12 |
| tblVehicleEF | MCY | 2.22 | 2.23 |
| tblVehicleEF | MCY | 0.52 | 1.11 |
| tblVehicleEF | MCY | 1.78 | 1.58 |
| tblVehicleEF | MCY | 2.1270e-003 | 2.1050e-003 |
| tblVehicleEF | MCY | 6.2000e-004 | 5.5200e-004 |
| tblVehicleEF | MCY | 1.50 | 1.58 |
| tblVehicleEF | MCY | 0.71 | 0.78 |
| tblVehicleEF | MCY | 1.07 | 1.12 |
| tblVehicleEF | MCY | 2.79 | 2.79 |
| tblVehicleEF | MCY | 0.52 | 1.11 |
| tblVehicleEF | MCY | 1.94 | 1.72 |
| tblVehicleEF | MCY | 0.50 | 0.34 |
| tblVehicleEF | MCY | 0.16 | 0.26 |
| tblVehicleEF | MCY | 18.17 | 18.27 |
| tblVehicleEF | MCY | 11.11 | 9.93 |
| tblVehicleEF | MCY | 179.13 | 216.00 |
| tblVehicleEF | MCY | 42.15 | 60.42 |
| tblVehicleEF | MCY | 1.15 | 1.15 |

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|---|---|---|---|
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 0.56 | 0.60 |
| tblVehicleEF | MCY | 0.75 | 0.82 |
| tblVehicleEF | MCY | 0.32 | 0.34 |
| tblVehicleEF | MCY | 2.33 | 2.34 |
| tblVehicleEF | MCY | 0.72 | 1.53 |
| tblVehicleEF | MCY | 2.24 | 2.01 |
| tblVehicleEF | MCY | 2.1590e-003 | 2.1370e-003 |
| tblVehicleEF | MCY | 6.6900e-004 | 5.9800e-004 |
| tblVehicleEF | MCY | 0.56 | 0.60 |
| tblVehicleEF | MCY | 0.75 | 0.82 |
| tblVehicleEF | MCY | 0.32 | 0.34 |
| tblVehicleEF | MCY | 2.92 | 2.93 |
| tblVehicleEF | MCY | 0.72 | 1.53 |
| tblVehicleEF | MCY | 2.44 | 2.19 |
| tblVehicleEF | MDV | 2.7570e-003 | 1.0960e-003 |
| tblVehicleEF | MDV | 3.0290e-003 | 0.03 |
| tblVehicleEF | MDV | 0.46 | 0.47 |
| tblVehicleEF | MDV | 0.81 | 1.96 |
| tblVehicleEF | MDV | 318.34 | 266.51 |
| tblVehicleEF | MDV | 68.99 | 54.02 |
| tblVehicleEF | MDV | 0.04 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.14 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |

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|---|---|---|---|
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 6.9650e-003 | 3.7440e-003 |
| tblVehicleEF | MDV | 0.05 | 0.24 |
| tblVehicleEF | MDV | 0.04 | 0.12 |
| tblVehicleEF | MDV | 3.1810e-003 | 2.6330e-003 |
| tblVehicleEF | MDV | 7.0300e-004 | 5.3500e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.01 | 5.4110e-003 |
| tblVehicleEF | MDV | 0.05 | 0.24 |
| tblVehicleEF | MDV | 0.04 | 0.13 |
| tblVehicleEF | MDV | 2.9330e-003 | 1.1800e-003 |
| tblVehicleEF | MDV | 2.6720e-003 | 0.03 |
| tblVehicleEF | MDV | 0.50 | 0.51 |
| tblVehicleEF | MDV | 0.70 | 1.62 |
| tblVehicleEF | MDV | 331.77 | 273.67 |
| tblVehicleEF | MDV | 68.99 | 53.43 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.13 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.06 | 0.07 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.07 | 0.09 |

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|---|---|---|---|
| tblVehicleEF | MDV | 7.4000e-003 | 3.9700e-003 |
| tblVehicleEF | MDV | 0.05 | 0.22 |
| tblVehicleEF | MDV | 0.04 | 0.10 |
| tblVehicleEF | MDV | 3.3160e-003 | 2.7040e-003 |
| tblVehicleEF | MDV | 7.0100e-004 | 5.2900e-004 |
| tblVehicleEF | MDV | 0.06 | 0.07 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.01 | 5.7410e-003 |
| tblVehicleEF | MDV | 0.05 | 0.22 |
| tblVehicleEF | MDV | 0.04 | 0.11 |
| tblVehicleEF | MDV | 2.7040e-003 | 1.0670e-003 |
| tblVehicleEF | MDV | 3.2450e-003 | 0.03 |
| tblVehicleEF | MDV | 0.45 | 0.46 |
| tblVehicleEF | MDV | 0.89 | 2.18 |
| tblVehicleEF | MDV | 315.80 | 265.15 |
| tblVehicleEF | MDV | 68.99 | 54.39 |
| tblVehicleEF | MDV | 0.04 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.15 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.02 | 0.03 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.03 | 0.04 |
| tblVehicleEF | MDV | 6.8320e-003 | 3.6750e-003 |
| tblVehicleEF | MDV | 0.06 | 0.29 |
| tblVehicleEF | MDV | 0.04 | 0.13 |
| tblVehicleEF | MDV | 3.1560e-003 | 2.6200e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 7.0400e-004 | 5.3800e-004 |
| tblVehicleEF | MDV | 0.02 | 0.03 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.03 | 0.04 |
| tblVehicleEF | MDV | 9.9180e-003 | 5.3090e-003 |
| tblVehicleEF | MDV | 0.06 | 0.29 |
| tblVehicleEF | MDV | 0.05 | 0.14 |
| tblVehicleEF | MH | 3.8210e-003 | 3.0770e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.18 |
| tblVehicleEF | MH | 3.13 | 1.37 |
| tblVehicleEF | MH | 1,048.97 | 1,194.05 |
| tblVehicleEF | MH | 55.78 | 13.48 |
| tblVehicleEF | MH | 0.61 | 0.91 |
| tblVehicleEF | MH | 0.55 | 0.24 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.31 | 0.26 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.17 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.6510e-003 | 0.24 |
| tblVehicleEF | MH | 0.19 | 0.07 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.1200e-004 | 1.3300e-004 |
| tblVehicleEF | MH | 0.31 | 0.26 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.17 |
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.6510e-003 | 0.24 |
| tblVehicleEF | MH | 0.21 | 0.07 |
| tblVehicleEF | MH | 3.9170e-003 | 3.1350e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.21 | 0.19 |
| tblVehicleEF | MH | 2.90 | 1.27 |
| tblVehicleEF | MH | 1,048.97 | 1,194.05 |
| tblVehicleEF | MH | 55.78 | 13.31 |
| tblVehicleEF | MH | 0.57 | 0.87 |
| tblVehicleEF | MH | 0.52 | 0.23 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.45 | 0.38 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.32 | 0.27 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.5160e-003 | 0.23 |
| tblVehicleEF | MH | 0.18 | 0.06 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.0800e-004 | 1.3200e-004 |
| tblVehicleEF | MH | 0.45 | 0.38 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.32 | 0.27 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.5160e-003 | 0.23 |
| tblVehicleEF | MH | 0.20 | 0.07 |
| tblVehicleEF | MH | 3.7600e-003 | 3.0400e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.18 |
| tblVehicleEF | MH | 3.26 | 1.43 |
| tblVehicleEF | MH | 1,048.97 | 1,194.04 |
| tblVehicleEF | MH | 55.78 | 13.58 |
| tblVehicleEF | MH | 0.61 | 0.91 |
| tblVehicleEF | MH | 0.57 | 0.25 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.23 | 0.19 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 0.14 | 0.12 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.9870e-003 | 0.26 |
| tblVehicleEF | MH | 0.20 | 0.07 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.1500e-004 | 1.3400e-004 |
| tblVehicleEF | MH | 0.23 | 0.19 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 0.14 | 0.12 |
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.9870e-003 | 0.26 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.22 | 0.07 |
| tblVehicleEF | MHD | 0.02 | 2.8830e-003 |
| tblVehicleEF | MHD | 1.5490e-003 | 5.5200e-004 |
| tblVehicleEF | MHD | 0.03 | 6.0840e-003 |
| tblVehicleEF | MHD | 0.30 | 0.34 |
| tblVehicleEF | MHD | 0.16 | 0.08 |
| tblVehicleEF | MHD | 2.51 | 0.56 |
| tblVehicleEF | MHD | 150.61 | 52.96 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.80 |
| tblVehicleEF | MHD | 0.39 | 0.28 |
| tblVehicleEF | MHD | 0.51 | 0.97 |
| tblVehicleEF | MHD | 11.67 | 1.82 |
| tblVehicleEF | MHD | 3.3000e-005 | 7.8000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 3.2000e-005 | 7.4000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 4.6300e-004 | 1.8900e-004 |
| tblVehicleEF | MHD | 0.02 | 9.4290e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 3.9500e-004 | 1.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3660e-003 |
| tblVehicleEF | MHD | 9.8920e-003 | 0.05 |
| tblVehicleEF | MHD | 0.17 | 0.03 |
| tblVehicleEF | MHD | 1.4470e-003 | 5.0200e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3600e-004 | 5.7000e-005 |
| tblVehicleEF | MHD | 4.6300e-004 | 1.8900e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.02 | 9.4290e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.9500e-004 | 1.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 8.6860e-003 |
| tblVehicleEF | MHD | 9.8920e-003 | 0.05 |
| tblVehicleEF | MHD | 0.18 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 2.7520e-003 |
| tblVehicleEF | MHD | 1.5590e-003 | 5.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 5.8070e-003 |
| tblVehicleEF | MHD | 0.22 | 0.30 |
| tblVehicleEF | MHD | 0.16 | 0.08 |
| tblVehicleEF | MHD | 2.35 | 0.52 |
| tblVehicleEF | MHD | 159.53 | 52.45 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.74 |
| tblVehicleEF | MHD | 0.40 | 0.27 |
| tblVehicleEF | MHD | 0.49 | 0.93 |
| tblVehicleEF | MHD | 11.65 | 1.82 |
| tblVehicleEF | MHD | 2.8000e-005 | 6.8000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 2.7000e-005 | 6.5000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 7.1300e-004 | 2.9100e-004 |
| tblVehicleEF | MHD | 0.02 | 9.6390e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 6.4000e-004 | 2.6200e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3930e-003 |
| tblVehicleEF | MHD | 9.3780e-003 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.16 | 0.03 |
| tblVehicleEF | MHD | 1.5310e-003 | 4.9800e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3400e-004 | 5.7000e-005 |
| tblVehicleEF | MHD | 7.1300e-004 | 2.9100e-004 |
| tblVehicleEF | MHD | 0.02 | 9.6390e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 6.4000e-004 | 2.6200e-004 |
| tblVehicleEF | MHD | 0.03 | 8.7250e-003 |
| tblVehicleEF | MHD | 9.3780e-003 | 0.04 |
| tblVehicleEF | MHD | 0.18 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 3.0710e-003 |
| tblVehicleEF | MHD | 1.5430e-003 | 5.4600e-004 |
| tblVehicleEF | MHD | 0.03 | 6.2650e-003 |
| tblVehicleEF | MHD | 0.42 | 0.39 |
| tblVehicleEF | MHD | 0.15 | 0.08 |
| tblVehicleEF | MHD | 2.63 | 0.59 |
| tblVehicleEF | MHD | 138.28 | 53.66 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.85 |
| tblVehicleEF | MHD | 0.37 | 0.30 |
| tblVehicleEF | MHD | 0.50 | 0.96 |
| tblVehicleEF | MHD | 11.68 | 1.82 |
| tblVehicleEF | MHD | 4.1000e-005 | 9.0000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 3.9000e-005 | 8.6000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 3.2800e-004 | 1.3400e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.02 | 9.7090e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3490e-003 |
| tblVehicleEF | MHD | 0.01 | 0.05 |
| tblVehicleEF | MHD | 0.17 | 0.03 |
| tblVehicleEF | MHD | 1.3310e-003 | 5.0900e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3800e-004 | 5.8000e-005 |
| tblVehicleEF | MHD | 3.2800e-004 | 1.3400e-004 |
| tblVehicleEF | MHD | 0.02 | 9.7090e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 2.8400e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 0.03 | 8.6610e-003 |
| tblVehicleEF | MHD | 0.01 | 0.05 |
| tblVehicleEF | MHD | 0.19 | 0.03 |
| tblVehicleEF | OBUS | 0.01 | 8.2890e-003 |
| tblVehicleEF | OBUS | 3.2290e-003 | 2.2180e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.42 |
| tblVehicleEF | OBUS | 0.20 | 0.24 |
| tblVehicleEF | OBUS | 4.06 | 2.10 |
| tblVehicleEF | OBUS | 43.59 | 46.75 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.05 |
| tblVehicleEF | OBUS | 68.94 | 17.45 |
| tblVehicleEF | OBUS | 0.07 | 0.18 |
| tblVehicleEF | OBUS | 0.29 | 0.78 |
| tblVehicleEF | OBUS | 1.36 | 0.71 |
| tblVehicleEF | OBUS | 6.0000e-006 | 5.9000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 5.6000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 1.1870e-003 | 1.5040e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 7.5500e-004 | 9.7900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.07 | 0.28 |
| tblVehicleEF | OBUS | 0.27 | 0.10 |
| tblVehicleEF | OBUS | 4.2800e-004 | 4.4700e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.6100e-004 | 1.7300e-004 |
| tblVehicleEF | OBUS | 1.1870e-003 | 1.5040e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.06 |
| tblVehicleEF | OBUS | 7.5500e-004 | 9.7900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.28 |
| tblVehicleEF | OBUS | 0.29 | 0.11 |
| tblVehicleEF | OBUS | 0.01 | 8.3520e-003 |
| tblVehicleEF | OBUS | 3.3050e-003 | 2.2820e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.42 |
| tblVehicleEF | OBUS | 0.21 | 0.24 |
| tblVehicleEF | OBUS | 3.77 | 1.95 |
| tblVehicleEF | OBUS | 45.18 | 46.28 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.06 |
| tblVehicleEF | OBUS | 68.94 | 17.19 |

| | | | |
|---|---|---|---|
| tblVehicleEF | OBUS | 0.07 | 0.18 |
| tblVehicleEF | OBUS | 0.27 | 0.75 |
| tblVehicleEF | OBUS | 1.32 | 0.70 |
| tblVehicleEF | OBUS | 5.0000e-006 | 5.2000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 5.0000e-006 | 5.0000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 1.7750e-003 | 2.2170e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.2420e-003 | 1.5850e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.07 | 0.27 |
| tblVehicleEF | OBUS | 0.25 | 0.10 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.5600e-004 | 1.7000e-004 |
| tblVehicleEF | OBUS | 1.7750e-003 | 2.2170e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.06 |
| tblVehicleEF | OBUS | 1.2420e-003 | 1.5850e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.27 |
| tblVehicleEF | OBUS | 0.28 | 0.11 |
| tblVehicleEF | OBUS | 0.01 | 8.2270e-003 |
| tblVehicleEF | OBUS | 3.1810e-003 | 2.1770e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.43 |
| tblVehicleEF | OBUS | 0.20 | 0.24 |

| | | | |
|---|---|---|---|
| tblVehicleEF | OBUS | 4.24 | 2.19 |
| tblVehicleEF | OBUS | 41.40 | 47.40 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.04 |
| tblVehicleEF | OBUS | 68.94 | 17.60 |
| tblVehicleEF | OBUS | 0.07 | 0.20 |
| tblVehicleEF | OBUS | 0.29 | 0.78 |
| tblVehicleEF | OBUS | 1.39 | 0.72 |
| tblVehicleEF | OBUS | 8.0000e-006 | 6.8000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 6.5000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 8.6300e-004 | 1.1090e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 5.4200e-004 | 7.0600e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.08 | 0.31 |
| tblVehicleEF | OBUS | 0.28 | 0.11 |
| tblVehicleEF | OBUS | 4.0700e-004 | 4.5300e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.6400e-004 | 1.7400e-004 |
| tblVehicleEF | OBUS | 8.6300e-004 | 1.1090e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 5.4200e-004 | 7.0600e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.08 | 0.31 |
| tblVehicleEF | OBUS | 0.30 | 0.12 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.8160e-003 | 2.4300e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 11.42 | 4.79 |
| tblVehicleEF | SBUS | 0.25 | 0.21 |
| tblVehicleEF | SBUS | 8.29 | 1.36 |
| tblVehicleEF | SBUS | 857.10 | 318.22 |
| tblVehicleEF | SBUS | 921.11 | 858.97 |
| tblVehicleEF | SBUS | 78.99 | 7.91 |
| tblVehicleEF | SBUS | 1.43 | 1.36 |
| tblVehicleEF | SBUS | 0.70 | 1.37 |
| tblVehicleEF | SBUS | 7.58 | 1.58 |
| tblVehicleEF | SBUS | 1.0400e-004 | 3.8300e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |
| tblVehicleEF | SBUS | 1.0000e-004 | 3.6600e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 4.7400e-003 | 1.4160e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |
| tblVehicleEF | SBUS | 3.0690e-003 | 9.1700e-004 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.03 | 0.09 |
| tblVehicleEF | SBUS | 0.46 | 0.06 |
| tblVehicleEF | SBUS | 8.5860e-003 | 3.0550e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.3400e-004 | 7.8000e-005 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 4.7400e-003 | 1.4160e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 3.0690e-003 | 9.1700e-004 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.03 | 0.09 |
| tblVehicleEF | SBUS | 0.51 | 0.06 |
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.8920e-003 | 2.4680e-003 |
| tblVehicleEF | SBUS | 0.04 | 8.8700e-003 |
| tblVehicleEF | SBUS | 11.40 | 4.78 |
| tblVehicleEF | SBUS | 0.26 | 0.21 |
| tblVehicleEF | SBUS | 6.45 | 1.06 |
| tblVehicleEF | SBUS | 884.88 | 317.96 |
| tblVehicleEF | SBUS | 921.11 | 858.98 |
| tblVehicleEF | SBUS | 78.99 | 7.41 |
| tblVehicleEF | SBUS | 1.47 | 1.32 |
| tblVehicleEF | SBUS | 0.67 | 1.31 |
| tblVehicleEF | SBUS | 7.54 | 1.57 |
| tblVehicleEF | SBUS | 8.8000e-005 | 3.3500e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |
| tblVehicleEF | SBUS | 8.4000e-005 | 3.2000e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 7.0540e-003 | 2.1070e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 5.0000e-003 | 1.4940e-003 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.03 | 0.08 |
| tblVehicleEF | SBUS | 0.40 | 0.05 |
| tblVehicleEF | SBUS | 8.8500e-003 | 3.0520e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.0300e-004 | 7.3000e-005 |
| tblVehicleEF | SBUS | 7.0540e-003 | 2.1070e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 5.0000e-003 | 1.4940e-003 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.03 | 0.08 |
| tblVehicleEF | SBUS | 0.44 | 0.06 |
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.7710e-003 | 2.4070e-003 |
| tblVehicleEF | SBUS | 0.06 | 0.01 |
| tblVehicleEF | SBUS | 11.45 | 4.82 |
| tblVehicleEF | SBUS | 0.25 | 0.20 |
| tblVehicleEF | SBUS | 9.30 | 1.52 |
| tblVehicleEF | SBUS | 818.74 | 318.57 |
| tblVehicleEF | SBUS | 921.11 | 858.97 |
| tblVehicleEF | SBUS | 78.99 | 8.19 |
| tblVehicleEF | SBUS | 1.37 | 1.40 |
| tblVehicleEF | SBUS | 0.70 | 1.36 |
| tblVehicleEF | SBUS | 7.60 | 1.58 |
| tblVehicleEF | SBUS | 1.2700e-004 | 4.4900e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 1.2100e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 3.4590e-003 | 1.0330e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |
| tblVehicleEF | SBUS | 2.2090e-003 | 6.6000e-004 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.04 | 0.12 |
| tblVehicleEF | SBUS | 0.49 | 0.06 |
| tblVehicleEF | SBUS | 8.2200e-003 | 3.0580e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.5100e-004 | 8.1000e-005 |
| tblVehicleEF | SBUS | 3.4590e-003 | 1.0330e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 2.2090e-003 | 6.6000e-004 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.04 | 0.12 |
| tblVehicleEF | SBUS | 0.54 | 0.07 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 4.23 | 28.76 |
| tblVehicleEF | UBUS | 8.00 | 1.69 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.58 |
| tblVehicleEF | UBUS | 144.80 | 16.08 |
| tblVehicleEF | UBUS | 0.68 | 0.33 |
| tblVehicleEF | UBUS | 11.82 | 0.17 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 2.8730e-003 | 7.2500e-004 |
| tblVehicleEF | UBUS | 0.05 | 9.5970e-003 |
| tblVehicleEF | UBUS | 2.5790e-003 | 5.8800e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.75 | 0.09 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.5960e-003 | 1.5900e-004 |
| tblVehicleEF | UBUS | 2.8730e-003 | 7.2500e-004 |
| tblVehicleEF | UBUS | 0.05 | 9.5970e-003 |
| tblVehicleEF | UBUS | 2.5790e-003 | 5.8800e-004 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.82 | 0.10 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 4.24 | 28.77 |
| tblVehicleEF | UBUS | 6.76 | 1.43 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.59 |
| tblVehicleEF | UBUS | 144.80 | 15.64 |
| tblVehicleEF | UBUS | 0.64 | 0.33 |
| tblVehicleEF | UBUS | 11.74 | 0.16 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 3.9960e-003 | 1.0930e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 4.2740e-003 | 1.0210e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.68 | 0.08 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.5740e-003 | 1.5500e-004 |
| tblVehicleEF | UBUS | 3.9960e-003 | 1.0930e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 4.2740e-003 | 1.0210e-003 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.74 | 0.09 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 4.23 | 28.76 |
| tblVehicleEF | UBUS | 8.84 | 1.86 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.58 |
| tblVehicleEF | UBUS | 144.80 | 16.36 |
| tblVehicleEF | UBUS | 0.68 | 0.33 |
| tblVehicleEF | UBUS | 11.87 | 0.17 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 2.1960e-003 | 5.2300e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 1.8270e-003 | 4.0800e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.06 |
| tblVehicleEF | UBUS | 0.79 | 0.09 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.6100e-003 | 1.6200e-004 |
| tblVehicleEF | UBUS | 2.1960e-003 | 5.2300e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 1.8270e-003 | 4.0800e-004 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.06 |
| tblVehicleEF | UBUS | 0.87 | 0.10 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |
| tblWater | IndoorWaterUseRate | 176,725,875.00 | 141,380,700.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 0.00 |

## 2.0 Emissions Summary

### 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 3.8708 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 287.8539 | 287.8539 | 0.0832 | 0.0172 | 295.0667 |
| Mobile | 0.5021 | 0.9188 | 5.0902 | 0.0160 | 2.2504 | 9.2900e-003 | 2.2597 | 0.6019 | 8.7200e-003 | 0.6106 | 0.0000 | 1,493.2393 | 1,493.2393 | 0.0707 | 0.0000 | 1,495.0067 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 107.7212 | 0.0000 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 50.0207 | 83.7448 | 133.7655 | 1.4603 | 0.1138 | 204.1814 |
| **Total** | **4.3730** | **0.9188** | **5.0972** | **0.0160** | **2.2504** | **9.3100e-003** | **2.2597** | **0.6019** | **8.7400e-003** | **0.6107** | **157.7419** | **1,864.8517** | **2,022.5936** | **7.9804** | **0.1310** | **2,261.1441** |

## 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 | 3.8708 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 242.1727 | 242.1727 | 0.0700 | 0.0145 | 248.2409 |
| Mobile | 0.5021 | 0.9188 | 5.0902 | 0.0160 | 2.2504 | 9.2900e-003 | 2.2597 | 0.6019 | 8.7200e-003 | 0.6106 | 0.0000 | 1,493.2393 | 1,493.2393 | 0.0707 | 0.0000 | 1,495.0067 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 107.7212 | 0.0000 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 42.5176 | 71.1831 | 113.7007 | 1.2412 | 0.0967 | 173.5542 |
| **Total** | **4.3730** | **0.9188** | **5.0972** | **0.0160** | **2.2504** | **9.3100e-003** | **2.2597** | **0.6019** | **8.7400e-003** | **0.6107** | **150.2388** | **1,806.6088** | **1,956.8476** | **7.7481** | **0.1112** | **2,183.6911** |

| | ROG | NOx | 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** | **4.76** | **3.12** | **3.25** | **2.91** | **15.11** | **3.43** |

# 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 | 0.5021 | 0.9188 | 5.0902 | 0.0160 | 2.2504 | 9.2900e-003 | 2.2597 | 0.6019 | 8.7200e-003 | 0.6106 | 0.0000 | 1,493.2393 | 1,493.2393 | 0.0707 | 0.0000 | 1,495.0067 |
| Unmitigated | 0.5021 | 0.9188 | 5.0902 | 0.0160 | 2.2504 | 9.2900e-003 | 2.2597 | 0.6019 | 8.7200e-003 | 0.6106 | 0.0000 | 1,493.2393 | 1,493.2393 | 0.0707 | 0.0000 | 1,495.0067 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 2,919.32 | 2,919.32 | 2919.32 | 5,948,617 | 5,948,617 |
| Total | 2,919.32 | 2,919.32 | 2,919.32 | 5,948,617 | 5,948,617 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.597756 | 0.058527 | 0.164080 | 0.102133 | 0.023632 | 0.006965 | 0.021753 | 0.018456 | 0.000741 | 0.000967 | 0.003489 | 0.000549 | 0.000951 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | 242.1727 | 242.1727 | 0.0700 | 0.0145 | 248.2409 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 287.8539 | 287.8539 | 0.0832 | 0.0172 | 295.0667 |
| 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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 | | | |
| General Light Industry | 6.32774e+006 | 287.8539 | 0.0832 | 0.0172 | 295.0667 |
| **Total** | | **287.8539** | **0.0832** | **0.0172** | **295.0667** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| General Light Industry | 5.32356e+006 | 242.1727 | 0.0700 | 0.0145 | 248.2409 |
| **Total** | | **242.1727** | **0.0700** | **0.0145** | **248.2409** |

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 3.8708 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Unmitigated | 3.8708 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |

## 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 | 0.8855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 6.4000e-004 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| **Total** | **3.8708** | **6.0000e-005** | **6.9800e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **0.0137** | **0.0137** | **4.0000e-005** | **0.0000** | **0.0145** |

**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 | 0.8855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 6.4000e-004 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| **Total** | **3.8708** | **6.0000e-005** | **6.9800e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **0.0137** | **0.0137** | **4.0000e-005** | **0.0000** | **0.0145** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 113.7007 | 1.2412 | 0.0967 | 173.5542 |
| Unmitigated | 133.7655 | 1.4603 | 0.1138 | 204.1814 |

### 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 141.381 / 0 | 133.7655 | 1.4603 | 0.1138 | 204.1814 |
| **Total** | | **133.7655** | **1.4603** | **0.1138** | **204.1814** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 120.174 / 0 | 113.7007 | 1.2412 | 0.0967 | 173.5542 |
| **Total** | | **113.7007** | **1.2412** | **0.0967** | **173.5542** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Unmitigated | 107.7212 | 6.3661 | 0.0000 | 266.8748 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 530.67 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| **Total** | | **107.7212** | **6.3661** | **0.0000** | **266.8748** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 530.67 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| **Total** | | **107.7212** | **6.3661** | **0.0000** | **266.8748** |

# 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

# Conejo Summit - Buildout Operational 2040

**Ventura County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 764.22 | 1000sqft | 49.64 | 764,220.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 100.29 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 382,110.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 1,146,330.00 | 0.00 |
| tblConstructionPhase | NumDays | 55.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.62 | 0.60 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.16 |
| tblFleetMix | LHD1 | 0.01 | 0.02 |
| tblFleetMix | LHD2 | 5.4070e-003 | 6.9650e-003 |
| tblFleetMix | MCY | 3.5990e-003 | 3.4890e-003 |
| tblFleetMix | MDV | 0.09 | 0.10 |
| tblFleetMix | MH | 7.1900e-004 | 9.5100e-004 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.2370e-003 | 7.4100e-004 |
| tblFleetMix | SBUS | 4.4900e-004 | 5.4900e-004 |
| tblFleetMix | UBUS | 1.1510e-003 | 9.6700e-004 |
| tblLandUse | LotAcreage | 17.54 | 49.64 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 100.29 |
| tblSolidWaste | SolidWasteGenerationRate | 947.63 | 530.67 |
| tblTripsAndVMT | WorkerTripNumber | 64.00 | 0.00 |
| tblVehicleEF | HHD | 0.30 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.05 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.33 | 6.73 |
| tblVehicleEF | HHD | 1.22 | 0.65 |
| tblVehicleEF | HHD | 4.67 | 9.8090e-003 |
| tblVehicleEF | HHD | 3,839.29 | 881.97 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 11.17 | 5.48 |
| tblVehicleEF | HHD | 1.07 | 1.92 |
| tblVehicleEF | HHD | 18.94 | 2.53 |
| tblVehicleEF | HHD | 2.1810e-003 | 2.0920e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.0870e-003 | 2.0020e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.1200e-004 | 2.0000e-006 |
| tblVehicleEF | HHD | 5.4250e-003 | 9.7000e-005 |
| tblVehicleEF | HHD | 0.33 | 0.44 |
| tblVehicleEF | HHD | 9.5000e-005 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 6.0900e-004 | 4.8500e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 8.0770e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1500e-004 | 1.0000e-006 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 1.1200e-004 | 2.0000e-006 |
| tblVehicleEF | HHD | 5.4250e-003 | 9.7000e-005 |
| tblVehicleEF | HHD | 0.40 | 0.52 |
| tblVehicleEF | HHD | 9.5000e-005 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 6.0900e-004 | 4.8500e-004 |
| tblVehicleEF | HHD | 0.09 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.29 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |
| tblVehicleEF | HHD | 0.05 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.97 | 6.64 |
| tblVehicleEF | HHD | 1.23 | 0.65 |
| tblVehicleEF | HHD | 4.36 | 9.1590e-003 |
| tblVehicleEF | HHD | 4,067.39 | 870.89 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 11.53 | 5.21 |
| tblVehicleEF | HHD | 1.02 | 1.84 |
| tblVehicleEF | HHD | 18.92 | 2.53 |
| tblVehicleEF | HHD | 1.8390e-003 | 1.8520e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7590e-003 | 1.7720e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7200e-004 | 3.0000e-006 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 5.5440e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.31 | 0.47 |
| tblVehicleEF | HHD | 1.5500e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 5.7700e-004 | 4.5900e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 7.9760e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1000e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7200e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 5.5440e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.38 | 0.55 |
| tblVehicleEF | HHD | 1.5500e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 5.7700e-004 | 4.5900e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.33 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.84 | 6.85 |
| tblVehicleEF | HHD | 1.22 | 0.65 |
| tblVehicleEF | HHD | 4.89 | 0.01 |
| tblVehicleEF | HHD | 3,524.30 | 897.28 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 10.68 | 5.84 |
| tblVehicleEF | HHD | 1.06 | 1.91 |
| tblVehicleEF | HHD | 18.96 | 2.53 |
| tblVehicleEF | HHD | 2.6540e-003 | 2.4240e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.5390e-003 | 2.3190e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 7.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 5.5830e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.36 | 0.41 |
| tblVehicleEF | HHD | 6.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 6.8600e-004 | 5.4600e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 8.2180e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 7.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 5.5830e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.43 | 0.47 |
| tblVehicleEF | HHD | 6.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 6.8600e-004 | 5.4600e-004 |
| tblVehicleEF | HHD | 0.09 | 3.0000e-006 |
| tblVehicleEF | LDA | 1.3420e-003 | 6.5600e-004 |
| tblVehicleEF | LDA | 7.4000e-004 | 0.02 |
| tblVehicleEF | LDA | 0.25 | 0.37 |
| tblVehicleEF | LDA | 0.36 | 1.43 |
| tblVehicleEF | LDA | 165.14 | 182.34 |

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|---|---|---|---|
| tblVehicleEF | LDA | 35.70 | 37.05 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.01 | 0.11 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 8.8180e-003 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 3.3750e-003 | 1.9160e-003 |
| tblVehicleEF | LDA | 0.03 | 0.15 |
| tblVehicleEF | LDA | 9.9840e-003 | 0.07 |
| tblVehicleEF | LDA | 1.6520e-003 | 1.8040e-003 |
| tblVehicleEF | LDA | 3.6200e-004 | 3.6700e-004 |
| tblVehicleEF | LDA | 8.8180e-003 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 4.9050e-003 | 2.7830e-003 |
| tblVehicleEF | LDA | 0.03 | 0.15 |
| tblVehicleEF | LDA | 0.01 | 0.08 |
| tblVehicleEF | LDA | 1.4300e-003 | 7.0700e-004 |
| tblVehicleEF | LDA | 6.4400e-004 | 0.02 |
| tblVehicleEF | LDA | 0.28 | 0.41 |
| tblVehicleEF | LDA | 0.29 | 1.18 |
| tblVehicleEF | LDA | 172.45 | 190.19 |
| tblVehicleEF | LDA | 35.70 | 36.64 |
| tblVehicleEF | LDA | 0.02 | 0.01 |
| tblVehicleEF | LDA | 0.01 | 0.10 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |

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|---|---|---|---|
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 3.5920e-003 | 2.0370e-003 |
| tblVehicleEF | LDA | 0.02 | 0.14 |
| tblVehicleEF | LDA | 8.6840e-003 | 0.06 |
| tblVehicleEF | LDA | 1.7250e-003 | 1.8810e-003 |
| tblVehicleEF | LDA | 3.6100e-004 | 3.6300e-004 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 5.2220e-003 | 2.9610e-003 |
| tblVehicleEF | LDA | 0.02 | 0.14 |
| tblVehicleEF | LDA | 9.5080e-003 | 0.07 |
| tblVehicleEF | LDA | 1.3150e-003 | 6.3800e-004 |
| tblVehicleEF | LDA | 7.9800e-004 | 0.02 |
| tblVehicleEF | LDA | 0.25 | 0.37 |
| tblVehicleEF | LDA | 0.39 | 1.58 |
| tblVehicleEF | LDA | 163.76 | 180.85 |
| tblVehicleEF | LDA | 35.70 | 37.31 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.01 | 0.12 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 5.9570e-003 | 9.8870e-003 |

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|---|---|---|---|
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 7.0170e-003 | 0.01 |
| tblVehicleEF | LDA | 3.3090e-003 | 1.8800e-003 |
| tblVehicleEF | LDA | 0.03 | 0.18 |
| tblVehicleEF | LDA | 0.01 | 0.08 |
| tblVehicleEF | LDA | 1.6380e-003 | 1.7890e-003 |
| tblVehicleEF | LDA | 3.6300e-004 | 3.6900e-004 |
| tblVehicleEF | LDA | 5.9570e-003 | 9.8870e-003 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 7.0170e-003 | 0.01 |
| tblVehicleEF | LDA | 4.8090e-003 | 2.7300e-003 |
| tblVehicleEF | LDA | 0.03 | 0.18 |
| tblVehicleEF | LDA | 0.01 | 0.09 |
| tblVehicleEF | LDT1 | 1.9740e-003 | 8.6600e-004 |
| tblVehicleEF | LDT1 | 1.6200e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.34 | 0.41 |
| tblVehicleEF | LDT1 | 0.57 | 1.56 |
| tblVehicleEF | LDT1 | 211.58 | 219.89 |
| tblVehicleEF | LDT1 | 47.05 | 45.35 |
| tblVehicleEF | LDT1 | 0.03 | 0.02 |
| tblVehicleEF | LDT1 | 0.03 | 0.13 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 4.8930e-003 | 2.7130e-003 |
| tblVehicleEF | LDT1 | 0.05 | 0.23 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.02 | 0.09 |
| tblVehicleEF | LDT1 | 2.1170e-003 | 2.1760e-003 |
| tblVehicleEF | LDT1 | 4.7900e-004 | 4.4900e-004 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 7.1370e-003 | 3.9690e-003 |
| tblVehicleEF | LDT1 | 0.05 | 0.23 |
| tblVehicleEF | LDT1 | 0.02 | 0.10 |
| tblVehicleEF | LDT1 | 2.1000e-003 | 9.3200e-004 |
| tblVehicleEF | LDT1 | 1.4080e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.37 | 0.45 |
| tblVehicleEF | LDT1 | 0.47 | 1.28 |
| tblVehicleEF | LDT1 | 220.75 | 227.96 |
| tblVehicleEF | LDT1 | 47.05 | 44.89 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.02 | 0.12 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.04 | 0.05 |
| tblVehicleEF | LDT1 | 5.2060e-003 | 2.8860e-003 |
| tblVehicleEF | LDT1 | 0.04 | 0.21 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 2.2090e-003 | 2.2560e-003 |
| tblVehicleEF | LDT1 | 4.7800e-004 | 4.4400e-004 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.04 | 0.05 |
| tblVehicleEF | LDT1 | 7.5930e-003 | 4.2220e-003 |
| tblVehicleEF | LDT1 | 0.04 | 0.21 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.9350e-003 | 8.4300e-004 |
| tblVehicleEF | LDT1 | 1.7480e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.33 | 0.41 |
| tblVehicleEF | LDT1 | 0.63 | 1.73 |
| tblVehicleEF | LDT1 | 209.84 | 218.36 |
| tblVehicleEF | LDT1 | 47.05 | 45.64 |
| tblVehicleEF | LDT1 | 0.03 | 0.02 |
| tblVehicleEF | LDT1 | 0.03 | 0.14 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.01 | 0.02 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 4.7970e-003 | 2.6600e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.28 |
| tblVehicleEF | LDT1 | 0.02 | 0.10 |
| tblVehicleEF | LDT1 | 2.1000e-003 | 2.1610e-003 |
| tblVehicleEF | LDT1 | 4.8000e-004 | 4.5200e-004 |
| tblVehicleEF | LDT1 | 0.01 | 0.02 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 6.9970e-003 | 3.8920e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.28 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.03 | 0.10 |
| tblVehicleEF | LDT2 | 1.9590e-003 | 1.0310e-003 |
| tblVehicleEF | LDT2 | 1.2530e-003 | 0.03 |
| tblVehicleEF | LDT2 | 0.37 | 0.46 |
| tblVehicleEF | LDT2 | 0.52 | 1.92 |
| tblVehicleEF | LDT2 | 240.17 | 218.56 |
| tblVehicleEF | LDT2 | 52.36 | 45.01 |
| tblVehicleEF | LDT2 | 0.03 | 0.02 |
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.03 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 4.8810e-003 | 3.3840e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.21 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 2.4030e-003 | 2.1620e-003 |
| tblVehicleEF | LDT2 | 5.3100e-004 | 4.4500e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.03 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 7.1100e-003 | 4.8950e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.21 |
| tblVehicleEF | LDT2 | 0.02 | 0.12 |
| tblVehicleEF | LDT2 | 2.0850e-003 | 1.1100e-003 |
| tblVehicleEF | LDT2 | 1.1320e-003 | 0.02 |
| tblVehicleEF | LDT2 | 0.41 | 0.51 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.46 | 1.58 |
| tblVehicleEF | LDT2 | 250.62 | 225.82 |
| tblVehicleEF | LDT2 | 52.36 | 44.44 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 5.1930e-003 | 3.5890e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.19 |
| tblVehicleEF | LDT2 | 0.02 | 0.09 |
| tblVehicleEF | LDT2 | 2.5080e-003 | 2.2340e-003 |
| tblVehicleEF | LDT2 | 5.3000e-004 | 4.4000e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 7.5660e-003 | 5.1960e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.19 |
| tblVehicleEF | LDT2 | 0.02 | 0.10 |
| tblVehicleEF | LDT2 | 1.9200e-003 | 1.0030e-003 |
| tblVehicleEF | LDT2 | 1.3260e-003 | 0.03 |
| tblVehicleEF | LDT2 | 0.37 | 0.46 |
| tblVehicleEF | LDT2 | 0.56 | 2.14 |
| tblVehicleEF | LDT2 | 238.19 | 217.18 |
| tblVehicleEF | LDT2 | 52.36 | 45.37 |
| tblVehicleEF | LDT2 | 0.03 | 0.02 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.03 |
| tblVehicleEF | LDT2 | 4.7850e-003 | 3.3210e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.25 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 2.3830e-003 | 2.1480e-003 |
| tblVehicleEF | LDT2 | 5.3200e-004 | 4.4900e-004 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.03 |
| tblVehicleEF | LDT2 | 6.9710e-003 | 4.8030e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.25 |
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2390e-003 |
| tblVehicleEF | LHD1 | 1.9640e-003 | 1.5690e-003 |
| tblVehicleEF | LHD1 | 4.6510e-003 | 5.7480e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.94 | 0.69 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.88 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.27 | 0.15 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.35 | 0.15 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 8.0400e-004 | 8.0900e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 6.8300e-004 | 6.7600e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.08 | 0.16 |
| tblVehicleEF | LHD1 | 0.06 | 0.03 |
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2100e-004 | 7.8000e-005 |
| tblVehicleEF | LHD1 | 8.0400e-004 | 8.0900e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 6.8300e-004 | 6.7600e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.08 | 0.16 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2480e-003 |
| tblVehicleEF | LHD1 | 1.9790e-003 | 1.5840e-003 |
| tblVehicleEF | LHD1 | 4.4260e-003 | 5.4920e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.88 | 0.65 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.82 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.26 | 0.14 |
| tblVehicleEF | LHD1 | 0.33 | 0.14 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 1.2220e-003 | 1.2390e-003 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 1.0950e-003 | 1.0940e-003 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.07 | 0.15 |
| tblVehicleEF | LHD1 | 0.06 | 0.02 |
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2000e-004 | 7.7000e-005 |
| tblVehicleEF | LHD1 | 1.2220e-003 | 1.2390e-003 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.0950e-003 | 1.0940e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.07 | 0.15 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2320e-003 |
| tblVehicleEF | LHD1 | 1.9550e-003 | 1.5580e-003 |
| tblVehicleEF | LHD1 | 4.8070e-003 | 5.9240e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.98 | 0.71 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.93 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.27 | 0.15 |
| tblVehicleEF | LHD1 | 0.36 | 0.16 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 5.7700e-004 | 5.7500e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 4.9500e-004 | 4.8800e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.08 | 0.18 |
| tblVehicleEF | LHD1 | 0.06 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2200e-004 | 7.8000e-005 |
| tblVehicleEF | LHD1 | 5.7700e-004 | 5.7500e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 4.9500e-004 | 4.8800e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.08 | 0.18 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1760e-003 |
| tblVehicleEF | LHD2 | 1.6160e-003 | 1.7890e-003 |
| tblVehicleEF | LHD2 | 2.1080e-003 | 3.3070e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.82 | 0.42 |
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.59 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.25 |
| tblVehicleEF | LHD2 | 0.19 | 0.10 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 4.1300e-004 | 4.9000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.4900e-004 | 4.2200e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4720e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2500e-004 | 5.5000e-005 |
| tblVehicleEF | LHD2 | 4.1300e-004 | 4.9000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 3.4900e-004 | 4.2200e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.02 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1820e-003 |
| tblVehicleEF | LHD2 | 1.6260e-003 | 1.7980e-003 |
| tblVehicleEF | LHD2 | 2.0870e-003 | 3.1600e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.77 | 0.40 |
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.55 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.24 |
| tblVehicleEF | LHD2 | 0.19 | 0.09 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.5000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.6900e-004 | 6.7900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4730e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2400e-004 | 5.5000e-005 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.5000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 5.6900e-004 | 6.7900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1720e-003 |
| tblVehicleEF | LHD2 | 1.6090e-003 | 1.7830e-003 |
| tblVehicleEF | LHD2 | 2.1220e-003 | 3.4080e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.85 | 0.44 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.61 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.24 |
| tblVehicleEF | LHD2 | 0.19 | 0.10 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |
| tblVehicleEF | LHD2 | 2.9200e-004 | 3.4900e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 2.5100e-004 | 3.0500e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.10 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4720e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2500e-004 | 5.6000e-005 |
| tblVehicleEF | LHD2 | 2.9200e-004 | 3.4900e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 2.5100e-004 | 3.0500e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.10 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.03 | 0.02 |
| tblVehicleEF | MCY | 0.49 | 0.34 |
| tblVehicleEF | MCY | 0.15 | 0.24 |
| tblVehicleEF | MCY | 17.36 | 17.45 |
| tblVehicleEF | MCY | 10.23 | 9.09 |
| tblVehicleEF | MCY | 179.13 | 214.53 |
| tblVehicleEF | MCY | 42.15 | 58.51 |
| tblVehicleEF | MCY | 1.13 | 1.13 |
| tblVehicleEF | MCY | 0.31 | 0.27 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 0.87 | 0.92 |
| tblVehicleEF | MCY | 0.63 | 0.69 |
| tblVehicleEF | MCY | 0.53 | 0.56 |
| tblVehicleEF | MCY | 2.28 | 2.29 |
| tblVehicleEF | MCY | 0.58 | 1.23 |
| tblVehicleEF | MCY | 2.06 | 1.83 |
| tblVehicleEF | MCY | 2.1450e-003 | 2.1230e-003 |
| tblVehicleEF | MCY | 6.4900e-004 | 5.7900e-004 |
| tblVehicleEF | MCY | 0.87 | 0.92 |
| tblVehicleEF | MCY | 0.63 | 0.69 |
| tblVehicleEF | MCY | 0.53 | 0.56 |
| tblVehicleEF | MCY | 2.87 | 2.87 |
| tblVehicleEF | MCY | 0.58 | 1.23 |
| tblVehicleEF | MCY | 2.24 | 2.00 |
| tblVehicleEF | MCY | 0.48 | 0.33 |
| tblVehicleEF | MCY | 0.13 | 0.20 |
| tblVehicleEF | MCY | 16.41 | 16.49 |

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|---|---|---|---|
| tblVehicleEF | MCY | 8.97 | 7.93 |
| tblVehicleEF | MCY | 179.13 | 212.76 |
| tblVehicleEF | MCY | 42.15 | 55.82 |
| tblVehicleEF | MCY | 1.00 | 1.00 |
| tblVehicleEF | MCY | 0.29 | 0.25 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 1.50 | 1.58 |
| tblVehicleEF | MCY | 0.71 | 0.78 |
| tblVehicleEF | MCY | 1.07 | 1.12 |
| tblVehicleEF | MCY | 2.22 | 2.23 |
| tblVehicleEF | MCY | 0.52 | 1.11 |
| tblVehicleEF | MCY | 1.78 | 1.58 |
| tblVehicleEF | MCY | 2.1270e-003 | 2.1050e-003 |
| tblVehicleEF | MCY | 6.2000e-004 | 5.5200e-004 |
| tblVehicleEF | MCY | 1.50 | 1.58 |
| tblVehicleEF | MCY | 0.71 | 0.78 |
| tblVehicleEF | MCY | 1.07 | 1.12 |
| tblVehicleEF | MCY | 2.79 | 2.79 |
| tblVehicleEF | MCY | 0.52 | 1.11 |
| tblVehicleEF | MCY | 1.94 | 1.72 |
| tblVehicleEF | MCY | 0.50 | 0.34 |
| tblVehicleEF | MCY | 0.16 | 0.26 |
| tblVehicleEF | MCY | 18.17 | 18.27 |
| tblVehicleEF | MCY | 11.11 | 9.93 |
| tblVehicleEF | MCY | 179.13 | 216.00 |
| tblVehicleEF | MCY | 42.15 | 60.42 |
| tblVehicleEF | MCY | 1.15 | 1.15 |

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|---|---|---|---|
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 0.56 | 0.60 |
| tblVehicleEF | MCY | 0.75 | 0.82 |
| tblVehicleEF | MCY | 0.32 | 0.34 |
| tblVehicleEF | MCY | 2.33 | 2.34 |
| tblVehicleEF | MCY | 0.72 | 1.53 |
| tblVehicleEF | MCY | 2.24 | 2.01 |
| tblVehicleEF | MCY | 2.1590e-003 | 2.1370e-003 |
| tblVehicleEF | MCY | 6.6900e-004 | 5.9800e-004 |
| tblVehicleEF | MCY | 0.56 | 0.60 |
| tblVehicleEF | MCY | 0.75 | 0.82 |
| tblVehicleEF | MCY | 0.32 | 0.34 |
| tblVehicleEF | MCY | 2.92 | 2.93 |
| tblVehicleEF | MCY | 0.72 | 1.53 |
| tblVehicleEF | MCY | 2.44 | 2.19 |
| tblVehicleEF | MDV | 2.7570e-003 | 1.0960e-003 |
| tblVehicleEF | MDV | 3.0290e-003 | 0.03 |
| tblVehicleEF | MDV | 0.46 | 0.47 |
| tblVehicleEF | MDV | 0.81 | 1.96 |
| tblVehicleEF | MDV | 318.34 | 266.51 |
| tblVehicleEF | MDV | 68.99 | 54.02 |
| tblVehicleEF | MDV | 0.04 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.14 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |

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|---|---|---|---|
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 6.9650e-003 | 3.7440e-003 |
| tblVehicleEF | MDV | 0.05 | 0.24 |
| tblVehicleEF | MDV | 0.04 | 0.12 |
| tblVehicleEF | MDV | 3.1810e-003 | 2.6330e-003 |
| tblVehicleEF | MDV | 7.0300e-004 | 5.3500e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.01 | 5.4110e-003 |
| tblVehicleEF | MDV | 0.05 | 0.24 |
| tblVehicleEF | MDV | 0.04 | 0.13 |
| tblVehicleEF | MDV | 2.9330e-003 | 1.1800e-003 |
| tblVehicleEF | MDV | 2.6720e-003 | 0.03 |
| tblVehicleEF | MDV | 0.50 | 0.51 |
| tblVehicleEF | MDV | 0.70 | 1.62 |
| tblVehicleEF | MDV | 331.77 | 273.67 |
| tblVehicleEF | MDV | 68.99 | 53.43 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.13 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.06 | 0.07 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.07 | 0.09 |

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|---|---|---|---|
| tblVehicleEF | MDV | 7.4000e-003 | 3.9700e-003 |
| tblVehicleEF | MDV | 0.05 | 0.22 |
| tblVehicleEF | MDV | 0.04 | 0.10 |
| tblVehicleEF | MDV | 3.3160e-003 | 2.7040e-003 |
| tblVehicleEF | MDV | 7.0100e-004 | 5.2900e-004 |
| tblVehicleEF | MDV | 0.06 | 0.07 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.01 | 5.7410e-003 |
| tblVehicleEF | MDV | 0.05 | 0.22 |
| tblVehicleEF | MDV | 0.04 | 0.11 |
| tblVehicleEF | MDV | 2.7040e-003 | 1.0670e-003 |
| tblVehicleEF | MDV | 3.2450e-003 | 0.03 |
| tblVehicleEF | MDV | 0.45 | 0.46 |
| tblVehicleEF | MDV | 0.89 | 2.18 |
| tblVehicleEF | MDV | 315.80 | 265.15 |
| tblVehicleEF | MDV | 68.99 | 54.39 |
| tblVehicleEF | MDV | 0.04 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.15 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.02 | 0.03 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.03 | 0.04 |
| tblVehicleEF | MDV | 6.8320e-003 | 3.6750e-003 |
| tblVehicleEF | MDV | 0.06 | 0.29 |
| tblVehicleEF | MDV | 0.04 | 0.13 |
| tblVehicleEF | MDV | 3.1560e-003 | 2.6200e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 7.0400e-004 | 5.3800e-004 |
| tblVehicleEF | MDV | 0.02 | 0.03 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.03 | 0.04 |
| tblVehicleEF | MDV | 9.9180e-003 | 5.3090e-003 |
| tblVehicleEF | MDV | 0.06 | 0.29 |
| tblVehicleEF | MDV | 0.05 | 0.14 |
| tblVehicleEF | MH | 3.8210e-003 | 3.0770e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.18 |
| tblVehicleEF | MH | 3.13 | 1.37 |
| tblVehicleEF | MH | 1,048.97 | 1,194.05 |
| tblVehicleEF | MH | 55.78 | 13.48 |
| tblVehicleEF | MH | 0.61 | 0.91 |
| tblVehicleEF | MH | 0.55 | 0.24 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.31 | 0.26 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.17 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.6510e-003 | 0.24 |
| tblVehicleEF | MH | 0.19 | 0.07 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.1200e-004 | 1.3300e-004 |
| tblVehicleEF | MH | 0.31 | 0.26 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.17 |
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.6510e-003 | 0.24 |
| tblVehicleEF | MH | 0.21 | 0.07 |
| tblVehicleEF | MH | 3.9170e-003 | 3.1350e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.21 | 0.19 |
| tblVehicleEF | MH | 2.90 | 1.27 |
| tblVehicleEF | MH | 1,048.97 | 1,194.05 |
| tblVehicleEF | MH | 55.78 | 13.31 |
| tblVehicleEF | MH | 0.57 | 0.87 |
| tblVehicleEF | MH | 0.52 | 0.23 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.45 | 0.38 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.32 | 0.27 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.5160e-003 | 0.23 |
| tblVehicleEF | MH | 0.18 | 0.06 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.0800e-004 | 1.3200e-004 |
| tblVehicleEF | MH | 0.45 | 0.38 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.32 | 0.27 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.5160e-003 | 0.23 |
| tblVehicleEF | MH | 0.20 | 0.07 |
| tblVehicleEF | MH | 3.7600e-003 | 3.0400e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.18 |
| tblVehicleEF | MH | 3.26 | 1.43 |
| tblVehicleEF | MH | 1,048.97 | 1,194.04 |
| tblVehicleEF | MH | 55.78 | 13.58 |
| tblVehicleEF | MH | 0.61 | 0.91 |
| tblVehicleEF | MH | 0.57 | 0.25 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.23 | 0.19 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 0.14 | 0.12 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.9870e-003 | 0.26 |
| tblVehicleEF | MH | 0.20 | 0.07 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.1500e-004 | 1.3400e-004 |
| tblVehicleEF | MH | 0.23 | 0.19 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 0.14 | 0.12 |
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.9870e-003 | 0.26 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.22 | 0.07 |
| tblVehicleEF | MHD | 0.02 | 2.8830e-003 |
| tblVehicleEF | MHD | 1.5490e-003 | 5.5200e-004 |
| tblVehicleEF | MHD | 0.03 | 6.0840e-003 |
| tblVehicleEF | MHD | 0.30 | 0.34 |
| tblVehicleEF | MHD | 0.16 | 0.08 |
| tblVehicleEF | MHD | 2.51 | 0.56 |
| tblVehicleEF | MHD | 150.61 | 52.96 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.80 |
| tblVehicleEF | MHD | 0.39 | 0.28 |
| tblVehicleEF | MHD | 0.51 | 0.97 |
| tblVehicleEF | MHD | 11.67 | 1.82 |
| tblVehicleEF | MHD | 3.3000e-005 | 7.8000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 3.2000e-005 | 7.4000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 4.6300e-004 | 1.8900e-004 |
| tblVehicleEF | MHD | 0.02 | 9.4290e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 3.9500e-004 | 1.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3660e-003 |
| tblVehicleEF | MHD | 9.8920e-003 | 0.05 |
| tblVehicleEF | MHD | 0.17 | 0.03 |
| tblVehicleEF | MHD | 1.4470e-003 | 5.0200e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3600e-004 | 5.7000e-005 |
| tblVehicleEF | MHD | 4.6300e-004 | 1.8900e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.02 | 9.4290e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.9500e-004 | 1.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 8.6860e-003 |
| tblVehicleEF | MHD | 9.8920e-003 | 0.05 |
| tblVehicleEF | MHD | 0.18 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 2.7520e-003 |
| tblVehicleEF | MHD | 1.5590e-003 | 5.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 5.8070e-003 |
| tblVehicleEF | MHD | 0.22 | 0.30 |
| tblVehicleEF | MHD | 0.16 | 0.08 |
| tblVehicleEF | MHD | 2.35 | 0.52 |
| tblVehicleEF | MHD | 159.53 | 52.45 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.74 |
| tblVehicleEF | MHD | 0.40 | 0.27 |
| tblVehicleEF | MHD | 0.49 | 0.93 |
| tblVehicleEF | MHD | 11.65 | 1.82 |
| tblVehicleEF | MHD | 2.8000e-005 | 6.8000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 2.7000e-005 | 6.5000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 7.1300e-004 | 2.9100e-004 |
| tblVehicleEF | MHD | 0.02 | 9.6390e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 6.4000e-004 | 2.6200e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3930e-003 |
| tblVehicleEF | MHD | 9.3780e-003 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.16 | 0.03 |
| tblVehicleEF | MHD | 1.5310e-003 | 4.9800e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3400e-004 | 5.7000e-005 |
| tblVehicleEF | MHD | 7.1300e-004 | 2.9100e-004 |
| tblVehicleEF | MHD | 0.02 | 9.6390e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 6.4000e-004 | 2.6200e-004 |
| tblVehicleEF | MHD | 0.03 | 8.7250e-003 |
| tblVehicleEF | MHD | 9.3780e-003 | 0.04 |
| tblVehicleEF | MHD | 0.18 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 3.0710e-003 |
| tblVehicleEF | MHD | 1.5430e-003 | 5.4600e-004 |
| tblVehicleEF | MHD | 0.03 | 6.2650e-003 |
| tblVehicleEF | MHD | 0.42 | 0.39 |
| tblVehicleEF | MHD | 0.15 | 0.08 |
| tblVehicleEF | MHD | 2.63 | 0.59 |
| tblVehicleEF | MHD | 138.28 | 53.66 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.85 |
| tblVehicleEF | MHD | 0.37 | 0.30 |
| tblVehicleEF | MHD | 0.50 | 0.96 |
| tblVehicleEF | MHD | 11.68 | 1.82 |
| tblVehicleEF | MHD | 4.1000e-005 | 9.0000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 3.9000e-005 | 8.6000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 3.2800e-004 | 1.3400e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.02 | 9.7090e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3490e-003 |
| tblVehicleEF | MHD | 0.01 | 0.05 |
| tblVehicleEF | MHD | 0.17 | 0.03 |
| tblVehicleEF | MHD | 1.3310e-003 | 5.0900e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3800e-004 | 5.8000e-005 |
| tblVehicleEF | MHD | 3.2800e-004 | 1.3400e-004 |
| tblVehicleEF | MHD | 0.02 | 9.7090e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 2.8400e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 0.03 | 8.6610e-003 |
| tblVehicleEF | MHD | 0.01 | 0.05 |
| tblVehicleEF | MHD | 0.19 | 0.03 |
| tblVehicleEF | OBUS | 0.01 | 8.2890e-003 |
| tblVehicleEF | OBUS | 3.2290e-003 | 2.2180e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.42 |
| tblVehicleEF | OBUS | 0.20 | 0.24 |
| tblVehicleEF | OBUS | 4.06 | 2.10 |
| tblVehicleEF | OBUS | 43.59 | 46.75 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.05 |
| tblVehicleEF | OBUS | 68.94 | 17.45 |
| tblVehicleEF | OBUS | 0.07 | 0.18 |
| tblVehicleEF | OBUS | 0.29 | 0.78 |
| tblVehicleEF | OBUS | 1.36 | 0.71 |
| tblVehicleEF | OBUS | 6.0000e-006 | 5.9000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 5.6000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 1.1870e-003 | 1.5040e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 7.5500e-004 | 9.7900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.07 | 0.28 |
| tblVehicleEF | OBUS | 0.27 | 0.10 |
| tblVehicleEF | OBUS | 4.2800e-004 | 4.4700e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.6100e-004 | 1.7300e-004 |
| tblVehicleEF | OBUS | 1.1870e-003 | 1.5040e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.06 |
| tblVehicleEF | OBUS | 7.5500e-004 | 9.7900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.28 |
| tblVehicleEF | OBUS | 0.29 | 0.11 |
| tblVehicleEF | OBUS | 0.01 | 8.3520e-003 |
| tblVehicleEF | OBUS | 3.3050e-003 | 2.2820e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.42 |
| tblVehicleEF | OBUS | 0.21 | 0.24 |
| tblVehicleEF | OBUS | 3.77 | 1.95 |
| tblVehicleEF | OBUS | 45.18 | 46.28 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.06 |
| tblVehicleEF | OBUS | 68.94 | 17.19 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.07 | 0.18 |
| tblVehicleEF | OBUS | 0.27 | 0.75 |
| tblVehicleEF | OBUS | 1.32 | 0.70 |
| tblVehicleEF | OBUS | 5.0000e-006 | 5.2000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 5.0000e-006 | 5.0000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 1.7750e-003 | 2.2170e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.2420e-003 | 1.5850e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.07 | 0.27 |
| tblVehicleEF | OBUS | 0.25 | 0.10 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.5600e-004 | 1.7000e-004 |
| tblVehicleEF | OBUS | 1.7750e-003 | 2.2170e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.06 |
| tblVehicleEF | OBUS | 1.2420e-003 | 1.5850e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.27 |
| tblVehicleEF | OBUS | 0.28 | 0.11 |
| tblVehicleEF | OBUS | 0.01 | 8.2270e-003 |
| tblVehicleEF | OBUS | 3.1810e-003 | 2.1770e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.43 |
| tblVehicleEF | OBUS | 0.20 | 0.24 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 4.24 | 2.19 |
| tblVehicleEF | OBUS | 41.40 | 47.40 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.04 |
| tblVehicleEF | OBUS | 68.94 | 17.60 |
| tblVehicleEF | OBUS | 0.07 | 0.20 |
| tblVehicleEF | OBUS | 0.29 | 0.78 |
| tblVehicleEF | OBUS | 1.39 | 0.72 |
| tblVehicleEF | OBUS | 8.0000e-006 | 6.8000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 6.5000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 8.6300e-004 | 1.1090e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 5.4200e-004 | 7.0600e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.08 | 0.31 |
| tblVehicleEF | OBUS | 0.28 | 0.11 |
| tblVehicleEF | OBUS | 4.0700e-004 | 4.5300e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.6400e-004 | 1.7400e-004 |
| tblVehicleEF | OBUS | 8.6300e-004 | 1.1090e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 5.4200e-004 | 7.0600e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.08 | 0.31 |
| tblVehicleEF | OBUS | 0.30 | 0.12 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.8160e-003 | 2.4300e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 11.42 | 4.79 |
| tblVehicleEF | SBUS | 0.25 | 0.21 |
| tblVehicleEF | SBUS | 8.29 | 1.36 |
| tblVehicleEF | SBUS | 857.10 | 318.22 |
| tblVehicleEF | SBUS | 921.11 | 858.97 |
| tblVehicleEF | SBUS | 78.99 | 7.91 |
| tblVehicleEF | SBUS | 1.43 | 1.36 |
| tblVehicleEF | SBUS | 0.70 | 1.37 |
| tblVehicleEF | SBUS | 7.58 | 1.58 |
| tblVehicleEF | SBUS | 1.0400e-004 | 3.8300e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |
| tblVehicleEF | SBUS | 1.0000e-004 | 3.6600e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 4.7400e-003 | 1.4160e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |
| tblVehicleEF | SBUS | 3.0690e-003 | 9.1700e-004 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.03 | 0.09 |
| tblVehicleEF | SBUS | 0.46 | 0.06 |
| tblVehicleEF | SBUS | 8.5860e-003 | 3.0550e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.3400e-004 | 7.8000e-005 |

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|---|---|---|---|
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| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 3.0690e-003 | 9.1700e-004 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.03 | 0.09 |
| tblVehicleEF | SBUS | 0.51 | 0.06 |
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.8920e-003 | 2.4680e-003 |
| tblVehicleEF | SBUS | 0.04 | 8.8700e-003 |
| tblVehicleEF | SBUS | 11.40 | 4.78 |
| tblVehicleEF | SBUS | 0.26 | 0.21 |
| tblVehicleEF | SBUS | 6.45 | 1.06 |
| tblVehicleEF | SBUS | 884.88 | 317.96 |
| tblVehicleEF | SBUS | 921.11 | 858.98 |
| tblVehicleEF | SBUS | 78.99 | 7.41 |
| tblVehicleEF | SBUS | 1.47 | 1.32 |
| tblVehicleEF | SBUS | 0.67 | 1.31 |
| tblVehicleEF | SBUS | 7.54 | 1.57 |
| tblVehicleEF | SBUS | 8.8000e-005 | 3.3500e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |
| tblVehicleEF | SBUS | 8.4000e-005 | 3.2000e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 7.0540e-003 | 2.1070e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 5.0000e-003 | 1.4940e-003 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.03 | 0.08 |
| tblVehicleEF | SBUS | 0.40 | 0.05 |
| tblVehicleEF | SBUS | 8.8500e-003 | 3.0520e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.0300e-004 | 7.3000e-005 |
| tblVehicleEF | SBUS | 7.0540e-003 | 2.1070e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 5.0000e-003 | 1.4940e-003 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.03 | 0.08 |
| tblVehicleEF | SBUS | 0.44 | 0.06 |
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.7710e-003 | 2.4070e-003 |
| tblVehicleEF | SBUS | 0.06 | 0.01 |
| tblVehicleEF | SBUS | 11.45 | 4.82 |
| tblVehicleEF | SBUS | 0.25 | 0.20 |
| tblVehicleEF | SBUS | 9.30 | 1.52 |
| tblVehicleEF | SBUS | 818.74 | 318.57 |
| tblVehicleEF | SBUS | 921.11 | 858.97 |
| tblVehicleEF | SBUS | 78.99 | 8.19 |
| tblVehicleEF | SBUS | 1.37 | 1.40 |
| tblVehicleEF | SBUS | 0.70 | 1.36 |
| tblVehicleEF | SBUS | 7.60 | 1.58 |
| tblVehicleEF | SBUS | 1.2700e-004 | 4.4900e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 1.2100e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 3.4590e-003 | 1.0330e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |
| tblVehicleEF | SBUS | 2.2090e-003 | 6.6000e-004 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.04 | 0.12 |
| tblVehicleEF | SBUS | 0.49 | 0.06 |
| tblVehicleEF | SBUS | 8.2200e-003 | 3.0580e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.5100e-004 | 8.1000e-005 |
| tblVehicleEF | SBUS | 3.4590e-003 | 1.0330e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 2.2090e-003 | 6.6000e-004 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.04 | 0.12 |
| tblVehicleEF | SBUS | 0.54 | 0.07 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 4.23 | 28.76 |
| tblVehicleEF | UBUS | 8.00 | 1.69 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.58 |
| tblVehicleEF | UBUS | 144.80 | 16.08 |
| tblVehicleEF | UBUS | 0.68 | 0.33 |
| tblVehicleEF | UBUS | 11.82 | 0.17 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 2.8730e-003 | 7.2500e-004 |
| tblVehicleEF | UBUS | 0.05 | 9.5970e-003 |
| tblVehicleEF | UBUS | 2.5790e-003 | 5.8800e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.75 | 0.09 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.5960e-003 | 1.5900e-004 |
| tblVehicleEF | UBUS | 2.8730e-003 | 7.2500e-004 |
| tblVehicleEF | UBUS | 0.05 | 9.5970e-003 |
| tblVehicleEF | UBUS | 2.5790e-003 | 5.8800e-004 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.82 | 0.10 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 4.24 | 28.77 |
| tblVehicleEF | UBUS | 6.76 | 1.43 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.59 |
| tblVehicleEF | UBUS | 144.80 | 15.64 |
| tblVehicleEF | UBUS | 0.64 | 0.33 |
| tblVehicleEF | UBUS | 11.74 | 0.16 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 3.9960e-003 | 1.0930e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 4.2740e-003 | 1.0210e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.68 | 0.08 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.5740e-003 | 1.5500e-004 |
| tblVehicleEF | UBUS | 3.9960e-003 | 1.0930e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 4.2740e-003 | 1.0210e-003 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.74 | 0.09 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 4.23 | 28.76 |
| tblVehicleEF | UBUS | 8.84 | 1.86 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.58 |
| tblVehicleEF | UBUS | 144.80 | 16.36 |
| tblVehicleEF | UBUS | 0.68 | 0.33 |
| tblVehicleEF | UBUS | 11.87 | 0.17 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 2.1960e-003 | 5.2300e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 1.8270e-003 | 4.0800e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.06 |
| tblVehicleEF | UBUS | 0.79 | 0.09 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.6100e-003 | 1.6200e-004 |
| tblVehicleEF | UBUS | 2.1960e-003 | 5.2300e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 1.8270e-003 | 4.0800e-004 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.06 |
| tblVehicleEF | UBUS | 0.87 | 0.10 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |
| tblWater | IndoorWaterUseRate | 176,725,875.00 | 141,380,700.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 0.00 |

# 2.0 Emissions Summary

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 21.2137 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| 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 | 2.8028 | 4.7683 | 27.4397 | 0.0904 | 12.5943 | 0.0511 | 12.6454 | 3.3635 | 0.0479 | 3.4114 | | 9,305.8296 | 9,305.8296 | 0.4140 | | 9,316.1798 |
| **Total** | **24.0164** | **4.7690** | **27.5173** | **0.0904** | **12.5943** | **0.0514** | **12.6457** | **3.3635** | **0.0482** | **3.4117** | | **9,305.9968** | **9,305.9968** | **0.4144** | **0.0000** | **9,316.3578** |

**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 | 21.2137 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| 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 | 2.8028 | 4.7683 | 27.4397 | 0.0904 | 12.5943 | 0.0511 | 12.6454 | 3.3635 | 0.0479 | 3.4114 | | 9,305.8296 | 9,305.8296 | 0.4140 | | 9,316.1798 |
| **Total** | **24.0164** | **4.7690** | **27.5173** | **0.0904** | **12.5943** | **0.0514** | **12.6457** | **3.3635** | **0.0482** | **3.4117** | | **9,305.9968** | **9,305.9968** | **0.4144** | **0.0000** | **9,316.3578** |

| | **ROG** | **NOx** | **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** |

# 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 | 2.8028 | 4.7683 | 27.4397 | 0.0904 | 12.5943 | 0.0511 | 12.6454 | 3.3635 | 0.0479 | 3.4114 | | 9,305.829 6 | 9,305.8296 | 0.4140 | | 9,316.179 8 |
| Unmitigated | 2.8028 | 4.7683 | 27.4397 | 0.0904 | 12.5943 | 0.0511 | 12.6454 | 3.3635 | 0.0479 | 3.4114 | | 9,305.829 6 | 9,305.8296 | 0.4140 | | 9,316.179 8 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 2,919.32 | 2,919.32 | 2919.32 | 5,948,617 | 5,948,617 |
| Total | 2,919.32 | 2,919.32 | 2,919.32 | 5,948,617 | 5,948,617 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.597756 | 0.058527 | 0.164080 | 0.102133 | 0.023632 | 0.006965 | 0.021753 | 0.018456 | 0.000741 | 0.000967 | 0.003489 | 0.000549 | 0.000951 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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

| | ROG | NOx | CO | SO2 | Fugitive 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 | 21.2137 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| Unmitigated | 21.2137 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |

## 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 | 4.8523 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 16.3543 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 7.0900e-003 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| **Total** | **21.2137** | **7.0000e-004** | **0.0775** | **1.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | | **0.1673** | **0.1673** | **4.3000e-004** | | **0.1780** |

**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 | 4.8523 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 16.3543 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 7.0900e-003 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| **Total** | **21.2137** | **7.0000e-004** | **0.0775** | **1.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | | **0.1673** | **0.1673** | **4.3000e-004** | | **0.1780** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

## 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

# Conejo Summit - Buildout Operational 2040

**Ventura County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 764.22 | 1000sqft | 49.64 | 764,220.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 100.29 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 382,110.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 1,146,330.00 | 0.00 |
| tblConstructionPhase | NumDays | 55.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.62 | 0.60 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.16 |
| tblFleetMix | LHD1 | 0.01 | 0.02 |
| tblFleetMix | LHD2 | 5.4070e-003 | 6.9650e-003 |
| tblFleetMix | MCY | 3.5990e-003 | 3.4890e-003 |
| tblFleetMix | MDV | 0.09 | 0.10 |
| tblFleetMix | MH | 7.1900e-004 | 9.5100e-004 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.2370e-003 | 7.4100e-004 |
| tblFleetMix | SBUS | 4.4900e-004 | 5.4900e-004 |
| tblFleetMix | UBUS | 1.1510e-003 | 9.6700e-004 |
| tblLandUse | LotAcreage | 17.54 | 49.64 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 100.29 |
| tblSolidWaste | SolidWasteGenerationRate | 947.63 | 530.67 |
| tblTripsAndVMT | WorkerTripNumber | 64.00 | 0.00 |
| tblVehicleEF | HHD | 0.30 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |

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|---|---|---|---|
| tblVehicleEF | HHD | 0.05 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.33 | 6.73 |
| tblVehicleEF | HHD | 1.22 | 0.65 |
| tblVehicleEF | HHD | 4.67 | 9.8090e-003 |
| tblVehicleEF | HHD | 3,839.29 | 881.97 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 11.17 | 5.48 |
| tblVehicleEF | HHD | 1.07 | 1.92 |
| tblVehicleEF | HHD | 18.94 | 2.53 |
| tblVehicleEF | HHD | 2.1810e-003 | 2.0920e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.0870e-003 | 2.0020e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.1200e-004 | 2.0000e-006 |
| tblVehicleEF | HHD | 5.4250e-003 | 9.7000e-005 |
| tblVehicleEF | HHD | 0.33 | 0.44 |
| tblVehicleEF | HHD | 9.5000e-005 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 6.0900e-004 | 4.8500e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 8.0770e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1500e-004 | 1.0000e-006 |

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|---|---|---|---|
| tblVehicleEF | HHD | 1.1200e-004 | 2.0000e-006 |
| tblVehicleEF | HHD | 5.4250e-003 | 9.7000e-005 |
| tblVehicleEF | HHD | 0.40 | 0.52 |
| tblVehicleEF | HHD | 9.5000e-005 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 6.0900e-004 | 4.8500e-004 |
| tblVehicleEF | HHD | 0.09 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.29 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |
| tblVehicleEF | HHD | 0.05 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.97 | 6.64 |
| tblVehicleEF | HHD | 1.23 | 0.65 |
| tblVehicleEF | HHD | 4.36 | 9.1590e-003 |
| tblVehicleEF | HHD | 4,067.39 | 870.89 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 11.53 | 5.21 |
| tblVehicleEF | HHD | 1.02 | 1.84 |
| tblVehicleEF | HHD | 18.92 | 2.53 |
| tblVehicleEF | HHD | 1.8390e-003 | 1.8520e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7590e-003 | 1.7720e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7200e-004 | 3.0000e-006 |

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|---|---|---|---|
| tblVehicleEF | HHD | 5.5440e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.31 | 0.47 |
| tblVehicleEF | HHD | 1.5500e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 5.7700e-004 | 4.5900e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 7.9760e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1000e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7200e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 5.5440e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.38 | 0.55 |
| tblVehicleEF | HHD | 1.5500e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 5.7700e-004 | 4.5900e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.33 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.84 | 6.85 |
| tblVehicleEF | HHD | 1.22 | 0.65 |
| tblVehicleEF | HHD | 4.89 | 0.01 |
| tblVehicleEF | HHD | 3,524.30 | 897.28 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 10.68 | 5.84 |
| tblVehicleEF | HHD | 1.06 | 1.91 |
| tblVehicleEF | HHD | 18.96 | 2.53 |
| tblVehicleEF | HHD | 2.6540e-003 | 2.4240e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.5390e-003 | 2.3190e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 7.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 5.5830e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.36 | 0.41 |
| tblVehicleEF | HHD | 6.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 6.8600e-004 | 5.4600e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 8.2180e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 7.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 5.5830e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.43 | 0.47 |
| tblVehicleEF | HHD | 6.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 6.8600e-004 | 5.4600e-004 |
| tblVehicleEF | HHD | 0.09 | 3.0000e-006 |
| tblVehicleEF | LDA | 1.3420e-003 | 6.5600e-004 |
| tblVehicleEF | LDA | 7.4000e-004 | 0.02 |
| tblVehicleEF | LDA | 0.25 | 0.37 |
| tblVehicleEF | LDA | 0.36 | 1.43 |
| tblVehicleEF | LDA | 165.14 | 182.34 |

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|---|---|---|---|
| tblVehicleEF | LDA | 35.70 | 37.05 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.01 | 0.11 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 8.8180e-003 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 3.3750e-003 | 1.9160e-003 |
| tblVehicleEF | LDA | 0.03 | 0.15 |
| tblVehicleEF | LDA | 9.9840e-003 | 0.07 |
| tblVehicleEF | LDA | 1.6520e-003 | 1.8040e-003 |
| tblVehicleEF | LDA | 3.6200e-004 | 3.6700e-004 |
| tblVehicleEF | LDA | 8.8180e-003 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 4.9050e-003 | 2.7830e-003 |
| tblVehicleEF | LDA | 0.03 | 0.15 |
| tblVehicleEF | LDA | 0.01 | 0.08 |
| tblVehicleEF | LDA | 1.4300e-003 | 7.0700e-004 |
| tblVehicleEF | LDA | 6.4400e-004 | 0.02 |
| tblVehicleEF | LDA | 0.28 | 0.41 |
| tblVehicleEF | LDA | 0.29 | 1.18 |
| tblVehicleEF | LDA | 172.45 | 190.19 |
| tblVehicleEF | LDA | 35.70 | 36.64 |
| tblVehicleEF | LDA | 0.02 | 0.01 |
| tblVehicleEF | LDA | 0.01 | 0.10 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |

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|---|---|---|---|
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 3.5920e-003 | 2.0370e-003 |
| tblVehicleEF | LDA | 0.02 | 0.14 |
| tblVehicleEF | LDA | 8.6840e-003 | 0.06 |
| tblVehicleEF | LDA | 1.7250e-003 | 1.8810e-003 |
| tblVehicleEF | LDA | 3.6100e-004 | 3.6300e-004 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 5.2220e-003 | 2.9610e-003 |
| tblVehicleEF | LDA | 0.02 | 0.14 |
| tblVehicleEF | LDA | 9.5080e-003 | 0.07 |
| tblVehicleEF | LDA | 1.3150e-003 | 6.3800e-004 |
| tblVehicleEF | LDA | 7.9800e-004 | 0.02 |
| tblVehicleEF | LDA | 0.25 | 0.37 |
| tblVehicleEF | LDA | 0.39 | 1.58 |
| tblVehicleEF | LDA | 163.76 | 180.85 |
| tblVehicleEF | LDA | 35.70 | 37.31 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.01 | 0.12 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 5.9570e-003 | 9.8870e-003 |

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|---|---|---|---|
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 7.0170e-003 | 0.01 |
| tblVehicleEF | LDA | 3.3090e-003 | 1.8800e-003 |
| tblVehicleEF | LDA | 0.03 | 0.18 |
| tblVehicleEF | LDA | 0.01 | 0.08 |
| tblVehicleEF | LDA | 1.6380e-003 | 1.7890e-003 |
| tblVehicleEF | LDA | 3.6300e-004 | 3.6900e-004 |
| tblVehicleEF | LDA | 5.9570e-003 | 9.8870e-003 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 7.0170e-003 | 0.01 |
| tblVehicleEF | LDA | 4.8090e-003 | 2.7300e-003 |
| tblVehicleEF | LDA | 0.03 | 0.18 |
| tblVehicleEF | LDA | 0.01 | 0.09 |
| tblVehicleEF | LDT1 | 1.9740e-003 | 8.6600e-004 |
| tblVehicleEF | LDT1 | 1.6200e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.34 | 0.41 |
| tblVehicleEF | LDT1 | 0.57 | 1.56 |
| tblVehicleEF | LDT1 | 211.58 | 219.89 |
| tblVehicleEF | LDT1 | 47.05 | 45.35 |
| tblVehicleEF | LDT1 | 0.03 | 0.02 |
| tblVehicleEF | LDT1 | 0.03 | 0.13 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 4.8930e-003 | 2.7130e-003 |
| tblVehicleEF | LDT1 | 0.05 | 0.23 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.02 | 0.09 |
| tblVehicleEF | LDT1 | 2.1170e-003 | 2.1760e-003 |
| tblVehicleEF | LDT1 | 4.7900e-004 | 4.4900e-004 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 7.1370e-003 | 3.9690e-003 |
| tblVehicleEF | LDT1 | 0.05 | 0.23 |
| tblVehicleEF | LDT1 | 0.02 | 0.10 |
| tblVehicleEF | LDT1 | 2.1000e-003 | 9.3200e-004 |
| tblVehicleEF | LDT1 | 1.4080e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.37 | 0.45 |
| tblVehicleEF | LDT1 | 0.47 | 1.28 |
| tblVehicleEF | LDT1 | 220.75 | 227.96 |
| tblVehicleEF | LDT1 | 47.05 | 44.89 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.02 | 0.12 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.04 | 0.05 |
| tblVehicleEF | LDT1 | 5.2060e-003 | 2.8860e-003 |
| tblVehicleEF | LDT1 | 0.04 | 0.21 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 2.2090e-003 | 2.2560e-003 |
| tblVehicleEF | LDT1 | 4.7800e-004 | 4.4400e-004 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.04 | 0.05 |
| tblVehicleEF | LDT1 | 7.5930e-003 | 4.2220e-003 |
| tblVehicleEF | LDT1 | 0.04 | 0.21 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.9350e-003 | 8.4300e-004 |
| tblVehicleEF | LDT1 | 1.7480e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.33 | 0.41 |
| tblVehicleEF | LDT1 | 0.63 | 1.73 |
| tblVehicleEF | LDT1 | 209.84 | 218.36 |
| tblVehicleEF | LDT1 | 47.05 | 45.64 |
| tblVehicleEF | LDT1 | 0.03 | 0.02 |
| tblVehicleEF | LDT1 | 0.03 | 0.14 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.01 | 0.02 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 4.7970e-003 | 2.6600e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.28 |
| tblVehicleEF | LDT1 | 0.02 | 0.10 |
| tblVehicleEF | LDT1 | 2.1000e-003 | 2.1610e-003 |
| tblVehicleEF | LDT1 | 4.8000e-004 | 4.5200e-004 |
| tblVehicleEF | LDT1 | 0.01 | 0.02 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 6.9970e-003 | 3.8920e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.28 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.03 | 0.10 |
| tblVehicleEF | LDT2 | 1.9590e-003 | 1.0310e-003 |
| tblVehicleEF | LDT2 | 1.2530e-003 | 0.03 |
| tblVehicleEF | LDT2 | 0.37 | 0.46 |
| tblVehicleEF | LDT2 | 0.52 | 1.92 |
| tblVehicleEF | LDT2 | 240.17 | 218.56 |
| tblVehicleEF | LDT2 | 52.36 | 45.01 |
| tblVehicleEF | LDT2 | 0.03 | 0.02 |
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.03 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 4.8810e-003 | 3.3840e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.21 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 2.4030e-003 | 2.1620e-003 |
| tblVehicleEF | LDT2 | 5.3100e-004 | 4.4500e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.03 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 7.1100e-003 | 4.8950e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.21 |
| tblVehicleEF | LDT2 | 0.02 | 0.12 |
| tblVehicleEF | LDT2 | 2.0850e-003 | 1.1100e-003 |
| tblVehicleEF | LDT2 | 1.1320e-003 | 0.02 |
| tblVehicleEF | LDT2 | 0.41 | 0.51 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.46 | 1.58 |
| tblVehicleEF | LDT2 | 250.62 | 225.82 |
| tblVehicleEF | LDT2 | 52.36 | 44.44 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 5.1930e-003 | 3.5890e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.19 |
| tblVehicleEF | LDT2 | 0.02 | 0.09 |
| tblVehicleEF | LDT2 | 2.5080e-003 | 2.2340e-003 |
| tblVehicleEF | LDT2 | 5.3000e-004 | 4.4000e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 7.5660e-003 | 5.1960e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.19 |
| tblVehicleEF | LDT2 | 0.02 | 0.10 |
| tblVehicleEF | LDT2 | 1.9200e-003 | 1.0030e-003 |
| tblVehicleEF | LDT2 | 1.3260e-003 | 0.03 |
| tblVehicleEF | LDT2 | 0.37 | 0.46 |
| tblVehicleEF | LDT2 | 0.56 | 2.14 |
| tblVehicleEF | LDT2 | 238.19 | 217.18 |
| tblVehicleEF | LDT2 | 52.36 | 45.37 |
| tblVehicleEF | LDT2 | 0.03 | 0.02 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.03 |
| tblVehicleEF | LDT2 | 4.7850e-003 | 3.3210e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.25 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 2.3830e-003 | 2.1480e-003 |
| tblVehicleEF | LDT2 | 5.3200e-004 | 4.4900e-004 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.03 |
| tblVehicleEF | LDT2 | 6.9710e-003 | 4.8030e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.25 |
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2390e-003 |
| tblVehicleEF | LHD1 | 1.9640e-003 | 1.5690e-003 |
| tblVehicleEF | LHD1 | 4.6510e-003 | 5.7480e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.94 | 0.69 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.88 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.27 | 0.15 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.35 | 0.15 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 8.0400e-004 | 8.0900e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 6.8300e-004 | 6.7600e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.08 | 0.16 |
| tblVehicleEF | LHD1 | 0.06 | 0.03 |
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2100e-004 | 7.8000e-005 |
| tblVehicleEF | LHD1 | 8.0400e-004 | 8.0900e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 6.8300e-004 | 6.7600e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.08 | 0.16 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2480e-003 |
| tblVehicleEF | LHD1 | 1.9790e-003 | 1.5840e-003 |
| tblVehicleEF | LHD1 | 4.4260e-003 | 5.4920e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.88 | 0.65 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.82 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.26 | 0.14 |
| tblVehicleEF | LHD1 | 0.33 | 0.14 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 1.2220e-003 | 1.2390e-003 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 1.0950e-003 | 1.0940e-003 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.07 | 0.15 |
| tblVehicleEF | LHD1 | 0.06 | 0.02 |
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2000e-004 | 7.7000e-005 |
| tblVehicleEF | LHD1 | 1.2220e-003 | 1.2390e-003 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.0950e-003 | 1.0940e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.07 | 0.15 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2320e-003 |
| tblVehicleEF | LHD1 | 1.9550e-003 | 1.5580e-003 |
| tblVehicleEF | LHD1 | 4.8070e-003 | 5.9240e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.98 | 0.71 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.93 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.27 | 0.15 |
| tblVehicleEF | LHD1 | 0.36 | 0.16 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 5.7700e-004 | 5.7500e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 4.9500e-004 | 4.8800e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.08 | 0.18 |
| tblVehicleEF | LHD1 | 0.06 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2200e-004 | 7.8000e-005 |
| tblVehicleEF | LHD1 | 5.7700e-004 | 5.7500e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 4.9500e-004 | 4.8800e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.08 | 0.18 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1760e-003 |
| tblVehicleEF | LHD2 | 1.6160e-003 | 1.7890e-003 |
| tblVehicleEF | LHD2 | 2.1080e-003 | 3.3070e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.82 | 0.42 |
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.59 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.25 |
| tblVehicleEF | LHD2 | 0.19 | 0.10 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 4.1300e-004 | 4.9000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.4900e-004 | 4.2200e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4720e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2500e-004 | 5.5000e-005 |
| tblVehicleEF | LHD2 | 4.1300e-004 | 4.9000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 3.4900e-004 | 4.2200e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.02 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1820e-003 |
| tblVehicleEF | LHD2 | 1.6260e-003 | 1.7980e-003 |
| tblVehicleEF | LHD2 | 2.0870e-003 | 3.1600e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.77 | 0.40 |
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.55 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.24 |
| tblVehicleEF | LHD2 | 0.19 | 0.09 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.5000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.6900e-004 | 6.7900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4730e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2400e-004 | 5.5000e-005 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.5000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 5.6900e-004 | 6.7900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1720e-003 |
| tblVehicleEF | LHD2 | 1.6090e-003 | 1.7830e-003 |
| tblVehicleEF | LHD2 | 2.1220e-003 | 3.4080e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.85 | 0.44 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.61 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.24 |
| tblVehicleEF | LHD2 | 0.19 | 0.10 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |
| tblVehicleEF | LHD2 | 2.9200e-004 | 3.4900e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 2.5100e-004 | 3.0500e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.10 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4720e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2500e-004 | 5.6000e-005 |
| tblVehicleEF | LHD2 | 2.9200e-004 | 3.4900e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 2.5100e-004 | 3.0500e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.10 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.03 | 0.02 |
| tblVehicleEF | MCY | 0.49 | 0.34 |
| tblVehicleEF | MCY | 0.15 | 0.24 |
| tblVehicleEF | MCY | 17.36 | 17.45 |
| tblVehicleEF | MCY | 10.23 | 9.09 |
| tblVehicleEF | MCY | 179.13 | 214.53 |
| tblVehicleEF | MCY | 42.15 | 58.51 |
| tblVehicleEF | MCY | 1.13 | 1.13 |
| tblVehicleEF | MCY | 0.31 | 0.27 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 0.87 | 0.92 |
| tblVehicleEF | MCY | 0.63 | 0.69 |
| tblVehicleEF | MCY | 0.53 | 0.56 |
| tblVehicleEF | MCY | 2.28 | 2.29 |
| tblVehicleEF | MCY | 0.58 | 1.23 |
| tblVehicleEF | MCY | 2.06 | 1.83 |
| tblVehicleEF | MCY | 2.1450e-003 | 2.1230e-003 |
| tblVehicleEF | MCY | 6.4900e-004 | 5.7900e-004 |
| tblVehicleEF | MCY | 0.87 | 0.92 |
| tblVehicleEF | MCY | 0.63 | 0.69 |
| tblVehicleEF | MCY | 0.53 | 0.56 |
| tblVehicleEF | MCY | 2.87 | 2.87 |
| tblVehicleEF | MCY | 0.58 | 1.23 |
| tblVehicleEF | MCY | 2.24 | 2.00 |
| tblVehicleEF | MCY | 0.48 | 0.33 |
| tblVehicleEF | MCY | 0.13 | 0.20 |
| tblVehicleEF | MCY | 16.41 | 16.49 |

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|---|---|---|---|
| tblVehicleEF | MCY | 8.97 | 7.93 |
| tblVehicleEF | MCY | 179.13 | 212.76 |
| tblVehicleEF | MCY | 42.15 | 55.82 |
| tblVehicleEF | MCY | 1.00 | 1.00 |
| tblVehicleEF | MCY | 0.29 | 0.25 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 1.50 | 1.58 |
| tblVehicleEF | MCY | 0.71 | 0.78 |
| tblVehicleEF | MCY | 1.07 | 1.12 |
| tblVehicleEF | MCY | 2.22 | 2.23 |
| tblVehicleEF | MCY | 0.52 | 1.11 |
| tblVehicleEF | MCY | 1.78 | 1.58 |
| tblVehicleEF | MCY | 2.1270e-003 | 2.1050e-003 |
| tblVehicleEF | MCY | 6.2000e-004 | 5.5200e-004 |
| tblVehicleEF | MCY | 1.50 | 1.58 |
| tblVehicleEF | MCY | 0.71 | 0.78 |
| tblVehicleEF | MCY | 1.07 | 1.12 |
| tblVehicleEF | MCY | 2.79 | 2.79 |
| tblVehicleEF | MCY | 0.52 | 1.11 |
| tblVehicleEF | MCY | 1.94 | 1.72 |
| tblVehicleEF | MCY | 0.50 | 0.34 |
| tblVehicleEF | MCY | 0.16 | 0.26 |
| tblVehicleEF | MCY | 18.17 | 18.27 |
| tblVehicleEF | MCY | 11.11 | 9.93 |
| tblVehicleEF | MCY | 179.13 | 216.00 |
| tblVehicleEF | MCY | 42.15 | 60.42 |
| tblVehicleEF | MCY | 1.15 | 1.15 |

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|---|---|---|---|
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 0.56 | 0.60 |
| tblVehicleEF | MCY | 0.75 | 0.82 |
| tblVehicleEF | MCY | 0.32 | 0.34 |
| tblVehicleEF | MCY | 2.33 | 2.34 |
| tblVehicleEF | MCY | 0.72 | 1.53 |
| tblVehicleEF | MCY | 2.24 | 2.01 |
| tblVehicleEF | MCY | 2.1590e-003 | 2.1370e-003 |
| tblVehicleEF | MCY | 6.6900e-004 | 5.9800e-004 |
| tblVehicleEF | MCY | 0.56 | 0.60 |
| tblVehicleEF | MCY | 0.75 | 0.82 |
| tblVehicleEF | MCY | 0.32 | 0.34 |
| tblVehicleEF | MCY | 2.92 | 2.93 |
| tblVehicleEF | MCY | 0.72 | 1.53 |
| tblVehicleEF | MCY | 2.44 | 2.19 |
| tblVehicleEF | MDV | 2.7570e-003 | 1.0960e-003 |
| tblVehicleEF | MDV | 3.0290e-003 | 0.03 |
| tblVehicleEF | MDV | 0.46 | 0.47 |
| tblVehicleEF | MDV | 0.81 | 1.96 |
| tblVehicleEF | MDV | 318.34 | 266.51 |
| tblVehicleEF | MDV | 68.99 | 54.02 |
| tblVehicleEF | MDV | 0.04 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.14 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |

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|---|---|---|---|
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 6.9650e-003 | 3.7440e-003 |
| tblVehicleEF | MDV | 0.05 | 0.24 |
| tblVehicleEF | MDV | 0.04 | 0.12 |
| tblVehicleEF | MDV | 3.1810e-003 | 2.6330e-003 |
| tblVehicleEF | MDV | 7.0300e-004 | 5.3500e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.01 | 5.4110e-003 |
| tblVehicleEF | MDV | 0.05 | 0.24 |
| tblVehicleEF | MDV | 0.04 | 0.13 |
| tblVehicleEF | MDV | 2.9330e-003 | 1.1800e-003 |
| tblVehicleEF | MDV | 2.6720e-003 | 0.03 |
| tblVehicleEF | MDV | 0.50 | 0.51 |
| tblVehicleEF | MDV | 0.70 | 1.62 |
| tblVehicleEF | MDV | 331.77 | 273.67 |
| tblVehicleEF | MDV | 68.99 | 53.43 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.13 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.06 | 0.07 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.07 | 0.09 |

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|---|---|---|---|
| tblVehicleEF | MDV | 7.4000e-003 | 3.9700e-003 |
| tblVehicleEF | MDV | 0.05 | 0.22 |
| tblVehicleEF | MDV | 0.04 | 0.10 |
| tblVehicleEF | MDV | 3.3160e-003 | 2.7040e-003 |
| tblVehicleEF | MDV | 7.0100e-004 | 5.2900e-004 |
| tblVehicleEF | MDV | 0.06 | 0.07 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.01 | 5.7410e-003 |
| tblVehicleEF | MDV | 0.05 | 0.22 |
| tblVehicleEF | MDV | 0.04 | 0.11 |
| tblVehicleEF | MDV | 2.7040e-003 | 1.0670e-003 |
| tblVehicleEF | MDV | 3.2450e-003 | 0.03 |
| tblVehicleEF | MDV | 0.45 | 0.46 |
| tblVehicleEF | MDV | 0.89 | 2.18 |
| tblVehicleEF | MDV | 315.80 | 265.15 |
| tblVehicleEF | MDV | 68.99 | 54.39 |
| tblVehicleEF | MDV | 0.04 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.15 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.02 | 0.03 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.03 | 0.04 |
| tblVehicleEF | MDV | 6.8320e-003 | 3.6750e-003 |
| tblVehicleEF | MDV | 0.06 | 0.29 |
| tblVehicleEF | MDV | 0.04 | 0.13 |
| tblVehicleEF | MDV | 3.1560e-003 | 2.6200e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 7.0400e-004 | 5.3800e-004 |
| tblVehicleEF | MDV | 0.02 | 0.03 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.03 | 0.04 |
| tblVehicleEF | MDV | 9.9180e-003 | 5.3090e-003 |
| tblVehicleEF | MDV | 0.06 | 0.29 |
| tblVehicleEF | MDV | 0.05 | 0.14 |
| tblVehicleEF | MH | 3.8210e-003 | 3.0770e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.18 |
| tblVehicleEF | MH | 3.13 | 1.37 |
| tblVehicleEF | MH | 1,048.97 | 1,194.05 |
| tblVehicleEF | MH | 55.78 | 13.48 |
| tblVehicleEF | MH | 0.61 | 0.91 |
| tblVehicleEF | MH | 0.55 | 0.24 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.31 | 0.26 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.17 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.6510e-003 | 0.24 |
| tblVehicleEF | MH | 0.19 | 0.07 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.1200e-004 | 1.3300e-004 |
| tblVehicleEF | MH | 0.31 | 0.26 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.17 |
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.6510e-003 | 0.24 |
| tblVehicleEF | MH | 0.21 | 0.07 |
| tblVehicleEF | MH | 3.9170e-003 | 3.1350e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.21 | 0.19 |
| tblVehicleEF | MH | 2.90 | 1.27 |
| tblVehicleEF | MH | 1,048.97 | 1,194.05 |
| tblVehicleEF | MH | 55.78 | 13.31 |
| tblVehicleEF | MH | 0.57 | 0.87 |
| tblVehicleEF | MH | 0.52 | 0.23 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.45 | 0.38 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.32 | 0.27 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.5160e-003 | 0.23 |
| tblVehicleEF | MH | 0.18 | 0.06 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.0800e-004 | 1.3200e-004 |
| tblVehicleEF | MH | 0.45 | 0.38 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.32 | 0.27 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.5160e-003 | 0.23 |
| tblVehicleEF | MH | 0.20 | 0.07 |
| tblVehicleEF | MH | 3.7600e-003 | 3.0400e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.18 |
| tblVehicleEF | MH | 3.26 | 1.43 |
| tblVehicleEF | MH | 1,048.97 | 1,194.04 |
| tblVehicleEF | MH | 55.78 | 13.58 |
| tblVehicleEF | MH | 0.61 | 0.91 |
| tblVehicleEF | MH | 0.57 | 0.25 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.23 | 0.19 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 0.14 | 0.12 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.9870e-003 | 0.26 |
| tblVehicleEF | MH | 0.20 | 0.07 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.1500e-004 | 1.3400e-004 |
| tblVehicleEF | MH | 0.23 | 0.19 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 0.14 | 0.12 |
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.9870e-003 | 0.26 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.22 | 0.07 |
| tblVehicleEF | MHD | 0.02 | 2.8830e-003 |
| tblVehicleEF | MHD | 1.5490e-003 | 5.5200e-004 |
| tblVehicleEF | MHD | 0.03 | 6.0840e-003 |
| tblVehicleEF | MHD | 0.30 | 0.34 |
| tblVehicleEF | MHD | 0.16 | 0.08 |
| tblVehicleEF | MHD | 2.51 | 0.56 |
| tblVehicleEF | MHD | 150.61 | 52.96 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.80 |
| tblVehicleEF | MHD | 0.39 | 0.28 |
| tblVehicleEF | MHD | 0.51 | 0.97 |
| tblVehicleEF | MHD | 11.67 | 1.82 |
| tblVehicleEF | MHD | 3.3000e-005 | 7.8000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 3.2000e-005 | 7.4000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 4.6300e-004 | 1.8900e-004 |
| tblVehicleEF | MHD | 0.02 | 9.4290e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 3.9500e-004 | 1.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3660e-003 |
| tblVehicleEF | MHD | 9.8920e-003 | 0.05 |
| tblVehicleEF | MHD | 0.17 | 0.03 |
| tblVehicleEF | MHD | 1.4470e-003 | 5.0200e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3600e-004 | 5.7000e-005 |
| tblVehicleEF | MHD | 4.6300e-004 | 1.8900e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.02 | 9.4290e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.9500e-004 | 1.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 8.6860e-003 |
| tblVehicleEF | MHD | 9.8920e-003 | 0.05 |
| tblVehicleEF | MHD | 0.18 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 2.7520e-003 |
| tblVehicleEF | MHD | 1.5590e-003 | 5.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 5.8070e-003 |
| tblVehicleEF | MHD | 0.22 | 0.30 |
| tblVehicleEF | MHD | 0.16 | 0.08 |
| tblVehicleEF | MHD | 2.35 | 0.52 |
| tblVehicleEF | MHD | 159.53 | 52.45 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.74 |
| tblVehicleEF | MHD | 0.40 | 0.27 |
| tblVehicleEF | MHD | 0.49 | 0.93 |
| tblVehicleEF | MHD | 11.65 | 1.82 |
| tblVehicleEF | MHD | 2.8000e-005 | 6.8000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 2.7000e-005 | 6.5000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 7.1300e-004 | 2.9100e-004 |
| tblVehicleEF | MHD | 0.02 | 9.6390e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 6.4000e-004 | 2.6200e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3930e-003 |
| tblVehicleEF | MHD | 9.3780e-003 | 0.04 |

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| tblVehicleEF | MHD | 0.16 | 0.03 |
| tblVehicleEF | MHD | 1.5310e-003 | 4.9800e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3400e-004 | 5.7000e-005 |
| tblVehicleEF | MHD | 7.1300e-004 | 2.9100e-004 |
| tblVehicleEF | MHD | 0.02 | 9.6390e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 6.4000e-004 | 2.6200e-004 |
| tblVehicleEF | MHD | 0.03 | 8.7250e-003 |
| tblVehicleEF | MHD | 9.3780e-003 | 0.04 |
| tblVehicleEF | MHD | 0.18 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 3.0710e-003 |
| tblVehicleEF | MHD | 1.5430e-003 | 5.4600e-004 |
| tblVehicleEF | MHD | 0.03 | 6.2650e-003 |
| tblVehicleEF | MHD | 0.42 | 0.39 |
| tblVehicleEF | MHD | 0.15 | 0.08 |
| tblVehicleEF | MHD | 2.63 | 0.59 |
| tblVehicleEF | MHD | 138.28 | 53.66 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.85 |
| tblVehicleEF | MHD | 0.37 | 0.30 |
| tblVehicleEF | MHD | 0.50 | 0.96 |
| tblVehicleEF | MHD | 11.68 | 1.82 |
| tblVehicleEF | MHD | 4.1000e-005 | 9.0000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 3.9000e-005 | 8.6000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 3.2800e-004 | 1.3400e-004 |

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| tblVehicleEF | MHD | 0.02 | 9.7090e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3490e-003 |
| tblVehicleEF | MHD | 0.01 | 0.05 |
| tblVehicleEF | MHD | 0.17 | 0.03 |
| tblVehicleEF | MHD | 1.3310e-003 | 5.0900e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3800e-004 | 5.8000e-005 |
| tblVehicleEF | MHD | 3.2800e-004 | 1.3400e-004 |
| tblVehicleEF | MHD | 0.02 | 9.7090e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 2.8400e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 0.03 | 8.6610e-003 |
| tblVehicleEF | MHD | 0.01 | 0.05 |
| tblVehicleEF | MHD | 0.19 | 0.03 |
| tblVehicleEF | OBUS | 0.01 | 8.2890e-003 |
| tblVehicleEF | OBUS | 3.2290e-003 | 2.2180e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.42 |
| tblVehicleEF | OBUS | 0.20 | 0.24 |
| tblVehicleEF | OBUS | 4.06 | 2.10 |
| tblVehicleEF | OBUS | 43.59 | 46.75 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.05 |
| tblVehicleEF | OBUS | 68.94 | 17.45 |
| tblVehicleEF | OBUS | 0.07 | 0.18 |
| tblVehicleEF | OBUS | 0.29 | 0.78 |
| tblVehicleEF | OBUS | 1.36 | 0.71 |
| tblVehicleEF | OBUS | 6.0000e-006 | 5.9000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 5.6000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 1.1870e-003 | 1.5040e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 7.5500e-004 | 9.7900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.07 | 0.28 |
| tblVehicleEF | OBUS | 0.27 | 0.10 |
| tblVehicleEF | OBUS | 4.2800e-004 | 4.4700e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.6100e-004 | 1.7300e-004 |
| tblVehicleEF | OBUS | 1.1870e-003 | 1.5040e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.06 |
| tblVehicleEF | OBUS | 7.5500e-004 | 9.7900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.28 |
| tblVehicleEF | OBUS | 0.29 | 0.11 |
| tblVehicleEF | OBUS | 0.01 | 8.3520e-003 |
| tblVehicleEF | OBUS | 3.3050e-003 | 2.2820e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.42 |
| tblVehicleEF | OBUS | 0.21 | 0.24 |
| tblVehicleEF | OBUS | 3.77 | 1.95 |
| tblVehicleEF | OBUS | 45.18 | 46.28 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.06 |
| tblVehicleEF | OBUS | 68.94 | 17.19 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.07 | 0.18 |
| tblVehicleEF | OBUS | 0.27 | 0.75 |
| tblVehicleEF | OBUS | 1.32 | 0.70 |
| tblVehicleEF | OBUS | 5.0000e-006 | 5.2000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 5.0000e-006 | 5.0000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 1.7750e-003 | 2.2170e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.2420e-003 | 1.5850e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.07 | 0.27 |
| tblVehicleEF | OBUS | 0.25 | 0.10 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.5600e-004 | 1.7000e-004 |
| tblVehicleEF | OBUS | 1.7750e-003 | 2.2170e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.06 |
| tblVehicleEF | OBUS | 1.2420e-003 | 1.5850e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.27 |
| tblVehicleEF | OBUS | 0.28 | 0.11 |
| tblVehicleEF | OBUS | 0.01 | 8.2270e-003 |
| tblVehicleEF | OBUS | 3.1810e-003 | 2.1770e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.43 |
| tblVehicleEF | OBUS | 0.20 | 0.24 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 4.24 | 2.19 |
| tblVehicleEF | OBUS | 41.40 | 47.40 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.04 |
| tblVehicleEF | OBUS | 68.94 | 17.60 |
| tblVehicleEF | OBUS | 0.07 | 0.20 |
| tblVehicleEF | OBUS | 0.29 | 0.78 |
| tblVehicleEF | OBUS | 1.39 | 0.72 |
| tblVehicleEF | OBUS | 8.0000e-006 | 6.8000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 6.5000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 8.6300e-004 | 1.1090e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 5.4200e-004 | 7.0600e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.08 | 0.31 |
| tblVehicleEF | OBUS | 0.28 | 0.11 |
| tblVehicleEF | OBUS | 4.0700e-004 | 4.5300e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.6400e-004 | 1.7400e-004 |
| tblVehicleEF | OBUS | 8.6300e-004 | 1.1090e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 5.4200e-004 | 7.0600e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.08 | 0.31 |
| tblVehicleEF | OBUS | 0.30 | 0.12 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.8160e-003 | 2.4300e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 11.42 | 4.79 |
| tblVehicleEF | SBUS | 0.25 | 0.21 |
| tblVehicleEF | SBUS | 8.29 | 1.36 |
| tblVehicleEF | SBUS | 857.10 | 318.22 |
| tblVehicleEF | SBUS | 921.11 | 858.97 |
| tblVehicleEF | SBUS | 78.99 | 7.91 |
| tblVehicleEF | SBUS | 1.43 | 1.36 |
| tblVehicleEF | SBUS | 0.70 | 1.37 |
| tblVehicleEF | SBUS | 7.58 | 1.58 |
| tblVehicleEF | SBUS | 1.0400e-004 | 3.8300e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |
| tblVehicleEF | SBUS | 1.0000e-004 | 3.6600e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 4.7400e-003 | 1.4160e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |
| tblVehicleEF | SBUS | 3.0690e-003 | 9.1700e-004 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.03 | 0.09 |
| tblVehicleEF | SBUS | 0.46 | 0.06 |
| tblVehicleEF | SBUS | 8.5860e-003 | 3.0550e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.3400e-004 | 7.8000e-005 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 4.7400e-003 | 1.4160e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 3.0690e-003 | 9.1700e-004 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.03 | 0.09 |
| tblVehicleEF | SBUS | 0.51 | 0.06 |
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.8920e-003 | 2.4680e-003 |
| tblVehicleEF | SBUS | 0.04 | 8.8700e-003 |
| tblVehicleEF | SBUS | 11.40 | 4.78 |
| tblVehicleEF | SBUS | 0.26 | 0.21 |
| tblVehicleEF | SBUS | 6.45 | 1.06 |
| tblVehicleEF | SBUS | 884.88 | 317.96 |
| tblVehicleEF | SBUS | 921.11 | 858.98 |
| tblVehicleEF | SBUS | 78.99 | 7.41 |
| tblVehicleEF | SBUS | 1.47 | 1.32 |
| tblVehicleEF | SBUS | 0.67 | 1.31 |
| tblVehicleEF | SBUS | 7.54 | 1.57 |
| tblVehicleEF | SBUS | 8.8000e-005 | 3.3500e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |
| tblVehicleEF | SBUS | 8.4000e-005 | 3.2000e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 7.0540e-003 | 2.1070e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 5.0000e-003 | 1.4940e-003 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.03 | 0.08 |
| tblVehicleEF | SBUS | 0.40 | 0.05 |
| tblVehicleEF | SBUS | 8.8500e-003 | 3.0520e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.0300e-004 | 7.3000e-005 |
| tblVehicleEF | SBUS | 7.0540e-003 | 2.1070e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 5.0000e-003 | 1.4940e-003 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.03 | 0.08 |
| tblVehicleEF | SBUS | 0.44 | 0.06 |
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.7710e-003 | 2.4070e-003 |
| tblVehicleEF | SBUS | 0.06 | 0.01 |
| tblVehicleEF | SBUS | 11.45 | 4.82 |
| tblVehicleEF | SBUS | 0.25 | 0.20 |
| tblVehicleEF | SBUS | 9.30 | 1.52 |
| tblVehicleEF | SBUS | 818.74 | 318.57 |
| tblVehicleEF | SBUS | 921.11 | 858.97 |
| tblVehicleEF | SBUS | 78.99 | 8.19 |
| tblVehicleEF | SBUS | 1.37 | 1.40 |
| tblVehicleEF | SBUS | 0.70 | 1.36 |
| tblVehicleEF | SBUS | 7.60 | 1.58 |
| tblVehicleEF | SBUS | 1.2700e-004 | 4.4900e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 1.2100e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 3.4590e-003 | 1.0330e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |
| tblVehicleEF | SBUS | 2.2090e-003 | 6.6000e-004 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.04 | 0.12 |
| tblVehicleEF | SBUS | 0.49 | 0.06 |
| tblVehicleEF | SBUS | 8.2200e-003 | 3.0580e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.5100e-004 | 8.1000e-005 |
| tblVehicleEF | SBUS | 3.4590e-003 | 1.0330e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 2.2090e-003 | 6.6000e-004 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.04 | 0.12 |
| tblVehicleEF | SBUS | 0.54 | 0.07 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 4.23 | 28.76 |
| tblVehicleEF | UBUS | 8.00 | 1.69 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.58 |
| tblVehicleEF | UBUS | 144.80 | 16.08 |
| tblVehicleEF | UBUS | 0.68 | 0.33 |
| tblVehicleEF | UBUS | 11.82 | 0.17 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 2.8730e-003 | 7.2500e-004 |
| tblVehicleEF | UBUS | 0.05 | 9.5970e-003 |
| tblVehicleEF | UBUS | 2.5790e-003 | 5.8800e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.75 | 0.09 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.5960e-003 | 1.5900e-004 |
| tblVehicleEF | UBUS | 2.8730e-003 | 7.2500e-004 |
| tblVehicleEF | UBUS | 0.05 | 9.5970e-003 |
| tblVehicleEF | UBUS | 2.5790e-003 | 5.8800e-004 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.82 | 0.10 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 4.24 | 28.77 |
| tblVehicleEF | UBUS | 6.76 | 1.43 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.59 |
| tblVehicleEF | UBUS | 144.80 | 15.64 |
| tblVehicleEF | UBUS | 0.64 | 0.33 |
| tblVehicleEF | UBUS | 11.74 | 0.16 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 3.9960e-003 | 1.0930e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 4.2740e-003 | 1.0210e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.68 | 0.08 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.5740e-003 | 1.5500e-004 |
| tblVehicleEF | UBUS | 3.9960e-003 | 1.0930e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 4.2740e-003 | 1.0210e-003 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.74 | 0.09 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 4.23 | 28.76 |
| tblVehicleEF | UBUS | 8.84 | 1.86 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.58 |
| tblVehicleEF | UBUS | 144.80 | 16.36 |
| tblVehicleEF | UBUS | 0.68 | 0.33 |
| tblVehicleEF | UBUS | 11.87 | 0.17 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 2.1960e-003 | 5.2300e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 1.8270e-003 | 4.0800e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.06 |
| tblVehicleEF | UBUS | 0.79 | 0.09 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.6100e-003 | 1.6200e-004 |
| tblVehicleEF | UBUS | 2.1960e-003 | 5.2300e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 1.8270e-003 | 4.0800e-004 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.06 |
| tblVehicleEF | UBUS | 0.87 | 0.10 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |
| tblWater | IndoorWaterUseRate | 176,725,875.00 | 141,380,700.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 0.00 |

## 2.0 Emissions Summary

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 21.2137 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| 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 | 2.9498 | 5.1505 | 28.9905 | 0.0874 | 12.5943 | 0.0512 | 12.6455 | 3.3635 | 0.0480 | 3.4115 | | 9,010.2854 | 9,010.2854 | 0.4381 | | 9,021.2389 |
| **Total** | **24.1635** | **5.1512** | **29.0681** | **0.0874** | **12.5943** | **0.0514** | **12.6458** | **3.3635** | **0.0483** | **3.4118** | | **9,010.4526** | **9,010.4526** | **0.4386** | **0.0000** | **9,021.4170** |

**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 | 21.2137 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| 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 | 2.9498 | 5.1505 | 28.9905 | 0.0874 | 12.5943 | 0.0512 | 12.6455 | 3.3635 | 0.0480 | 3.4115 | | 9,010.2854 | 9,010.2854 | 0.4381 | | 9,021.2389 |
| **Total** | **24.1635** | **5.1512** | **29.0681** | **0.0874** | **12.5943** | **0.0514** | **12.6458** | **3.3635** | **0.0483** | **3.4118** | | **9,010.4526** | **9,010.4526** | **0.4386** | **0.0000** | **9,021.4170** |

| | **ROG** | **NOx** | **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** |

# 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 | 2.9498 | 5.1505 | 28.9905 | 0.0874 | 12.5943 | 0.0512 | 12.6455 | 3.3635 | 0.0480 | 3.4115 | | 9,010.285 4 | 9,010.2854 | 0.4381 | | 9,021.238 9 |
| Unmitigated | 2.9498 | 5.1505 | 28.9905 | 0.0874 | 12.5943 | 0.0512 | 12.6455 | 3.3635 | 0.0480 | 3.4115 | | 9,010.285 4 | 9,010.2854 | 0.4381 | | 9,021.238 9 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 2,919.32 | 2,919.32 | 2919.32 | 5,948,617 | 5,948,617 |
| Total | 2,919.32 | 2,919.32 | 2,919.32 | 5,948,617 | 5,948,617 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.597756 | 0.058527 | 0.164080 | 0.102133 | 0.023632 | 0.006965 | 0.021753 | 0.018456 | 0.000741 | 0.000967 | 0.003489 | 0.000549 | 0.000951 |

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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

| | ROG | NOx | CO | SO2 | Fugitive 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 | 21.2137 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| Unmitigated | 21.2137 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |

## 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 | 4.8523 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 16.3543 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 7.0900e-003 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| **Total** | **21.2137** | **7.0000e-004** | **0.0775** | **1.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | | **0.1673** | **0.1673** | **4.3000e-004** | | **0.1780** |

**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 | 4.8523 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 16.3543 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 7.0900e-003 | 7.0000e-004 | 0.0775 | 1.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | | 0.1673 | 0.1673 | 4.3000e-004 | | 0.1780 |
| **Total** | **21.2137** | **7.0000e-004** | **0.0775** | **1.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | | **0.1673** | **0.1673** | **4.3000e-004** | | **0.1780** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

## 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

# Air Quality Analysis

## Conejo Summit Project

### 6. EMFAC 2017

# Conejo Summit Project

## Total On-Road Emissions

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Idling per Day (minutes) |
|---|---|---|---|---|---|
| | 260 | Max construction days per year | | | |
| Phase 1 & 2 Grading | 2021 | | | | |
| Total Haul Trips | 2835 | | | | |
| Hauling | 50 | 129 | 10 | 0.04 | 15 |
| Vendor | 2 | 129 | 10 | 7.3 | 15 |
| Worker | 30 | 129 | 10 | 10.8 | 0 |
| Phase 3,4&7 Grading | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 0 | 78 | 10 | 0.04 | 15 |
| Vendor | 4 | 78 | 10 | 7.3 | 15 |
| Worker | 36 | 78 | 10 | 10.8 | 0 |
| Phase 5&6 Grading | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 0 | 105 | 10 | 0.04 | 15 |
| Vendor | 2 | 105 | 10 | 7.3 | 15 |
| Worker | 30 | 105 | 10 | 10.8 | 0 |
| Phase 1 BC | 2021 | | | | |
| Total Haul Trips | | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 15 |
| Vendor | 8 | 286 | 10 | 7.3 | 15 |
| Worker | 56 | 286 | 10 | 10.8 | 0 |
| Phase 2 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 15 |
| Vendor | 8 | 286 | 10 | 7.3 | 15 |
| Worker | 60 | 286 | 10 | 10.8 | 0 |
| Phase 3 BC | 2021 | | | | |
| Total Haul Trips | | | | | |
| Hauling | 2 | 208 | 10 | 0.04 | 15 |
| Vendor | 4 | 208 | 10 | 7.3 | 15 |
| Worker | 20 | 208 | 10 | 10.8 | 0 |
| Phase 4 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 235 | 10 | 0.04 | 15 |
| Vendor | 4 | 235 | 10 | 7.3 | 15 |
| Worker | 24 | 235 | 10 | 10.8 | 0 |
| Phase 5 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 263 | 10 | 0.04 | 15 |
| Vendor | 6 | 263 | 10 | 7.3 | 15 |
| Worker | 52 | 263 | 10 | 10.8 | 0 |
| Phase 6 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 4 | 259 | 10 | 0.04 | 15 |
| Vendor | 8 | 259 | 10 | 7.3 | 15 |
| Worker | 54 | 259 | 10 | 10.8 | 0 |
| Phase 7 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 261 | 10 | 0.04 | 15 |
| Vendor | 8 | 261 | 10 | 7.3 | 15 |
| Worker | 54 | 261 | 10 | 10.8 | 0 |

# Conejo Summit Project

## Total On-Road Emissions

| Construction Phase | Regional Emissions (pounds/day) | | | | | | | | | | (MT/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ROG | NOX | CO | SO2 | PM10 Dust | PM10 Exh | Total PM10 | PM2.5 Dust | PM2.5 Exh | Total PM2.5 | Total CO2e |
| Phase 1 & 2 Grading | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.27 | 3.86 | 3.55 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 42.19 |
| Vendor | 0.01 | 0.19 | 0.10 | 0.00 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | 0.01 | 3.35 |
| Worker | 0.01 | 0.06 | 0.70 | 0.00 | 0.25 | 0.00 | 0.25 | 0.07 | 0.00 | 0.07 | 12.50 |
| Phase 3,4&7 Grading | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.02 | 0.37 | 0.19 | 0.00 | 0.03 | 0.00 | 0.03 | 0.01 | 0.00 | 0.01 | 4.06 |
| Worker | 0.02 | 0.07 | 0.84 | 0.00 | 0.30 | 0.00 | 0.30 | 0.08 | 0.00 | 0.08 | 9.07 |
| Phase 5&6 Grading | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.01 | 0.19 | 0.10 | 0.00 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | 0.01 | 2.73 |
| Worker | 0.01 | 0.06 | 0.70 | 0.00 | 0.25 | 0.00 | 0.25 | 0.07 | 0.00 | 0.07 | 10.18 |
| Phase 1 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.02 | 0.31 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.48 |
| Vendor | 0.04 | 0.74 | 0.39 | 0.00 | 0.05 | 0.01 | 0.06 | 0.02 | 0.01 | 0.02 | 29.74 |
| Worker | 0.03 | 0.11 | 1.31 | 0.00 | 0.46 | 0.00 | 0.46 | 0.12 | 0.00 | 0.12 | 51.74 |
| Phase 2 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.02 | 0.31 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.48 |
| Vendor | 0.04 | 0.74 | 0.39 | 0.00 | 0.05 | 0.01 | 0.06 | 0.02 | 0.01 | 0.02 | 29.74 |
| Worker | 0.03 | 0.12 | 1.40 | 0.00 | 0.49 | 0.00 | 0.49 | 0.13 | 0.00 | 0.13 | 55.43 |
| Phase 3 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.01 | 0.15 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.72 |
| Vendor | 0.02 | 0.37 | 0.19 | 0.00 | 0.03 | 0.00 | 0.03 | 0.01 | 0.00 | 0.01 | 10.82 |
| Worker | 0.01 | 0.04 | 0.47 | 0.00 | 0.16 | 0.00 | 0.16 | 0.04 | 0.00 | 0.04 | 13.44 |
| Phase 4 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.01 | 0.15 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.07 |
| Vendor | 0.02 | 0.37 | 0.19 | 0.00 | 0.03 | 0.00 | 0.03 | 0.01 | 0.00 | 0.01 | 12.22 |
| Worker | 0.01 | 0.05 | 0.56 | 0.00 | 0.20 | 0.00 | 0.20 | 0.05 | 0.00 | 0.05 | 18.22 |
| Phase 5 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.01 | 0.15 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.44 |
| Vendor | 0.03 | 0.56 | 0.29 | 0.00 | 0.04 | 0.01 | 0.05 | 0.01 | 0.01 | 0.02 | 20.51 |
| Worker | 0.02 | 0.10 | 1.22 | 0.00 | 0.43 | 0.00 | 0.43 | 0.11 | 0.00 | 0.12 | 44.18 |
| Phase 6 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.02 | 0.31 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.78 |
| Vendor | 0.04 | 0.74 | 0.39 | 0.00 | 0.05 | 0.01 | 0.06 | 0.02 | 0.01 | 0.02 | 26.94 |
| Worker | 0.03 | 0.10 | 1.26 | 0.00 | 0.44 | 0.00 | 0.45 | 0.12 | 0.00 | 0.12 | 45.18 |
| Phase 7 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.01 | 0.15 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.41 |
| Vendor | 0.04 | 0.74 | 0.39 | 0.00 | 0.05 | 0.01 | 0.06 | 0.02 | 0.01 | 0.02 | 27.14 |
| Worker | 0.03 | 0.10 | 1.26 | 0.00 | 0.44 | 0.00 | 0.45 | 0.12 | 0.00 | 0.12 | 45.53 |

# Conejo Summit Project

## Total On-Road Emissions

260 Max construction days per year

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Idling per Day (minutes) |
|---|---|---|---|---|---|
| Phase 1 & 2 Grading | 2021 | | | | |
| Total Haul Trips | 2835 | | | | |
| Hauling | 50 | 129 | 10 | 0.04 | 15 |
| Vendor | 2 | 129 | 10 | 7.3 | 15 |
| Worker | 30 | 129 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 3,4&7 Grading | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 0 | 78 | 10 | 0.04 | 15 |
| Vendor | 4 | 78 | 10 | 7.3 | 15 |
| Worker | 36 | 78 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 5&6 Grading | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 0 | 105 | 10 | 0.04 | 15 |
| Vendor | 2 | 105 | 10 | 7.3 | 15 |
| Worker | 30 | 105 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 1 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 15 |
| Vendor | 8 | 286 | 10 | 7.3 | 15 |
| Worker | 56 | 286 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 2 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 15 |
| Vendor | 8 | 286 | 10 | 7.3 | 15 |
| Worker | 60 | 286 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 3 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 208 | 10 | 0.04 | 15 |
| Vendor | 4 | 208 | 10 | 7.3 | 15 |
| Worker | 20 | 208 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 4 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 235 | 10 | 0.04 | 15 |
| Vendor | 4 | 235 | 10 | 7.3 | 15 |
| Worker | 24 | 235 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 5 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 263 | 10 | 0.04 | 15 |
| Vendor | 6 | 263 | 10 | 7.3 | 15 |
| Worker | 52 | 263 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 6 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 4 | 259 | 10 | 0.04 | 15 |
| Vendor | 8 | 259 | 10 | 7.3 | 15 |
| Worker | 54 | 259 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 7 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 261 | 10 | 0.04 | 15 |
| Vendor | 8 | 261 | 10 | 7.3 | 15 |
| Worker | 54 | 261 | 10 | 10.8 | 0 |

# Conejo Summit Project

## Total On-Road Emissions

| Construction Phase | Regional Emissions (Tons/year) | | | | | | | | | | (MT/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ROG | NOX | CO | SO2 | PM10 Dust | PM10 Exh | Total PM10 | PM2.5 Dust | PM2.5 Exh | Total PM2.5 | Total CO2e |
| Phase 1 & 2 Grading | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.02 | 0.25 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 42.19 |
| Vendor | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.35 |
| Worker | 0.00 | 0.00 | 0.05 | 0.00 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 12.50 |
| Phase 3,4&7 Grading | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.06 |
| Worker | 0.00 | 0.00 | 0.03 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 9.07 |
| Phase 5&6 Grading | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.73 |
| Worker | 0.00 | 0.00 | 0.04 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 10.18 |
| Phase 1 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.48 |
| Vendor | 0.00 | 0.10 | 0.05 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 29.74 |
| Worker | 0.00 | 0.01 | 0.17 | 0.00 | 0.06 | 0.00 | 0.06 | 0.02 | 0.00 | 0.02 | 51.74 |
| Phase 2 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.48 |
| Vendor | 0.00 | 0.10 | 0.05 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 29.74 |
| Worker | 0.00 | 0.02 | 0.18 | 0.00 | 0.06 | 0.00 | 0.06 | 0.02 | 0.00 | 0.02 | 55.43 |
| Phase 3 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.72 |
| Vendor | 0.00 | 0.04 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.82 |
| Worker | 0.00 | 0.00 | 0.05 | 0.00 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 13.44 |
| Phase 4 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.07 |
| Vendor | 0.00 | 0.04 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 12.22 |
| Worker | 0.00 | 0.01 | 0.07 | 0.00 | 0.02 | 0.00 | 0.02 | 0.01 | 0.00 | 0.01 | 18.22 |
| Phase 5 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.44 |
| Vendor | 0.00 | 0.07 | 0.04 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 20.51 |
| Worker | 0.00 | 0.01 | 0.16 | 0.00 | 0.06 | 0.00 | 0.06 | 0.01 | 0.00 | 0.01 | 44.18 |
| Phase 6 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.78 |
| Vendor | 0.00 | 0.10 | 0.05 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 26.94 |
| Worker | 0.00 | 0.01 | 0.16 | 0.00 | 0.06 | 0.00 | 0.06 | 0.02 | 0.00 | 0.02 | 45.18 |
| Phase 7 BC | | | | | | | | | | | |
| Total Haul Trips | | | | | | | | | | | |
| Hauling | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.41 |
| Vendor | 0.00 | 0.10 | 0.05 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 27.14 |
| Worker | 0.00 | 0.01 | 0.16 | 0.00 | 0.06 | 0.00 | 0.06 | 0.02 | 0.00 | 0.02 | 45.53 |

## Conejo Summit Project
### Running Emissions

| | | Running Emissions Factor (grams/mile) | | | | | |
|---|---|---|---|---|---|---|---|
| | | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| 2021Hauling | Hauling | 0.10530007 | 3.84446215 | 0.67680966 | 0.01338517 | 0.05591994 | 0.05350083 |
| 2021Vendor | Vendor | 0.10981432 | 3.09688622 | 0.63332846 | 0.01153464 | 0.06323496 | 0.06049747 |
| 2021Worker | Worker | 0.01953065 | 0.08103036 | 0.98194378 | 0.00293769 | 0.00187996 | 0.00173171 |
| 2023Hauling | Hauling | 0.02304013 | 2.416927422 | 0.46183336 | 0.01223691 | 0.01977011 | 0.01891484 |
| 2023Vendor | Vendor | 0.0173588 | 1.71565449 | 0.32490623 | 0.0106429 | 0.01356257 | 0.01297394 |
| 2023Worker | Worker | 0.01474457 | 0.062195905 | 0.8172741 | 0.00275657 | 0.00166945 | 0.0015375 |
| 2027Hauling | Hauling | 0.02149125 | 2.245896671 | 0.53389942 | 0.0111459 | 0.01946429 | 0.01862224 |
| 2027Vendor | Vendor | 0.01530049 | 1.625928711 | 0.32732475 | 0.00982302 | 0.01350232 | 0.01291623 |
| 2027Worker | Worker | 0.00891143 | 0.039979987 | 0.6172106 | 0.00242553 | 0.0013586 | 0.00125055 |
| 2040Hauling | Hauling | 0.01873266 | 1.91859501 | 0.64956455 | 0.0089039 | 0.01779462 | 0.01702479 |
| 2040Vendor | Vendor | 0.01304957 | 1.443538306 | 0.3647668 | 0.0081699 | 0.01258715 | 0.01204051 |
| 2040Worker | Worker | 0.00248234 | 0.018151744 | 0.40611795 | 0.00198625 | 0.00063884 | 0.00058801 |
| | GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase 1 & 2 Grading | 2021 | | | | | | | | | |
| Total Haul Trips | 2835 | | | | | | | | | |
| Hauling | 50 | 129 | 10 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 2 | 129 | 10 | 7.3 | 0.00 | 0.10 | 0.02 | 0.00 | 0.00 | 0.00 |
| Worker | 30 | 129 | 10 | 10.8 | 0.01 | 0.06 | 0.70 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| Phase 3,4&7 Grading | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 0 | 78 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 78 | 10 | 7.3 | 0.01 | 0.20 | 0.04 | 0.00 | 0.00 | 0.00 |
| Worker | 36 | 78 | 10 | 10.8 | 0.02 | 0.07 | 0.84 | 0.00 | 0.00 | 0.00 |

# Conejo Summit Project
## Running Emissions

| | Running Emissions Factor (grams/mile) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| 2021Hauling Hauling | 0.10530007 | 3.84446215 | 0.67680966 | 0.01338517 | 0.05591994 | 0.05350083 |
| 2021Vendor Vendor | 0.10981432 | 3.09688622 | 0.63332846 | 0.01153464 | 0.06323496 | 0.06049747 |
| 2021Worker Worker | 0.01953065 | 0.08103036 | 0.98194378 | 0.00293769 | 0.00187996 | 0.00173171 |
| 2023Hauling Hauling | 0.02304013 | 2.416927422 | 0.46183336 | 0.01223691 | 0.01977011 | 0.01891484 |
| 2023Vendor Vendor | 0.0173588 | 1.71565449 | 0.32490623 | 0.0106429 | 0.01356257 | 0.01297394 |
| 2023Worker Worker | 0.01474457 | 0.062195905 | 0.8172741 | 0.00275657 | 0.00166945 | 0.0015375 |
| 2027Hauling Hauling | 0.02149125 | 2.245896671 | 0.53389942 | 0.0111459 | 0.01946429 | 0.01862224 |
| 2027Vendor Vendor | 0.01530049 | 1.625928711 | 0.32732475 | 0.00982302 | 0.01350232 | 0.01291623 |
| 2027Worker Worker | 0.00891143 | 0.039979987 | 0.6172106 | 0.00242553 | 0.0013586 | 0.00125055 |
| 2040Hauling Hauling | 0.01873266 | 1.91859501 | 0.64956455 | 0.0089039 | 0.01779462 | 0.01702479 |
| 2040Vendor Vendor | 0.01304957 | 1.443538306 | 0.3647668 | 0.0081699 | 0.01258715 | 0.01204051 |
| 2040Worker Worker | 0.00248234 | 0.018151744 | 0.40611795 | 0.00198625 | 0.00063884 | 0.00058801 |
| GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase 5&6 Grading | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 0 | 105 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 2 | 105 | 10 | 7.3 | 0.00 | 0.10 | 0.02 | 0.00 | 0.00 | 0.00 |
| Worker | 30 | 105 | 10 | 10.8 | 0.01 | 0.06 | 0.70 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| Phase 1 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 286 | 10 | 7.3 | 0.01 | 0.40 | 0.08 | 0.00 | 0.01 | 0.01 |
| Worker | 56 | 286 | 10 | 10.8 | 0.03 | 0.11 | 1.31 | 0.00 | 0.00 | 0.00 |

# Conejo Summit Project
## Running Emissions

| | | Running Emissions Factor (grams/mile) | | | | | |
|---|---|---|---|---|---|---|---|
| | | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| 2021Hauling | Hauling | 0.10530007 | 3.84446215 | 0.67680966 | 0.01338517 | 0.05591994 | 0.05350083 |
| 2021Vendor | Vendor | 0.10981432 | 3.09688622 | 0.63332846 | 0.01153464 | 0.06323496 | 0.06049747 |
| 2021Worker | Worker | 0.01953065 | 0.08103036 | 0.98194378 | 0.00293769 | 0.00187996 | 0.00173171 |
| 2023Hauling | Hauling | 0.02304013 | 2.416927422 | 0.46183336 | 0.01223691 | 0.01977011 | 0.01891484 |
| 2023Vendor | Vendor | 0.0173588 | 1.71565449 | 0.32490623 | 0.0106429 | 0.01356257 | 0.01297394 |
| 2023Worker | Worker | 0.01474457 | 0.062195905 | 0.8172741 | 0.00275657 | 0.00166945 | 0.0015375 |
| 2027Hauling | Hauling | 0.02149125 | 2.245896671 | 0.53389942 | 0.0111459 | 0.01946429 | 0.01862224 |
| 2027Vendor | Vendor | 0.01530049 | 1.625928711 | 0.32732475 | 0.00982302 | 0.01350232 | 0.01291623 |
| 2027Worker | Worker | 0.00891143 | 0.039979987 | 0.6172106 | 0.00242553 | 0.0013586 | 0.00125055 |
| 2040Hauling | Hauling | 0.01873266 | 1.91859501 | 0.64956455 | 0.0089039 | 0.01779462 | 0.01702479 |
| 2040Vendor | Vendor | 0.01304957 | 1.443538306 | 0.3647668 | 0.0081699 | 0.01258715 | 0.01204051 |
| 2040Worker | Worker | 0.00248234 | 0.018151744 | 0.40611795 | 0.00198625 | 0.00063884 | 0.00058801 |
| | GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase 2 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 286 | 10 | 7.3 | 0.01 | 0.40 | 0.08 | 0.00 | 0.01 | 0.01 |
| Worker | 60 | 286 | 10 | 10.8 | 0.03 | 0.12 | 1.40 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| Phase 3 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 208 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 208 | 10 | 7.3 | 0.01 | 0.20 | 0.04 | 0.00 | 0.00 | 0.00 |
| Worker | 20 | 208 | 10 | 10.8 | 0.01 | 0.04 | 0.47 | 0.00 | 0.00 | 0.00 |

## Conejo Summit Project
### Running Emissions

| | | Running Emissions Factor (grams/mile) | | | | | |
|---|---|---|---|---|---|---|---|
| | | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| 2021Hauling | Hauling | 0.10530007 | 3.84446215 | 0.67680966 | 0.01338517 | 0.05591994 | 0.05350083 |
| 2021Vendor | Vendor | 0.10981432 | 3.09688622 | 0.63332846 | 0.01153464 | 0.06323496 | 0.06049747 |
| 2021Worker | Worker | 0.01953065 | 0.08103036 | 0.98194378 | 0.00293769 | 0.00187996 | 0.00173171 |
| 2023Hauling | Hauling | 0.02304013 | 2.416927422 | 0.46183336 | 0.01223691 | 0.01977011 | 0.01891484 |
| 2023Vendor | Vendor | 0.0173588 | 1.71565449 | 0.32490623 | 0.0106429 | 0.01356257 | 0.01297394 |
| 2023Worker | Worker | 0.01474457 | 0.062195905 | 0.8172741 | 0.00275657 | 0.00166945 | 0.0015375 |
| 2027Hauling | Hauling | 0.02149125 | 2.245896671 | 0.53389942 | 0.0111459 | 0.01946429 | 0.01862224 |
| 2027Vendor | Vendor | 0.01530049 | 1.625928711 | 0.32732475 | 0.00982302 | 0.01350232 | 0.01291623 |
| 2027Worker | Worker | 0.00891143 | 0.039979987 | 0.6172106 | 0.00242553 | 0.0013586 | 0.00125055 |
| 2040Hauling | Hauling | 0.01873266 | 1.91859501 | 0.64956455 | 0.0089039 | 0.01779462 | 0.01702479 |
| 2040Vendor | Vendor | 0.01304957 | 1.443538306 | 0.3647668 | 0.0081699 | 0.01258715 | 0.01204051 |
| 2040Worker | Worker | 0.00248234 | 0.018151744 | 0.40611795 | 0.00198625 | 0.00063884 | 0.00058801 |
| | GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase 4 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 235 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 235 | 10 | 7.3 | 0.01 | 0.20 | 0.04 | 0.00 | 0.00 | 0.00 |
| Worker | 24 | 235 | 10 | 10.8 | 0.01 | 0.05 | 0.56 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| Phase 5 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 263 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 6 | 263 | 10 | 7.3 | 0.01 | 0.30 | 0.06 | 0.00 | 0.01 | 0.01 |
| Worker | 52 | 263 | 10 | 10.8 | 0.02 | 0.10 | 1.22 | 0.00 | 0.00 | 0.00 |

**Conejo Summit Project**
**Running Emissions**

| | Running Emissions Factor (grams/mile) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| 2021Hauling Hauling | 0.10530007 | 3.84446215 | 0.67680966 | 0.01338517 | 0.05591994 | 0.05350083 |
| 2021Vendor Vendor | 0.10981432 | 3.09688622 | 0.63332846 | 0.01153464 | 0.06323496 | 0.06049747 |
| 2021Worker Worker | 0.01953065 | 0.08103036 | 0.98194378 | 0.00293769 | 0.00187996 | 0.00173171 |
| 2023Hauling Hauling | 0.02304013 | 2.416927422 | 0.46183336 | 0.01223691 | 0.01977011 | 0.01891484 |
| 2023Vendor Vendor | 0.0173588 | 1.71565449 | 0.32490623 | 0.0106429 | 0.01356257 | 0.01297394 |
| 2023Worker Worker | 0.01474457 | 0.062195905 | 0.8172741 | 0.00275657 | 0.00166945 | 0.0015375 |
| 2027Hauling Hauling | 0.02149125 | 2.245896671 | 0.53389942 | 0.0111459 | 0.01946429 | 0.01862224 |
| 2027Vendor Vendor | 0.01530049 | 1.625928711 | 0.32732475 | 0.00982302 | 0.01350232 | 0.01291623 |
| 2027Worker Worker | 0.00891143 | 0.039979987 | 0.6172106 | 0.00242553 | 0.0013586 | 0.00125055 |
| 2040Hauling Hauling | 0.01873266 | 1.91859501 | 0.64956455 | 0.0089039 | 0.01779462 | 0.01702479 |
| 2040Vendor Vendor | 0.01304957 | 1.443538306 | 0.3647668 | 0.0081699 | 0.01258715 | 0.01204051 |
| 2040Worker Worker | 0.00248234 | 0.018151744 | 0.40611795 | 0.00198625 | 0.00063884 | 0.00058801 |
| GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase 6 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 4 | 259 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 259 | 10 | 7.3 | 0.01 | 0.40 | 0.08 | 0.00 | 0.01 | 0.01 |
| Worker | 54 | 259 | 10 | 10.8 | 0.03 | 0.10 | 1.26 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| Phase 7 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 261 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 261 | 10 | 7.3 | 0.01 | 0.40 | 0.08 | 0.00 | 0.01 | 0.01 |
| Worker | 54 | 261 | 10 | 10.8 | 0.03 | 0.10 | 1.26 | 0.00 | 0.00 | 0.00 |

## Conejo Summit Project
### Running Emissions

| | | Running Emissions Factor (grams/mile) | | |
|---|---|---|---|---|
| | | CO2 | CH4 | N2O |
| 2021Hauling | Hauling | 1475.02084 | 0.09214853 | 0.2345011 |
| 2021Vendor | Vendor | 1246.34092 | 0.0493296 | 0.1863396 |
| 2021Worker | Worker | 296.941161 | 0.00459071 | 0.00704357 |
| 2023Hauling | Hauling | 1359.85363 | 0.09474951 | 0.21667049 |
| 2023Vendor | Vendor | 1155.20939 | 0.04804575 | 0.17203857 |
| 2023Worker | Worker | 278.637762 | 0.00355303 | 0.00587016 |
| 2027Hauling | Hauling | 1253.61482 | 0.10627513 | 0.2003752 |
| 2027Vendor | Vendor | 1073.22157 | 0.05356181 | 0.15957262 |
| 2027Worker | Worker | 245.180584 | 0.00225233 | 0.0044397 |
| 2040Hauling | Hauling | 1024.99711 | 0.12708859 | 0.16485194 |
| 2040Vendor | Vendor | 902.936723 | 0.06382025 | 0.13393818 |
| 2040Worker | Worker | 200.779917 | 0.00080208 | 0.00310682 |
| | GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (MT/year) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | CO2 | CH4 | N2O | CO2e |
| Phase 1 & 2 Grading | 2021 | | | | | | | |
| Total Haul Trips | 2835 | | | | | | | |
| Hauling | 50 | 129 | 10 | 0.04 | 0.38 | 0.00 | 0.02 | 0.40 |
| Vendor | 2 | 129 | 10 | 7.3 | 2.35 | 0.00 | 0.10 | 2.45 |
| Worker | 30 | 129 | 10 | 10.8 | 12.41 | 0.00 | 0.09 | 12.50 |
| | | | | | | | | |
| Phase 3,4&7 Grading | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 0 | 78 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 78 | 10 | 7.3 | 2.84 | 0.00 | 0.12 | 2.96 |
| Worker | 36 | 78 | 10 | 10.8 | 9.01 | 0.00 | 0.06 | 9.07 |

## Conejo Summit Project
### Running Emissions

| | | Running Emissions Factor (grams/mile) CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2021Hauling | Hauling | 1475.02084 | 0.09214853 | 0.2345011 |
| 2021Vendor | Vendor | 1246.34092 | 0.0493296 | 0.1863396 |
| 2021Worker | Worker | 296.941161 | 0.00459071 | 0.00704357 |
| 2023Hauling | Hauling | 1359.85363 | 0.09474951 | 0.21667049 |
| 2023Vendor | Vendor | 1155.20939 | 0.04804575 | 0.17203857 |
| 2023Worker | Worker | 278.637762 | 0.00355303 | 0.00587016 |
| 2027Hauling | Hauling | 1253.61482 | 0.10627513 | 0.2003752 |
| 2027Vendor | Vendor | 1073.22157 | 0.05356181 | 0.15957262 |
| 2027Worker | Worker | 245.180584 | 0.00225233 | 0.0044397 |
| 2040Hauling | Hauling | 1024.99711 | 0.12708859 | 0.16485194 |
| 2040Vendor | Vendor | 902.936723 | 0.06382025 | 0.13393818 |
| 2040Worker | Worker | 200.779917 | 0.00080208 | 0.00310682 |
| | GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (MT/year) CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Phase 5&6 Grading | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 0 | 105 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 2 | 105 | 10 | 7.3 | 1.91 | 0.00 | 0.08 | 2.00 |
| Worker | 30 | 105 | 10 | 10.8 | 10.10 | 0.00 | 0.07 | 10.18 |
| | | | | | | | | |
| Phase 1 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 0.07 | 0.00 | 0.00 | 0.07 |
| Vendor | 8 | 286 | 10 | 7.3 | 20.82 | 0.02 | 0.90 | 21.74 |
| Worker | 56 | 286 | 10 | 10.8 | 51.36 | 0.02 | 0.35 | 51.74 |

## Conejo Summit Project
### Running Emissions

| | | Running Emissions Factor (grams/mile) | | |
|---|---|---|---|---|
| | | CO2 | CH4 | N2O |
| 2021Hauling | Hauling | 1475.02084 | 0.09214853 | 0.2345011 |
| 2021Vendor | Vendor | 1246.34092 | 0.0493296 | 0.1863396 |
| 2021Worker | Worker | 296.941161 | 0.00459071 | 0.00704357 |
| 2023Hauling | Hauling | 1359.85363 | 0.09474951 | 0.21667049 |
| 2023Vendor | Vendor | 1155.20939 | 0.04804575 | 0.17203857 |
| 2023Worker | Worker | 278.637762 | 0.00355303 | 0.00587016 |
| 2027Hauling | Hauling | 1253.61482 | 0.10627513 | 0.2003752 |
| 2027Vendor | Vendor | 1073.22157 | 0.05356181 | 0.15957262 |
| 2027Worker | Worker | 245.180584 | 0.00225233 | 0.0044397 |
| 2040Hauling | Hauling | 1024.99711 | 0.12708859 | 0.16485194 |
| 2040Vendor | Vendor | 902.936723 | 0.06382025 | 0.13393818 |
| 2040Worker | Worker | 200.779917 | 0.00080208 | 0.00310682 |
| | GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (MT/year) CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Phase 2 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 0.07 | 0.00 | 0.00 | 0.07 |
| Vendor | 8 | 286 | 10 | 7.3 | 20.82 | 0.02 | 0.90 | 21.74 |
| Worker | 60 | 286 | 10 | 10.8 | 55.03 | 0.02 | 0.38 | 55.43 |
| | | | | | | | | |
| Phase 3 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 2 | 208 | 10 | 0.04 | 0.02 | 0.00 | 0.00 | 0.03 |
| Vendor | 4 | 208 | 10 | 7.3 | 7.57 | 0.01 | 0.33 | 7.91 |
| Worker | 20 | 208 | 10 | 10.8 | 13.34 | 0.01 | 0.09 | 13.44 |

## Conejo Summit Project
### Running Emissions

| | Running Emissions Factor (grams/mile) CO2 | CH4 | N2O |
|---|---|---|---|
| 2021Hauling Hauling | 1475.02084 | 0.09214853 | 0.2345011 |
| 2021Vendor Vendor | 1246.34092 | 0.0493296 | 0.1863396 |
| 2021Worker Worker | 296.941161 | 0.00459071 | 0.00704357 |
| 2023Hauling Hauling | 1359.85363 | 0.09474951 | 0.21667049 |
| 2023Vendor Vendor | 1155.20939 | 0.04804575 | 0.17203857 |
| 2023Worker Worker | 278.637762 | 0.00355303 | 0.00587016 |
| 2027Hauling Hauling | 1253.61482 | 0.10627513 | 0.2003752 |
| 2027Vendor Vendor | 1073.22157 | 0.05356181 | 0.15957262 |
| 2027Worker Worker | 245.180584 | 0.00225233 | 0.0044397 |
| 2040Hauling Hauling | 1024.99711 | 0.12708859 | 0.16485194 |
| 2040Vendor Vendor | 902.936723 | 0.06382025 | 0.13393818 |
| 2040Worker Worker | 200.779917 | 0.00080208 | 0.00310682 |
| GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (MT/year) CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Phase 4 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 2 | 235 | 10 | 0.04 | 0.03 | 0.00 | 0.00 | 0.03 |
| Vendor | 4 | 235 | 10 | 7.3 | 8.55 | 0.01 | 0.37 | 8.93 |
| Worker | 24 | 235 | 10 | 10.8 | 18.09 | 0.01 | 0.12 | 18.22 |
| | | | | | | | | |
| Phase 5 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 2 | 263 | 10 | 0.04 | 0.03 | 0.00 | 0.00 | 0.03 |
| Vendor | 6 | 263 | 10 | 7.3 | 14.36 | 0.01 | 0.62 | 14.99 |
| Worker | 52 | 263 | 10 | 10.8 | 43.86 | 0.02 | 0.30 | 44.18 |

**Conejo Summit Project**
**Running Emissions**

| | Running Emissions Factor (grams/mile) CO2 | CH4 | N2O |
|---|---|---|---|
| 2021Hauling Hauling | 1475.02084 | 0.09214853 | 0.2345011 |
| 2021Vendor Vendor | 1246.34092 | 0.0493296 | 0.1863396 |
| 2021Worker Worker | 296.941161 | 0.00459071 | 0.00704357 |
| 2023Hauling Hauling | 1359.85363 | 0.09474951 | 0.21667049 |
| 2023Vendor Vendor | 1155.20939 | 0.04804575 | 0.17203857 |
| 2023Worker Worker | 278.637762 | 0.00355303 | 0.00587016 |
| 2027Hauling Hauling | 1253.61482 | 0.10627513 | 0.2003752 |
| 2027Vendor Vendor | 1073.22157 | 0.05356181 | 0.15957262 |
| 2027Worker Worker | 245.180584 | 0.00225233 | 0.0044397 |
| 2040Hauling Hauling | 1024.99711 | 0.12708859 | 0.16485194 |
| 2040Vendor Vendor | 902.936723 | 0.06382025 | 0.13393818 |
| 2040Worker Worker | 200.779917 | 0.00080208 | 0.00310682 |
| GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (MT/year) CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Phase 6 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 4 | 259 | 10 | 0.04 | 0.06 | 0.00 | 0.00 | 0.06 |
| Vendor | 8 | 259 | 10 | 7.3 | 18.85 | 0.02 | 0.82 | 19.69 |
| Worker | 54 | 259 | 10 | 10.8 | 44.85 | 0.02 | 0.31 | 45.18 |
| Phase 7 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 2 | 261 | 10 | 0.04 | 0.03 | 0.00 | 0.00 | 0.03 |
| Vendor | 8 | 261 | 10 | 7.3 | 19.00 | 0.02 | 0.82 | 19.84 |
| Worker | 54 | 261 | 10 | 10.8 | 45.20 | 0.02 | 0.31 | 45.53 |

## Conejo Summit Project
### Idling Emissions

| | Idling Emissions Factor (grams/minute) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| 2021Hauling Hauling | 0.16531794 | 2.321348371 | 2.143635 | 0.00383289 | 0.00383811 | 0.00367208 |
| 2021Vendor Vendor | 0.08710205 | 1.306755645 | 1.14763714 | 0.00207272 | 0.00243364 | 0.00232836 |
| 2021Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2023Hauling Hauling | 0.16238578 | 2.133118085 | 2.39270482 | 0.00376396 | 0.00138578 | 0.00132583 |
| 2023Vendor Vendor | 0.0847478 | 1.156199253 | 1.27336196 | 0.00202904 | 0.00077611 | 0.00074254 |
| 2023Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2027Hauling Hauling | 0.16246135 | 2.084740555 | 2.42098493 | 0.00353758 | 0.00112729 | 0.00107852 |
| 2027Vendor Vendor | 0.08454956 | 1.120124463 | 1.28613762 | 0.00190497 | 0.00060974 | 0.00058337 |
| 2027Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2040Hauling Hauling | 0.17093025 | 2.110456703 | 2.59344651 | 0.00311351 | 0.00080648 | 0.0007716 |
| 2040Vendor Vendor | 0.08880623 | 1.120033013 | 1.37448605 | 0.00167253 | 0.00042111 | 0.00040289 |
| 2040Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| Phase 1 & 2 Grading | 2021 | | | | | | | | | |
| Total Haul Trips | 2835 | | | | | | | | | |
| Hauling | 50 | 129 | 10 | 15 | 0.27 | 3.84 | 3.54 | 0.01 | 0.01 | 0.01 |
| Vendor | 2 | 129 | 10 | 15 | 0.01 | 0.09 | 0.08 | 0.00 | 0.00 | 0.00 |
| Worker | 30 | 129 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 3,4&7 Grading | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 0 | 78 | 10 | 15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 78 | 10 | 15 | 0.01 | 0.17 | 0.15 | 0.00 | 0.00 | 0.00 |
| Worker | 36 | 78 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## Conejo Summit Project
### Idling Emissions

| | Idling Emissions Factor (grams/minute) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| 2021Hauling Hauling | 0.16531794 | 2.321348371 | 2.143635 | 0.00383289 | 0.00383811 | 0.00367208 |
| 2021Vendor Vendor | 0.08710205 | 1.306755645 | 1.14763714 | 0.00207272 | 0.00243364 | 0.00232836 |
| 2021Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2023Hauling Hauling | 0.16238578 | 2.133118085 | 2.39270482 | 0.00376396 | 0.00138578 | 0.00132583 |
| 2023Vendor Vendor | 0.0847478 | 1.156199253 | 1.27336196 | 0.00202904 | 0.00077611 | 0.00074254 |
| 2023Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2027Hauling Hauling | 0.16246135 | 2.084740555 | 2.42098493 | 0.00353758 | 0.00112729 | 0.00107852 |
| 2027Vendor Vendor | 0.08454956 | 1.120124463 | 1.28613762 | 0.00190497 | 0.00060974 | 0.00058337 |
| 2027Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2040Hauling Hauling | 0.17093025 | 2.110456703 | 2.59344651 | 0.00311351 | 0.00080648 | 0.0007716 |
| 2040Vendor Vendor | 0.08880623 | 1.120033013 | 1.37448605 | 0.00167253 | 0.00042111 | 0.00040289 |
| 2040Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (pounds/day) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase 5&6 Grading | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 0 | 105 | 10 | 15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 2 | 105 | 10 | 15 | 0.01 | 0.09 | 0.08 | 0.00 | 0.00 | 0.00 |
| Worker | 30 | 105 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| Phase 1 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 4 | 286 | 10 | 15 | 0.02 | 0.31 | 0.28 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 286 | 10 | 15 | 0.02 | 0.35 | 0.30 | 0.00 | 0.00 | 0.00 |
| Worker | 56 | 286 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Conejo Summit Project**
**Idling Emissions**

| | Idling Emissions Factor (grams/minute) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| 2021Hauling Hauling | 0.16531794 | 2.321348371 | 2.143635 | 0.00383289 | 0.00383811 | 0.00367208 |
| 2021Vendor Vendor | 0.08710205 | 1.306755645 | 1.14763714 | 0.00207272 | 0.00243364 | 0.00232836 |
| 2021Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2023Hauling Hauling | 0.16238578 | 2.133118085 | 2.39270482 | 0.00376396 | 0.00138578 | 0.00132583 |
| 2023Vendor Vendor | 0.0847478 | 1.156199253 | 1.27336196 | 0.00202904 | 0.00077611 | 0.00074254 |
| 2023Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2027Hauling Hauling | 0.16246135 | 2.084740555 | 2.42098493 | 0.00353758 | 0.00112729 | 0.00107852 |
| 2027Vendor Vendor | 0.08454956 | 1.120124463 | 1.28613762 | 0.00190497 | 0.00060974 | 0.00058337 |
| 2027Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2040Hauling Hauling | 0.17093025 | 2.110456703 | 2.59344651 | 0.00311351 | 0.00080648 | 0.0007716 |
| 2040Vendor Vendor | 0.08880623 | 1.120033013 | 1.37448605 | 0.00167253 | 0.00042111 | 0.00040289 |
| 2040Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (pounds/day) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase 2 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 4 | 286 | 10 | 15 | 0.02 | 0.31 | 0.28 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 286 | 10 | 15 | 0.02 | 0.35 | 0.30 | 0.00 | 0.00 | 0.00 |
| Worker | 60 | 286 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| Phase 3 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 208 | 10 | 15 | 0.01 | 0.15 | 0.14 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 208 | 10 | 15 | 0.01 | 0.17 | 0.15 | 0.00 | 0.00 | 0.00 |
| Worker | 20 | 208 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## Conejo Summit Project
### Idling Emissions

| | Idling Emissions Factor (grams/minute) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| 2021Hauling Hauling | 0.16531794 | 2.321348371 | 2.143635 | 0.00383289 | 0.00383811 | 0.00367208 |
| 2021Vendor Vendor | 0.08710205 | 1.306755645 | 1.14763714 | 0.00207272 | 0.00243364 | 0.00232836 |
| 2021Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2023Hauling Hauling | 0.16238578 | 2.133118085 | 2.39270482 | 0.00376396 | 0.00138578 | 0.00132583 |
| 2023Vendor Vendor | 0.0847478 | 1.156199253 | 1.27336196 | 0.00202904 | 0.00077611 | 0.00074254 |
| 2023Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2027Hauling Hauling | 0.16246135 | 2.084740555 | 2.42098493 | 0.00353758 | 0.00112729 | 0.00107852 |
| 2027Vendor Vendor | 0.08454956 | 1.120124463 | 1.28613762 | 0.00190497 | 0.00060974 | 0.00058337 |
| 2027Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2040Hauling Hauling | 0.17093025 | 2.110456703 | 2.59344651 | 0.00311351 | 0.00080648 | 0.0007716 |
| 2040Vendor Vendor | 0.08880623 | 1.120033013 | 1.37448605 | 0.00167253 | 0.00042111 | 0.00040289 |
| 2040Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| Phase 4 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 235 | 10 | 15 | 0.01 | 0.15 | 0.14 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 235 | 10 | 15 | 0.01 | 0.17 | 0.15 | 0.00 | 0.00 | 0.00 |
| Worker | 24 | 235 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| Phase 5 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 263 | 10 | 15 | 0.01 | 0.15 | 0.14 | 0.00 | 0.00 | 0.00 |
| Vendor | 6 | 263 | 10 | 15 | 0.02 | 0.26 | 0.23 | 0.00 | 0.00 | 0.00 |
| Worker | 52 | 263 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Conejo Summit Project**

**Idling Emissions**

| | Idling Emissions Factor (grams/minute) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| 2021Hauling Hauling | 0.16531794 | 2.321348371 | 2.143635 | 0.00383289 | 0.00383811 | 0.00367208 |
| 2021Vendor Vendor | 0.08710205 | 1.306755645 | 1.14763714 | 0.00207272 | 0.00243364 | 0.00232836 |
| 2021Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2023Hauling Hauling | 0.16238578 | 2.133118085 | 2.39270482 | 0.00376396 | 0.00138578 | 0.00132583 |
| 2023Vendor Vendor | 0.0847478 | 1.156199253 | 1.27336196 | 0.00202904 | 0.00077611 | 0.00074254 |
| 2023Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2027Hauling Hauling | 0.16246135 | 2.084740555 | 2.42098493 | 0.00353758 | 0.00112729 | 0.00107852 |
| 2027Vendor Vendor | 0.08454956 | 1.120124463 | 1.28613762 | 0.00190497 | 0.00060974 | 0.00058337 |
| 2027Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| 2040Hauling Hauling | 0.17093025 | 2.110456703 | 2.59344651 | 0.00311351 | 0.00080648 | 0.0007716 |
| 2040Vendor Vendor | 0.08880623 | 1.120033013 | 1.37448605 | 0.00167253 | 0.00042111 | 0.00040289 |
| 2040Worker Worker | 0 | 0 | 0 | 0 | 0 | 0 |
| GWP | N/A | N/A | N/A | N/A | N/A | N/A |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (pounds/day) ROG | NOX | CO | SO2 | PM10 | PM2.5 |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase 6 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 4 | 259 | 10 | 15 | 0.02 | 0.31 | 0.28 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 259 | 10 | 15 | 0.02 | 0.35 | 0.30 | 0.00 | 0.00 | 0.00 |
| Worker | 54 | 259 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| Phase 7 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 261 | 10 | 15 | 0.01 | 0.15 | 0.14 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 261 | 10 | 15 | 0.02 | 0.35 | 0.30 | 0.00 | 0.00 | 0.00 |
| Worker | 54 | 261 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## Conejo Summit Project
### Idling Emissions

| | Idling Emissions Factor (grams/minute) CO2 | CH4 | N2O |
|---|---|---|---|
| 2021Hauling Hauling | 412.828601 | 0.01013022 | 0.06522342 |
| 2021Vendor Vendor | 222.897719 | 0.00574224 | 0.03502581 |
| 2021Worker Worker | 0 | 0 | 0 |
| 2023Hauling Hauling | 406.280641 | 0.01021544 | 0.06422909 |
| 2023Vendor Vendor | 218.647352 | 0.00577511 | 0.03437541 |
| 2023Worker Worker | 0 | 0 | 0 |
| 2027Hauling Hauling | 383.296454 | 0.01058004 | 0.0606619 |
| 2027Vendor Vendor | 206.010829 | 0.00592966 | 0.03243541 |
| 2027Worker Worker | 0 | 0 | 0 |
| 2040Hauling Hauling | 339.963522 | 0.01186051 | 0.05392313 |
| 2040Vendor Vendor | 182.189753 | 0.00659476 | 0.02874433 |
| 2040Worker Worker | 0 | 0 | 0 |
| GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (MT/year) CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Phase 1 & 2 Grading | 2021 | | | | | | | |
| Total Haul Trips | 2835 | | | | | | | |
| Hauling | 50 | 129 | 10 | 15 | 39.94 | 0.02 | 1.83 | 41.80 |
| Vendor | 2 | 129 | 10 | 15 | 0.86 | 0.00 | 0.04 | 0.90 |
| Worker | 30 | 129 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 3,4&7 Grading | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 0 | 78 | 10 | 15 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 78 | 10 | 15 | 1.04 | 0.00 | 0.05 | 1.09 |
| Worker | 36 | 78 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |

**Conejo Summit Project**
**Idling Emissions**

| | Idling Emissions Factor (grams/minute) CO2 | CH4 | N2O |
|---|---|---|---|
| 2021Hauling Hauling | 412.828601 | 0.01013022 | 0.06522342 |
| 2021Vendor Vendor | 222.897719 | 0.00574224 | 0.03502581 |
| 2021Worker Worker | 0 | 0 | 0 |
| 2023Hauling Hauling | 406.280641 | 0.01021544 | 0.06422909 |
| 2023Vendor Vendor | 218.647352 | 0.00577511 | 0.03437541 |
| 2023Worker Worker | 0 | 0 | 0 |
| 2027Hauling Hauling | 383.296454 | 0.01058004 | 0.0606619 |
| 2027Vendor Vendor | 206.010829 | 0.00592966 | 0.03243541 |
| 2027Worker Worker | 0 | 0 | 0 |
| 2040Hauling Hauling | 339.963522 | 0.01186051 | 0.05392313 |
| 2040Vendor Vendor | 182.189753 | 0.00659476 | 0.02874433 |
| 2040Worker Worker | 0 | 0 | 0 |
| GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (MT/year) CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Phase 5&6 Grading | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 0 | 105 | 10 | 15 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 2 | 105 | 10 | 15 | 0.70 | 0.00 | 0.03 | 0.73 |
| Worker | 30 | 105 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | |
| Phase 1 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 4 | 286 | 10 | 15 | 7.08 | 0.00 | 0.32 | 7.41 |
| Vendor | 8 | 286 | 10 | 15 | 7.65 | 0.00 | 0.35 | 8.00 |
| Worker | 56 | 286 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |

**Conejo Summit Project**
**Idling Emissions**

| | Idling Emissions Factor (grams/minute) CO2 | CH4 | N2O |
|---|---|---|---|
| 2021Hauling Hauling | 412.828601 | 0.01013022 | 0.06522342 |
| 2021Vendor Vendor | 222.897719 | 0.00574224 | 0.03502581 |
| 2021Worker Worker | 0 | 0 | 0 |
| 2023Hauling Hauling | 406.280641 | 0.01021544 | 0.06422909 |
| 2023Vendor Vendor | 218.647352 | 0.00577511 | 0.03437541 |
| 2023Worker Worker | 0 | 0 | 0 |
| 2027Hauling Hauling | 383.296454 | 0.01058004 | 0.0606619 |
| 2027Vendor Vendor | 206.010829 | 0.00592966 | 0.03243541 |
| 2027Worker Worker | 0 | 0 | 0 |
| 2040Hauling Hauling | 339.963522 | 0.01186051 | 0.05392313 |
| 2040Vendor Vendor | 182.189753 | 0.00659476 | 0.02874433 |
| 2040Worker Worker | 0 | 0 | 0 |
| GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (MT/year) CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Phase 2 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 4 | 286 | 10 | 15 | 7.08 | 0.00 | 0.32 | 7.41 |
| Vendor | 8 | 286 | 10 | 15 | 7.65 | 0.00 | 0.35 | 8.00 |
| Worker | 60 | 286 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | |
| Phase 3 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 2 | 208 | 10 | 15 | 2.58 | 0.00 | 0.12 | 2.70 |
| Vendor | 4 | 208 | 10 | 15 | 2.78 | 0.00 | 0.13 | 2.91 |
| Worker | 20 | 208 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |

## Conejo Summit Project
### Idling Emissions

| | Idling Emissions Factor (grams/minute) CO2 | CH4 | N2O |
|---|---|---|---|
| 2021Hauling Hauling | 412.828601 | 0.01013022 | 0.06522342 |
| 2021Vendor Vendor | 222.897719 | 0.00574224 | 0.03502581 |
| 2021Worker Worker | 0 | 0 | 0 |
| 2023Hauling Hauling | 406.280641 | 0.01021544 | 0.06422909 |
| 2023Vendor Vendor | 218.647352 | 0.00577511 | 0.03437541 |
| 2023Worker Worker | 0 | 0 | 0 |
| 2027Hauling Hauling | 383.296454 | 0.01058004 | 0.0606619 |
| 2027Vendor Vendor | 206.010829 | 0.00592966 | 0.03243541 |
| 2027Worker Worker | 0 | 0 | 0 |
| 2040Hauling Hauling | 339.963522 | 0.01186051 | 0.05392313 |
| 2040Vendor Vendor | 182.189753 | 0.00659476 | 0.02874433 |
| 2040Worker Worker | 0 | 0 | 0 |
| GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (MT/year) CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Phase 4 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 2 | 235 | 10 | 15 | 2.91 | 0.00 | 0.13 | 3.05 |
| Vendor | 4 | 235 | 10 | 15 | 3.14 | 0.00 | 0.14 | 3.29 |
| Worker | 24 | 235 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 5 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 2 | 263 | 10 | 15 | 3.26 | 0.00 | 0.15 | 3.41 |
| Vendor | 6 | 263 | 10 | 15 | 5.28 | 0.00 | 0.24 | 5.52 |
| Worker | 52 | 263 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |

**Conejo Summit Project**
**Idling Emissions**

| | Idling Emissions Factor (grams/minute) CO2 | CH4 | N2O |
|---|---|---|---|
| 2021Hauling Hauling | 412.828601 | 0.01013022 | 0.06522342 |
| 2021Vendor Vendor | 222.897719 | 0.00574224 | 0.03502581 |
| 2021Worker Worker | 0 | 0 | 0 |
| 2023Hauling Hauling | 406.280641 | 0.01021544 | 0.06422909 |
| 2023Vendor Vendor | 218.647352 | 0.00577511 | 0.03437541 |
| 2023Worker Worker | 0 | 0 | 0 |
| 2027Hauling Hauling | 383.296454 | 0.01058004 | 0.0606619 |
| 2027Vendor Vendor | 206.010829 | 0.00592966 | 0.03243541 |
| 2027Worker Worker | 0 | 0 | 0 |
| 2040Hauling Hauling | 339.963522 | 0.01186051 | 0.05392313 |
| 2040Vendor Vendor | 182.189753 | 0.00659476 | 0.02874433 |
| 2040Worker Worker | 0 | 0 | 0 |
| GWP | 1 | 25 | 290 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | Idling minutes per Day (miles) | Regional Emissions (MT/year) CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Phase 6 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 4 | 259 | 10 | 15 | 6.42 | 0.00 | 0.29 | 6.71 |
| Vendor | 8 | 259 | 10 | 15 | 6.93 | 0.00 | 0.32 | 7.25 |
| Worker | 54 | 259 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | |
| Phase 7 BC | 2021 | | | | | | | |
| Total Haul Trips | 0 | | | | | | | |
| Hauling | 2 | 261 | 10 | 15 | 3.23 | 0.00 | 0.15 | 3.38 |
| Vendor | 8 | 261 | 10 | 15 | 6.98 | 0.00 | 0.32 | 7.30 |
| Worker | 54 | 261 | 10 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |

## Conejo Summit Project
### Road Dust, Break Wear, and Tire wear Emissions

| | Emission Factors (grams/mile) | | | | | |
|---|---|---|---|---|---|---|
| | PM10 | | | PM2.5 | | |
| | RD | BW | TW | RD | BW | TW |
| 2021Hauling Hauling | 3.00E-01 | 0.060339617 | 0.03517537 | 7.36E-02 | 0.02585984 | 0.00879384 |
| 2021Vendor Vendor | 3.00E-01 | 0.095339827 | 0.02358768 | 7.36E-02 | 0.04085993 | 0.00589692 |
| 2021Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2023Hauling Hauling | 3.00E-01 | 0.060401584 | 0.03520991 | 7.36E-02 | 0.02588639 | 0.00880248 |
| 2023Vendor Vendor | 3.00E-01 | 0.09537081 | 0.02360496 | 7.36E-02 | 0.0408732 | 0.00590124 |
| 2023Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2027Hauling Hauling | 3.00E-01 | 0.06051103 | 0.03527022 | 7.36E-02 | 0.0259333 | 0.00881756 |
| 2027Vendor Vendor | 3.00E-01 | 0.095425534 | 0.02363511 | 7.36E-02 | 0.04089666 | 0.00590878 |
| 2027Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2040Hauling Hauling | 3.00E-01 | 0.060670582 | 0.03535917 | 7.36E-02 | 0.02600168 | 0.00883979 |
| 2040Vendor Vendor | 3.00E-01 | 0.09550531 | 0.02367959 | 7.36E-02 | 0.04093085 | 0.0059199 |
| 2040Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) PM10 RD | PM10 BW | PM10 TW | PM2.5 RD | PM2.5 BW | PM2.5 TW |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase 1 & 2 Grading | 2021 | | | | | | | | | |
| Total Haul Trips | 2835 | | | | | | | | | |
| Hauling | 50 | 129 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 2 | 129 | 10 | 7.3 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 30 | 129 | 10 | 10.8 | 0.21 | 0.03 | 0.01 | 0.05 | 0.01 | 0.00 |
| | | | | | | | | | | |
| Phase 3,4&7 Grading | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 0 | 78 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 78 | 10 | 7.3 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 36 | 78 | 10 | 10.8 | 0.26 | 0.03 | 0.01 | 0.06 | 0.01 | 0.00 |

# Conejo Summit Project
## Road Dust, Break Wear, and Tire wear Emissions

| | Emission Factors (grams/mile) | | | | | |
|---|---|---|---|---|---|---|
| | PM10 | | | PM2.5 | | |
| | RD | BW | TW | RD | BW | TW |
| 2021Hauling Hauling | 3.00E-01 | 0.060339617 | 0.03517537 | 7.36E-02 | 0.02585984 | 0.00879384 |
| 2021Vendor Vendor | 3.00E-01 | 0.095339827 | 0.02358768 | 7.36E-02 | 0.04085993 | 0.00589692 |
| 2021Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2023Hauling Hauling | 3.00E-01 | 0.060401584 | 0.03520991 | 7.36E-02 | 0.02588639 | 0.00880248 |
| 2023Vendor Vendor | 3.00E-01 | 0.09537081 | 0.02360496 | 7.36E-02 | 0.0408732 | 0.00590124 |
| 2023Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2027Hauling Hauling | 3.00E-01 | 0.06051103 | 0.03527022 | 7.36E-02 | 0.0259333 | 0.00881756 |
| 2027Vendor Vendor | 3.00E-01 | 0.095425534 | 0.02363511 | 7.36E-02 | 0.04089666 | 0.00590878 |
| 2027Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2040Hauling Hauling | 3.00E-01 | 0.060670582 | 0.03535917 | 7.36E-02 | 0.02600168 | 0.00883979 |
| 2040Vendor Vendor | 3.00E-01 | 0.09550531 | 0.02367959 | 7.36E-02 | 0.04093085 | 0.0059199 |
| 2040Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | PM10 | | | PM2.5 | | |
| | | | | | RD | BW | TW | RD | BW | TW |
| Phase 5&6 Grading | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 0 | 105 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 2 | 105 | 10 | 7.3 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 30 | 105 | 10 | 10.8 | 0.21 | 0.03 | 0.01 | 0.05 | 0.01 | 0.00 |
| Phase 1 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 286 | 10 | 7.3 | 0.04 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 |
| Worker | 56 | 286 | 10 | 10.8 | 0.40 | 0.05 | 0.01 | 0.10 | 0.02 | 0.00 |

# Conejo Summit Project
## Road Dust, Break Wear, and Tire wear Emissions

| | Emission Factors (grams/mile) | | | | | |
|---|---|---|---|---|---|---|
| | PM10 | | | PM2.5 | | |
| | RD | BW | TW | RD | BW | TW |
| 2021Hauling Hauling | 3.00E-01 | 0.060339617 | 0.03517537 | 7.36E-02 | 0.02585984 | 0.00879384 |
| 2021Vendor Vendor | 3.00E-01 | 0.095339827 | 0.02358768 | 7.36E-02 | 0.04085993 | 0.00589692 |
| 2021Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2023Hauling Hauling | 3.00E-01 | 0.060401584 | 0.03520991 | 7.36E-02 | 0.02588639 | 0.00880248 |
| 2023Vendor Vendor | 3.00E-01 | 0.09537081 | 0.02360496 | 7.36E-02 | 0.0408732 | 0.00590124 |
| 2023Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2027Hauling Hauling | 3.00E-01 | 0.06051103 | 0.03527022 | 7.36E-02 | 0.0259333 | 0.00881756 |
| 2027Vendor Vendor | 3.00E-01 | 0.095425534 | 0.02363511 | 7.36E-02 | 0.04089666 | 0.00590878 |
| 2027Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2040Hauling Hauling | 3.00E-01 | 0.060670582 | 0.03535917 | 7.36E-02 | 0.02600168 | 0.00883979 |
| 2040Vendor Vendor | 3.00E-01 | 0.09550531 | 0.02367959 | 7.36E-02 | 0.04093085 | 0.0059199 |
| 2040Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | PM10 | | | PM2.5 | | |
| | | | | | RD | BW | TW | RD | BW | TW |
| <u>Phase 2 BC</u> | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 286 | 10 | 7.3 | 0.04 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 |
| Worker | 60 | 286 | 10 | 10.8 | 0.43 | 0.05 | 0.01 | 0.11 | 0.02 | 0.00 |
| | | | | | | | | | | |
| <u>Phase 3 BC</u> | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 208 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 208 | 10 | 7.3 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 20 | 208 | 10 | 10.8 | 0.14 | 0.02 | 0.00 | 0.04 | 0.01 | 0.00 |

## Conejo Summit Project
### Road Dust, Break Wear, and Tire wear Emissions

| | Emission Factors (grams/mile) | | | | | |
|---|---|---|---|---|---|---|
| | PM10 | | | PM2.5 | | |
| | RD | BW | TW | RD | BW | TW |
| 2021Hauling Hauling | 3.00E-01 | 0.060339617 | 0.03517537 | 7.36E-02 | 0.02585984 | 0.00879384 |
| 2021Vendor Vendor | 3.00E-01 | 0.095339827 | 0.02358768 | 7.36E-02 | 0.04085993 | 0.00589692 |
| 2021Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2023Hauling Hauling | 3.00E-01 | 0.060401584 | 0.03520991 | 7.36E-02 | 0.02588639 | 0.00880248 |
| 2023Vendor Vendor | 3.00E-01 | 0.09537081 | 0.02360496 | 7.36E-02 | 0.0408732 | 0.00590124 |
| 2023Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2027Hauling Hauling | 3.00E-01 | 0.06051103 | 0.03527022 | 7.36E-02 | 0.0259333 | 0.00881756 |
| 2027Vendor Vendor | 3.00E-01 | 0.095425534 | 0.02363511 | 7.36E-02 | 0.04089666 | 0.00590878 |
| 2027Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2040Hauling Hauling | 3.00E-01 | 0.060670582 | 0.03535917 | 7.36E-02 | 0.02600168 | 0.00883979 |
| 2040Vendor Vendor | 3.00E-01 | 0.09550531 | 0.02367959 | 7.36E-02 | 0.04093085 | 0.0059199 |
| 2040Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | PM10 | | | PM2.5 | | |
| | | | | | RD | BW | TW | RD | BW | TW |
| Phase 4 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 235 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 4 | 235 | 10 | 7.3 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 24 | 235 | 10 | 10.8 | 0.17 | 0.02 | 0.00 | 0.04 | 0.01 | 0.00 |
| | | | | | | | | | | |
| Phase 5 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 263 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 6 | 263 | 10 | 7.3 | 0.03 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 |
| Worker | 52 | 263 | 10 | 10.8 | 0.37 | 0.05 | 0.01 | 0.09 | 0.02 | 0.00 |

# Conejo Summit Project
## Road Dust, Break Wear, and Tire wear Emissions

| | Emission Factors (grams/mile) | | | | | |
|---|---|---|---|---|---|---|
| | PM10 | | | PM2.5 | | |
| | RD | BW | TW | RD | BW | TW |
| 2021Hauling Hauling | 3.00E-01 | 0.060339617 | 0.03517537 | 7.36E-02 | 0.02585984 | 0.00879384 |
| 2021Vendor Vendor | 3.00E-01 | 0.095339827 | 0.02358768 | 7.36E-02 | 0.04085993 | 0.00589692 |
| 2021Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2023Hauling Hauling | 3.00E-01 | 0.060401584 | 0.03520991 | 7.36E-02 | 0.02588639 | 0.00880248 |
| 2023Vendor Vendor | 3.00E-01 | 0.09537081 | 0.02360496 | 7.36E-02 | 0.0408732 | 0.00590124 |
| 2023Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2027Hauling Hauling | 3.00E-01 | 0.06051103 | 0.03527022 | 7.36E-02 | 0.0259333 | 0.00881756 |
| 2027Vendor Vendor | 3.00E-01 | 0.095425534 | 0.02363511 | 7.36E-02 | 0.04089666 | 0.00590878 |
| 2027Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |
| 2040Hauling Hauling | 3.00E-01 | 0.060670582 | 0.03535917 | 7.36E-02 | 0.02600168 | 0.00883979 |
| 2040Vendor Vendor | 3.00E-01 | 0.09550531 | 0.02367959 | 7.36E-02 | 0.04093085 | 0.0059199 |
| 2040Worker Worker | 3.00E-01 | 0.036750011 | 0.008 | 7.36E-02 | 0.01575 | 0.002 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Regional Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | PM10 | | | PM2.5 | | |
| | | | | | RD | BW | TW | RD | BW | TW |
| Phase 6 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 4 | 259 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 259 | 10 | 7.3 | 0.04 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 |
| Worker | 54 | 259 | 10 | 10.8 | 0.39 | 0.05 | 0.01 | 0.09 | 0.02 | 0.00 |
| | | | | | | | | | | |
| Phase 7 BC | 2021 | | | | | | | | | |
| Total Haul Trips | 0 | | | | | | | | | |
| Hauling | 2 | 261 | 10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 8 | 261 | 10 | 7.3 | 0.04 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 |
| Worker | 54 | 261 | 10 | 10.8 | 0.39 | 0.05 | 0.01 | 0.09 | 0.02 | 0.00 |

# Conejo Summit Project
## Road Dust

**Paved Road Dust Emission Factors (Assumes No Precipitation)**

Formula: $EF_{Dust,P} = (k\ (sL)^{0.91} \times (W)^{1.02})$

Where:

$EF_{Dust,P}$ = Paved Road Dust Emission Factor (having the same units as k)
k = particle size multiplier
sL = road surface silt loading ($g/m^2$)
W = average fleet vehicle weight (tons) (CARB uses 2.4 tons as a fleet average vehicle weight factor)

| | Emission Factor (grams per VMT) | |
|---|---|---|
| | PM10 | PM2.5 |
| k | 0.9979 | 0.2449 |
| sL | 0.1 | 0.1 |
| W | 2.4 | 2.4 |
| $EF_{Dust,P}$ | 3.00E-01 | 7.36E-02 |

**Unpaved Road Dust Emission Factors (Assumes No Precipitation)**

Formula: $EF_{Dust,U} = (k\ (s / 12)^{1} \times (Sp / 30)^{0.5} / (M / 0.5)^{0.2}) - C)$

Where:

$EF_{Dust,U}$ = Unpaved Road Dust Emission Factor (having the same units as k)
k = particle size multiplier
s = surface material silt content (%)
Sp = mean vehicle speed (mph)
M = surface material moisture content (%)
C = Emission Factor for 1980s vehicle fleet exhaust, brake wear, and tire wear

| | Emission Factor (grams per VMT) | |
|---|---|---|
| | PM10 | PM2.5 |
| k | 816.47 | 81.65 |
| s | 4.3% | 4.3% |
| Sp | 15 | 15 |
| M | 0.5% | 0.5% |
| C | 0.00047 | 0.00036 |
| $EF_{Dust,U}$ | 5.20E+00 | 5.19E-01 |

Sources:
SCAQMD, CalEEMod, Version 2011.1.
CARB, *Entrained Dust from Paved Road Travel: Emission Estimation Methodology Background Document* , (1997).
USEPA, *AP-42* , Fifth Edition, Volume I, Chapter 13.2.1 - Paved Roads, (2011).
PCR Services Corporation, 2013.

# Conejo Summit Project
## Operational Vehicle Fuel Consumption

| | Initial | 2027 | 2040 |
|---|---|---|---|
| Unmitigated $CO_2e$ (MT/year) | 978 | 1,819 | 1,495 |
| Mitigated $CO_2e$ (MT/year) | 861 | 1,602 | 1,317 |

| | | Initial | | 2027 | | 2040 | | |
|---|---|---|---|---|---|---|---|---|
| Summary | | Unmitigated | Mitigated | Unmitigated | Mitigated | Unmitigated | Mitigated | |
| | Gasolilne | 92,161 | 81,135 | 168,760 | 148,628 | 136,767 | 120,483 | gallons |
| | Diesel | 15,023 | 13,226 | 29,978 | 26,401.74 | 25,813 | 22,740 | gallons |
| | Electric | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | GWh |
| | Natural Gas | 118.07 | 103.95 | 275.85 | 242.94 | 329.21 | 290.01 | MBTU |

Existing 2023

Unmitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.837737588 | 819.3073613 | 819,307 | NA | 8.89 | 92,161 | NA | NA | NA |
| Diesel | 0.156072279 | 152.6386886 | 152,639 | NA | 10.16 | 15,023 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.006190133 | 6.053950027 | 6,054 | NA | NA | NA | 113.97 | 118.07 | NA |

Mitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.837737588 | 721.2920635 | 721,292 | NA | 8.89 | 81,135 | NA | NA | NA |
| Diesel | 0.156072279 | 134.378232 | 134,378 | NA | 10.16 | 13,226 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.006190133 | 5.329704472 | 5,330 | NA | NA | NA | 100.33 | 103.95 | NA |

Operational Year 1 2027

Unmitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.824782664 | 1500.279666 | 1,500,280 | NA | 8.89 | 168,760 | NA | NA | NA |
| Diesel | 0.167441764 | 304.5765695 | 304,577 | NA | 10.16 | 29,978 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.007775572 | 14.14376481 | 14,144 | NA | NA | NA | 266.26 | 275.85 | NA |

Mitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.824782664 | 1321.301828 | 1,321,302 | NA | 8.89 | 148,628 | NA | NA | NA |
| Diesel | 0.167441764 | 268.2417066 | 268,242 | NA | 10.16 | 26,402 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.007775572 | 12.45646576 | 12,456 | NA | NA | NA | 234.50 | 242.94 | NA |

# Conejo Summit Project
## Operational Vehicle Fuel Consumption

Operational Year 2 2040

Unmitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.813282653 | 1215.857567 | 1,215,858 | NA | 8.89 | 136,767 | NA | NA | NA |
| Diesel | 0.175426511 | 262.2626336 | 262,263 | NA | 10.16 | 25,813 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.011290836 | 16.87979983 | 16,880 | NA | NA | NA | 317.77 | 329.21 | NA |

Mitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.813282653 | 1071.093254 | 1,071,093 | NA | 8.89 | 120,483 | NA | NA | NA |
| Diesel | 0.175426511 | 231.0367147 | 231,037 | NA | 10.16 | 22,740 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.011290836 | 14.87003102 | 14,870 | NA | NA | NA | 279.93 | 290.01 | NA |

Emissions Percentage

| | 2021 | 2023 | 2027 |
|---|---|---|---|
| Gasoline | 0.840677456 | 0.837737588 | 0.824782664 |
| Diesel | 0.153939893 | 0.156072279 | 0.167441764 |
| Electric | 0 | 0 | 0 |
| Natural Gas | 0.00538265 | 0.006190133 | 0.007775572 |

Conversion Factors:

| | | | |
|---|---|---|---|
| 1000 | kg/MT | | |
| 8.89 | kg $CO_2$/gallon gasoline | https://www.eia.gov/environment/emissions/co2_vol_mass.php | Feb. 2016 |
| 10.16 | kg $CO_2$/gallon diesel | https://www.eia.gov/environment/emissions/co2_vol_mass.php | Feb. 2016 |
| 53.12 | kg $CO_2$/ thousand cubic feet | https://www.eia.gov/environment/emissions/co2_vol_mass.php | Feb. 2016 |
| 1036 | btu/cubic foot | | |
| 441.8972278 | $CO_2$ lbs/MWh | Initial | |
| 361.0394372 | $CO_2$ lbs/MWh | 2027 | |
| 100.2887325 | $CO_2$ lbs/MWh | 2040 | |
| 0.907185 | MT/ton | | |
| 2000 | lbs/ton | | |

# Appendix B
## CNDDB Database Results

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE RareFind

**Query Summary:**
Quad IS (Newbury Park (3411828) OR Camarillo (3411921) OR Moorpark (3411838) OR Point Mugu (3411911) OR Point Dume (3411817) OR Santa Paula (3411931) OR Triunfo Pass (3411818) OR Thousand Oaks (3411827) OR Simi (3411837))

Print Close

**CNDDB Element Query Results**

| Scientific Name | Common Name | Taxonomic Group | Element Code | Total Occs | Returned Occs | Federal Status | State Status | Global Rank | State Rank | CA Rare Plant Rank | Other Status | Habitats |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Accipiter cooperii | Cooper's hawk | Birds | ABNKC12040 | 118 | 1 | None | None | G5 | S4 | null | CDFW_WL-Watch List, IUCN_LC-Least Concern | Cismontane woodland, Riparian forest, Riparian woodland, Upper montane coniferous forest |
| Agelaius tricolor | tricolored blackbird | Birds | ABPBXB0020 | 955 | 2 | None | Threatened | G2G3 | S1S2 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern | Freshwater marsh, Marsh & swamp, Swamp, Wetland |
| Aimophila ruficeps canescens | southern California rufous-crowned sparrow | Birds | ABPBX91091 | 235 | 3 | None | None | G5T3 | S3 | null | CDFW_WL-Watch List | Chaparral, Coastal scrub |
| Anniella spp. | California legless lizard | Reptiles | ARACC01070 | 119 | 11 | None | None | G3G4 | S3S4 | null | CDFW_SSC-Species of Special Concern | null |
| Anniella stebbinsi | Southern California legless lizard | Reptiles | ARACC01060 | 417 | 10 | None | None | G3 | S3 | null | CDFW_SSC-Species of Special Concern, USFS_S-Sensitive | Broadleaved upland forest, Chaparral, Coastal dunes, Coastal scrub |
| Antrozous pallidus | pallid bat | Mammals | AMACC10010 | 420 | 2 | None | None | G5 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority | Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland |
| Aquila chrysaetos | golden eagle | Birds | ABNKC22010 | 323 | 3 | None | None | G5 | S3 | null | BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern | Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland |
| Arizona elegans occidentalis | California glossy snake | Reptiles | ARADB01017 | 260 | 1 | None | None | G5T2 | S2 | null | CDFW_SSC-Species of Special Concern | null |
| Artemisiospiza belli belli | Bell's sage sparrow | Birds | ABPBX97021 | 61 | 1 | None | None | G5T2T3 | S3 | null | CDFW_WL-Watch List, USFWS_BCC- | Chaparral, Coastal scrub |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Birds of Conservation Concern | |
| Aspidoscelis tigris stejnegeri | coastal whiptail | Reptiles | ARACJ02143 | 148 | 10 | None | None | G5T5 | S3 | null | CDFW_SSC-Species of Special Concern | null |
| Astragalus brauntonii | Braunton's milk-vetch | Dicots | PDFAB0F1G0 | 44 | 19 | Endangered | None | G2 | S2 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden | Chaparral, Coastal scrub, Limestone, Valley & foothill grassland |
| Athene cunicularia | burrowing owl | Birds | ABNSB10010 | 1989 | 12 | None | None | G4 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern | Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland |
| Atractelmis wawona | Wawona riffle beetle | Insects | IICOL58010 | 80 | 1 | None | None | G3 | S1S2 | null | null | Aquatic |
| Atriplex coulteri | Coulter's saltbush | Dicots | PDCHE040E0 | 121 | 2 | None | None | G3 | S1S2 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley & foothill grassland |
| Baccharis malibuensis | Malibu baccharis | Dicots | PDAST0W0W0 | 13 | 3 | None | None | G1 | S1 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland |
| Bombus crotchii | Crotch bumble bee | Insects | IIHYM24480 | 276 | 2 | None | Candidate Endangered | G3G4 | S1S2 | null | null | null |
| Buteo regalis | ferruginous hawk | Birds | ABNKC19120 | 107 | 1 | None | None | G4 | S3S4 | null | CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern | Great Basin grassland, Great Basin scrub, Pinon & juniper woodlands, Valley & foothill grassland |
| California Walnut Woodland | California Walnut Woodland | Woodland | CTT71210CA | 76 | 1 | None | None | G2 | S2.1 | null | null | Cismontane woodland |
| Calochortus clavatus var. gracilis | slender mariposa-lily | Monocots | PMLIL0D096 | 143 | 5 | None | None | G4T2T3 | S2S3 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive | Chaparral, Coastal scrub, Valley & foothill grassland |
| Calochortus plummerae | Plummer's mariposa-lily | Monocots | PMLIL0D150 | 230 | 16 | None | None | G4 | S4 | 4.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley & foothill grassland |
| Catostomus santaanae | Santa Ana sucker | Fish | AFCJC02190 | 28 | 1 | Threatened | None | G1 | S1 | null | AFS_TH-Threatened, IUCN_VU-Vulnerable | Aquatic, South coast flowing waters |
| Centromadia parryi ssp. australis | southern tarplant | Dicots | PDAST4R0P4 | 94 | 1 | None | None | G3T2 | S2 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, SB_SBBG-Santa Barbara Botanic Garden | Marsh & swamp, Salt marsh, Valley & foothill grassland, Vernal pool, Wetland |
| Chaenactis glabriuscula var. orcuttiana | Orcutt's pincushion | Dicots | PDAST20095 | 36 | 1 | None | None | G5T1T2 | S1 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | Coastal bluff scrub, Coastal dunes |
| | western snowy plover | Birds | ABNNB03031 | 138 | 2 | Threatened | None | G3T3 | S2S3 | null | CDFW_SSC-Species of Special | Great Basin standing waters, |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Charadrius alexandrinus nivosus | | | | | | | | | | | Concern, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern | Sand shore, Wetland |
| Chloropyron maritimum ssp. maritimum | salt marsh bird's-beak | Dicots | PDSCR0J0C2 | 30 | 3 | Endangered | Endangered | G4?T1 | S1 | 1B.2 | BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, SB_SBBG-Santa Barbara Botanic Garden | Coastal dunes, Marsh & swamp, Salt marsh, Wetland |
| Chorizanthe parryi var. parryi | Parry's spineflower | Dicots | PDPGN040J2 | 150 | 1 | None | None | G3T2 | S2 | 1B.1 | BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive | Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland |
| Cicindela hirticollis gravida | sandy beach tiger beetle | Insects | IICOL02101 | 34 | 2 | None | None | G5T2 | S2 | null | null | Coastal dunes |
| Cicindela senilis frosti | senile tiger beetle | Insects | IICOL02121 | 9 | 2 | None | None | G2G3T1T3 | S1 | null | null | Mud shore/flats, Wetland |
| Coccyzus americanus occidentalis | western yellow-billed cuckoo | Birds | ABNRB02022 | 165 | 2 | Threatened | Endangered | G5T2T3 | S1 | null | BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern | Riparian forest |
| Coelus globosus | globose dune beetle | Insects | IICOL4A010 | 50 | 2 | None | None | G1G2 | S1S2 | null | IUCN_VU-Vulnerable | Coastal dunes |
| Danaus plexippus pop. 1 | monarch - California overwintering population | Insects | IILEPP2012 | 383 | 15 | None | None | G4T2T3 | S2S3 | null | USFS_S-Sensitive | Closed-cone coniferous forest |
| Deinandra minthornii | Santa Susana tarplant | Dicots | PDAST4R0J0 | 27 | 13 | None | Rare | G2 | S2 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Coastal scrub |
| Delphinium parryi ssp. blochmaniae | dune larkspur | Dicots | PDRAN0B1B1 | 27 | 1 | None | None | G4T2 | S2 | 1B.2 | null | Chaparral, Coastal dunes |
| Diadophis punctatus modestus | San Bernardino ringneck snake | Reptiles | ARADB10015 | 14 | 1 | None | None | G5T2T3 | S2? | null | USFS_S-Sensitive | null |
| Dudleya blochmaniae ssp. blochmaniae | Blochman's dudleya | Dicots | PDCRA04051 | 81 | 11 | None | None | G3T2 | S2 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Coastal bluff scrub, Coastal scrub, Ultramafic, Valley & foothill grassland |
| Dudleya cymosa ssp. agourensis | Agoura Hills dudleya | Dicots | PDCRA040A7 | 8 | 8 | Threatened | None | G5T1 | S1 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Cismontane woodland |
| Dudleya cymosa ssp. marcescens | marcescent dudleya | Dicots | PDCRA040A3 | 14 | 11 | Threatened | Rare | G5T2 | S2 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral |
| Dudleya cymosa ssp. ovatifolia | Santa Monica dudleya | Dicots | PDCRA040A5 | 3 | 1 | Threatened | None | G5T1 | S1 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Coastal scrub |
| Dudleya parva | Conejo dudleya | Dicots | PDCRA04016 | 13 | 13 | Threatened | None | G1 | S1 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Coastal scrub, Valley & foothill grassland |
| Dudleya verityi | Verity's dudleya | Dicots | PDCRA040U0 | 8 | 8 | Threatened | None | G1 | S1 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Cismontane woodland, Coastal scrub |
| Elanus leucurus | white-tailed kite | Birds | ABNKC06010 | 180 | 3 | None | None | G5 | S3S4 | null | BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern | Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Empidonax traillii extimus | southwestern willow flycatcher | Birds | ABPAE33043 | 70 | 2 | Endangered | Endangered | G5T2 | S1 | null | NABCI_RWL-Red Watch List | Riparian woodland |
| Emys marmorata | western pond turtle | Reptiles | ARAAD02030 | 1398 | 16 | None | None | G3G4 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive | Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland |
| Eremophila alpestris actia | California horned lark | Birds | ABPAT02011 | 94 | 1 | None | None | G5T4Q | S4 | null | CDFW_WL-Watch List, IUCN_LC-Least Concern | Marine intertidal & splash zone communities, Meadow & seep |
| Eriogonum crocatum | conejo buckwheat | Dicots | PDPGN081G0 | 13 | 13 | None | Rare | G1 | S1 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Coastal scrub, Valley & foothill grassland |
| Eucyclogobius newberryi | tidewater goby | Fish | AFCQN04010 | 127 | 1 | Endangered | None | G3 | S3 | null | AFS_EN-Endangered, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable | Aquatic, Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters, South coast flowing waters |
| Eumops perotis californicus | western mastiff bat | Mammals | AMACD02011 | 296 | 3 | None | None | G5T4 | S3S4 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, WBWG_H-High Priority | Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland |
| Euphydryas editha quino | quino checkerspot butterfly | Insects | IILEPK405L | 127 | 1 | Endangered | None | G5T1T2 | S1S2 | null | null | Chaparral, Coastal scrub |
| Gasterosteus aculeatus williamsoni | unarmored threespine stickleback | Fish | AFCPA03011 | 16 | 1 | Endangered | Endangered | G5T1 | S1 | null | AFS_EN-Endangered, CDFW_FP-Fully Protected | Aquatic, South coast flowing waters |
| Gila orcuttii | arroyo chub | Fish | AFCJB13120 | 49 | 6 | None | None | G2 | S2 | null | AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive | Aquatic, South coast flowing waters |
| Helminthoglypta traskii traskii | Trask shoulderband | Mollusks | IMGASC2473 | 1 | 1 | None | None | G1G2T1 | S1 | null | null | null |
| Horkelia cuneata var. puberula | mesa horkelia | Dicots | PDROS0W045 | 103 | 5 | None | None | G4T1 | S1 | 1B.1 | USFS_S-Sensitive | Chaparral, Cismontane woodland, Coastal scrub |
| Lasiurus blossevillii | western red bat | Mammals | AMACC05060 | 128 | 2 | None | None | G5 | S3 | null | CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_H-High Priority | Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland |
| Lasiurus cinereus | hoary bat | Mammals | AMACC05030 | 238 | 1 | None | None | G5 | S4 | null | IUCN_LC-Least Concern, WBWG_M-Medium Priority | Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest |
| Lasthenia glabrata ssp. coulteri | Coulter's goldfields | Dicots | PDAST5L0A1 | 111 | 1 | None | None | G4T2 | S2 | 1B.1 | BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG- | Alkali playa, Marsh & swamp, Salt marsh, Vernal pool, Wetland |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Santa Barbara Botanic Garden | |
| Lupinus paynei | Payne's bush lupine | Dicots | PDFAB2B580 | 7 | 2 | None | None | G1Q | S1 | 1B.1 | null | Coastal scrub, Riparian scrub, Valley & foothill grassland |
| Microtus californicus stephensi | south coast marsh vole | Mammals | AMAFF11035 | 7 | 1 | None | None | G5T1T2 | S1S2 | null | CDFW_SSC-Species of Special Concern | null |
| Monardella hypoleuca ssp. hypoleuca | white-veined monardella | Dicots | PDLAM180A5 | 29 | 1 | None | None | G4T3 | S3 | 1B.3 | null | Chaparral, Cismontane woodland |
| Monardella sinuata ssp. gerryi | Gerry's curly-leaved monardella | Dicots | PDLAM18163 | 3 | 3 | None | None | G3T1 | S1 | 1B.1 | null | Coastal scrub |
| Myotis ciliolabrum | western small-footed myotis | Mammals | AMACC01140 | 82 | 1 | None | None | G5 | S3 | null | BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_M-Medium Priority | null |
| Myotis yumanensis | Yuma myotis | Mammals | AMACC01020 | 265 | 1 | None | None | G5 | S4 | null | BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_LM-Low-Medium Priority | Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest |
| Navarretia ojaiensis | Ojai navarretia | Dicots | PDPLM0C130 | 22 | 8 | None | None | G2 | S2 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive | Chaparral, Coastal scrub, Valley & foothill grassland |
| Neotoma lepida intermedia | San Diego desert woodrat | Mammals | AMAFF08041 | 132 | 4 | None | None | G5T3T4 | S3S4 | null | CDFW_SSC-Species of Special Concern | Coastal scrub |
| Nolina cismontana | chaparral nolina | Monocots | PMAGA080E0 | 68 | 6 | None | None | G3 | S3 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive | Chaparral, Coastal scrub, Ultramafic |
| Oncorhynchus mykiss irideus pop. 10 | steelhead - southern California DPS | Fish | AFCHA0209J | 20 | 4 | Endangered | None | G5T1Q | S1 | null | AFS_EN-Endangered | Aquatic, South coast flowing waters |
| Orcuttia californica | California Orcutt grass | Monocots | PMPOA4G010 | 37 | 3 | Endangered | Endangered | G1 | S1 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | Vernal pool, Wetland |
| Panoquina errans | wandering (=saltmarsh) skipper | Insects | IILEP84030 | 14 | 1 | None | None | G4G5 | S2 | null | IUCN_NT-Near Threatened | Marsh & swamp, Wetland |
| Passerculus sandwichensis beldingi | Belding's savannah sparrow | Birds | ABPBX99015 | 39 | 1 | None | Endangered | G5T3 | S3 | null | null | Marsh & swamp, Wetland |
| Pelecanus occidentalis californicus | California brown pelican | Birds | ABNFC01021 | 27 | 1 | Delisted | Delisted | G4T3T4 | S3 | null | BLM_S-Sensitive, CDFW_FP-Fully Protected, USFS_S-Sensitive | null |
| Pentachaeta lyonii | Lyon's pentachaeta | Dicots | PDAST6X060 | 45 | 38 | Endangered | Endangered | G1 | S1 | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Coastal scrub, Valley & foothill grassland |
| Phrynosoma blainvillii | coast horned lizard | Reptiles | ARACF12100 | 784 | 11 | None | None | G3G4 | S3S4 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern | Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland |
| Polioptila californica californica | coastal California gnatcatcher | Birds | ABPBJ08081 | 845 | 10 | Threatened | None | G4G5T2Q | S2 | null | CDFW_SSC-Species of Special Concern, | Coastal bluff scrub, Coastal scrub |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | NABCI_YWL-Yellow Watch List | |
| Pseudognaphalium leucocephalum | white rabbit-tobacco | Dicots | PDAST440C0 | 62 | 5 | None | None | G4 | S2 | 2B.2 | null | Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland |
| Quercus dumosa | Nuttall's scrub oak | Dicots | PDFAG050D0 | 180 | 2 | None | None | G3 | S3 | 1B.1 | BLM_S-Sensitive, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive | Chaparral, Closed-cone coniferous forest, Coastal scrub |
| Rallus obsoletus levipes | light-footed Ridgway's rail | Birds | ABNME05014 | 32 | 1 | Endangered | Endangered | G5T1T2 | S1 | null | CDFW_FP-Fully Protected, NABCI_RWL-Red Watch List | Marsh & swamp, Salt marsh, Wetland |
| Riparia riparia | bank swallow | Birds | ABPAU08010 | 298 | 4 | None | Threatened | G5 | S2 | null | BLM_S-Sensitive, IUCN_LC-Least Concern | Riparian scrub, Riparian woodland |
| Senecio aphanactis | chaparral ragwort | Dicots | PDAST8H060 | 98 | 7 | None | None | G3 | S2 | 2B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | Chaparral, Cismontane woodland, Coastal scrub |
| Setophaga petechia | yellow warbler | Birds | ABPBX03010 | 78 | 1 | None | None | G5 | S3S4 | null | CDFW_SSC-Species of Special Concern, USFWS_BCC-Birds of Conservation Concern | Riparian forest, Riparian scrub, Riparian woodland |
| Sorex ornatus salicornicus | southern California saltmarsh shrew | Mammals | AMABA01104 | 4 | 1 | None | None | G5T1? | S1 | null | CDFW_SSC-Species of Special Concern | Salt marsh |
| Southern Coast Live Oak Riparian Forest | Southern Coast Live Oak Riparian Forest | Riparian | CTT61310CA | 246 | 19 | None | None | G4 | S4 | null | null | Riparian forest |
| Southern Coastal Salt Marsh | Southern Coastal Salt Marsh | Marsh | CTT52120CA | 24 | 1 | None | None | G2 | S2.1 | null | null | Marsh & swamp, Wetland |
| Southern Riparian Forest | Southern Riparian Forest | Riparian | CTT61300CA | 20 | 1 | None | None | G4 | S4 | null | null | Riparian forest |
| Southern Riparian Scrub | Southern Riparian Scrub | Riparian | CTT63300CA | 56 | 8 | None | None | G3 | S3.2 | null | null | Riparian scrub |
| Southern Sycamore Alder Riparian Woodland | Southern Sycamore Alder Riparian Woodland | Riparian | CTT62400CA | 230 | 10 | None | None | G4 | S4 | null | null | Riparian woodland |
| Southern Willow Scrub | Southern Willow Scrub | Riparian | CTT63320CA | 45 | 2 | None | None | G3 | S2.1 | null | null | Riparian scrub |
| Spea hammondii | western spadefoot | Amphibians | AAABF02020 | 1409 | 7 | None | None | G3 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened | Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland |
| Sternula antillarum browni | California least tern | Birds | ABNNM08103 | 75 | 1 | Endangered | Endangered | G4T2T3Q | S2 | null | CDFW_FP-Fully Protected, NABCI_RWL-Red Watch List | Alkali playa, Wetland |
| Streptocephalus woottoni | Riverside fairy shrimp | Crustaceans | ICBRA07010 | 83 | 1 | Endangered | None | G1G2 | S1S2 | null | IUCN_EN-Endangered | Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland |
| Suaeda esteroa | estuary seablite | Dicots | PDCHE0P0D0 | 39 | 3 | None | None | G3 | S2 | 1B.2 | null | Marsh & swamp, Salt marsh, Wetland |
| Taxidea taxus | American badger | Mammals | AMAJF04010 | 594 | 6 | None | None | G5 | S3 | null | CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern | Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, Ione formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland |
| Texosporium sancti-jacobi | woven-spored lichen | Lichens | NLTEST7980 | 19 | 1 | None | None | G3 | S2 | 3 | null | Chaparral |
| Thamnophis hammondii | two-striped gartersnake | Reptiles | ARADB36160 | 184 | 10 | None | None | G4 | S3S4 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive | Marsh & swamp, Riparian scrub, Riparian woodland, Wetland |
| Thamnophis sirtalis pop. 1 | south coast gartersnake | Reptiles | ARADB3613F | 3 | 1 | None | None | G5T1T2 | S1S2 | null | CDFW_SSC-Species of Special Concern | Artificial standing waters, Marsh & swamp, Riparian scrub, Riparian woodland, South coast flowing waters, South coast standing waters, Wetland |
| Thelypteris puberula var. sonorensis | Sonoran maiden fern | Ferns | PPTHE05192 | 27 | 3 | None | None | G5T3 | S2 | 2B.2 | USFS_S-Sensitive | Meadow & seep, Wetland |
| Tortula californica | California screw moss | Bryophytes | NBMUS7L090 | 15 | 3 | None | None | G2G3 | S2? | 1B.2 | BLM_S-Sensitive | Chenopod scrub, Valley & foothill grassland |
| Trimerotropis occidentiloides | Santa Monica grasshopper | Insects | IIORT36300 | 4 | 4 | None | None | G1G2 | S1S2 | null | IUCN_EN-Endangered | Chaparral |
| Tryonia imitator | mimic tryonia (=California brackishwater snail) | Mollusks | IMGASJ7040 | 39 | 1 | None | None | G2 | S2 | null | IUCN_DD-Data Deficient | Aquatic, Brackish marsh, Estuary, Lagoon, Marsh & swamp, Salt marsh, Wetland |
| Valley Needlegrass Grassland | Valley Needlegrass Grassland | Herbaceous | CTT42110CA | 45 | 2 | None | None | G3 | S3.1 | null | null | Valley & foothill grassland |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Valley Oak Woodland | Valley Oak Woodland | Woodland | CTT71130CA | 91 | 10 | None | None | G3 | S2.1 | null | null | Cismontane woodland |
| Vireo bellii pusillus | least Bell's vireo | Birds | ABPBW01114 | 503 | 20 | Endangered | Endangered | G5T2 | S2 | null | IUCN_NT-Near Threatened, NABCI_YWL-Yellow Watch List | Riparian forest, Riparian scrub, Riparian woodland |

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

## Plant List

**49** matches found. *Click on scientific name for details*

**Search Criteria**

California Rare Plant Rank is one of [1A, 1B, 2A, 2B, 3, 4], FESA is one of [Endangered, Threatened, Candidate, Not Listed], CESA is one of [Endangered, Threatened, Rare, Not Listed], Found in Quads 3411931, 3411838, 3411837, 3411921, 3411828, 3411827, 3411911, 3411818 and 3411817;
Lifeform is one of [Tree, Shrub, Leaf succulent, Herb, Vine, Stem succulent, Lichen, Moss, Liverwort],
Duration is one of [ann, per, ephem],
Bloom Time is one of [January, February, March, April, May, June, July, August, September, October, November, December]

Modify Search Criteria Export to Excel Modify Columns Modify Sort Display Photos

| Scientific Name | Common Name | Family | Lifeform | Blooming Period | CA Rare Plant Rank | State Rank | Global Rank |
|---|---|---|---|---|---|---|---|
| Abronia maritima | red sand-verbena | Nyctaginaceae | perennial herb | Feb-Nov | 4.2 | S3? | G4 |
| Asplenium vespertinum | western spleenwort | Aspleniaceae | perennial rhizomatous herb | Feb-Jun | 4.2 | S4 | G4 |
| Astragalus brauntonii | Braunton's milk-vetch | Fabaceae | perennial herb | Jan-Aug | 1B.1 | S2 | G2 |
| Atriplex coulteri | Coulter's saltbush | Chenopodiaceae | perennial herb | Mar-Oct | 1B.2 | S1S2 | G3 |
| Baccharis malibuensis | Malibu baccharis | Asteraceae | perennial deciduous shrub | Aug | 1B.1 | S1 | G1 |
| Calochortus catalinae | Catalina mariposa lily | Liliaceae | perennial bulbiferous herb | (Feb)Mar-Jun | 4.2 | S3S4 | G3G4 |
| Calochortus clavatus var. clavatus | club-haired mariposa lily | Liliaceae | perennial bulbiferous herb | (Mar)May-Jun | 4.3 | S3 | G4T3 |
| Calochortus clavatus var. gracilis | slender mariposa lily | Liliaceae | perennial bulbiferous herb | Mar-Jun(Nov) | 1B.2 | S2S3 | G4T2T3 |
| Calochortus plummerae | Plummer's mariposa lily | Liliaceae | perennial bulbiferous herb | May-Jul | 4.2 | S4 | G4 |
| Camissoniopsis lewisii | Lewis' evening-primrose | Onagraceae | annual herb | Mar-May(Jun) | 3 | S4 | G4 |
| Centromadia parryi ssp. australis | southern tarplant | Asteraceae | annual herb | May-Nov | 1B.1 | S2 | G3T2 |
| Cercocarpus betuloides var. blancheae | island mountain-mahogany | Rosaceae | perennial evergreen shrub | Feb-May | 4.3 | S4 | G5T4 |
| Chaenactis glabriuscula var. orcuttiana | Orcutt's pincushion | Asteraceae | annual herb | Jan-Aug | 1B.1 | S1 | G5T1T2 |
| Chloropyron maritimum ssp. maritimum | salt marsh bird's-beak | Orobanchaceae | annual herb (hemiparasitic) | May-Oct(Nov) | 1B.2 | S1 | G4?T1 |
| Chorizanthe parryi var. parryi | Parry's spineflower | Polygonaceae | annual herb | Apr-Jun | 1B.1 | S2 | G3T2 |
| Convolvulus simulans | small-flowered morning-glory | Convolvulaceae | annual herb | Mar-Jul | 4.2 | S4 | G4 |
| Deinandra minthornii | Santa Susana tarplant | Asteraceae | perennial deciduous shrub | Jul-Nov | 1B.2 | S2 | G2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Delphinium parryi ssp. blochmaniae | dune larkspur | Ranunculaceae | perennial herb | Apr-Jun | 1B.2 | S2 | G4T2 |
| Delphinium parryi ssp. purpureum | Mt. Pinos larkspur | Ranunculaceae | perennial herb | May-Jun | 4.3 | S4 | G4T4 |
| Dichondra occidentalis | western dichondra | Convolvulaceae | perennial rhizomatous herb | (Jan)Mar-Jul | 4.2 | S3S4 | G3G4 |
| Dudleya blochmaniae ssp. blochmaniae | Blochman's dudleya | Crassulaceae | perennial herb | Apr-Jun | 1B.1 | S2 | G3T2 |
| Dudleya cymosa ssp. agourensis | Agoura Hills dudleya | Crassulaceae | perennial herb | May-Jun | 1B.2 | S1 | G5T1 |
| Dudleya cymosa ssp. marcescens | marcescent dudleya | Crassulaceae | perennial herb | Apr-Jul | 1B.2 | S2 | G5T2 |
| Dudleya cymosa ssp. ovatifolia | Santa Monica dudleya | Crassulaceae | perennial herb | Mar-Jun | 1B.1 | S1 | G5T1 |
| Dudleya parva | Conejo dudleya | Crassulaceae | perennial herb | May-Jun | 1B.2 | S1 | G1 |
| Dudleya verityi | Verity's dudleya | Crassulaceae | perennial herb | May-Jun | 1B.1 | S1 | G1 |
| Eriogonum crocatum | conejo buckwheat | Polygonaceae | perennial herb | Apr-Jul | 1B.2 | S1 | G1 |
| Hordeum intercedens | vernal barley | Poaceae | annual herb | Mar-Jun | 3.2 | S3S4 | G3G4 |
| Horkelia cuneata var. puberula | mesa horkelia | Rosaceae | perennial herb | Feb-Jul(Sep) | 1B.1 | S1 | G4T1 |
| Lasthenia glabrata ssp. coulteri | Coulter's goldfields | Asteraceae | annual herb | Feb-Jun | 1B.1 | S2 | G4T2 |
| Lepechinia fragrans | fragrant pitcher sage | Lamiaceae | perennial shrub | Mar-Oct | 4.2 | S3 | G3 |
| Lilium humboldtii ssp. ocellatum | ocellated Humboldt lily | Liliaceae | perennial bulbiferous herb | Mar-Jul(Aug) | 4.2 | S4? | G4T4? |
| Lupinus paynei | Payne's bush lupine | Fabaceae | perennial shrub | Mar-Apr(May-Jul) | 1B.1 | S1 | G1Q |
| Monardella hypoleuca ssp. hypoleuca | white-veined monardella | Lamiaceae | perennial herb | (Apr)May-Aug (Sep-Dec) | 1B.3 | S3 | G4T3 |
| Monardella sinuata ssp. gerryi | Gerry's curly-leaved monardella | Lamiaceae | annual herb | Apr-Jun | 1B.1 | S1 | G3T1 |
| Monardella sinuata ssp. sinuata | southern curly-leaved monardella | Lamiaceae | annual herb | Apr-Sep | 1B.2 | S2 | G3T2 |
| Navarretia ojaiensis | Ojai navarretia | Polemoniaceae | annual herb | May-Jul | 1B.1 | S2 | G2 |
| Nolina cismontana | chaparral nolina | Ruscaceae | perennial evergreen shrub | (Mar)May-Jul | 1B.2 | S3 | G3 |
| Orcuttia californica | California Orcutt grass | Poaceae | annual herb | Apr-Aug | 1B.1 | S1 | G1 |
| Pentachaeta lyonii | Lyon's pentachaeta | Asteraceae | annual herb | (Feb)Mar-Aug | 1B.1 | S1 | G1 |
| Phacelia hubbyi | Hubby's phacelia | Hydrophyllaceae | annual herb | Apr-Jul | 4.2 | S4 | G4 |
| Phacelia ramosissima var. austrolitoralis | south coast branching phacelia | Hydrophyllaceae | perennial herb | Mar-Aug | 3.2 | S3 | G5?T3Q |
| Piperia michaelii | Michael's rein orchid | Orchidaceae | perennial herb | Apr-Aug | 4.2 | S3 | G3 |
| Pseudognaphalium leucocephalum | white rabbit-tobacco | Asteraceae | perennial herb | (Jul)Aug-Nov (Dec) | 2B.2 | S2 | G4 |
| Quercus dumosa | Nuttall's scrub oak | Fagaceae | perennial evergreen shrub | Feb-Apr(May-Aug) | 1B.1 | S3 | G3 |
| Senecio aphanactis | chaparral ragwort | Asteraceae | annual herb | Jan-Apr(May) | 2B.2 | S2 | G3 |
| Suaeda esteroa | estuary seablite | Chenopodiaceae | perennial herb | (May)Jul-Oct (Jan) | 1B.2 | S2 | G3 |
| Suaeda taxifolia | woolly seablite | Chenopodiaceae | perennial evergreen shrub | Jan-Dec | 4.2 | S4 | G4 |
| Thelypteris puberula var. sonorensis | Sonoran maiden fern | Thelypteridaceae | perennial rhizomatous herb | Jan-Sep | 2B.2 | S2 | G5T3 |

**Suggested Citation**

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**Questions and Comments**
rareplants@cnps.org

**IPaC** Information for Planning and Consultation **U.S. Fish & Wildlife Service**

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.



## Location

Ventura County, California

## Local office

Ventura Fish And Wildlife Office

(805) 644-1766
(805) 644-3958

2493 Portola Road, Suite B
Ventura, CA 93003-7726

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

| NAME | STATUS |
|---|---|
| Coastal California Gnatcatcher Polioptila californica californica<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/8178 | Threatened |
| Least Bell's Vireo Vireo bellii pusillus<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/5945 | Endangered |
| Southwestern Willow Flycatcher Empidonax traillii extimus<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/6749 | Endangered |

## Amphibians

| NAME | STATUS |
|---|---|
| California Red-legged Frog Rana draytonii<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/2891 | Threatened |

## Crustaceans

| NAME | STATUS |
|---|---|
| Riverside Fairy Shrimp Streptocephalus woottoni<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/8148 | Endangered |
| Vernal Pool Fairy Shrimp Branchinecta lynchi<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/498 | Threatened |

## Flowering Plants

| NAME | STATUS |
|---|---|
| Braunton's Milk-vetch Astragalus brauntonii<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/5674 | Endangered |

| | |
|---|---|
| California Orcutt Grass *Orcuttia californica*<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/4923 | Endangered |
| Conejo Dudleya *Dudleya abramsii ssp. parva*<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/4871 | Threatened |
| Gambel's Watercress *Rorippa gambellii*<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/4201 | Endangered |
| Lyon's Pentachaeta *Pentachaeta lyonii*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/4699 | Endangered |
| Marcescent Dudleya *Dudleya cymosa ssp. marcescens*<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/7145 | Threatened |
| Marsh Sandwort *Arenaria paludicola*<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/2229 | Endangered |
| Santa Monica Mountains Dudleyea *Dudleya cymosa ssp. ovatifolia*<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/2538 | Threatened |
| Spreading Navarretia *Navarretia fossalis*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/1334 | Threatened |
| Verity's Dudleya *Dudleya verityi*<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/4342 | Threatened |

# Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

| NAME | BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" |
|---|---|

| | |
|---|---|
| | INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.) |
| Allen's Hummingbird Selasphorus sasin<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9637 | Breeds Feb 1 to Jul 15 |
| Burrowing Owl Athene cunicularia<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br>https://ecos.fws.gov/ecp/species/9737 | Breeds Mar 15 to Aug 31 |
| Common Yellowthroat Geothlypis trichas sinuosa<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br>https://ecos.fws.gov/ecp/species/2084 | Breeds May 20 to Jul 31 |
| Costa's Hummingbird Calypte costae<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br>https://ecos.fws.gov/ecp/species/9470 | Breeds Jan 15 to Jun 10 |
| Golden Eagle Aquila chrysaetos<br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.<br>https://ecos.fws.gov/ecp/species/1680 | Breeds Jan 1 to Aug 31 |
| Lawrence's Goldfinch Carduelis lawrencei<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9464 | Breeds Mar 20 to Sep 20 |
| Nuttall's Woodpecker Picoides nuttallii<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br>https://ecos.fws.gov/ecp/species/9410 | Breeds Apr 1 to Jul 20 |
| Oak Titmouse Baeolophus inornatus<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9656 | Breeds Mar 15 to Jul 15 |

Rufous Hummingbird selasphorus rufus — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

White Headed Woodpecker Picoides albolarvatus — Breeds May 1 to Aug 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9411

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.



# Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

**Probability of Presence (■)**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For

example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

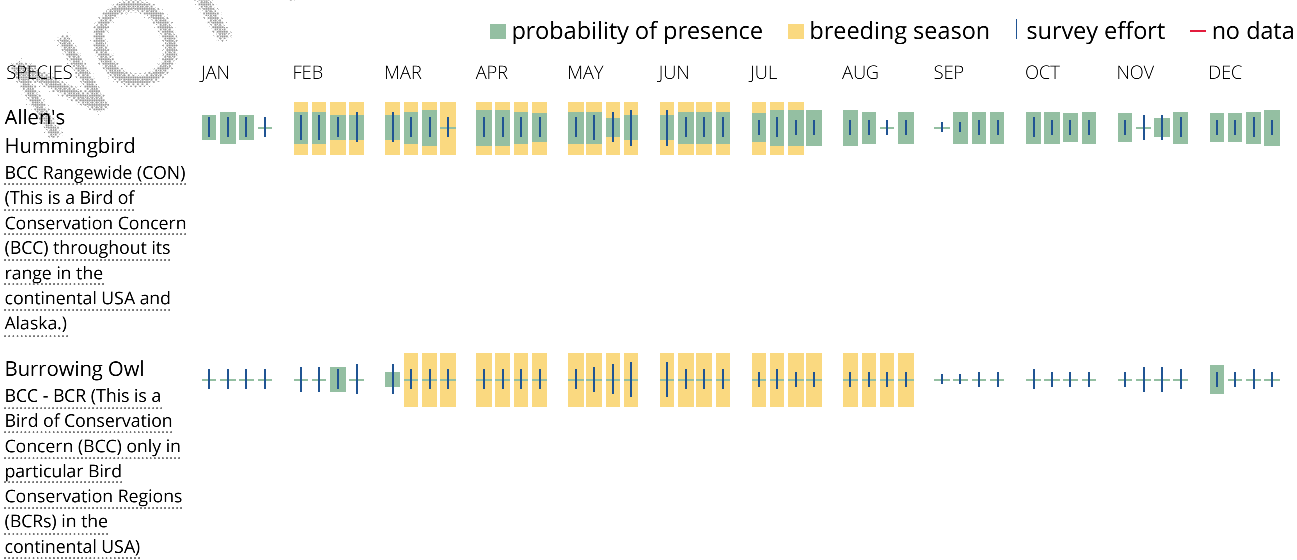
**Breeding Season** (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort** (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

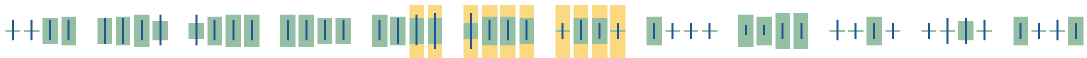
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

**No Data** (–)
A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

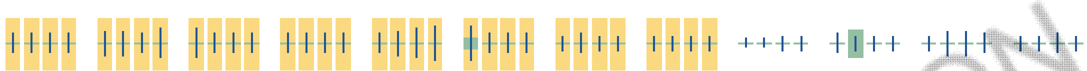


Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

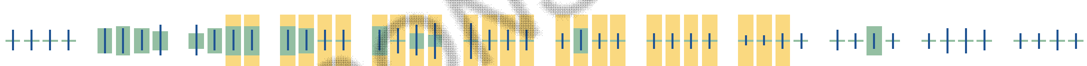


Costa's Hummingbird
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

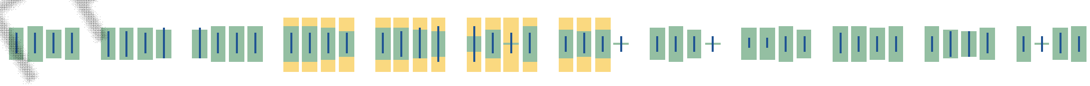
Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



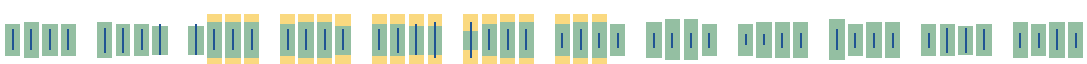
Lawrence's Goldfinch
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

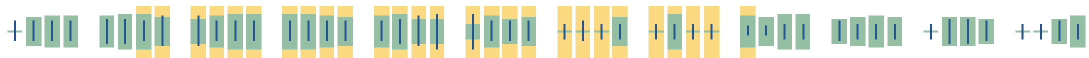


Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

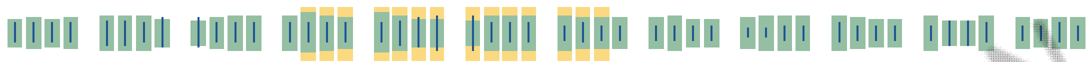


Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

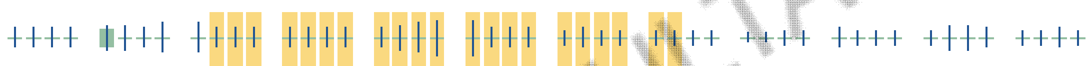
Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

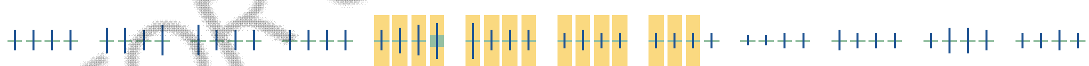


Tricolored Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

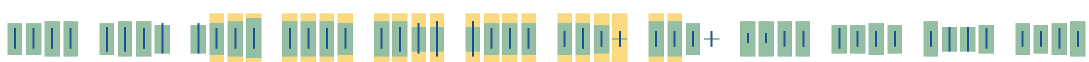


SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

White Headed Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)





**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

**Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

#### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

#### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.



# Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

**Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

**Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

# Appendix C

## Rare Plant Survey Memorandum

ESA 50 YEARS 1969-2019

770 Paseo Camarillo
Suite 310
Camarillo, CA 93010
805.914.1500 phone
805.914.1501 fax

esassoc.com

July 26, 2021

Iain Holt, AICP
Senior Planner
Community Development Department
2100 Thousand Oaks Blvd.
Thousand Oaks, CA 91362

**Subject:** Focused Rare Plant Survey for the Conejo Summit Project

Dear Mr. Holt:

This letter documents the findings of a focused rare plant survey conducted by Environmental Science Associates (ESA) for the Conejo Summit Project (project), located in the City of Thousand Oaks, California.

## Background

A biological assessment was conducted in February 2020 by ESA to characterize habitat suitability for sensitive biological resources within the project site. The survey revealed that seven special-status plant species have the potential to occur within the project site, including the Catalina mariposa lily (*Calochortus catalinae*), Plummer's mariposa lily (*C. plummerae*), club haired mariposa-lily (*C. clavatus* var. *clavatus*), slender mariposa lily (*C.clavatus* var. *gracilis*), southern tarplant (*Centromadia parryi* ssp. *australis*), Ojai navarretia (*Navarretia ojaiensis*) and Lyon's pentachaeta (*Pentachaeta lyonii*).

## Methods

ESA biologist Robert Sweet conducted a focused rare plant survey for the seven special-status plant species with potential to occur within the project site, on June 30, 2021, between 0830 and 1130. Weather remained calm during the survey, with wind speeds between 0 and 1 miles per hour, clear skies and temperatures ranging between 73° and 82° Fahrenheit. The survey was seasonally-timed to coincide with the typical blooming period for the special-status plant species with potential to occur and was conducted in accordance with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*[1]. Survey transects were conducted throughout all accessible portions of the project site with suitable habitat (e.g., vegetation, soils, slope, disturbance), including a surrounding 50-foot buffer (survey area).

1 California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. March 20, 2018.

## Results and Conclusions

No special-status plants were observed during the survey; therefore, the proposed project is not expected to have an effect on special-status plant populations.

If you have questions regarding these findings, please feel free to contact Robbie Sweet at (805) 279-2569 or rsweet@esassoc.com.

Sincerely,

Robert Sweet
Senior Biologist

Daryl Koutnik
Principal, Biological and Environmental Compliance

# Appendix D
## Energy Calculations

# Appendix D
# Energy Analysis
## Conejo Summit Project

1. Construction

2. Operations

# Energy Analysis
## Conejo Summit Project
### 1. Construction

# Conejo Summit Project
## Energy Summary

***Construction Fuel Consumption Summary***

| | gallons | | |
|---|---|---|---|
| **Year** | **Diesel** | **Gas** | **Years** |
| Initial | 205,097 | 14,346 | 1.92 |
| **Annual Average** | 107,007 | 7,485 | |
| Remainder | 417,051 | 22,271 | 6.33 |
| **Annual Average** | 65,850 | 3,517 | |
| ***Total*** | ***622,148*** | ***36,617*** | 6.75 |
| **Annual Average** | 92,170 | 5,425 | |

| | | |
|---|---|---|
| **State Usage (2019)[1]** | 1,559,000,000 | 13,473,000,000 |
| **Project % State** | 0.0059% | 0.0000% |
| **County Usage** | 33,000,000 | 297,000,000 |
| **Project % County** | 0.2793% | 0.0018% |

| **Construction** | Total Gallons | Annual | |
|---|---|---|---|
| Onsite Equipment | 610,517 | 305,259 | diesel |
| Haul Trucks | 71 | 36 | diesel |
| Vendor Trucks | 11,559 | 5,780 | diesel |
| Worker Trips | 36,617 | 18,308 | gasoline |

# Conejo Summit Project
## Fuel Conversion - Construction

| | Total $CO_2$ MT/yr | Fuel Type | Factor $KGCO_2$/gal | Gallons | Total Diesel (gal) | Total Gas (gal) |
|---|---|---|---|---|---|---|
| *Bldg1* | | | | | | |
| *Phase 1&2 -Grading* | | | | | | |
| Off-road | 720.06 | diesel | 10.16 | 70,868.48 | | |
| Haul | | diesel | 10.16 | 39.27 | | |
| Vendor | | diesel | 10.16 | 231.80 | | |
| Worker | | gasoline | 8.89 | 1,498.60 | 71,139.55 | 1,498.60 |
| *Phase 3,4&7 - Grading* | | | | | | |
| Off-road | 435.38 | diesel | 10.16 | 42,850.71 | | |
| Haul | | diesel | 10.16 | 0.00 | | |
| Vendor | | diesel | 10.16 | 280.31 | | |
| Worker | | gasoline | 8.89 | 1,087.36 | 43,131.02 | 1,087.36 |
| *Phase 5 & 6 - Grading* | | | | | | |
| Off-road | 586.09 | diesel | 10.16 | 57,683.65 | | |
| Haul | | diesel | 10.16 | 0.00 | | |
| Vendor | | diesel | 10.16 | 188.67 | | |
| Worker | | gasoline | 8.89 | 1,219.79 | 57,872.32 | 1,219.79 |
| *Phase 1 - BC* | | | | | | |
| Off-road | 586.09 | diesel | 10.16 | 57,683.65 | | |
| Haul | 0.00 | diesel | 10.16 | 6.97 | | |
| Vendor | 2.73 | diesel | 10.16 | 2,055.63 | | |
| Worker | 10.18 | gasoline | 8.89 | 6,201.96 | 59,746.25 | 6,201.96 |
| *Phase 2 - BC* | | | | | | |
| Off-road | 733.07 | diesel | 10.16 | 72,148.94 | | |
| Haul | | diesel | 10.16 | 6.97 | | |
| Vendor | | diesel | 10.16 | 2,055.63 | | |
| Worker | | gasoline | 8.89 | 6,644.96 | 74,211.53 | 6,644.96 |
| *Phase 3 - BC* | | | | | | |
| Off-road | 533.14 | diesel | 10.16 | 52,471.95 | | |
| Haul | | diesel | 10.16 | 2.53 | | |
| Vendor | | diesel | 10.16 | 747.50 | | |
| Worker | | gasoline | 8.89 | 1,610.90 | 53,221.99 | 1,610.90 |
| *Phase 4 - BC* | | | | | | |
| Off-road | 602.35 | diesel | 10.16 | 59,283.22 | | |
| Haul | | diesel | 10.16 | 2.86 | | |
| Vendor | | diesel | 10.16 | 844.53 | | |
| Worker | | gasoline | 8.89 | 2,184.01 | 60,130.61 | 2,184.01 |

# Conejo Summit Project
## Fuel Conversion - Construction

| | | | | | | |
|---|---|---|---|---|---|---|
| *Phase 5 - BC* | | | | | | |
| Off-road | 674.11 | diesel | 10.16 | 66,346.75 | | |
| Haul | | diesel | 10.16 | 3.20 | | |
| Vendor | | diesel | 10.16 | 1,417.74 | | |
| Worker | | gasoline | 8.89 | 5,295.83 | 67,767.69 | 5,295.83 |
| *Phase 6 - BC* | | | | | | |
| Off-road | 663.86 | diesel | 10.16 | 65,337.67 | | |
| Haul | | diesel | 10.16 | 6.31 | | |
| Vendor | | diesel | 10.16 | 1,861.57 | | |
| Worker | | gasoline | 8.89 | 5,415.87 | 67,205.55 | 5,415.87 |
| *Phase 7 - BC* | | | | | | |
| Off-road | 668.99 | diesel | 10.16 | 65,842.21 | | |
| Haul | | diesel | 10.16 | 3.18 | | |
| Vendor | | diesel | 10.16 | 1,875.94 | | |
| Worker | | gasoline | 8.89 | 5,457.70 | 67,721.33 | 5,457.70 |

# Conejo Summit Project

## Total On-Road Fuel Consumption

| | | gal/mile | gal/min |
|---|---|---|---|
| 2021Hauling | Hauling | 0.15126777 | 5.05862E-06 |
| 2021Vendor | Vendor | 0.12307016 | 3.83142E-06 |
| 2021Worker | Worker | 0.03585513 | 1.51915E-06 |
| 2023Hauling | Hauling | 0.13928364 | 4.32067E-06 |
| 2023Vendor | Vendor | 0.11357879 | 3.36639E-06 |
| 2023Worker | Worker | 0.03384965 | 1.43418E-06 |
| 2027Hauling | Hauling | 0.12779047 | 4.3838E-06 |
| 2027Vendor | Vendor | 0.1051852 | 3.72687E-06 |
| 2027Worker | Worker | 0.03020007 | 1.90983E-06 |
| 2040Hauling | Hauling | 0.10311131 | 3.15172E-06 |
| 2040Vendor | Vendor | 0.08755138 | 2.9562E-06 |
| 2040Worker | Worker | 0.02521926 | 1.61521E-06 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Idling per Day (minutes) |
|---|---|---|---|---|---|
| Phase 1 & 2 Grading | 2021 | | | | |
| Total Haul Trips | 2835 | | | | |
| Hauling | 50 | 129 | 10 | 0.04 | 15 |
| Vendor | 2 | 129 | 10 | 7.3 | 15 |
| Worker | 30 | 129 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 3,4&7 Grading | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 0 | 78 | 10 | 0.04 | 15 |
| Vendor | 4 | 78 | 10 | 7.3 | 15 |
| Worker | 36 | 78 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 5&6 Grading | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 0 | 105 | 10 | 0.04 | 15 |
| Vendor | 2 | 105 | 10 | 7.3 | 15 |
| Worker | 30 | 105 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 1 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 15 |
| Vendor | 8 | 286 | 10 | 7.3 | 15 |
| Worker | 56 | 286 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 2 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 4 | 286 | 10 | 0.04 | 15 |
| Vendor | 8 | 286 | 10 | 7.3 | 15 |
| Worker | 60 | 286 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 3 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 208 | 10 | 0.04 | 15 |
| Vendor | 4 | 208 | 10 | 7.3 | 15 |
| Worker | 20 | 208 | 10 | 10.8 | 0 |

## Conejo Summit Project

### Total On-Road Fuel Consumption

| | | gal/mile | gal/min |
|---|---|---|---|
| 2021Hauling | Hauling | 0.15126777 | 5.05862E-06 |
| 2021Vendor | Vendor | 0.12307016 | 3.83142E-06 |
| 2021Worker | Worker | 0.03585513 | 1.51915E-06 |
| 2023Hauling | Hauling | 0.13928364 | 4.32067E-06 |
| 2023Vendor | Vendor | 0.11357879 | 3.36639E-06 |
| 2023Worker | Worker | 0.03384965 | 1.43418E-06 |
| 2027Hauling | Hauling | 0.12779047 | 4.3838E-06 |
| 2027Vendor | Vendor | 0.1051852 | 3.72687E-06 |
| 2027Worker | Worker | 0.03020007 | 1.90983E-06 |
| 2040Hauling | Hauling | 0.10311131 | 3.15172E-06 |
| 2040Vendor | Vendor | 0.08755138 | 2.9562E-06 |
| 2040Worker | Worker | 0.02521926 | 1.61521E-06 |

| Construction Phase | Daily One-Way Trips | Haul Days per Phase (days) | Work Hours per Day (hours/day) | One-Way Trip Distance per Day (miles) | Idling per Day (minutes) |
|---|---|---|---|---|---|
| Phase 4 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 235 | 10 | 0.04 | 15 |
| Vendor | 4 | 235 | 10 | 7.3 | 15 |
| Worker | 24 | 235 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 5 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 263 | 10 | 0.04 | 15 |
| Vendor | 6 | 263 | 10 | 7.3 | 15 |
| Worker | 52 | 263 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 6 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 4 | 259 | 10 | 0.04 | 15 |
| Vendor | 8 | 259 | 10 | 7.3 | 15 |
| Worker | 54 | 259 | 10 | 10.8 | 0 |
| | | | | | |
| Phase 7 BC | 2021 | | | | |
| Total Haul Trips | 0 | | | | |
| Hauling | 2 | 261 | 10 | 0.04 | 15 |
| Vendor | 8 | 261 | 10 | 7.3 | 15 |
| Worker | 54 | 261 | 10 | 10.8 | 0 |

# Conejo Summit Project

## Total On-Road Fuel Consumption

| Construction Phase | Regional Emissions (gallons) | | | | | | |
|---|---|---|---|---|---|---|---|
| | gal/mile | gal/min | gal/day | Total Gallons/yr | | | |
| Phase 1 & 2 Grading | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 39 | | | |
| Vendor | 0.12 | 3.83E-06 | 2 | 232 | | | |
| Worker | 0.04 | 1.52E-06 | 12 | 1,499 | | | |
| | | | | | | | |
| Phase 3,4&7 Grading | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 0 | | | |
| Vendor | 0.12 | 3.83E-06 | 4 | 280 | | | |
| Worker | 0.04 | 1.52E-06 | 14 | 1,087 | | | |
| | | | | | | | |
| Phase 5&6 Grading | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 0 | | | |
| Vendor | 0.12 | 3.83E-06 | 2 | 189 | | | |
| Worker | 0.04 | 1.52E-06 | 12 | 1,220 | | | |
| | | | | | | | |
| Phase 1 BC | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 7 | | | |
| Vendor | 0.12 | 3.83E-06 | 7 | 2,056 | | | |
| Worker | 0.04 | 1.52E-06 | 22 | 6,202 | | | |
| | | | | | | | |
| Phase 2 BC | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 7 | | | |
| Vendor | 0.12 | 3.83E-06 | 7 | 2,056 | | | |
| Worker | 0.04 | 1.52E-06 | 23 | 6,645 | | | |
| | | | | | | | |
| Phase 3 BC | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 3 | | | |
| Vendor | 0.12 | 3.83E-06 | 4 | 748 | | | |
| Worker | 0.04 | 1.52E-06 | 8 | 1,611 | | | |

# Conejo Summit Project

T **Total On-Road Fuel Consumption**

| Construction Phase | Regional Emissions (gallons) | | | | | | |
|---|---|---|---|---|---|---|---|
| | gal/mile | gal/min | gal/day | Total Gallons/yr | | | |
| <u>Phase 4 BC</u> | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 3 | | | |
| Vendor | 0.12 | 3.83E-06 | 4 | 845 | | | |
| Worker | 0.04 | 1.52E-06 | 9 | 2,184 | | | |
| | | | | | | | |
| <u>Phase 5 BC</u> | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 3 | | | |
| Vendor | 0.12 | 3.83E-06 | 5 | 1,418 | | | |
| Worker | 0.04 | 1.52E-06 | 20 | 5,296 | | | |
| | | | | | | | |
| <u>Phase 6 BC</u> | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 6 | | | |
| Vendor | 0.12 | 3.83E-06 | 7 | 1,862 | | | |
| Worker | 0.04 | 1.52E-06 | 21 | 5,416 | | | |
| | | | | | | | |
| <u>Phase 7 BC</u> | | | | | | | |
| Total Haul Trips | | | | | | | |
| Hauling | 0.15 | 5.06E-06 | 0 | 3 | | | |
| Vendor | 0.12 | 3.83E-06 | 7 | 1,876 | | | |
| Worker | 0.04 | 1.52E-06 | 21 | 5,458 | | | |

# Energy Analysis

## Conejo Summit Project

### 2. Operations

# Conejo Summit Project
# Energy Information - Electricity

**Electricity Information**

| | | | | |
|---|---|---|---|---|
| SCE | Company Profile | | | |
| | https://www.sce.com/wps/portal/hor . | | | |
| Ventura | | 5,344,035,137 | kWh | 2019 |
| | | 5,344 | gWh | |

http://www.ecdms.energy.ca.gov/elecbycounty.aspx

| | | | |
|---|---|---|---|
| SCE Total | 84,654,000,000 | kWh | |
| | 84,654 | GWh | 2019 |

SCE 2020 Annual Report

# Conejo Summit Project
# Energy Information -Natural Gas

**Natural Gas Information**

SCG Company Profile
http://www.socalgas.com/about-us/company-info.shtml

California Gas and Electricity Utilities
https://www.socalgas.com/regulatory/cgr.shtml
pg. 80 pg. 81 pg. 17

| | | | |
|---|---|---|---|
| Ventura County | 186.508888 | million therms | 2019 |
| | 186,508,888 | therms | |
| | 1 Therm = | 99.9761 CF | |
| | 18,646,431,238 | cubic feet | |
| | 18,646 | million cubic feet | |
| | 1 Therm = | 99976.12 | |
| | 1.86464E+13 | BTU | |
| | 18,646,436 | MBTU | |

http://www.ecdms.energy.ca.gov/gasbycounty.aspx

SoCalGas Total

| | | | |
|---|---|---|---|
| 1037 | btu/cubic foot[9] | | |
| 3435 | MMcf/day | 1,253,775 | per year |
| 3435000000 | cf/day | | |
| 3.5621E+12 | BTU/day | | |
| 3,562,095 | Mmbtu/day | 1,300,164,675 | per year |

# Conejo Summit Project
# Energy Information - Transportation Fuels

**Transportation Fuels**

***Gasoline***

State Consumption

| | | |
|---|---|---|
| 13,473,000,000 | gallons | 2019 |
| 13,473.00 | million gallons | |

County Consumption

| | | |
|---|---|---|
| 297 | million gallons | Ventura |

http://listserver.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html

***Diesel***

Diesel Consumption

| | | |
|---|---|---|
| 1,559,000,000 | gallons | 2019 |
| 1,559.00 | million gallons | |

County Consumption

| | | |
|---|---|---|
| 33 | million gallons | Ventura |

http://listserver.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html

Integrated Energy Policy Report

https://www.energy.ca.gov/energypolicy/

**Conejo Summit Project**
**Operational Energy Demand - Buildout 2027-2040 (Building Energy/Non-Transportation)**

| Electricity | kWh/yr | GWh/yr |
|---|---|---|
| General Light Industry | 5,323,560 | 5.324 |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| **Total Building Energy** | **5,323,560** | **5.324** |
| **Total** | **5,323,560** | **5.324** |
| **Total (including water, see below)** | **6,888,346** | **6.888** |

Source: California Air Resources Board, CalEEMod, Version 2016.3.2.

| Electricity | GWh/yr |
|---|---|
| SCE (2019) | 84,654 |
| Ventura County | 5,344 |
| Project Annual | 6.888 |
| Net Project Annual | 6.888 |
| Percent Net Project of SCE | 0.0081% |
| Percent Net Project of County | 0.1289% |

Source: SCE, Annual Report, 2020

| Water | Mgal/yr | MWh/yr |
|---|---|---|
| General Light Industry | 120.174 | 1,564.79 |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| **Total** | **120.174** | 1,564.79 |

| Electricity Intensity Factors | kWh/Mgal |
|---|---|
| Electricity Factor - Supply | 9,727 |
| Electricity Factor - Treat | 111 |
| Electricity Factor - Distribute | 1,272 |
| Electricity Factor - Wastewater Treatment | 1,911 |

| Electricity from Water Demand | kWh/yr | GWh/yr |
|---|---|---|
| **Total** | **1,564,786** | **1.565** |

Source: California Air Resources Board, CalEEMod, Version 2016.3.2.
Water Demand based on Project Water supply Assessment
Sewage Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories, 2012.

| Natural Gas | kBtu/yr | cubic foot (cf) |
|---|---|---|
| General Light Industry | 0 | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| | | - |
| **Total** | **-** | **-** |

Source: California Air Resources Board, CalEEMod, Version 2016.3.2.
Conversion factor of 1,035 Btu per cubic foot based on United States Energy Information Administration data
(see: USEIA, Natural Gas, Heat Content of Natural Gas Consumed, February 28, 2018,
https://www.eia.gov/dnav/ng/ng_cons_heat_a_EPG0_VGTH_btucf_a.htm. Accessed March 2020.)

-

| Natural Gas | million BTU (MMBtu) |
|---|---|
| SoCalGas | 1,300,164,675 |
| Project Annual | - |
| Net Project Annual | - |
| Percent Net Project of SoCalGas | 0.0000% |

Source: California Gas and Electric Utilities, 2020 California Gas Report

-

# Conejo Summit Project
## Energy Summary

***Annual Operational Fuel Consumption***

| | gallons | | MBTU/yr[3] | GWh/yr[3] | |
|---|---|---|---|---|---|
| | **Diesel** | **Gas** | **Natural Gas** | **Electric** | |
| **Initial** | | | | | |
| Unmitigated | 15,023.00 | 92,161.00 | 118.07 | 3.28 | |
| % of County | *0.05%* | *0.03%* | 0.001% | 0.061% | |
| **2027** | | | | | |
| Unmitigated | 168,760.00 | 29,401.74 | 275.85 | 6.89 | |
| % of County | *0.51%* | *0.01%* | 0.001% | 0.129% | |
| **2040** | | | | | |
| Unmitigated | 136,767.00 | 25,813.00 | 329.21 | 6.89 | |
| % of County | *0.41%* | *0.01%* | 0.002% | 0.129% | |
| SCE[4] | | | | 5,344 | County |
| SoCalGas[5] | | | 18,646,436 | | County |

| | | kWh |
|---|---|---|
| | MBTU | kWh |
| Initial | 118 | 3,276,000 |
| 2027 | 276 | 6,888,346 |
| 2040 | 329 | 6,888,346 |

Conejo Summit - Buildout Operational 2027 - Ventura County, Annual

# Conejo Summit - Buildout Operational 2027

**Ventura County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 764.22 | 1000sqft | 49.64 | 764,220.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2027 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 361.04 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 382,110.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 1,146,330.00 | 0.00 |
| tblConstructionPhase | NumDays | 55.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.61 | 0.58 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.17 |
| tblFleetMix | LHD1 | 0.01 | 0.03 |
| tblFleetMix | LHD2 | 5.7550e-003 | 7.2790e-003 |
| tblFleetMix | MCY | 3.7200e-003 | 3.7080e-003 |
| tblFleetMix | MDV | 0.10 | 0.11 |
| tblFleetMix | MH | 1.0730e-003 | 1.3760e-003 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.1980e-003 | 8.0100e-004 |
| tblFleetMix | SBUS | 4.0400e-004 | 5.5900e-004 |
| tblFleetMix | UBUS | 1.0750e-003 | 9.5900e-004 |
| tblLandUse | LotAcreage | 17.54 | 49.64 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 361.04 |
| tblSolidWaste | SolidWasteGenerationRate | 947.63 | 530.67 |
| tblTripsAndVMT | WorkerTripNumber | 64.00 | 0.00 |
| tblVehicleEF | HHD | 0.45 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.48 | 6.33 |
| tblVehicleEF | HHD | 1.10 | 0.53 |
| tblVehicleEF | HHD | 3.56 | 6.4740e-003 |
| tblVehicleEF | HHD | 3,896.24 | 1,002.87 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.61 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 12.85 | 5.45 |
| tblVehicleEF | HHD | 1.43 | 2.25 |
| tblVehicleEF | HHD | 19.34 | 2.54 |
| tblVehicleEF | HHD | 8.6360e-003 | 2.9490e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 8.2630e-003 | 2.8220e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 7.5000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 3.9950e-003 | 3.9000e-005 |
| tblVehicleEF | HHD | 0.36 | 0.43 |
| tblVehicleEF | HHD | 6.3000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.2200e-004 | 1.4900e-004 |
| tblVehicleEF | HHD | 0.06 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 9.2560e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.7000e-004 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 7.5000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 3.9950e-003 | 3.9000e-005 |
| tblVehicleEF | HHD | 0.44 | 0.49 |
| tblVehicleEF | HHD | 6.3000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.2200e-004 | 1.4900e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.43 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |
| tblVehicleEF | HHD | 0.05 | 0.00 |
| tblVehicleEF | HHD | 1.07 | 6.24 |
| tblVehicleEF | HHD | 1.11 | 0.53 |
| tblVehicleEF | HHD | 3.32 | 6.0450e-003 |
| tblVehicleEF | HHD | 4,127.72 | 991.81 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.62 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 13.27 | 5.22 |
| tblVehicleEF | HHD | 1.37 | 2.15 |
| tblVehicleEF | HHD | 19.33 | 2.54 |
| tblVehicleEF | HHD | 7.2810e-003 | 2.5700e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 6.9660e-003 | 2.4580e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 1.1700e-004 | 1.0000e-006 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 4.0950e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.34 | 0.45 |
| tblVehicleEF | HHD | 1.0300e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.0100e-004 | 1.4200e-004 |
| tblVehicleEF | HHD | 0.06 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 9.1530e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.6700e-004 | 0.00 |
| tblVehicleEF | HHD | 1.1700e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 4.0950e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.41 | 0.52 |
| tblVehicleEF | HHD | 1.0300e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.0100e-004 | 1.4200e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.49 | 0.03 |
| tblVehicleEF | HHD | 0.14 | 0.11 |
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.04 | 6.46 |
| tblVehicleEF | HHD | 1.09 | 0.53 |
| tblVehicleEF | HHD | 3.73 | 6.7820e-003 |
| tblVehicleEF | HHD | 3,576.57 | 1,018.14 |
| tblVehicleEF | HHD | 1,515.25 | 1,253.61 |
| tblVehicleEF | HHD | 11.27 | 0.05 |
| tblVehicleEF | HHD | 12.28 | 5.78 |
| tblVehicleEF | HHD | 1.43 | 2.23 |
| tblVehicleEF | HHD | 19.35 | 2.54 |
| tblVehicleEF | HHD | 0.01 | 3.4740e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.03 | 0.04 |
| tblVehicleEF | HHD | 5.8450e-003 | 0.02 |
| tblVehicleEF | HHD | 1.1300e-004 | 0.00 |
| tblVehicleEF | HHD | 0.01 | 3.3240e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7350e-003 | 8.8180e-003 |
| tblVehicleEF | HHD | 5.5920e-003 | 0.02 |
| tblVehicleEF | HHD | 1.0400e-004 | 0.00 |
| tblVehicleEF | HHD | 5.3000e-005 | 0.00 |
| tblVehicleEF | HHD | 4.1270e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.39 | 0.39 |
| tblVehicleEF | HHD | 4.5000e-005 | 0.00 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 4.7500e-004 | 1.6700e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 9.3980e-003 |
| tblVehicleEF | HHD | 0.01 | 0.01 |
| tblVehicleEF | HHD | 1.7300e-004 | 0.00 |
| tblVehicleEF | HHD | 5.3000e-005 | 0.00 |
| tblVehicleEF | HHD | 4.1270e-003 | 4.1000e-005 |
| tblVehicleEF | HHD | 0.47 | 0.45 |
| tblVehicleEF | HHD | 4.5000e-005 | 0.00 |
| tblVehicleEF | HHD | 0.22 | 0.13 |
| tblVehicleEF | HHD | 4.7500e-004 | 1.6700e-004 |
| tblVehicleEF | HHD | 0.07 | 3.0000e-006 |
| tblVehicleEF | LDA | 2.7190e-003 | 1.3890e-003 |
| tblVehicleEF | LDA | 3.0880e-003 | 0.04 |
| tblVehicleEF | LDA | 0.41 | 0.47 |
| tblVehicleEF | LDA | 0.79 | 1.87 |
| tblVehicleEF | LDA | 204.34 | 218.76 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 46.66 | 46.02 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.14 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 6.8430e-003 | 4.9460e-003 |
| tblVehicleEF | LDA | 0.03 | 0.19 |
| tblVehicleEF | LDA | 0.04 | 0.16 |
| tblVehicleEF | LDA | 2.0450e-003 | 2.1640e-003 |
| tblVehicleEF | LDA | 4.8000e-004 | 4.5500e-004 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 0.07 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 9.9450e-003 | 7.1840e-003 |
| tblVehicleEF | LDA | 0.03 | 0.19 |
| tblVehicleEF | LDA | 0.05 | 0.17 |
| tblVehicleEF | LDA | 2.8930e-003 | 1.4950e-003 |
| tblVehicleEF | LDA | 2.6830e-003 | 0.03 |
| tblVehicleEF | LDA | 0.45 | 0.52 |
| tblVehicleEF | LDA | 0.65 | 1.54 |
| tblVehicleEF | LDA | 213.33 | 228.15 |
| tblVehicleEF | LDA | 46.66 | 45.43 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.13 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.04 | 0.05 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.04 | 0.06 |
| tblVehicleEF | LDA | 7.2720e-003 | 5.2550e-003 |
| tblVehicleEF | LDA | 0.03 | 0.17 |
| tblVehicleEF | LDA | 0.04 | 0.14 |
| tblVehicleEF | LDA | 2.1360e-003 | 2.2570e-003 |
| tblVehicleEF | LDA | 4.7700e-004 | 4.5000e-004 |
| tblVehicleEF | LDA | 0.04 | 0.05 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.04 | 0.06 |
| tblVehicleEF | LDA | 0.01 | 7.6340e-003 |
| tblVehicleEF | LDA | 0.03 | 0.17 |
| tblVehicleEF | LDA | 0.04 | 0.15 |
| tblVehicleEF | LDA | 2.6670e-003 | 1.3520e-003 |
| tblVehicleEF | LDA | 3.3340e-003 | 0.04 |
| tblVehicleEF | LDA | 0.41 | 0.47 |
| tblVehicleEF | LDA | 0.88 | 2.08 |
| tblVehicleEF | LDA | 202.64 | 216.98 |
| tblVehicleEF | LDA | 46.66 | 46.39 |
| tblVehicleEF | LDA | 0.03 | 0.02 |
| tblVehicleEF | LDA | 0.04 | 0.15 |
| tblVehicleEF | LDA | 1.6200e-003 | 1.2390e-003 |
| tblVehicleEF | LDA | 2.1630e-003 | 1.5420e-003 |
| tblVehicleEF | LDA | 1.4910e-003 | 1.1410e-003 |
| tblVehicleEF | LDA | 1.9890e-003 | 1.4180e-003 |
| tblVehicleEF | LDA | 0.02 | 0.02 |

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|---|---|---|---|
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 6.7130e-003 | 4.8520e-003 |
| tblVehicleEF | LDA | 0.04 | 0.22 |
| tblVehicleEF | LDA | 0.04 | 0.17 |
| tblVehicleEF | LDA | 2.0280e-003 | 2.1460e-003 |
| tblVehicleEF | LDA | 4.8100e-004 | 4.5900e-004 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.08 | 0.08 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 9.7540e-003 | 7.0470e-003 |
| tblVehicleEF | LDA | 0.04 | 0.22 |
| tblVehicleEF | LDA | 0.05 | 0.18 |
| tblVehicleEF | LDT1 | 6.5100e-003 | 3.6460e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.06 |
| tblVehicleEF | LDT1 | 0.83 | 0.85 |
| tblVehicleEF | LDT1 | 2.12 | 2.06 |
| tblVehicleEF | LDT1 | 263.27 | 266.81 |
| tblVehicleEF | LDT1 | 61.51 | 57.01 |
| tblVehicleEF | LDT1 | 0.08 | 0.07 |
| tblVehicleEF | LDT1 | 0.12 | 0.21 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.09 | 0.09 |
| tblVehicleEF | LDT1 | 0.23 | 0.17 |
| tblVehicleEF | LDT1 | 0.08 | 0.08 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.16 | 0.64 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.14 | 0.27 |
| tblVehicleEF | LDT1 | 2.6410e-003 | 2.6400e-003 |
| tblVehicleEF | LDT1 | 6.5200e-004 | 5.6400e-004 |
| tblVehicleEF | LDT1 | 0.09 | 0.09 |
| tblVehicleEF | LDT1 | 0.23 | 0.17 |
| tblVehicleEF | LDT1 | 0.08 | 0.08 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.16 | 0.64 |
| tblVehicleEF | LDT1 | 0.15 | 0.29 |
| tblVehicleEF | LDT1 | 6.8870e-003 | 3.8950e-003 |
| tblVehicleEF | LDT1 | 8.8250e-003 | 0.05 |
| tblVehicleEF | LDT1 | 0.89 | 0.92 |
| tblVehicleEF | LDT1 | 1.73 | 1.69 |
| tblVehicleEF | LDT1 | 274.46 | 276.65 |
| tblVehicleEF | LDT1 | 61.51 | 56.32 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.11 | 0.19 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.14 | 0.14 |
| tblVehicleEF | LDT1 | 0.24 | 0.18 |
| tblVehicleEF | LDT1 | 0.13 | 0.14 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.14 | 0.57 |
| tblVehicleEF | LDT1 | 0.12 | 0.23 |
| tblVehicleEF | LDT1 | 2.7540e-003 | 2.7380e-003 |
| tblVehicleEF | LDT1 | 6.4500e-004 | 5.5700e-004 |
| tblVehicleEF | LDT1 | 0.14 | 0.14 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.24 | 0.18 |
| tblVehicleEF | LDT1 | 0.13 | 0.14 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.14 | 0.57 |
| tblVehicleEF | LDT1 | 0.13 | 0.25 |
| tblVehicleEF | LDT1 | 6.3960e-003 | 3.5590e-003 |
| tblVehicleEF | LDT1 | 0.01 | 0.06 |
| tblVehicleEF | LDT1 | 0.82 | 0.84 |
| tblVehicleEF | LDT1 | 2.36 | 2.30 |
| tblVehicleEF | LDT1 | 261.15 | 264.94 |
| tblVehicleEF | LDT1 | 61.51 | 57.45 |
| tblVehicleEF | LDT1 | 0.08 | 0.07 |
| tblVehicleEF | LDT1 | 0.12 | 0.22 |
| tblVehicleEF | LDT1 | 2.1480e-003 | 1.6250e-003 |
| tblVehicleEF | LDT1 | 2.9150e-003 | 2.0210e-003 |
| tblVehicleEF | LDT1 | 1.9760e-003 | 1.4940e-003 |
| tblVehicleEF | LDT1 | 2.6800e-003 | 1.8580e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.25 | 0.19 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.20 | 0.78 |
| tblVehicleEF | LDT1 | 0.15 | 0.29 |
| tblVehicleEF | LDT1 | 2.6200e-003 | 2.6220e-003 |
| tblVehicleEF | LDT1 | 6.5600e-004 | 5.6900e-004 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.25 | 0.19 |
| tblVehicleEF | LDT1 | 0.06 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.20 | 0.78 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.16 | 0.32 |
| tblVehicleEF | LDT2 | 3.7240e-003 | 2.5850e-003 |
| tblVehicleEF | LDT2 | 4.2360e-003 | 0.05 |
| tblVehicleEF | LDT2 | 0.55 | 0.67 |
| tblVehicleEF | LDT2 | 1.04 | 2.43 |
| tblVehicleEF | LDT2 | 289.62 | 276.40 |
| tblVehicleEF | LDT2 | 66.47 | 59.18 |
| tblVehicleEF | LDT2 | 0.05 | 0.05 |
| tblVehicleEF | LDT2 | 0.07 | 0.21 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.08 | 0.11 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 9.2470e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.41 |
| tblVehicleEF | LDT2 | 0.06 | 0.24 |
| tblVehicleEF | LDT2 | 2.9000e-003 | 2.7340e-003 |
| tblVehicleEF | LDT2 | 6.8200e-004 | 5.8600e-004 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.08 | 0.11 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.41 |
| tblVehicleEF | LDT2 | 0.06 | 0.26 |
| tblVehicleEF | LDT2 | 3.9580e-003 | 2.7720e-003 |
| tblVehicleEF | LDT2 | 3.6880e-003 | 0.05 |
| tblVehicleEF | LDT2 | 0.60 | 0.73 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.87 | 1.99 |
| tblVehicleEF | LDT2 | 302.13 | 285.62 |
| tblVehicleEF | LDT2 | 66.47 | 58.40 |
| tblVehicleEF | LDT2 | 0.04 | 0.04 |
| tblVehicleEF | LDT2 | 0.06 | 0.19 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.05 | 0.09 |
| tblVehicleEF | LDT2 | 0.08 | 0.12 |
| tblVehicleEF | LDT2 | 0.06 | 0.11 |
| tblVehicleEF | LDT2 | 9.8270e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.05 | 0.37 |
| tblVehicleEF | LDT2 | 0.05 | 0.21 |
| tblVehicleEF | LDT2 | 3.0250e-003 | 2.8250e-003 |
| tblVehicleEF | LDT2 | 6.7900e-004 | 5.7800e-004 |
| tblVehicleEF | LDT2 | 0.05 | 0.09 |
| tblVehicleEF | LDT2 | 0.08 | 0.12 |
| tblVehicleEF | LDT2 | 0.06 | 0.11 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.05 | 0.37 |
| tblVehicleEF | LDT2 | 0.05 | 0.23 |
| tblVehicleEF | LDT2 | 3.6520e-003 | 2.5200e-003 |
| tblVehicleEF | LDT2 | 4.5670e-003 | 0.06 |
| tblVehicleEF | LDT2 | 0.54 | 0.66 |
| tblVehicleEF | LDT2 | 1.15 | 2.70 |
| tblVehicleEF | LDT2 | 287.25 | 274.65 |
| tblVehicleEF | LDT2 | 66.47 | 59.68 |
| tblVehicleEF | LDT2 | 0.05 | 0.05 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.07 | 0.22 |
| tblVehicleEF | LDT2 | 1.7270e-003 | 1.3320e-003 |
| tblVehicleEF | LDT2 | 2.3320e-003 | 1.5890e-003 |
| tblVehicleEF | LDT2 | 1.5880e-003 | 1.2270e-003 |
| tblVehicleEF | LDT2 | 2.1440e-003 | 1.4610e-003 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 0.09 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 9.0700e-003 | 0.01 |
| tblVehicleEF | LDT2 | 0.07 | 0.50 |
| tblVehicleEF | LDT2 | 0.06 | 0.26 |
| tblVehicleEF | LDT2 | 2.8760e-003 | 2.7170e-003 |
| tblVehicleEF | LDT2 | 6.8400e-004 | 5.9100e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 0.09 | 0.12 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.01 | 0.01 |
| tblVehicleEF | LDT2 | 0.07 | 0.50 |
| tblVehicleEF | LDT2 | 0.07 | 0.28 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1330e-003 |
| tblVehicleEF | LHD1 | 7.1770e-003 | 3.9640e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |
| tblVehicleEF | LHD1 | 0.62 | 0.49 |
| tblVehicleEF | LHD1 | 1.95 | 0.87 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.31 |
| tblVehicleEF | LHD1 | 26.54 | 9.45 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.25 | 0.88 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.77 | 0.24 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 2.0040e-003 | 1.5820e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 1.3860e-003 | 1.0850e-003 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.31 | 0.51 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5760e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 3.0200e-004 | 9.4000e-005 |
| tblVehicleEF | LHD1 | 2.0040e-003 | 1.5820e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.3860e-003 | 1.0850e-003 |
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.31 | 0.51 |
| tblVehicleEF | LHD1 | 0.20 | 0.06 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1450e-003 |
| tblVehicleEF | LHD1 | 7.3220e-003 | 4.0310e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.63 | 0.50 |
| tblVehicleEF | LHD1 | 1.83 | 0.82 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.32 |
| tblVehicleEF | LHD1 | 26.54 | 9.36 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.19 | 0.84 |
| tblVehicleEF | LHD1 | 0.72 | 0.23 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 3.0980e-003 | 2.4560e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 2.2730e-003 | 1.7890e-003 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.29 | 0.48 |
| tblVehicleEF | LHD1 | 0.18 | 0.05 |
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5760e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 2.9900e-004 | 9.3000e-005 |
| tblVehicleEF | LHD1 | 3.0980e-003 | 2.4560e-003 |
| tblVehicleEF | LHD1 | 0.09 | 0.07 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 2.2730e-003 | 1.7890e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.29 | 0.48 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |
| tblVehicleEF | LHD1 | 4.2000e-003 | 4.1240e-003 |
| tblVehicleEF | LHD1 | 7.0840e-003 | 3.9210e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.13 | 0.17 |
| tblVehicleEF | LHD1 | 0.61 | 0.49 |
| tblVehicleEF | LHD1 | 2.04 | 0.91 |
| tblVehicleEF | LHD1 | 9.22 | 8.98 |
| tblVehicleEF | LHD1 | 570.52 | 590.30 |
| tblVehicleEF | LHD1 | 26.54 | 9.51 |
| tblVehicleEF | LHD1 | 0.08 | 0.07 |
| tblVehicleEF | LHD1 | 1.24 | 0.87 |
| tblVehicleEF | LHD1 | 0.80 | 0.25 |
| tblVehicleEF | LHD1 | 9.5800e-004 | 1.0470e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 0.01 | 8.5270e-003 |
| tblVehicleEF | LHD1 | 7.3500e-004 | 2.1200e-004 |
| tblVehicleEF | LHD1 | 9.1700e-004 | 1.0020e-003 |
| tblVehicleEF | LHD1 | 2.6070e-003 | 2.5280e-003 |
| tblVehicleEF | LHD1 | 0.01 | 8.1360e-003 |
| tblVehicleEF | LHD1 | 6.7500e-004 | 1.9500e-004 |
| tblVehicleEF | LHD1 | 1.3920e-003 | 1.0920e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.01 | 0.02 |
| tblVehicleEF | LHD1 | 9.8100e-004 | 7.6500e-004 |
| tblVehicleEF | LHD1 | 0.06 | 0.05 |
| tblVehicleEF | LHD1 | 0.34 | 0.56 |
| tblVehicleEF | LHD1 | 0.19 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 9.1000e-005 | 8.7000e-005 |
| tblVehicleEF | LHD1 | 5.5750e-003 | 5.7370e-003 |
| tblVehicleEF | LHD1 | 3.0300e-004 | 9.4000e-005 |
| tblVehicleEF | LHD1 | 1.3920e-003 | 1.0920e-003 |
| tblVehicleEF | LHD1 | 0.10 | 0.08 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 9.8100e-004 | 7.6500e-004 |
| tblVehicleEF | LHD1 | 0.07 | 0.06 |
| tblVehicleEF | LHD1 | 0.34 | 0.56 |
| tblVehicleEF | LHD1 | 0.21 | 0.06 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9660e-003 |
| tblVehicleEF | LHD2 | 2.6840e-003 | 2.9100e-003 |
| tblVehicleEF | LHD2 | 5.2320e-003 | 7.1760e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 1.01 | 0.53 |
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.16 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.53 | 0.88 |
| tblVehicleEF | LHD2 | 0.41 | 0.17 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 6.7200e-004 | 8.2900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 5.2900e-004 | 6.2200e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.06 | 0.21 |
| tblVehicleEF | LHD2 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7330e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6100e-004 | 7.1000e-005 |
| tblVehicleEF | LHD2 | 6.7200e-004 | 8.2900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 5.2900e-004 | 6.2200e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.21 |
| tblVehicleEF | LHD2 | 0.08 | 0.04 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9750e-003 |
| tblVehicleEF | LHD2 | 2.7140e-003 | 2.9350e-003 |
| tblVehicleEF | LHD2 | 5.0210e-003 | 6.8530e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 0.95 | 0.50 |
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.10 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.51 | 0.84 |
| tblVehicleEF | LHD2 | 0.39 | 0.16 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |
| tblVehicleEF | LHD2 | 1.0350e-003 | 1.2770e-003 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 8.6400e-004 | 1.0180e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.06 | 0.20 |
| tblVehicleEF | LHD2 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7340e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6000e-004 | 7.0000e-005 |
| tblVehicleEF | LHD2 | 1.0350e-003 | 1.2770e-003 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 8.6400e-004 | 1.0180e-003 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.20 |
| tblVehicleEF | LHD2 | 0.07 | 0.04 |
| tblVehicleEF | LHD2 | 3.1040e-003 | 2.9600e-003 |
| tblVehicleEF | LHD2 | 2.6650e-003 | 2.8930e-003 |
| tblVehicleEF | LHD2 | 5.3780e-003 | 7.3980e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.26 | 0.34 |
| tblVehicleEF | LHD2 | 1.05 | 0.55 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 13.73 | 13.86 |
| tblVehicleEF | LHD2 | 589.47 | 603.44 |
| tblVehicleEF | LHD2 | 24.28 | 7.20 |
| tblVehicleEF | LHD2 | 0.08 | 0.10 |
| tblVehicleEF | LHD2 | 0.53 | 0.87 |
| tblVehicleEF | LHD2 | 0.42 | 0.18 |
| tblVehicleEF | LHD2 | 1.1060e-003 | 1.4460e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 8.3370e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.6200e-004 | 1.0700e-004 |
| tblVehicleEF | LHD2 | 1.0590e-003 | 1.3840e-003 |
| tblVehicleEF | LHD2 | 2.6880e-003 | 2.7020e-003 |
| tblVehicleEF | LHD2 | 7.9650e-003 | 0.01 |
| tblVehicleEF | LHD2 | 3.3300e-004 | 9.8000e-005 |
| tblVehicleEF | LHD2 | 4.7300e-004 | 5.8300e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 3.7900e-004 | 4.4400e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.05 |
| tblVehicleEF | LHD2 | 0.07 | 0.24 |
| tblVehicleEF | LHD2 | 0.07 | 0.04 |
| tblVehicleEF | LHD2 | 1.3400e-004 | 1.3200e-004 |
| tblVehicleEF | LHD2 | 5.7330e-003 | 5.8190e-003 |
| tblVehicleEF | LHD2 | 2.6100e-004 | 7.1000e-005 |
| tblVehicleEF | LHD2 | 4.7300e-004 | 5.8300e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.02 | 0.02 |
| tblVehicleEF | LHD2 | 3.7900e-004 | 4.4400e-004 |
| tblVehicleEF | LHD2 | 0.04 | 0.06 |
| tblVehicleEF | LHD2 | 0.07 | 0.24 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.08 | 0.04 |
| tblVehicleEF | MCY | 0.48 | 0.34 |
| tblVehicleEF | MCY | 0.16 | 0.24 |
| tblVehicleEF | MCY | 18.38 | 18.68 |
| tblVehicleEF | MCY | 10.02 | 8.87 |
| tblVehicleEF | MCY | 176.71 | 214.21 |
| tblVehicleEF | MCY | 44.77 | 60.65 |
| tblVehicleEF | MCY | 1.14 | 1.14 |
| tblVehicleEF | MCY | 0.32 | 0.27 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 0.89 | 0.93 |
| tblVehicleEF | MCY | 0.71 | 0.76 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 2.33 | 2.35 |
| tblVehicleEF | MCY | 0.85 | 1.90 |
| tblVehicleEF | MCY | 2.14 | 1.90 |
| tblVehicleEF | MCY | 2.1370e-003 | 2.1200e-003 |
| tblVehicleEF | MCY | 6.7400e-004 | 6.0000e-004 |
| tblVehicleEF | MCY | 0.89 | 0.93 |
| tblVehicleEF | MCY | 0.71 | 0.76 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 2.90 | 2.92 |
| tblVehicleEF | MCY | 0.85 | 1.90 |
| tblVehicleEF | MCY | 2.33 | 2.07 |
| tblVehicleEF | MCY | 0.47 | 0.33 |
| tblVehicleEF | MCY | 0.13 | 0.21 |
| tblVehicleEF | MCY | 17.28 | 17.54 |

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|---|---|---|---|
| tblVehicleEF | MCY | 8.85 | 7.80 |
| tblVehicleEF | MCY | 176.71 | 212.11 |
| tblVehicleEF | MCY | 44.77 | 58.01 |
| tblVehicleEF | MCY | 1.00 | 1.01 |
| tblVehicleEF | MCY | 0.30 | 0.25 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 1.54 | 1.60 |
| tblVehicleEF | MCY | 0.78 | 0.83 |
| tblVehicleEF | MCY | 1.16 | 1.20 |
| tblVehicleEF | MCY | 2.25 | 2.27 |
| tblVehicleEF | MCY | 0.79 | 1.75 |
| tblVehicleEF | MCY | 1.84 | 1.62 |
| tblVehicleEF | MCY | 2.1170e-003 | 2.0990e-003 |
| tblVehicleEF | MCY | 6.4600e-004 | 5.7400e-004 |
| tblVehicleEF | MCY | 1.54 | 1.60 |
| tblVehicleEF | MCY | 0.78 | 0.83 |
| tblVehicleEF | MCY | 1.16 | 1.20 |
| tblVehicleEF | MCY | 2.80 | 2.82 |
| tblVehicleEF | MCY | 0.79 | 1.75 |
| tblVehicleEF | MCY | 2.00 | 1.76 |
| tblVehicleEF | MCY | 0.49 | 0.35 |
| tblVehicleEF | MCY | 0.17 | 0.27 |
| tblVehicleEF | MCY | 19.30 | 19.64 |
| tblVehicleEF | MCY | 10.86 | 9.66 |
| tblVehicleEF | MCY | 176.71 | 215.94 |
| tblVehicleEF | MCY | 44.77 | 62.55 |
| tblVehicleEF | MCY | 1.16 | 1.16 |

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|---|---|---|---|
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 2.2730e-003 | 2.2140e-003 |
| tblVehicleEF | MCY | 3.5440e-003 | 2.9800e-003 |
| tblVehicleEF | MCY | 2.1230e-003 | 2.0680e-003 |
| tblVehicleEF | MCY | 3.3290e-003 | 2.8000e-003 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 0.88 | 0.93 |
| tblVehicleEF | MCY | 0.33 | 0.36 |
| tblVehicleEF | MCY | 2.39 | 2.41 |
| tblVehicleEF | MCY | 1.01 | 2.26 |
| tblVehicleEF | MCY | 2.34 | 2.10 |
| tblVehicleEF | MCY | 2.1540e-003 | 2.1370e-003 |
| tblVehicleEF | MCY | 6.9400e-004 | 6.1900e-004 |
| tblVehicleEF | MCY | 0.57 | 0.60 |
| tblVehicleEF | MCY | 0.88 | 0.93 |
| tblVehicleEF | MCY | 0.33 | 0.36 |
| tblVehicleEF | MCY | 2.97 | 2.99 |
| tblVehicleEF | MCY | 1.01 | 2.26 |
| tblVehicleEF | MCY | 2.55 | 2.28 |
| tblVehicleEF | MDV | 6.5670e-003 | 3.0130e-003 |
| tblVehicleEF | MDV | 9.8130e-003 | 0.06 |
| tblVehicleEF | MDV | 0.79 | 0.72 |
| tblVehicleEF | MDV | 1.90 | 2.70 |
| tblVehicleEF | MDV | 398.72 | 343.92 |
| tblVehicleEF | MDV | 91.05 | 73.25 |
| tblVehicleEF | MDV | 0.08 | 0.06 |
| tblVehicleEF | MDV | 0.16 | 0.26 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.05 | 0.07 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.10 | 0.45 |
| tblVehicleEF | MDV | 0.13 | 0.30 |
| tblVehicleEF | MDV | 3.9890e-003 | 3.3990e-003 |
| tblVehicleEF | MDV | 9.4300e-004 | 7.2500e-004 |
| tblVehicleEF | MDV | 0.05 | 0.07 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.06 | 0.08 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.10 | 0.45 |
| tblVehicleEF | MDV | 0.14 | 0.32 |
| tblVehicleEF | MDV | 6.9690e-003 | 3.2320e-003 |
| tblVehicleEF | MDV | 8.5180e-003 | 0.05 |
| tblVehicleEF | MDV | 0.86 | 0.79 |
| tblVehicleEF | MDV | 1.57 | 2.21 |
| tblVehicleEF | MDV | 415.42 | 353.45 |
| tblVehicleEF | MDV | 91.05 | 72.36 |
| tblVehicleEF | MDV | 0.07 | 0.05 |
| tblVehicleEF | MDV | 0.14 | 0.23 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.09 | 0.11 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.10 | 0.14 |

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|---|---|---|---|
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.09 | 0.41 |
| tblVehicleEF | MDV | 0.11 | 0.26 |
| tblVehicleEF | MDV | 4.1570e-003 | 3.4930e-003 |
| tblVehicleEF | MDV | 9.3700e-004 | 7.1600e-004 |
| tblVehicleEF | MDV | 0.09 | 0.11 |
| tblVehicleEF | MDV | 0.15 | 0.14 |
| tblVehicleEF | MDV | 0.10 | 0.14 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.09 | 0.41 |
| tblVehicleEF | MDV | 0.13 | 0.28 |
| tblVehicleEF | MDV | 6.4470e-003 | 2.9380e-003 |
| tblVehicleEF | MDV | 0.01 | 0.07 |
| tblVehicleEF | MDV | 0.78 | 0.71 |
| tblVehicleEF | MDV | 2.10 | 3.00 |
| tblVehicleEF | MDV | 395.55 | 342.11 |
| tblVehicleEF | MDV | 91.05 | 73.82 |
| tblVehicleEF | MDV | 0.08 | 0.06 |
| tblVehicleEF | MDV | 0.16 | 0.27 |
| tblVehicleEF | MDV | 1.7560e-003 | 1.3650e-003 |
| tblVehicleEF | MDV | 2.2960e-003 | 1.6000e-003 |
| tblVehicleEF | MDV | 1.6180e-003 | 1.2590e-003 |
| tblVehicleEF | MDV | 2.1110e-003 | 1.4710e-003 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.16 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.01 |
| tblVehicleEF | MDV | 0.12 | 0.54 |
| tblVehicleEF | MDV | 0.14 | 0.32 |
| tblVehicleEF | MDV | 3.9570e-003 | 3.3810e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 9.4700e-004 | 7.3000e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.16 | 0.15 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.02 | 0.02 |
| tblVehicleEF | MDV | 0.12 | 0.54 |
| tblVehicleEF | MDV | 0.16 | 0.35 |
| tblVehicleEF | MH | 0.02 | 7.0410e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.48 | 0.73 |
| tblVehicleEF | MH | 4.93 | 1.80 |
| tblVehicleEF | MH | 1,080.16 | 1,404.14 |
| tblVehicleEF | MH | 58.00 | 17.35 |
| tblVehicleEF | MH | 1.21 | 1.37 |
| tblVehicleEF | MH | 0.78 | 0.26 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 0.77 | 0.58 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.38 | 0.30 |
| tblVehicleEF | MH | 0.06 | 0.05 |
| tblVehicleEF | MH | 0.02 | 1.14 |
| tblVehicleEF | MH | 0.29 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.6600e-004 | 1.7200e-004 |
| tblVehicleEF | MH | 0.77 | 0.58 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.38 | 0.30 |
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.02 | 1.14 |
| tblVehicleEF | MH | 0.32 | 0.09 |
| tblVehicleEF | MH | 0.02 | 7.2150e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.53 | 0.75 |
| tblVehicleEF | MH | 4.56 | 1.67 |
| tblVehicleEF | MH | 1,080.16 | 1,404.18 |
| tblVehicleEF | MH | 58.00 | 17.13 |
| tblVehicleEF | MH | 1.13 | 1.30 |
| tblVehicleEF | MH | 0.73 | 0.24 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 1.14 | 0.86 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.62 | 0.50 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.02 | 1.10 |
| tblVehicleEF | MH | 0.28 | 0.08 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.6000e-004 | 1.7000e-004 |
| tblVehicleEF | MH | 1.14 | 0.86 |
| tblVehicleEF | MH | 0.07 | 0.05 |
| tblVehicleEF | MH | 0.62 | 0.50 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.09 | 0.06 |
| tblVehicleEF | MH | 0.02 | 1.10 |
| tblVehicleEF | MH | 0.30 | 0.09 |
| tblVehicleEF | MH | 0.02 | 6.9300e-003 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 1.45 | 0.72 |
| tblVehicleEF | MH | 5.14 | 1.88 |
| tblVehicleEF | MH | 1,080.16 | 1,404.12 |
| tblVehicleEF | MH | 58.00 | 17.49 |
| tblVehicleEF | MH | 1.21 | 1.37 |
| tblVehicleEF | MH | 0.81 | 0.27 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 9.3000e-004 | 2.0300e-004 |
| tblVehicleEF | MH | 3.2300e-003 | 3.3000e-003 |
| tblVehicleEF | MH | 0.03 | 0.03 |
| tblVehicleEF | MH | 8.5500e-004 | 1.8700e-004 |
| tblVehicleEF | MH | 0.55 | 0.42 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.27 | 0.21 |
| tblVehicleEF | MH | 0.06 | 0.05 |
| tblVehicleEF | MH | 0.03 | 1.22 |
| tblVehicleEF | MH | 0.30 | 0.09 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.7000e-004 | 1.7300e-004 |
| tblVehicleEF | MH | 0.55 | 0.42 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.27 | 0.21 |
| tblVehicleEF | MH | 0.08 | 0.06 |
| tblVehicleEF | MH | 0.03 | 1.22 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.33 | 0.10 |
| tblVehicleEF | MHD | 0.02 | 2.8280e-003 |
| tblVehicleEF | MHD | 2.1840e-003 | 8.4800e-004 |
| tblVehicleEF | MHD | 0.04 | 6.6450e-003 |
| tblVehicleEF | MHD | 0.30 | 0.33 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 4.03 | 0.72 |
| tblVehicleEF | MHD | 154.61 | 63.49 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.71 |
| tblVehicleEF | MHD | 0.41 | 0.34 |
| tblVehicleEF | MHD | 0.61 | 1.01 |
| tblVehicleEF | MHD | 11.96 | 1.82 |
| tblVehicleEF | MHD | 7.4000e-005 | 2.0400e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 7.1000e-005 | 1.9500e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 6.0400e-004 | 2.3400e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 4.5800e-004 | 1.7500e-004 |
| tblVehicleEF | MHD | 0.03 | 9.1100e-003 |
| tblVehicleEF | MHD | 0.01 | 0.07 |
| tblVehicleEF | MHD | 0.24 | 0.03 |
| tblVehicleEF | MHD | 1.4850e-003 | 6.0200e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.7200e-004 | 6.6000e-005 |
| tblVehicleEF | MHD | 6.0400e-004 | 2.3400e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 4.5800e-004 | 1.7500e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.01 | 0.07 |
| tblVehicleEF | MHD | 0.27 | 0.04 |
| tblVehicleEF | MHD | 0.01 | 2.6980e-003 |
| tblVehicleEF | MHD | 2.2110e-003 | 8.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 6.3360e-003 |
| tblVehicleEF | MHD | 0.22 | 0.29 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 3.76 | 0.67 |
| tblVehicleEF | MHD | 163.77 | 63.20 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.62 |
| tblVehicleEF | MHD | 0.42 | 0.33 |
| tblVehicleEF | MHD | 0.58 | 0.96 |
| tblVehicleEF | MHD | 11.92 | 1.81 |
| tblVehicleEF | MHD | 6.2000e-005 | 1.7500e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 6.0000e-005 | 1.6700e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 9.4100e-004 | 3.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 7.6300e-004 | 2.9300e-004 |
| tblVehicleEF | MHD | 0.03 | 9.1790e-003 |
| tblVehicleEF | MHD | 0.01 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.23 | 0.03 |
| tblVehicleEF | MHD | 1.5720e-003 | 5.9900e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.6800e-004 | 6.6000e-005 |
| tblVehicleEF | MHD | 9.4100e-004 | 3.6600e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 7.6300e-004 | 2.9300e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.01 | 0.06 |
| tblVehicleEF | MHD | 0.25 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 3.0140e-003 |
| tblVehicleEF | MHD | 2.1660e-003 | 8.3700e-004 |
| tblVehicleEF | MHD | 0.04 | 6.8490e-003 |
| tblVehicleEF | MHD | 0.41 | 0.39 |
| tblVehicleEF | MHD | 0.20 | 0.12 |
| tblVehicleEF | MHD | 4.22 | 0.76 |
| tblVehicleEF | MHD | 141.96 | 63.89 |
| tblVehicleEF | MHD | 1,096.62 | 892.83 |
| tblVehicleEF | MHD | 50.20 | 6.76 |
| tblVehicleEF | MHD | 0.39 | 0.36 |
| tblVehicleEF | MHD | 0.60 | 1.00 |
| tblVehicleEF | MHD | 11.98 | 1.82 |
| tblVehicleEF | MHD | 9.0000e-005 | 2.4400e-004 |
| tblVehicleEF | MHD | 2.8370e-003 | 7.5400e-003 |
| tblVehicleEF | MHD | 6.8500e-004 | 8.1000e-005 |
| tblVehicleEF | MHD | 8.6000e-005 | 2.3300e-004 |
| tblVehicleEF | MHD | 2.7110e-003 | 7.2100e-003 |
| tblVehicleEF | MHD | 6.3000e-004 | 7.5000e-005 |
| tblVehicleEF | MHD | 4.2200e-004 | 1.6200e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.02 |
| tblVehicleEF | MHD | 3.2400e-004 | 1.2300e-004 |
| tblVehicleEF | MHD | 0.03 | 9.0650e-003 |
| tblVehicleEF | MHD | 0.02 | 0.07 |
| tblVehicleEF | MHD | 0.25 | 0.03 |
| tblVehicleEF | MHD | 1.3660e-003 | 6.0600e-004 |
| tblVehicleEF | MHD | 0.01 | 8.5000e-003 |
| tblVehicleEF | MHD | 5.7600e-004 | 6.7000e-005 |
| tblVehicleEF | MHD | 4.2200e-004 | 1.6200e-004 |
| tblVehicleEF | MHD | 0.04 | 0.01 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.2400e-004 | 1.2300e-004 |
| tblVehicleEF | MHD | 0.03 | 0.01 |
| tblVehicleEF | MHD | 0.02 | 0.07 |
| tblVehicleEF | MHD | 0.28 | 0.04 |
| tblVehicleEF | OBUS | 0.01 | 8.0530e-003 |
| tblVehicleEF | OBUS | 5.0000e-003 | 4.5060e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |
| tblVehicleEF | OBUS | 0.34 | 0.55 |
| tblVehicleEF | OBUS | 4.91 | 2.51 |
| tblVehicleEF | OBUS | 47.43 | 50.81 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.89 |
| tblVehicleEF | OBUS | 70.06 | 19.68 |
| tblVehicleEF | OBUS | 0.08 | 0.18 |
| tblVehicleEF | OBUS | 0.39 | 0.90 |
| tblVehicleEF | OBUS | 1.53 | 0.75 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.6000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 5.3000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 1.1560e-003 | 1.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 6.9800e-004 | 9.6900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.06 | 0.31 |
| tblVehicleEF | OBUS | 0.31 | 0.12 |
| tblVehicleEF | OBUS | 4.6500e-004 | 4.8600e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.8700e-004 | 1.9500e-004 |
| tblVehicleEF | OBUS | 1.1560e-003 | 1.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 6.9800e-004 | 9.6900e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.06 | 0.31 |
| tblVehicleEF | OBUS | 0.34 | 0.13 |
| tblVehicleEF | OBUS | 0.01 | 8.1090e-003 |
| tblVehicleEF | OBUS | 5.1260e-003 | 4.6390e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |
| tblVehicleEF | OBUS | 0.34 | 0.56 |
| tblVehicleEF | OBUS | 4.55 | 2.32 |
| tblVehicleEF | OBUS | 49.23 | 50.30 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.91 |
| tblVehicleEF | OBUS | 70.06 | 19.37 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.08 | 0.17 |
| tblVehicleEF | OBUS | 0.37 | 0.85 |
| tblVehicleEF | OBUS | 1.48 | 0.73 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.9000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 4.7000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 1.7400e-003 | 2.4430e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.1650e-003 | 1.6020e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.29 | 0.11 |
| tblVehicleEF | OBUS | 4.8200e-004 | 4.8100e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.8000e-004 | 1.9200e-004 |
| tblVehicleEF | OBUS | 1.7400e-003 | 2.4430e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 1.1650e-003 | 1.6020e-003 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 0.06 | 0.29 |
| tblVehicleEF | OBUS | 0.32 | 0.12 |
| tblVehicleEF | OBUS | 0.01 | 7.9970e-003 |
| tblVehicleEF | OBUS | 4.9200e-003 | 4.4210e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.41 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.33 | 0.54 |
| tblVehicleEF | OBUS | 5.12 | 2.61 |
| tblVehicleEF | OBUS | 44.95 | 51.51 |
| tblVehicleEF | OBUS | 1,135.39 | 1,255.87 |
| tblVehicleEF | OBUS | 70.06 | 19.87 |
| tblVehicleEF | OBUS | 0.08 | 0.19 |
| tblVehicleEF | OBUS | 0.39 | 0.90 |
| tblVehicleEF | OBUS | 1.56 | 0.76 |
| tblVehicleEF | OBUS | 9.0000e-006 | 6.4000e-005 |
| tblVehicleEF | OBUS | 1.9990e-003 | 6.4940e-003 |
| tblVehicleEF | OBUS | 9.7900e-004 | 2.1700e-004 |
| tblVehicleEF | OBUS | 8.0000e-006 | 6.1000e-005 |
| tblVehicleEF | OBUS | 1.8870e-003 | 6.1950e-003 |
| tblVehicleEF | OBUS | 9.0100e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 8.3800e-004 | 1.1970e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 4.9600e-004 | 6.8900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |
| tblVehicleEF | OBUS | 0.32 | 0.12 |
| tblVehicleEF | OBUS | 4.4100e-004 | 4.9300e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.9000e-004 | 1.9700e-004 |
| tblVehicleEF | OBUS | 8.3800e-004 | 1.1970e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 4.9600e-004 | 6.8900e-004 |
| tblVehicleEF | OBUS | 0.03 | 0.03 |
| tblVehicleEF | OBUS | 0.07 | 0.33 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.35 | 0.13 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.5050e-003 | 8.3830e-003 |
| tblVehicleEF | SBUS | 0.05 | 6.3100e-003 |
| tblVehicleEF | SBUS | 9.74 | 2.64 |
| tblVehicleEF | SBUS | 0.39 | 0.70 |
| tblVehicleEF | SBUS | 7.50 | 0.89 |
| tblVehicleEF | SBUS | 998.61 | 351.53 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.72 |
| tblVehicleEF | SBUS | 66.73 | 4.88 |
| tblVehicleEF | SBUS | 5.42 | 3.27 |
| tblVehicleEF | SBUS | 2.41 | 4.80 |
| tblVehicleEF | SBUS | 9.82 | 0.76 |
| tblVehicleEF | SBUS | 3.8400e-003 | 2.9550e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 3.6740e-003 | 2.8280e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 2.6140e-003 | 6.4200e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.5220e-003 |
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 1.6010e-003 | 4.0100e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.38 | 0.04 |
| tblVehicleEF | SBUS | 9.8690e-003 | 3.3500e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 7.9600e-004 | 4.8000e-005 |
| tblVehicleEF | SBUS | 2.6140e-003 | 6.4200e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.5220e-003 |
| tblVehicleEF | SBUS | 1.68 | 0.44 |
| tblVehicleEF | SBUS | 1.6010e-003 | 4.0100e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.42 | 0.04 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.6140e-003 | 8.4950e-003 |
| tblVehicleEF | SBUS | 0.04 | 5.4750e-003 |
| tblVehicleEF | SBUS | 9.67 | 2.60 |
| tblVehicleEF | SBUS | 0.40 | 0.71 |
| tblVehicleEF | SBUS | 5.83 | 0.70 |
| tblVehicleEF | SBUS | 1,038.39 | 361.49 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.75 |
| tblVehicleEF | SBUS | 66.73 | 4.55 |
| tblVehicleEF | SBUS | 5.59 | 3.35 |
| tblVehicleEF | SBUS | 2.30 | 4.59 |
| tblVehicleEF | SBUS | 9.79 | 0.76 |
| tblVehicleEF | SBUS | 3.2370e-003 | 2.5000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 3.0970e-003 | 2.3920e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 3.9560e-003 | 9.6000e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.6210e-003 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 2.6840e-003 | 6.6600e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.33 | 0.03 |
| tblVehicleEF | SBUS | 0.01 | 3.4440e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |
| tblVehicleEF | SBUS | 7.6900e-004 | 4.5000e-005 |
| tblVehicleEF | SBUS | 3.9560e-003 | 9.6000e-004 |
| tblVehicleEF | SBUS | 0.02 | 7.6210e-003 |
| tblVehicleEF | SBUS | 1.68 | 0.44 |
| tblVehicleEF | SBUS | 2.6840e-003 | 6.6600e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.01 | 0.04 |
| tblVehicleEF | SBUS | 0.36 | 0.04 |
| tblVehicleEF | SBUS | 0.83 | 0.06 |
| tblVehicleEF | SBUS | 6.4400e-003 | 8.3160e-003 |
| tblVehicleEF | SBUS | 0.05 | 6.7580e-003 |
| tblVehicleEF | SBUS | 9.83 | 2.69 |
| tblVehicleEF | SBUS | 0.39 | 0.69 |
| tblVehicleEF | SBUS | 8.41 | 1.00 |
| tblVehicleEF | SBUS | 943.68 | 337.76 |
| tblVehicleEF | SBUS | 1,015.52 | 1,091.71 |
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| tblVehicleEF | SBUS | 5.18 | 3.17 |
| tblVehicleEF | SBUS | 2.39 | 4.77 |
| tblVehicleEF | SBUS | 9.84 | 0.76 |
| tblVehicleEF | SBUS | 4.6730e-003 | 3.5840e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.01 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 1.2700e-003 | 6.7000e-005 |
| tblVehicleEF | SBUS | 4.4710e-003 | 3.4290e-003 |
| tblVehicleEF | SBUS | 2.5910e-003 | 2.7000e-003 |
| tblVehicleEF | SBUS | 0.01 | 0.03 |
| tblVehicleEF | SBUS | 1.1670e-003 | 6.2000e-005 |
| tblVehicleEF | SBUS | 1.8830e-003 | 4.6900e-004 |
| tblVehicleEF | SBUS | 0.03 | 7.7010e-003 |
| tblVehicleEF | SBUS | 1.16 | 0.30 |
| tblVehicleEF | SBUS | 1.1390e-003 | 2.8700e-004 |
| tblVehicleEF | SBUS | 0.07 | 0.12 |
| tblVehicleEF | SBUS | 0.02 | 0.06 |
| tblVehicleEF | SBUS | 0.41 | 0.04 |
| tblVehicleEF | SBUS | 9.3450e-003 | 3.2200e-003 |
| tblVehicleEF | SBUS | 9.8070e-003 | 0.01 |
| tblVehicleEF | SBUS | 8.1200e-004 | 5.0000e-005 |
| tblVehicleEF | SBUS | 1.8830e-003 | 4.6900e-004 |
| tblVehicleEF | SBUS | 0.03 | 7.7010e-003 |
| tblVehicleEF | SBUS | 1.69 | 0.44 |
| tblVehicleEF | SBUS | 1.1390e-003 | 2.8700e-004 |
| tblVehicleEF | SBUS | 0.08 | 0.14 |
| tblVehicleEF | SBUS | 0.02 | 0.06 |
| tblVehicleEF | SBUS | 0.45 | 0.04 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 5.80 | 22.84 |
| tblVehicleEF | UBUS | 9.04 | 1.69 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.87 |
| tblVehicleEF | UBUS | 136.72 | 17.29 |
| tblVehicleEF | UBUS | 2.18 | 0.37 |
| tblVehicleEF | UBUS | 12.53 | 0.16 |

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|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 2.4000e-003 | 5.4900e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.5700e-003 |
| tblVehicleEF | UBUS | 1.9500e-003 | 4.1900e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 0.01 | 0.03 |
| tblVehicleEF | UBUS | 0.73 | 0.08 |
| tblVehicleEF | UBUS | 8.2430e-003 | 5.0710e-003 |
| tblVehicleEF | UBUS | 1.5310e-003 | 1.7100e-004 |
| tblVehicleEF | UBUS | 2.4000e-003 | 5.4900e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.5700e-003 |
| tblVehicleEF | UBUS | 1.9500e-003 | 4.1900e-004 |
| tblVehicleEF | UBUS | 1.55 | 3.05 |
| tblVehicleEF | UBUS | 0.01 | 0.03 |
| tblVehicleEF | UBUS | 0.80 | 0.09 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 5.82 | 22.84 |
| tblVehicleEF | UBUS | 7.63 | 1.44 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.85 |
| tblVehicleEF | UBUS | 136.72 | 16.86 |
| tblVehicleEF | UBUS | 2.07 | 0.37 |
| tblVehicleEF | UBUS | 12.46 | 0.15 |

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|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 3.3760e-003 | 8.4600e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.9950e-003 |
| tblVehicleEF | UBUS | 3.3170e-003 | 7.5700e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 9.9720e-003 | 0.03 |
| tblVehicleEF | UBUS | 0.66 | 0.08 |
| tblVehicleEF | UBUS | 8.2430e-003 | 5.0700e-003 |
| tblVehicleEF | UBUS | 1.5060e-003 | 1.6700e-004 |
| tblVehicleEF | UBUS | 3.3760e-003 | 8.4600e-004 |
| tblVehicleEF | UBUS | 0.04 | 6.9950e-003 |
| tblVehicleEF | UBUS | 3.3170e-003 | 7.5700e-004 |
| tblVehicleEF | UBUS | 1.56 | 3.05 |
| tblVehicleEF | UBUS | 9.9720e-003 | 0.03 |
| tblVehicleEF | UBUS | 0.73 | 0.08 |
| tblVehicleEF | UBUS | 1.33 | 2.98 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 5.79 | 22.84 |
| tblVehicleEF | UBUS | 9.98 | 1.86 |
| tblVehicleEF | UBUS | 1,755.03 | 1,568.85 |
| tblVehicleEF | UBUS | 136.72 | 17.57 |
| tblVehicleEF | UBUS | 2.17 | 0.37 |
| tblVehicleEF | UBUS | 12.58 | 0.16 |

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|---|---|---|---|
| tblVehicleEF | UBUS | 0.51 | 0.09 |
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 0.02 | 4.1700e-003 |
| tblVehicleEF | UBUS | 1.4270e-003 | 2.1100e-004 |
| tblVehicleEF | UBUS | 0.22 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 0.02 | 3.9750e-003 |
| tblVehicleEF | UBUS | 1.3120e-003 | 1.9400e-004 |
| tblVehicleEF | UBUS | 1.8300e-003 | 3.8900e-004 |
| tblVehicleEF | UBUS | 0.04 | 7.1930e-003 |
| tblVehicleEF | UBUS | 1.3630e-003 | 2.8400e-004 |
| tblVehicleEF | UBUS | 0.19 | 0.05 |
| tblVehicleEF | UBUS | 0.01 | 0.04 |
| tblVehicleEF | UBUS | 0.78 | 0.09 |
| tblVehicleEF | UBUS | 8.2420e-003 | 5.0700e-003 |
| tblVehicleEF | UBUS | 1.5470e-003 | 1.7400e-004 |
| tblVehicleEF | UBUS | 1.8300e-003 | 3.8900e-004 |
| tblVehicleEF | UBUS | 0.04 | 7.1930e-003 |
| tblVehicleEF | UBUS | 1.3630e-003 | 2.8400e-004 |
| tblVehicleEF | UBUS | 1.55 | 3.05 |
| tblVehicleEF | UBUS | 0.01 | 0.04 |
| tblVehicleEF | UBUS | 0.85 | 0.10 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |

| | | | |
|---|---|---|---|
| tblWater | IndoorWaterUseRate | 176,725,875.00 | 141,380,700.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

## 2.0 Emissions Summary

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 3.8709 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1,036.2625 | 1,036.2625 | 0.0832 | 0.0172 | 1,043.4754 |
| Mobile | 0.9109 | 1.2748 | 6.6776 | 0.0195 | 2.2500 | 0.0154 | 2.2655 | 0.6018 | 0.0144 | 0.6162 | 0.0000 | 1,817.1814 | 1,817.1814 | 0.0923 | 0.0000 | 1,819.4892 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 107.7212 | 0.0000 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 50.0207 | 301.4779 | 351.4987 | 1.4603 | 0.1138 | 421.9145 |
| **Total** | **4.7818** | **1.2749** | **6.6846** | **0.0195** | **2.2500** | **0.0154** | **2.2655** | **0.6018** | **0.0144** | **0.6162** | **157.7419** | **3,154.9355** | **3,312.6775** | **8.0020** | **0.1310** | **3,551.7684** |

**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 | 3.8709 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 871.8122 | 871.8122 | 0.0700 | 0.0145 | 877.8804 |
| Mobile | 0.9109 | 1.2748 | 6.6776 | 0.0195 | 2.2500 | 0.0154 | 2.2655 | 0.6018 | 0.0144 | 0.6162 | 0.0000 | 1,817.1814 | 1,817.1814 | 0.0923 | 0.0000 | 1,819.4892 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 107.7212 | 0.0000 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 42.5176 | 256.2562 | 298.7739 | 1.2412 | 0.0967 | 358.6273 |
| **Total** | **4.7818** | **1.2749** | **6.6846** | **0.0195** | **2.2500** | **0.0154** | **2.2655** | **0.6018** | **0.0144** | **0.6162** | **150.2388** | **2,945.2635** | **3,095.5023** | **7.7698** | **0.1112** | **3,322.8862** |

| | ROG | NOx | 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** | **4.76** | **6.65** | **6.56** | **2.90** | **15.11** | **6.44** |

# 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 | 0.9109 | 1.2748 | 6.6776 | 0.0195 | 2.2500 | 0.0154 | 2.2655 | 0.6018 | 0.0144 | 0.6162 | 0.0000 | 1,817.1814 | 1,817.1814 | 0.0923 | 0.0000 | 1,819.4892 |
| Unmitigated | 0.9109 | 1.2748 | 6.6776 | 0.0195 | 2.2500 | 0.0154 | 2.2655 | 0.6018 | 0.0144 | 0.6162 | 0.0000 | 1,817.1814 | 1,817.1814 | 0.0923 | 0.0000 | 1,819.4892 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 2,919.32 | 2,919.32 | 2919.32 | 5,948,617 | 5,948,617 |
| Total | 2,919.32 | 2,919.32 | 2,919.32 | 5,948,617 | 5,948,617 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.583951 | 0.057343 | 0.169126 | 0.111554 | 0.025561 | 0.007279 | 0.020117 | 0.017665 | 0.000801 | 0.000959 | 0.003708 | 0.000559 | 0.001376 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | 871.8122 | 871.8122 | 0.0700 | 0.0145 | 877.8804 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1,036.2625 | 1,036.2625 | 0.0832 | 0.0172 | 1,043.4754 |
| 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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 | | | |
| General Light Industry | 6.32774e+006 | 1,036.2625 | 0.0832 | 0.0172 | 1,043.4754 |
| **Total** | | **1,036.2625** | **0.0832** | **0.0172** | **1,043.4754** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| General Light Industry | 5.32356e+006 | 871.8122 | 0.0700 | 0.0145 | 877.8804 |
| **Total** | | **871.8122** | **0.0700** | **0.0145** | **877.8804** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 3.8709 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Unmitigated | 3.8709 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |

### 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 | 0.8855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 6.4000e-004 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| **Total** | **3.8708** | **6.0000e-005** | **7.0000e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **0.0137** | **0.0137** | **4.0000e-005** | **0.0000** | **0.0145** |

**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 | 0.8855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 6.4000e-004 | 6.0000e-005 | 7.0000e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| **Total** | **3.8708** | **6.0000e-005** | **7.0000e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **0.0137** | **0.0137** | **4.0000e-005** | **0.0000** | **0.0145** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 298.7739 | 1.2412 | 0.0967 | 358.6273 |
| Unmitigated | 351.4987 | 1.4603 | 0.1138 | 421.9145 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 141.381 / 0 | 351.4987 | 1.4603 | 0.1138 | 421.9145 |
| **Total** | | **351.4987** | **1.4603** | **0.1138** | **421.9145** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 120.174 / 0 | 298.7739 | 1.2412 | 0.0967 | 358.6273 |
| **Total** | | **298.7739** | **1.2412** | **0.0967** | **358.6273** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Unmitigated | 107.7212 | 6.3661 | 0.0000 | 266.8748 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 530.67 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| **Total** | | **107.7212** | **6.3661** | **0.0000** | **266.8748** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 530.67 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| **Total** | | **107.7212** | **6.3661** | **0.0000** | **266.8748** |

## 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

Conejo Summit - Buildout Operational 2040 - Ventura County, Annual

# Conejo Summit - Buildout Operational 2040

**Ventura County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Light Industry | 764.22 | 1000sqft | 49.64 | 764,220.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.6 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 8 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 100.29 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment - Construction Modeled Separately

Trips and VMT - Construction Modeled Separately

Architectural Coating - Construction Modeled Separately

Vehicle Trips - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 382,110.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 1,146,330.00 | 0.00 |
| tblConstructionPhase | NumDays | 55.00 | 1.00 |
| tblEnergyUse | NT24NG | 6.86 | 0.00 |
| tblEnergyUse | T24E | 1.63 | 1.46 |
| tblEnergyUse | T24NG | 14.04 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.02 |
| tblFleetMix | LDA | 0.62 | 0.60 |
| tblFleetMix | LDT1 | 0.04 | 0.06 |
| tblFleetMix | LDT2 | 0.19 | 0.16 |
| tblFleetMix | LHD1 | 0.01 | 0.02 |
| tblFleetMix | LHD2 | 5.4070e-003 | 6.9650e-003 |
| tblFleetMix | MCY | 3.5990e-003 | 3.4890e-003 |
| tblFleetMix | MDV | 0.09 | 0.10 |
| tblFleetMix | MH | 7.1900e-004 | 9.5100e-004 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.2370e-003 | 7.4100e-004 |
| tblFleetMix | SBUS | 4.4900e-004 | 5.4900e-004 |
| tblFleetMix | UBUS | 1.1510e-003 | 9.6700e-004 |
| tblLandUse | LotAcreage | 17.54 | 49.64 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 702.44 | 100.29 |
| tblSolidWaste | SolidWasteGenerationRate | 947.63 | 530.67 |
| tblTripsAndVMT | WorkerTripNumber | 64.00 | 0.00 |
| tblVehicleEF | HHD | 0.30 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.05 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.33 | 6.73 |
| tblVehicleEF | HHD | 1.22 | 0.65 |
| tblVehicleEF | HHD | 4.67 | 9.8090e-003 |
| tblVehicleEF | HHD | 3,839.29 | 881.97 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 11.17 | 5.48 |
| tblVehicleEF | HHD | 1.07 | 1.92 |
| tblVehicleEF | HHD | 18.94 | 2.53 |
| tblVehicleEF | HHD | 2.1810e-003 | 2.0920e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.0870e-003 | 2.0020e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.1200e-004 | 2.0000e-006 |
| tblVehicleEF | HHD | 5.4250e-003 | 9.7000e-005 |
| tblVehicleEF | HHD | 0.33 | 0.44 |
| tblVehicleEF | HHD | 9.5000e-005 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 6.0900e-004 | 4.8500e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 8.0770e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1500e-004 | 1.0000e-006 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 1.1200e-004 | 2.0000e-006 |
| tblVehicleEF | HHD | 5.4250e-003 | 9.7000e-005 |
| tblVehicleEF | HHD | 0.40 | 0.52 |
| tblVehicleEF | HHD | 9.5000e-005 | 2.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 6.0900e-004 | 4.8500e-004 |
| tblVehicleEF | HHD | 0.09 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.29 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |
| tblVehicleEF | HHD | 0.05 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.97 | 6.64 |
| tblVehicleEF | HHD | 1.23 | 0.65 |
| tblVehicleEF | HHD | 4.36 | 9.1590e-003 |
| tblVehicleEF | HHD | 4,067.39 | 870.89 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 11.53 | 5.21 |
| tblVehicleEF | HHD | 1.02 | 1.84 |
| tblVehicleEF | HHD | 18.92 | 2.53 |
| tblVehicleEF | HHD | 1.8390e-003 | 1.8520e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7590e-003 | 1.7720e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7200e-004 | 3.0000e-006 |

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|---|---|---|---|
| tblVehicleEF | HHD | 5.5440e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.31 | 0.47 |
| tblVehicleEF | HHD | 1.5500e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 5.7700e-004 | 4.5900e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.04 | 7.9760e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1000e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.7200e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 5.5440e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.38 | 0.55 |
| tblVehicleEF | HHD | 1.5500e-004 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 5.7700e-004 | 4.5900e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.33 | 0.03 |
| tblVehicleEF | HHD | 0.15 | 0.13 |
| tblVehicleEF | HHD | 0.06 | 1.0000e-006 |
| tblVehicleEF | HHD | 1.84 | 6.85 |
| tblVehicleEF | HHD | 1.22 | 0.65 |
| tblVehicleEF | HHD | 4.89 | 0.01 |
| tblVehicleEF | HHD | 3,524.30 | 897.28 |
| tblVehicleEF | HHD | 1,475.38 | 1,025.00 |
| tblVehicleEF | HHD | 13.89 | 0.07 |
| tblVehicleEF | HHD | 10.68 | 5.84 |
| tblVehicleEF | HHD | 1.06 | 1.91 |
| tblVehicleEF | HHD | 18.96 | 2.53 |
| tblVehicleEF | HHD | 2.6540e-003 | 2.4240e-003 |
| tblVehicleEF | HHD | 0.06 | 0.06 |

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|---|---|---|---|
| tblVehicleEF | HHD | 0.04 | 0.04 |
| tblVehicleEF | HHD | 4.9690e-003 | 0.02 |
| tblVehicleEF | HHD | 1.7100e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 2.5390e-003 | 2.3190e-003 |
| tblVehicleEF | HHD | 0.03 | 0.03 |
| tblVehicleEF | HHD | 8.7600e-003 | 8.8400e-003 |
| tblVehicleEF | HHD | 4.7540e-003 | 0.02 |
| tblVehicleEF | HHD | 1.5800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 7.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 5.5830e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.36 | 0.41 |
| tblVehicleEF | HHD | 6.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.07 | 0.02 |
| tblVehicleEF | HHD | 6.8600e-004 | 5.4600e-004 |
| tblVehicleEF | HHD | 0.08 | 3.0000e-006 |
| tblVehicleEF | HHD | 0.03 | 8.2180e-003 |
| tblVehicleEF | HHD | 0.01 | 8.9040e-003 |
| tblVehicleEF | HHD | 2.1800e-004 | 1.0000e-006 |
| tblVehicleEF | HHD | 7.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 5.5830e-003 | 1.0000e-004 |
| tblVehicleEF | HHD | 0.43 | 0.47 |
| tblVehicleEF | HHD | 6.9000e-005 | 1.0000e-006 |
| tblVehicleEF | HHD | 0.22 | 0.15 |
| tblVehicleEF | HHD | 6.8600e-004 | 5.4600e-004 |
| tblVehicleEF | HHD | 0.09 | 3.0000e-006 |
| tblVehicleEF | LDA | 1.3420e-003 | 6.5600e-004 |
| tblVehicleEF | LDA | 7.4000e-004 | 0.02 |
| tblVehicleEF | LDA | 0.25 | 0.37 |
| tblVehicleEF | LDA | 0.36 | 1.43 |
| tblVehicleEF | LDA | 165.14 | 182.34 |

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|---|---|---|---|
| tblVehicleEF | LDA | 35.70 | 37.05 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.01 | 0.11 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 8.8180e-003 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 3.3750e-003 | 1.9160e-003 |
| tblVehicleEF | LDA | 0.03 | 0.15 |
| tblVehicleEF | LDA | 9.9840e-003 | 0.07 |
| tblVehicleEF | LDA | 1.6520e-003 | 1.8040e-003 |
| tblVehicleEF | LDA | 3.6200e-004 | 3.6700e-004 |
| tblVehicleEF | LDA | 8.8180e-003 | 0.01 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 4.9050e-003 | 2.7830e-003 |
| tblVehicleEF | LDA | 0.03 | 0.15 |
| tblVehicleEF | LDA | 0.01 | 0.08 |
| tblVehicleEF | LDA | 1.4300e-003 | 7.0700e-004 |
| tblVehicleEF | LDA | 6.4400e-004 | 0.02 |
| tblVehicleEF | LDA | 0.28 | 0.41 |
| tblVehicleEF | LDA | 0.29 | 1.18 |
| tblVehicleEF | LDA | 172.45 | 190.19 |
| tblVehicleEF | LDA | 35.70 | 36.64 |
| tblVehicleEF | LDA | 0.02 | 0.01 |
| tblVehicleEF | LDA | 0.01 | 0.10 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |

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|---|---|---|---|
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 3.5920e-003 | 2.0370e-003 |
| tblVehicleEF | LDA | 0.02 | 0.14 |
| tblVehicleEF | LDA | 8.6840e-003 | 0.06 |
| tblVehicleEF | LDA | 1.7250e-003 | 1.8810e-003 |
| tblVehicleEF | LDA | 3.6100e-004 | 3.6300e-004 |
| tblVehicleEF | LDA | 0.01 | 0.02 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 0.02 | 0.03 |
| tblVehicleEF | LDA | 5.2220e-003 | 2.9610e-003 |
| tblVehicleEF | LDA | 0.02 | 0.14 |
| tblVehicleEF | LDA | 9.5080e-003 | 0.07 |
| tblVehicleEF | LDA | 1.3150e-003 | 6.3800e-004 |
| tblVehicleEF | LDA | 7.9800e-004 | 0.02 |
| tblVehicleEF | LDA | 0.25 | 0.37 |
| tblVehicleEF | LDA | 0.39 | 1.58 |
| tblVehicleEF | LDA | 163.76 | 180.85 |
| tblVehicleEF | LDA | 35.70 | 37.31 |
| tblVehicleEF | LDA | 0.02 | 0.02 |
| tblVehicleEF | LDA | 0.01 | 0.12 |
| tblVehicleEF | LDA | 7.0200e-004 | 5.9800e-004 |
| tblVehicleEF | LDA | 1.0040e-003 | 7.7100e-004 |
| tblVehicleEF | LDA | 6.4600e-004 | 5.5000e-004 |
| tblVehicleEF | LDA | 9.2400e-004 | 7.0900e-004 |
| tblVehicleEF | LDA | 5.9570e-003 | 9.8870e-003 |

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|---|---|---|---|
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 7.0170e-003 | 0.01 |
| tblVehicleEF | LDA | 3.3090e-003 | 1.8800e-003 |
| tblVehicleEF | LDA | 0.03 | 0.18 |
| tblVehicleEF | LDA | 0.01 | 0.08 |
| tblVehicleEF | LDA | 1.6380e-003 | 1.7890e-003 |
| tblVehicleEF | LDA | 3.6300e-004 | 3.6900e-004 |
| tblVehicleEF | LDA | 5.9570e-003 | 9.8870e-003 |
| tblVehicleEF | LDA | 0.03 | 0.04 |
| tblVehicleEF | LDA | 7.0170e-003 | 0.01 |
| tblVehicleEF | LDA | 4.8090e-003 | 2.7300e-003 |
| tblVehicleEF | LDA | 0.03 | 0.18 |
| tblVehicleEF | LDA | 0.01 | 0.09 |
| tblVehicleEF | LDT1 | 1.9740e-003 | 8.6600e-004 |
| tblVehicleEF | LDT1 | 1.6200e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.34 | 0.41 |
| tblVehicleEF | LDT1 | 0.57 | 1.56 |
| tblVehicleEF | LDT1 | 211.58 | 219.89 |
| tblVehicleEF | LDT1 | 47.05 | 45.35 |
| tblVehicleEF | LDT1 | 0.03 | 0.02 |
| tblVehicleEF | LDT1 | 0.03 | 0.13 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 4.8930e-003 | 2.7130e-003 |
| tblVehicleEF | LDT1 | 0.05 | 0.23 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.02 | 0.09 |
| tblVehicleEF | LDT1 | 2.1170e-003 | 2.1760e-003 |
| tblVehicleEF | LDT1 | 4.7900e-004 | 4.4900e-004 |
| tblVehicleEF | LDT1 | 0.02 | 0.03 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.03 | 0.03 |
| tblVehicleEF | LDT1 | 7.1370e-003 | 3.9690e-003 |
| tblVehicleEF | LDT1 | 0.05 | 0.23 |
| tblVehicleEF | LDT1 | 0.02 | 0.10 |
| tblVehicleEF | LDT1 | 2.1000e-003 | 9.3200e-004 |
| tblVehicleEF | LDT1 | 1.4080e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.37 | 0.45 |
| tblVehicleEF | LDT1 | 0.47 | 1.28 |
| tblVehicleEF | LDT1 | 220.75 | 227.96 |
| tblVehicleEF | LDT1 | 47.05 | 44.89 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 0.02 | 0.12 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.04 | 0.05 |
| tblVehicleEF | LDT1 | 5.2060e-003 | 2.8860e-003 |
| tblVehicleEF | LDT1 | 0.04 | 0.21 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 2.2090e-003 | 2.2560e-003 |
| tblVehicleEF | LDT1 | 4.7800e-004 | 4.4400e-004 |
| tblVehicleEF | LDT1 | 0.03 | 0.04 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.04 | 0.05 |
| tblVehicleEF | LDT1 | 7.5930e-003 | 4.2220e-003 |
| tblVehicleEF | LDT1 | 0.04 | 0.21 |
| tblVehicleEF | LDT1 | 0.02 | 0.08 |
| tblVehicleEF | LDT1 | 1.9350e-003 | 8.4300e-004 |
| tblVehicleEF | LDT1 | 1.7480e-003 | 0.02 |
| tblVehicleEF | LDT1 | 0.33 | 0.41 |
| tblVehicleEF | LDT1 | 0.63 | 1.73 |
| tblVehicleEF | LDT1 | 209.84 | 218.36 |
| tblVehicleEF | LDT1 | 47.05 | 45.64 |
| tblVehicleEF | LDT1 | 0.03 | 0.02 |
| tblVehicleEF | LDT1 | 0.03 | 0.14 |
| tblVehicleEF | LDT1 | 8.8900e-004 | 6.8500e-004 |
| tblVehicleEF | LDT1 | 1.3260e-003 | 8.9900e-004 |
| tblVehicleEF | LDT1 | 8.1800e-004 | 6.2900e-004 |
| tblVehicleEF | LDT1 | 1.2190e-003 | 8.2700e-004 |
| tblVehicleEF | LDT1 | 0.01 | 0.02 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 4.7970e-003 | 2.6600e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.28 |
| tblVehicleEF | LDT1 | 0.02 | 0.10 |
| tblVehicleEF | LDT1 | 2.1000e-003 | 2.1610e-003 |
| tblVehicleEF | LDT1 | 4.8000e-004 | 4.5200e-004 |
| tblVehicleEF | LDT1 | 0.01 | 0.02 |
| tblVehicleEF | LDT1 | 0.07 | 0.06 |
| tblVehicleEF | LDT1 | 0.02 | 0.02 |
| tblVehicleEF | LDT1 | 6.9970e-003 | 3.8920e-003 |
| tblVehicleEF | LDT1 | 0.06 | 0.28 |

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|---|---|---|---|
| tblVehicleEF | LDT1 | 0.03 | 0.10 |
| tblVehicleEF | LDT2 | 1.9590e-003 | 1.0310e-003 |
| tblVehicleEF | LDT2 | 1.2530e-003 | 0.03 |
| tblVehicleEF | LDT2 | 0.37 | 0.46 |
| tblVehicleEF | LDT2 | 0.52 | 1.92 |
| tblVehicleEF | LDT2 | 240.17 | 218.56 |
| tblVehicleEF | LDT2 | 52.36 | 45.01 |
| tblVehicleEF | LDT2 | 0.03 | 0.02 |
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.03 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 4.8810e-003 | 3.3840e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.21 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 2.4030e-003 | 2.1620e-003 |
| tblVehicleEF | LDT2 | 5.3100e-004 | 4.4500e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.03 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.02 | 0.04 |
| tblVehicleEF | LDT2 | 7.1100e-003 | 4.8950e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.21 |
| tblVehicleEF | LDT2 | 0.02 | 0.12 |
| tblVehicleEF | LDT2 | 2.0850e-003 | 1.1100e-003 |
| tblVehicleEF | LDT2 | 1.1320e-003 | 0.02 |
| tblVehicleEF | LDT2 | 0.41 | 0.51 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.46 | 1.58 |
| tblVehicleEF | LDT2 | 250.62 | 225.82 |
| tblVehicleEF | LDT2 | 52.36 | 44.44 |
| tblVehicleEF | LDT2 | 0.02 | 0.02 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 5.1930e-003 | 3.5890e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.19 |
| tblVehicleEF | LDT2 | 0.02 | 0.09 |
| tblVehicleEF | LDT2 | 2.5080e-003 | 2.2340e-003 |
| tblVehicleEF | LDT2 | 5.3000e-004 | 4.4000e-004 |
| tblVehicleEF | LDT2 | 0.02 | 0.05 |
| tblVehicleEF | LDT2 | 0.04 | 0.05 |
| tblVehicleEF | LDT2 | 0.03 | 0.06 |
| tblVehicleEF | LDT2 | 7.5660e-003 | 5.1960e-003 |
| tblVehicleEF | LDT2 | 0.03 | 0.19 |
| tblVehicleEF | LDT2 | 0.02 | 0.10 |
| tblVehicleEF | LDT2 | 1.9200e-003 | 1.0030e-003 |
| tblVehicleEF | LDT2 | 1.3260e-003 | 0.03 |
| tblVehicleEF | LDT2 | 0.37 | 0.46 |
| tblVehicleEF | LDT2 | 0.56 | 2.14 |
| tblVehicleEF | LDT2 | 238.19 | 217.18 |
| tblVehicleEF | LDT2 | 52.36 | 45.37 |
| tblVehicleEF | LDT2 | 0.03 | 0.02 |

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|---|---|---|---|
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LDT2 | 8.1300e-004 | 6.7400e-004 |
| tblVehicleEF | LDT2 | 1.1550e-003 | 8.0100e-004 |
| tblVehicleEF | LDT2 | 7.4800e-004 | 6.2200e-004 |
| tblVehicleEF | LDT2 | 1.0620e-003 | 7.3700e-004 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.03 |
| tblVehicleEF | LDT2 | 4.7850e-003 | 3.3210e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.25 |
| tblVehicleEF | LDT2 | 0.02 | 0.11 |
| tblVehicleEF | LDT2 | 2.3830e-003 | 2.1480e-003 |
| tblVehicleEF | LDT2 | 5.3200e-004 | 4.4900e-004 |
| tblVehicleEF | LDT2 | 0.01 | 0.02 |
| tblVehicleEF | LDT2 | 0.04 | 0.06 |
| tblVehicleEF | LDT2 | 0.01 | 0.03 |
| tblVehicleEF | LDT2 | 6.9710e-003 | 4.8030e-003 |
| tblVehicleEF | LDT2 | 0.04 | 0.25 |
| tblVehicleEF | LDT2 | 0.02 | 0.13 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2390e-003 |
| tblVehicleEF | LHD1 | 1.9640e-003 | 1.5690e-003 |
| tblVehicleEF | LHD1 | 4.6510e-003 | 5.7480e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.94 | 0.69 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.88 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.27 | 0.15 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.35 | 0.15 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 8.0400e-004 | 8.0900e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 6.8300e-004 | 6.7600e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.08 | 0.16 |
| tblVehicleEF | LHD1 | 0.06 | 0.03 |
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2100e-004 | 7.8000e-005 |
| tblVehicleEF | LHD1 | 8.0400e-004 | 8.0900e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 6.8300e-004 | 6.7600e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.08 | 0.16 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2480e-003 |
| tblVehicleEF | LHD1 | 1.9790e-003 | 1.5840e-003 |
| tblVehicleEF | LHD1 | 4.4260e-003 | 5.4920e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.88 | 0.65 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.82 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.26 | 0.14 |
| tblVehicleEF | LHD1 | 0.33 | 0.14 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 1.2220e-003 | 1.2390e-003 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 1.0950e-003 | 1.0940e-003 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.07 | 0.15 |
| tblVehicleEF | LHD1 | 0.06 | 0.02 |
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2000e-004 | 7.7000e-005 |
| tblVehicleEF | LHD1 | 1.2220e-003 | 1.2390e-003 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 1.0950e-003 | 1.0940e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.07 | 0.15 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD1 | 2.7230e-003 | 3.2320e-003 |
| tblVehicleEF | LHD1 | 1.9550e-003 | 1.5580e-003 |
| tblVehicleEF | LHD1 | 4.8070e-003 | 5.9240e-003 |
| tblVehicleEF | LHD1 | 0.12 | 0.16 |
| tblVehicleEF | LHD1 | 0.20 | 0.17 |
| tblVehicleEF | LHD1 | 0.98 | 0.71 |
| tblVehicleEF | LHD1 | 8.98 | 7.81 |
| tblVehicleEF | LHD1 | 526.87 | 512.57 |
| tblVehicleEF | LHD1 | 20.48 | 7.93 |
| tblVehicleEF | LHD1 | 0.06 | 0.04 |
| tblVehicleEF | LHD1 | 0.27 | 0.15 |
| tblVehicleEF | LHD1 | 0.36 | 0.16 |
| tblVehicleEF | LHD1 | 7.3200e-004 | 1.1030e-003 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 5.4050e-003 | 4.2010e-003 |
| tblVehicleEF | LHD1 | 4.2800e-004 | 1.6300e-004 |
| tblVehicleEF | LHD1 | 7.0000e-004 | 1.0550e-003 |
| tblVehicleEF | LHD1 | 2.6780e-003 | 2.5400e-003 |
| tblVehicleEF | LHD1 | 5.1580e-003 | 3.9990e-003 |
| tblVehicleEF | LHD1 | 3.9300e-004 | 1.5000e-004 |
| tblVehicleEF | LHD1 | 5.7700e-004 | 5.7500e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.01 | 0.01 |
| tblVehicleEF | LHD1 | 4.9500e-004 | 4.8800e-004 |
| tblVehicleEF | LHD1 | 0.03 | 0.02 |
| tblVehicleEF | LHD1 | 0.08 | 0.18 |
| tblVehicleEF | LHD1 | 0.06 | 0.03 |

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|---|---|---|---|
| tblVehicleEF | LHD1 | 8.8000e-005 | 7.5000e-005 |
| tblVehicleEF | LHD1 | 5.1270e-003 | 4.9800e-003 |
| tblVehicleEF | LHD1 | 2.2200e-004 | 7.8000e-005 |
| tblVehicleEF | LHD1 | 5.7700e-004 | 5.7500e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.02 | 0.02 |
| tblVehicleEF | LHD1 | 4.9500e-004 | 4.8800e-004 |
| tblVehicleEF | LHD1 | 0.04 | 0.03 |
| tblVehicleEF | LHD1 | 0.08 | 0.18 |
| tblVehicleEF | LHD1 | 0.07 | 0.03 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1760e-003 |
| tblVehicleEF | LHD2 | 1.6160e-003 | 1.7890e-003 |
| tblVehicleEF | LHD2 | 2.1080e-003 | 3.3070e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.82 | 0.42 |
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.59 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.25 |
| tblVehicleEF | LHD2 | 0.19 | 0.10 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 4.1300e-004 | 4.9000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 3.4900e-004 | 4.2200e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4720e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2500e-004 | 5.5000e-005 |
| tblVehicleEF | LHD2 | 4.1300e-004 | 4.9000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 3.4900e-004 | 4.2200e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.02 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1820e-003 |
| tblVehicleEF | LHD2 | 1.6260e-003 | 1.7980e-003 |
| tblVehicleEF | LHD2 | 2.0870e-003 | 3.1600e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.77 | 0.40 |
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.55 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.24 |
| tblVehicleEF | LHD2 | 0.19 | 0.09 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.5000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.6900e-004 | 6.7900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4730e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2400e-004 | 5.5000e-005 |
| tblVehicleEF | LHD2 | 6.3700e-004 | 7.5000e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 5.6900e-004 | 6.7900e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.09 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 2.1840e-003 | 2.1720e-003 |
| tblVehicleEF | LHD2 | 1.6090e-003 | 1.7830e-003 |
| tblVehicleEF | LHD2 | 2.1220e-003 | 3.4080e-003 |
| tblVehicleEF | LHD2 | 0.12 | 0.13 |
| tblVehicleEF | LHD2 | 0.15 | 0.19 |
| tblVehicleEF | LHD2 | 0.85 | 0.44 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 13.32 | 12.34 |
| tblVehicleEF | LHD2 | 563.29 | 520.62 |
| tblVehicleEF | LHD2 | 21.15 | 5.61 |
| tblVehicleEF | LHD2 | 0.05 | 0.06 |
| tblVehicleEF | LHD2 | 0.06 | 0.24 |
| tblVehicleEF | LHD2 | 0.19 | 0.10 |
| tblVehicleEF | LHD2 | 8.6800e-004 | 1.5130e-003 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 5.1050e-003 | 9.8180e-003 |
| tblVehicleEF | LHD2 | 3.8100e-004 | 9.6000e-005 |
| tblVehicleEF | LHD2 | 8.3100e-004 | 1.4480e-003 |
| tblVehicleEF | LHD2 | 2.7110e-003 | 2.7230e-003 |
| tblVehicleEF | LHD2 | 4.8710e-003 | 9.3820e-003 |
| tblVehicleEF | LHD2 | 3.5000e-004 | 8.8000e-005 |
| tblVehicleEF | LHD2 | 2.9200e-004 | 3.4900e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.01 |
| tblVehicleEF | LHD2 | 2.5100e-004 | 3.0500e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.03 |
| tblVehicleEF | LHD2 | 0.03 | 0.10 |
| tblVehicleEF | LHD2 | 0.03 | 0.01 |
| tblVehicleEF | LHD2 | 1.3000e-004 | 1.1800e-004 |
| tblVehicleEF | LHD2 | 5.4720e-003 | 5.0150e-003 |
| tblVehicleEF | LHD2 | 2.2500e-004 | 5.6000e-005 |
| tblVehicleEF | LHD2 | 2.9200e-004 | 3.4900e-004 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 0.01 | 0.02 |
| tblVehicleEF | LHD2 | 2.5100e-004 | 3.0500e-004 |
| tblVehicleEF | LHD2 | 0.03 | 0.04 |
| tblVehicleEF | LHD2 | 0.03 | 0.10 |

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|---|---|---|---|
| tblVehicleEF | LHD2 | 0.03 | 0.02 |
| tblVehicleEF | MCY | 0.49 | 0.34 |
| tblVehicleEF | MCY | 0.15 | 0.24 |
| tblVehicleEF | MCY | 17.36 | 17.45 |
| tblVehicleEF | MCY | 10.23 | 9.09 |
| tblVehicleEF | MCY | 179.13 | 214.53 |
| tblVehicleEF | MCY | 42.15 | 58.51 |
| tblVehicleEF | MCY | 1.13 | 1.13 |
| tblVehicleEF | MCY | 0.31 | 0.27 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 0.87 | 0.92 |
| tblVehicleEF | MCY | 0.63 | 0.69 |
| tblVehicleEF | MCY | 0.53 | 0.56 |
| tblVehicleEF | MCY | 2.28 | 2.29 |
| tblVehicleEF | MCY | 0.58 | 1.23 |
| tblVehicleEF | MCY | 2.06 | 1.83 |
| tblVehicleEF | MCY | 2.1450e-003 | 2.1230e-003 |
| tblVehicleEF | MCY | 6.4900e-004 | 5.7900e-004 |
| tblVehicleEF | MCY | 0.87 | 0.92 |
| tblVehicleEF | MCY | 0.63 | 0.69 |
| tblVehicleEF | MCY | 0.53 | 0.56 |
| tblVehicleEF | MCY | 2.87 | 2.87 |
| tblVehicleEF | MCY | 0.58 | 1.23 |
| tblVehicleEF | MCY | 2.24 | 2.00 |
| tblVehicleEF | MCY | 0.48 | 0.33 |
| tblVehicleEF | MCY | 0.13 | 0.20 |
| tblVehicleEF | MCY | 16.41 | 16.49 |

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|---|---|---|---|
| tblVehicleEF | MCY | 8.97 | 7.93 |
| tblVehicleEF | MCY | 179.13 | 212.76 |
| tblVehicleEF | MCY | 42.15 | 55.82 |
| tblVehicleEF | MCY | 1.00 | 1.00 |
| tblVehicleEF | MCY | 0.29 | 0.25 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 1.50 | 1.58 |
| tblVehicleEF | MCY | 0.71 | 0.78 |
| tblVehicleEF | MCY | 1.07 | 1.12 |
| tblVehicleEF | MCY | 2.22 | 2.23 |
| tblVehicleEF | MCY | 0.52 | 1.11 |
| tblVehicleEF | MCY | 1.78 | 1.58 |
| tblVehicleEF | MCY | 2.1270e-003 | 2.1050e-003 |
| tblVehicleEF | MCY | 6.2000e-004 | 5.5200e-004 |
| tblVehicleEF | MCY | 1.50 | 1.58 |
| tblVehicleEF | MCY | 0.71 | 0.78 |
| tblVehicleEF | MCY | 1.07 | 1.12 |
| tblVehicleEF | MCY | 2.79 | 2.79 |
| tblVehicleEF | MCY | 0.52 | 1.11 |
| tblVehicleEF | MCY | 1.94 | 1.72 |
| tblVehicleEF | MCY | 0.50 | 0.34 |
| tblVehicleEF | MCY | 0.16 | 0.26 |
| tblVehicleEF | MCY | 18.17 | 18.27 |
| tblVehicleEF | MCY | 11.11 | 9.93 |
| tblVehicleEF | MCY | 179.13 | 216.00 |
| tblVehicleEF | MCY | 42.15 | 60.42 |
| tblVehicleEF | MCY | 1.15 | 1.15 |

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|---|---|---|---|
| tblVehicleEF | MCY | 0.33 | 0.28 |
| tblVehicleEF | MCY | 2.4390e-003 | 2.4200e-003 |
| tblVehicleEF | MCY | 3.3190e-003 | 2.8650e-003 |
| tblVehicleEF | MCY | 2.2740e-003 | 2.2560e-003 |
| tblVehicleEF | MCY | 3.0980e-003 | 2.6760e-003 |
| tblVehicleEF | MCY | 0.56 | 0.60 |
| tblVehicleEF | MCY | 0.75 | 0.82 |
| tblVehicleEF | MCY | 0.32 | 0.34 |
| tblVehicleEF | MCY | 2.33 | 2.34 |
| tblVehicleEF | MCY | 0.72 | 1.53 |
| tblVehicleEF | MCY | 2.24 | 2.01 |
| tblVehicleEF | MCY | 2.1590e-003 | 2.1370e-003 |
| tblVehicleEF | MCY | 6.6900e-004 | 5.9800e-004 |
| tblVehicleEF | MCY | 0.56 | 0.60 |
| tblVehicleEF | MCY | 0.75 | 0.82 |
| tblVehicleEF | MCY | 0.32 | 0.34 |
| tblVehicleEF | MCY | 2.92 | 2.93 |
| tblVehicleEF | MCY | 0.72 | 1.53 |
| tblVehicleEF | MCY | 2.44 | 2.19 |
| tblVehicleEF | MDV | 2.7570e-003 | 1.0960e-003 |
| tblVehicleEF | MDV | 3.0290e-003 | 0.03 |
| tblVehicleEF | MDV | 0.46 | 0.47 |
| tblVehicleEF | MDV | 0.81 | 1.96 |
| tblVehicleEF | MDV | 318.34 | 266.51 |
| tblVehicleEF | MDV | 68.99 | 54.02 |
| tblVehicleEF | MDV | 0.04 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.14 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |

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|---|---|---|---|
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 6.9650e-003 | 3.7440e-003 |
| tblVehicleEF | MDV | 0.05 | 0.24 |
| tblVehicleEF | MDV | 0.04 | 0.12 |
| tblVehicleEF | MDV | 3.1810e-003 | 2.6330e-003 |
| tblVehicleEF | MDV | 7.0300e-004 | 5.3500e-004 |
| tblVehicleEF | MDV | 0.04 | 0.05 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.04 | 0.06 |
| tblVehicleEF | MDV | 0.01 | 5.4110e-003 |
| tblVehicleEF | MDV | 0.05 | 0.24 |
| tblVehicleEF | MDV | 0.04 | 0.13 |
| tblVehicleEF | MDV | 2.9330e-003 | 1.1800e-003 |
| tblVehicleEF | MDV | 2.6720e-003 | 0.03 |
| tblVehicleEF | MDV | 0.50 | 0.51 |
| tblVehicleEF | MDV | 0.70 | 1.62 |
| tblVehicleEF | MDV | 331.77 | 273.67 |
| tblVehicleEF | MDV | 68.99 | 53.43 |
| tblVehicleEF | MDV | 0.03 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.13 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.06 | 0.07 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.07 | 0.09 |

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|---|---|---|---|
| tblVehicleEF | MDV | 7.4000e-003 | 3.9700e-003 |
| tblVehicleEF | MDV | 0.05 | 0.22 |
| tblVehicleEF | MDV | 0.04 | 0.10 |
| tblVehicleEF | MDV | 3.3160e-003 | 2.7040e-003 |
| tblVehicleEF | MDV | 7.0100e-004 | 5.2900e-004 |
| tblVehicleEF | MDV | 0.06 | 0.07 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.07 | 0.09 |
| tblVehicleEF | MDV | 0.01 | 5.7410e-003 |
| tblVehicleEF | MDV | 0.05 | 0.22 |
| tblVehicleEF | MDV | 0.04 | 0.11 |
| tblVehicleEF | MDV | 2.7040e-003 | 1.0670e-003 |
| tblVehicleEF | MDV | 3.2450e-003 | 0.03 |
| tblVehicleEF | MDV | 0.45 | 0.46 |
| tblVehicleEF | MDV | 0.89 | 2.18 |
| tblVehicleEF | MDV | 315.80 | 265.15 |
| tblVehicleEF | MDV | 68.99 | 54.39 |
| tblVehicleEF | MDV | 0.04 | 0.02 |
| tblVehicleEF | MDV | 0.05 | 0.15 |
| tblVehicleEF | MDV | 8.8400e-004 | 6.7600e-004 |
| tblVehicleEF | MDV | 1.2690e-003 | 8.3200e-004 |
| tblVehicleEF | MDV | 8.1400e-004 | 6.2300e-004 |
| tblVehicleEF | MDV | 1.1660e-003 | 7.6500e-004 |
| tblVehicleEF | MDV | 0.02 | 0.03 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.03 | 0.04 |
| tblVehicleEF | MDV | 6.8320e-003 | 3.6750e-003 |
| tblVehicleEF | MDV | 0.06 | 0.29 |
| tblVehicleEF | MDV | 0.04 | 0.13 |
| tblVehicleEF | MDV | 3.1560e-003 | 2.6200e-003 |

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|---|---|---|---|
| tblVehicleEF | MDV | 7.0400e-004 | 5.3800e-004 |
| tblVehicleEF | MDV | 0.02 | 0.03 |
| tblVehicleEF | MDV | 0.09 | 0.08 |
| tblVehicleEF | MDV | 0.03 | 0.04 |
| tblVehicleEF | MDV | 9.9180e-003 | 5.3090e-003 |
| tblVehicleEF | MDV | 0.06 | 0.29 |
| tblVehicleEF | MDV | 0.05 | 0.14 |
| tblVehicleEF | MH | 3.8210e-003 | 3.0770e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.18 |
| tblVehicleEF | MH | 3.13 | 1.37 |
| tblVehicleEF | MH | 1,048.97 | 1,194.05 |
| tblVehicleEF | MH | 55.78 | 13.48 |
| tblVehicleEF | MH | 0.61 | 0.91 |
| tblVehicleEF | MH | 0.55 | 0.24 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.31 | 0.26 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.17 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.6510e-003 | 0.24 |
| tblVehicleEF | MH | 0.19 | 0.07 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.1200e-004 | 1.3300e-004 |
| tblVehicleEF | MH | 0.31 | 0.26 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.17 |
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.6510e-003 | 0.24 |
| tblVehicleEF | MH | 0.21 | 0.07 |
| tblVehicleEF | MH | 3.9170e-003 | 3.1350e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.21 | 0.19 |
| tblVehicleEF | MH | 2.90 | 1.27 |
| tblVehicleEF | MH | 1,048.97 | 1,194.05 |
| tblVehicleEF | MH | 55.78 | 13.31 |
| tblVehicleEF | MH | 0.57 | 0.87 |
| tblVehicleEF | MH | 0.52 | 0.23 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.45 | 0.38 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.32 | 0.27 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.5160e-003 | 0.23 |
| tblVehicleEF | MH | 0.18 | 0.06 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.0800e-004 | 1.3200e-004 |
| tblVehicleEF | MH | 0.45 | 0.38 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 0.32 | 0.27 |

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|---|---|---|---|
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.5160e-003 | 0.23 |
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| tblVehicleEF | MH | 3.7600e-003 | 3.0400e-003 |
| tblVehicleEF | MH | 0.01 | 0.02 |
| tblVehicleEF | MH | 0.20 | 0.18 |
| tblVehicleEF | MH | 3.26 | 1.43 |
| tblVehicleEF | MH | 1,048.97 | 1,194.04 |
| tblVehicleEF | MH | 55.78 | 13.58 |
| tblVehicleEF | MH | 0.61 | 0.91 |
| tblVehicleEF | MH | 0.57 | 0.25 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 8.9420e-003 | 0.02 |
| tblVehicleEF | MH | 8.3900e-004 | 1.8400e-004 |
| tblVehicleEF | MH | 3.2230e-003 | 3.3280e-003 |
| tblVehicleEF | MH | 8.5230e-003 | 0.02 |
| tblVehicleEF | MH | 7.7100e-004 | 1.6900e-004 |
| tblVehicleEF | MH | 0.23 | 0.19 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 0.14 | 0.12 |
| tblVehicleEF | MH | 0.02 | 0.02 |
| tblVehicleEF | MH | 3.9870e-003 | 0.26 |
| tblVehicleEF | MH | 0.20 | 0.07 |
| tblVehicleEF | MH | 0.01 | 0.01 |
| tblVehicleEF | MH | 6.1500e-004 | 1.3400e-004 |
| tblVehicleEF | MH | 0.23 | 0.19 |
| tblVehicleEF | MH | 0.03 | 0.02 |
| tblVehicleEF | MH | 0.14 | 0.12 |
| tblVehicleEF | MH | 0.02 | 0.03 |
| tblVehicleEF | MH | 3.9870e-003 | 0.26 |

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|---|---|---|---|
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| tblVehicleEF | MHD | 0.02 | 2.8830e-003 |
| tblVehicleEF | MHD | 1.5490e-003 | 5.5200e-004 |
| tblVehicleEF | MHD | 0.03 | 6.0840e-003 |
| tblVehicleEF | MHD | 0.30 | 0.34 |
| tblVehicleEF | MHD | 0.16 | 0.08 |
| tblVehicleEF | MHD | 2.51 | 0.56 |
| tblVehicleEF | MHD | 150.61 | 52.96 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.80 |
| tblVehicleEF | MHD | 0.39 | 0.28 |
| tblVehicleEF | MHD | 0.51 | 0.97 |
| tblVehicleEF | MHD | 11.67 | 1.82 |
| tblVehicleEF | MHD | 3.3000e-005 | 7.8000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 3.2000e-005 | 7.4000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 4.6300e-004 | 1.8900e-004 |
| tblVehicleEF | MHD | 0.02 | 9.4290e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 3.9500e-004 | 1.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3660e-003 |
| tblVehicleEF | MHD | 9.8920e-003 | 0.05 |
| tblVehicleEF | MHD | 0.17 | 0.03 |
| tblVehicleEF | MHD | 1.4470e-003 | 5.0200e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3600e-004 | 5.7000e-005 |
| tblVehicleEF | MHD | 4.6300e-004 | 1.8900e-004 |

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|---|---|---|---|
| tblVehicleEF | MHD | 0.02 | 9.4290e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 3.9500e-004 | 1.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 8.6860e-003 |
| tblVehicleEF | MHD | 9.8920e-003 | 0.05 |
| tblVehicleEF | MHD | 0.18 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 2.7520e-003 |
| tblVehicleEF | MHD | 1.5590e-003 | 5.6100e-004 |
| tblVehicleEF | MHD | 0.03 | 5.8070e-003 |
| tblVehicleEF | MHD | 0.22 | 0.30 |
| tblVehicleEF | MHD | 0.16 | 0.08 |
| tblVehicleEF | MHD | 2.35 | 0.52 |
| tblVehicleEF | MHD | 159.53 | 52.45 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.74 |
| tblVehicleEF | MHD | 0.40 | 0.27 |
| tblVehicleEF | MHD | 0.49 | 0.93 |
| tblVehicleEF | MHD | 11.65 | 1.82 |
| tblVehicleEF | MHD | 2.8000e-005 | 6.8000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 2.7000e-005 | 6.5000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 7.1300e-004 | 2.9100e-004 |
| tblVehicleEF | MHD | 0.02 | 9.6390e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 6.4000e-004 | 2.6200e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3930e-003 |
| tblVehicleEF | MHD | 9.3780e-003 | 0.04 |

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| tblVehicleEF | MHD | 0.16 | 0.03 |
| tblVehicleEF | MHD | 1.5310e-003 | 4.9800e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3400e-004 | 5.7000e-005 |
| tblVehicleEF | MHD | 7.1300e-004 | 2.9100e-004 |
| tblVehicleEF | MHD | 0.02 | 9.6390e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 6.4000e-004 | 2.6200e-004 |
| tblVehicleEF | MHD | 0.03 | 8.7250e-003 |
| tblVehicleEF | MHD | 9.3780e-003 | 0.04 |
| tblVehicleEF | MHD | 0.18 | 0.03 |
| tblVehicleEF | MHD | 0.02 | 3.0710e-003 |
| tblVehicleEF | MHD | 1.5430e-003 | 5.4600e-004 |
| tblVehicleEF | MHD | 0.03 | 6.2650e-003 |
| tblVehicleEF | MHD | 0.42 | 0.39 |
| tblVehicleEF | MHD | 0.15 | 0.08 |
| tblVehicleEF | MHD | 2.63 | 0.59 |
| tblVehicleEF | MHD | 138.28 | 53.66 |
| tblVehicleEF | MHD | 1,081.35 | 780.88 |
| tblVehicleEF | MHD | 49.23 | 5.85 |
| tblVehicleEF | MHD | 0.37 | 0.30 |
| tblVehicleEF | MHD | 0.50 | 0.96 |
| tblVehicleEF | MHD | 11.68 | 1.82 |
| tblVehicleEF | MHD | 4.1000e-005 | 9.0000e-005 |
| tblVehicleEF | MHD | 2.6690e-003 | 7.3800e-003 |
| tblVehicleEF | MHD | 7.0400e-004 | 8.3000e-005 |
| tblVehicleEF | MHD | 3.9000e-005 | 8.6000e-005 |
| tblVehicleEF | MHD | 2.5500e-003 | 7.0560e-003 |
| tblVehicleEF | MHD | 6.4700e-004 | 7.6000e-005 |
| tblVehicleEF | MHD | 3.2800e-004 | 1.3400e-004 |

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| tblVehicleEF | MHD | 0.02 | 9.7090e-003 |
| tblVehicleEF | MHD | 0.02 | 0.01 |
| tblVehicleEF | MHD | 2.8400e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 0.03 | 7.3490e-003 |
| tblVehicleEF | MHD | 0.01 | 0.05 |
| tblVehicleEF | MHD | 0.17 | 0.03 |
| tblVehicleEF | MHD | 1.3310e-003 | 5.0900e-004 |
| tblVehicleEF | MHD | 0.01 | 7.4360e-003 |
| tblVehicleEF | MHD | 5.3800e-004 | 5.8000e-005 |
| tblVehicleEF | MHD | 3.2800e-004 | 1.3400e-004 |
| tblVehicleEF | MHD | 0.02 | 9.7090e-003 |
| tblVehicleEF | MHD | 0.03 | 0.02 |
| tblVehicleEF | MHD | 2.8400e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 0.03 | 8.6610e-003 |
| tblVehicleEF | MHD | 0.01 | 0.05 |
| tblVehicleEF | MHD | 0.19 | 0.03 |
| tblVehicleEF | OBUS | 0.01 | 8.2890e-003 |
| tblVehicleEF | OBUS | 3.2290e-003 | 2.2180e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.42 |
| tblVehicleEF | OBUS | 0.20 | 0.24 |
| tblVehicleEF | OBUS | 4.06 | 2.10 |
| tblVehicleEF | OBUS | 43.59 | 46.75 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.05 |
| tblVehicleEF | OBUS | 68.94 | 17.45 |
| tblVehicleEF | OBUS | 0.07 | 0.18 |
| tblVehicleEF | OBUS | 0.29 | 0.78 |
| tblVehicleEF | OBUS | 1.36 | 0.71 |
| tblVehicleEF | OBUS | 6.0000e-006 | 5.9000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |

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| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 6.0000e-006 | 5.6000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 1.1870e-003 | 1.5040e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 7.5500e-004 | 9.7900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.07 | 0.28 |
| tblVehicleEF | OBUS | 0.27 | 0.10 |
| tblVehicleEF | OBUS | 4.2800e-004 | 4.4700e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.6100e-004 | 1.7300e-004 |
| tblVehicleEF | OBUS | 1.1870e-003 | 1.5040e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.06 |
| tblVehicleEF | OBUS | 7.5500e-004 | 9.7900e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.28 |
| tblVehicleEF | OBUS | 0.29 | 0.11 |
| tblVehicleEF | OBUS | 0.01 | 8.3520e-003 |
| tblVehicleEF | OBUS | 3.3050e-003 | 2.2820e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.42 |
| tblVehicleEF | OBUS | 0.21 | 0.24 |
| tblVehicleEF | OBUS | 3.77 | 1.95 |
| tblVehicleEF | OBUS | 45.18 | 46.28 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.06 |
| tblVehicleEF | OBUS | 68.94 | 17.19 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 0.07 | 0.18 |
| tblVehicleEF | OBUS | 0.27 | 0.75 |
| tblVehicleEF | OBUS | 1.32 | 0.70 |
| tblVehicleEF | OBUS | 5.0000e-006 | 5.2000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 5.0000e-006 | 5.0000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 1.7750e-003 | 2.2170e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 1.2420e-003 | 1.5850e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.07 | 0.27 |
| tblVehicleEF | OBUS | 0.25 | 0.10 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.5600e-004 | 1.7000e-004 |
| tblVehicleEF | OBUS | 1.7750e-003 | 2.2170e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.06 |
| tblVehicleEF | OBUS | 1.2420e-003 | 1.5850e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.07 | 0.27 |
| tblVehicleEF | OBUS | 0.28 | 0.11 |
| tblVehicleEF | OBUS | 0.01 | 8.2270e-003 |
| tblVehicleEF | OBUS | 3.1810e-003 | 2.1770e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.24 | 0.43 |
| tblVehicleEF | OBUS | 0.20 | 0.24 |

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|---|---|---|---|
| tblVehicleEF | OBUS | 4.24 | 2.19 |
| tblVehicleEF | OBUS | 41.40 | 47.40 |
| tblVehicleEF | OBUS | 1,121.51 | 1,120.04 |
| tblVehicleEF | OBUS | 68.94 | 17.60 |
| tblVehicleEF | OBUS | 0.07 | 0.20 |
| tblVehicleEF | OBUS | 0.29 | 0.78 |
| tblVehicleEF | OBUS | 1.39 | 0.72 |
| tblVehicleEF | OBUS | 8.0000e-006 | 6.8000e-005 |
| tblVehicleEF | OBUS | 1.9260e-003 | 6.4740e-003 |
| tblVehicleEF | OBUS | 1.0940e-003 | 2.3100e-004 |
| tblVehicleEF | OBUS | 7.0000e-006 | 6.5000e-005 |
| tblVehicleEF | OBUS | 1.8150e-003 | 6.1720e-003 |
| tblVehicleEF | OBUS | 1.0060e-003 | 2.1200e-004 |
| tblVehicleEF | OBUS | 8.6300e-004 | 1.1090e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.03 | 0.04 |
| tblVehicleEF | OBUS | 5.4200e-004 | 7.0600e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.01 |
| tblVehicleEF | OBUS | 0.08 | 0.31 |
| tblVehicleEF | OBUS | 0.28 | 0.11 |
| tblVehicleEF | OBUS | 4.0700e-004 | 4.5300e-004 |
| tblVehicleEF | OBUS | 0.01 | 0.01 |
| tblVehicleEF | OBUS | 7.6400e-004 | 1.7400e-004 |
| tblVehicleEF | OBUS | 8.6300e-004 | 1.1090e-003 |
| tblVehicleEF | OBUS | 0.02 | 0.03 |
| tblVehicleEF | OBUS | 0.04 | 0.05 |
| tblVehicleEF | OBUS | 5.4200e-004 | 7.0600e-004 |
| tblVehicleEF | OBUS | 0.02 | 0.02 |
| tblVehicleEF | OBUS | 0.08 | 0.31 |
| tblVehicleEF | OBUS | 0.30 | 0.12 |

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|---|---|---|---|
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.8160e-003 | 2.4300e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 11.42 | 4.79 |
| tblVehicleEF | SBUS | 0.25 | 0.21 |
| tblVehicleEF | SBUS | 8.29 | 1.36 |
| tblVehicleEF | SBUS | 857.10 | 318.22 |
| tblVehicleEF | SBUS | 921.11 | 858.97 |
| tblVehicleEF | SBUS | 78.99 | 7.91 |
| tblVehicleEF | SBUS | 1.43 | 1.36 |
| tblVehicleEF | SBUS | 0.70 | 1.37 |
| tblVehicleEF | SBUS | 7.58 | 1.58 |
| tblVehicleEF | SBUS | 1.0400e-004 | 3.8300e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |
| tblVehicleEF | SBUS | 1.0000e-004 | 3.6600e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 4.7400e-003 | 1.4160e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |
| tblVehicleEF | SBUS | 3.0690e-003 | 9.1700e-004 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.03 | 0.09 |
| tblVehicleEF | SBUS | 0.46 | 0.06 |
| tblVehicleEF | SBUS | 8.5860e-003 | 3.0550e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.3400e-004 | 7.8000e-005 |

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|---|---|---|---|
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| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 3.0690e-003 | 9.1700e-004 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.03 | 0.09 |
| tblVehicleEF | SBUS | 0.51 | 0.06 |
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.8920e-003 | 2.4680e-003 |
| tblVehicleEF | SBUS | 0.04 | 8.8700e-003 |
| tblVehicleEF | SBUS | 11.40 | 4.78 |
| tblVehicleEF | SBUS | 0.26 | 0.21 |
| tblVehicleEF | SBUS | 6.45 | 1.06 |
| tblVehicleEF | SBUS | 884.88 | 317.96 |
| tblVehicleEF | SBUS | 921.11 | 858.98 |
| tblVehicleEF | SBUS | 78.99 | 7.41 |
| tblVehicleEF | SBUS | 1.47 | 1.32 |
| tblVehicleEF | SBUS | 0.67 | 1.31 |
| tblVehicleEF | SBUS | 7.54 | 1.57 |
| tblVehicleEF | SBUS | 8.8000e-005 | 3.3500e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |
| tblVehicleEF | SBUS | 8.4000e-005 | 3.2000e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 7.0540e-003 | 2.1070e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 5.0000e-003 | 1.4940e-003 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.03 | 0.08 |
| tblVehicleEF | SBUS | 0.40 | 0.05 |
| tblVehicleEF | SBUS | 8.8500e-003 | 3.0520e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.0300e-004 | 7.3000e-005 |
| tblVehicleEF | SBUS | 7.0540e-003 | 2.1070e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 5.0000e-003 | 1.4940e-003 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.03 | 0.08 |
| tblVehicleEF | SBUS | 0.44 | 0.06 |
| tblVehicleEF | SBUS | 0.84 | 0.12 |
| tblVehicleEF | SBUS | 3.7710e-003 | 2.4070e-003 |
| tblVehicleEF | SBUS | 0.06 | 0.01 |
| tblVehicleEF | SBUS | 11.45 | 4.82 |
| tblVehicleEF | SBUS | 0.25 | 0.20 |
| tblVehicleEF | SBUS | 9.30 | 1.52 |
| tblVehicleEF | SBUS | 818.74 | 318.57 |
| tblVehicleEF | SBUS | 921.11 | 858.97 |
| tblVehicleEF | SBUS | 78.99 | 8.19 |
| tblVehicleEF | SBUS | 1.37 | 1.40 |
| tblVehicleEF | SBUS | 0.70 | 1.36 |
| tblVehicleEF | SBUS | 7.60 | 1.58 |
| tblVehicleEF | SBUS | 1.2700e-004 | 4.4900e-004 |
| tblVehicleEF | SBUS | 9.9090e-003 | 0.01 |
| tblVehicleEF | SBUS | 2.4130e-003 | 6.0220e-003 |
| tblVehicleEF | SBUS | 1.7240e-003 | 1.4300e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | SBUS | 1.2100e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 2.4770e-003 | 2.5470e-003 |
| tblVehicleEF | SBUS | 2.2770e-003 | 5.7350e-003 |
| tblVehicleEF | SBUS | 1.5860e-003 | 1.3200e-004 |
| tblVehicleEF | SBUS | 3.4590e-003 | 1.0330e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 1.39 | 0.55 |
| tblVehicleEF | SBUS | 2.2090e-003 | 6.6000e-004 |
| tblVehicleEF | SBUS | 0.03 | 0.03 |
| tblVehicleEF | SBUS | 0.04 | 0.12 |
| tblVehicleEF | SBUS | 0.49 | 0.06 |
| tblVehicleEF | SBUS | 8.2200e-003 | 3.0580e-003 |
| tblVehicleEF | SBUS | 8.9350e-003 | 8.2600e-003 |
| tblVehicleEF | SBUS | 9.5100e-004 | 8.1000e-005 |
| tblVehicleEF | SBUS | 3.4590e-003 | 1.0330e-003 |
| tblVehicleEF | SBUS | 0.05 | 0.01 |
| tblVehicleEF | SBUS | 2.02 | 0.79 |
| tblVehicleEF | SBUS | 2.2090e-003 | 6.6000e-004 |
| tblVehicleEF | SBUS | 0.04 | 0.04 |
| tblVehicleEF | SBUS | 0.04 | 0.12 |
| tblVehicleEF | SBUS | 0.54 | 0.07 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 4.23 | 28.76 |
| tblVehicleEF | UBUS | 8.00 | 1.69 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.58 |
| tblVehicleEF | UBUS | 144.80 | 16.08 |
| tblVehicleEF | UBUS | 0.68 | 0.33 |
| tblVehicleEF | UBUS | 11.82 | 0.17 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 2.8730e-003 | 7.2500e-004 |
| tblVehicleEF | UBUS | 0.05 | 9.5970e-003 |
| tblVehicleEF | UBUS | 2.5790e-003 | 5.8800e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.75 | 0.09 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.5960e-003 | 1.5900e-004 |
| tblVehicleEF | UBUS | 2.8730e-003 | 7.2500e-004 |
| tblVehicleEF | UBUS | 0.05 | 9.5970e-003 |
| tblVehicleEF | UBUS | 2.5790e-003 | 5.8800e-004 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.82 | 0.10 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.05 | 0.02 |
| tblVehicleEF | UBUS | 4.24 | 28.77 |
| tblVehicleEF | UBUS | 6.76 | 1.43 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.59 |
| tblVehicleEF | UBUS | 144.80 | 15.64 |
| tblVehicleEF | UBUS | 0.64 | 0.33 |
| tblVehicleEF | UBUS | 11.74 | 0.16 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 3.9960e-003 | 1.0930e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 4.2740e-003 | 1.0210e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.68 | 0.08 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.5740e-003 | 1.5500e-004 |
| tblVehicleEF | UBUS | 3.9960e-003 | 1.0930e-003 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 4.2740e-003 | 1.0210e-003 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.05 |
| tblVehicleEF | UBUS | 0.74 | 0.09 |
| tblVehicleEF | UBUS | 0.91 | 3.74 |
| tblVehicleEF | UBUS | 0.06 | 0.02 |
| tblVehicleEF | UBUS | 4.23 | 28.76 |
| tblVehicleEF | UBUS | 8.84 | 1.86 |
| tblVehicleEF | UBUS | 1,697.87 | 1,560.58 |
| tblVehicleEF | UBUS | 144.80 | 16.36 |
| tblVehicleEF | UBUS | 0.68 | 0.33 |
| tblVehicleEF | UBUS | 11.87 | 0.17 |
| tblVehicleEF | UBUS | 0.49 | 0.09 |

| | | | |
|---|---|---|---|
| tblVehicleEF | UBUS | 0.01 | 0.02 |
| tblVehicleEF | UBUS | 2.8760e-003 | 4.0120e-003 |
| tblVehicleEF | UBUS | 1.6910e-003 | 2.1300e-004 |
| tblVehicleEF | UBUS | 0.21 | 0.04 |
| tblVehicleEF | UBUS | 3.0000e-003 | 5.6970e-003 |
| tblVehicleEF | UBUS | 2.7090e-003 | 3.8230e-003 |
| tblVehicleEF | UBUS | 1.5550e-003 | 1.9600e-004 |
| tblVehicleEF | UBUS | 2.1960e-003 | 5.2300e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 1.8270e-003 | 4.0800e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.06 |
| tblVehicleEF | UBUS | 0.02 | 0.06 |
| tblVehicleEF | UBUS | 0.79 | 0.09 |
| tblVehicleEF | UBUS | 7.9940e-003 | 2.8020e-003 |
| tblVehicleEF | UBUS | 1.6100e-003 | 1.6200e-004 |
| tblVehicleEF | UBUS | 2.1960e-003 | 5.2300e-004 |
| tblVehicleEF | UBUS | 0.05 | 0.01 |
| tblVehicleEF | UBUS | 1.8270e-003 | 4.0800e-004 |
| tblVehicleEF | UBUS | 0.97 | 3.82 |
| tblVehicleEF | UBUS | 0.02 | 0.06 |
| tblVehicleEF | UBUS | 0.87 | 0.10 |
| tblVehicleTrips | CC_TL | 7.30 | 6.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 6.00 |
| tblVehicleTrips | CW_TL | 9.50 | 6.00 |
| tblVehicleTrips | ST_TR | 1.32 | 3.82 |
| tblVehicleTrips | SU_TR | 0.68 | 3.82 |
| tblVehicleTrips | WD_TR | 6.97 | 3.82 |
| tblWater | AerobicPercent | 87.46 | 97.54 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 2.46 |
| tblWater | IndoorWaterUseRate | 176,725,875.00 | 141,380,700.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 0.00 |

## 2.0 Emissions Summary

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 3.8708 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 287.8539 | 287.8539 | 0.0832 | 0.0172 | 295.0667 |
| Mobile | 0.5021 | 0.9188 | 5.0902 | 0.0160 | 2.2504 | 9.2900e-003 | 2.2597 | 0.6019 | 8.7200e-003 | 0.6106 | 0.0000 | 1,493.2393 | 1,493.2393 | 0.0707 | 0.0000 | 1,495.0067 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 107.7212 | 0.0000 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 50.0207 | 83.7448 | 133.7655 | 1.4603 | 0.1138 | 204.1814 |
| **Total** | **4.3730** | **0.9188** | **5.0972** | **0.0160** | **2.2504** | **9.3100e-003** | **2.2597** | **0.6019** | **8.7400e-003** | **0.6107** | **157.7419** | **1,864.8517** | **2,022.5936** | **7.9804** | **0.1310** | **2,261.1441** |

## 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 | 3.8708 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 242.1727 | 242.1727 | 0.0700 | 0.0145 | 248.2409 |
| Mobile | 0.5021 | 0.9188 | 5.0902 | 0.0160 | 2.2504 | 9.2900e-003 | 2.2597 | 0.6019 | 8.7200e-003 | 0.6106 | 0.0000 | 1,493.2393 | 1,493.2393 | 0.0707 | 0.0000 | 1,495.0067 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 107.7212 | 0.0000 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 42.5176 | 71.1831 | 113.7007 | 1.2412 | 0.0967 | 173.5542 |
| **Total** | **4.3730** | **0.9188** | **5.0972** | **0.0160** | **2.2504** | **9.3100e-003** | **2.2597** | **0.6019** | **8.7400e-003** | **0.6107** | **150.2388** | **1,806.6088** | **1,956.8476** | **7.7481** | **0.1112** | **2,183.6911** |

| | ROG | NOx | 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** | **4.76** | **3.12** | **3.25** | **2.91** | **15.11** | **3.43** |

# 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 | 0.5021 | 0.9188 | 5.0902 | 0.0160 | 2.2504 | 9.2900e-003 | 2.2597 | 0.6019 | 8.7200e-003 | 0.6106 | 0.0000 | 1,493.2393 | 1,493.2393 | 0.0707 | 0.0000 | 1,495.0067 |
| Unmitigated | 0.5021 | 0.9188 | 5.0902 | 0.0160 | 2.2504 | 9.2900e-003 | 2.2597 | 0.6019 | 8.7200e-003 | 0.6106 | 0.0000 | 1,493.2393 | 1,493.2393 | 0.0707 | 0.0000 | 1,495.0067 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 2,919.32 | 2,919.32 | 2919.32 | 5,948,617 | 5,948,617 |
| Total | 2,919.32 | 2,919.32 | 2,919.32 | 5,948,617 | 5,948,617 |

## 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 |
| General Light Industry | 6.00 | 6.00 | 6.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.597756 | 0.058527 | 0.164080 | 0.102133 | 0.023632 | 0.006965 | 0.021753 | 0.018456 | 0.000741 | 0.000967 | 0.003489 | 0.000549 | 0.000951 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | 242.1727 | 242.1727 | 0.0700 | 0.0145 | 248.2409 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 287.8539 | 287.8539 | 0.0832 | 0.0172 | 295.0667 |
| 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 | | | | | |
| General Light Industry | 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 | | | | | |
| General Light Industry | 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 | | | |
| General Light Industry | 6.32774e+006 | 287.8539 | 0.0832 | 0.0172 | 295.0667 |
| **Total** | | **287.8539** | **0.0832** | **0.0172** | **295.0667** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| General Light Industry | 5.32356e+006 | 242.1727 | 0.0700 | 0.0145 | 248.2409 |
| **Total** | | **242.1727** | **0.0700** | **0.0145** | **248.2409** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 3.8708 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| Unmitigated | 3.8708 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |

## 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 | 0.8855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 6.4000e-004 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| **Total** | **3.8708** | **6.0000e-005** | **6.9800e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **0.0137** | **0.0137** | **4.0000e-005** | **0.0000** | **0.0145** |

**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 | 0.8855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 6.4000e-004 | 6.0000e-005 | 6.9800e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 0.0137 | 0.0137 | 4.0000e-005 | 0.0000 | 0.0145 |
| **Total** | **3.8708** | **6.0000e-005** | **6.9800e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **0.0137** | **0.0137** | **4.0000e-005** | **0.0000** | **0.0145** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 113.7007 | 1.2412 | 0.0967 | 173.5542 |
| Unmitigated | 133.7655 | 1.4603 | 0.1138 | 204.1814 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 141.381 / 0 | 133.7655 | 1.4603 | 0.1138 | 204.1814 |
| **Total** | | **133.7655** | **1.4603** | **0.1138** | **204.1814** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 120.174 / 0 | 113.7007 | 1.2412 | 0.0967 | 173.5542 |
| **Total** | | **113.7007** | **1.2412** | **0.0967** | **173.5542** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| Unmitigated | 107.7212 | 6.3661 | 0.0000 | 266.8748 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 530.67 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| **Total** | | **107.7212** | **6.3661** | **0.0000** | **266.8748** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 530.67 | 107.7212 | 6.3661 | 0.0000 | 266.8748 |
| **Total** | | **107.7212** | **6.3661** | **0.0000** | **266.8748** |

# 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

# Conejo Summit Project
## Operational Vehicle Fuel Consumption

| | Initial | 2027 | 2040 |
|---|---|---|---|
| Unmitigated $CO_2e$ (MT/year) | 978 | 1,819 | 1,495 |
| Mitigated $CO_2e$ (MT/year) | 861 | 1,602 | 1,317 |

| Summary | Initial | | 2027 | | 2040 | | |
|---|---|---|---|---|---|---|---|
| | Unmitigated | Mitigated | Unmitigated | Mitigated | Unmitigated | Mitigated | |
| Gasolilne | 92,161 | 81,135 | 168,760 | 148,628 | 136,767 | 120,483 | gallons |
| Diesel | 15,023 | 13,226 | 29,978 | 26,401.74 | 25,813 | 22,740 | gallons |
| Electric | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | GWh |
| Natural Gas | 118.07 | 103.95 | 275.85 | 242.94 | 329.21 | 290.01 | MBTU |

Existing 2023

Unmitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.837737588 | 819.3073613 | 819,307 | NA | 8.89 | 92,161 | NA | NA | NA |
| Diesel | 0.156072279 | 152.6386886 | 152,639 | NA | 10.16 | 15,023 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.006190133 | 6.053950027 | 6,054 | NA | NA | NA | 113.97 | 118.07 | NA |

Mitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.837737588 | 721.2920635 | 721,292 | NA | 8.89 | 81,135 | NA | NA | NA |
| Diesel | 0.156072279 | 134.378232 | 134,378 | NA | 10.16 | 13,226 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.006190133 | 5.329704472 | 5,330 | NA | NA | NA | 100.33 | 103.95 | NA |

Operational Year 1 2027

Unmitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.824782664 | 1500.279666 | 1,500,280 | NA | 8.89 | 168,760 | NA | NA | NA |
| Diesel | 0.167441764 | 304.5765695 | 304,577 | NA | 10.16 | 29,978 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.007775572 | 14.14376481 | 14,144 | NA | NA | NA | 266.26 | 275.85 | NA |

Mitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.824782664 | 1321.301828 | 1,321,302 | NA | 8.89 | 148,628 | NA | NA | NA |
| Diesel | 0.167441764 | 268.2417066 | 268,242 | NA | 10.16 | 26,402 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.007775572 | 12.45646576 | 12,456 | NA | NA | NA | 234.50 | 242.94 | NA |

# Conejo Summit Project
## Operational Vehicle Fuel Consumption

Operational Year 2 2040

Unmitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.813282653 | 1215.857567 | 1,215,858 | NA | 8.89 | 136,767 | NA | NA | NA |
| Diesel | 0.175426511 | 262.2626336 | 262,263 | NA | 10.16 | 25,813 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.011290836 | 16.87979983 | 16,880 | NA | NA | NA | 317.77 | 329.21 | NA |

Mitigated Calculations

| | % Emissions | $CO_2e$ (MT) | $CO_2e$ (kg) | $CO_2e$ (lbs) | kg CO2/gallon | Gallons | Mcf | MBTU | GWh |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline | 0.813282653 | 1071.093254 | 1,071,093 | NA | 8.89 | 120,483 | NA | NA | NA |
| Diesel | 0.175426511 | 231.0367147 | 231,037 | NA | 10.16 | 22,740 | NA | NA | NA |
| Electric | 0 | 0 | NA | 0 | NA | NA | NA | NA | 0.00 |
| Natural Gas | 0.011290836 | 14.87003102 | 14,870 | NA | NA | NA | 279.93 | 290.01 | NA |

Emissions Percentage

| | 2021 | 2023 | 2027 |
|---|---|---|---|
| Gasoline | 0.840677456 | 0.837737588 | 0.824782664 |
| Diesel | 0.153939893 | 0.156072279 | 0.167441764 |
| Electric | 0 | 0 | 0 |
| Natural Gas | 0.00538265 | 0.006190133 | 0.007775572 |

Conversion Factors:

| | | | |
|---|---|---|---|
| 1000 | kg/MT | | |
| 8.89 | kg $CO_2$/gallon gasoline | https://www.eia.gov/environment/emissions/co2_vol_mass.php | Feb. 2016 |
| 10.16 | kg $CO_2$/gallon diesel | https://www.eia.gov/environment/emissions/co2_vol_mass.php | Feb. 2016 |
| 53.12 | kg $CO_2$/ thousand cubic feet | https://www.eia.gov/environment/emissions/co2_vol_mass.php | Feb. 2016 |
| 1036 | btu/cubic foot | | |
| 441.8972278 | $CO_2$ lbs/MWh | Initial | |
| 361.0394372 | $CO_2$ lbs/MWh | 2027 | |
| 100.2887325 | $CO_2$ lbs/MWh | 2040 | |
| 0.907185 | MT/ton | | |
| 2000 | lbs/ton | | |

# Appendix E
## Geotechnical Site Evaluation

**Geotechnical Site Evaluation Update**
**Commercial Development**
**of**
**Tract 4823, Phases 1 and 3**
**Conejo Center Drive and Rancho Conejo Boulevard**
**in the Newbury Park area of**
**Thousand Oaks, California.**

prepared for

**Thousand Oaks Master, LLC**
1990 S. Bundy Drive
Suite 500
Los Angeles, California 90025

GORIAN
& ASSOCIATES, INC.

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GORIAN
& ASSOCIATES, INC.

***Applied Earth Sciences***
Geotechnical Engineers
Engineering Geologists
DSA Accepted Testing Laboratory
Special Inspection and Materials Testing

3595 Old Conejo Road
Thousand Oaks
California 91320-2122
805 375-9262
805 375-9263 fax

February 12, 2019

**Thousand Oaks Master, LLC**
1990 S. Bundy Drive
Suite 500
Los Angeles, California 90025

Work Order: 1550-3-SP-200

Attention: Adrian Taghdiri
Development Manager

Subject: **Geotechnical Site Evaluation Update, Commercial Development of Tract 4823, Phases 1 and 3, Conejo Center Drive and Rancho Conejo Boulevard in the Newbury Park area of Thousand Oaks California.**

## 1. INTRODUCTION

This report was prepared to present our geotechnical evaluation regarding commercial development within the remaining lots within Tract 4823 Phases 1 and 3 as shown on the attached Geotechnical Map, Plate 1. The lots are on either side of Conejo Center Drive and Rancho Conejo Boulevard in the Newbury Park area of Thousand Oaks California. The development will consist of commercial/industrial buildings with loading docks. The proposed grading and building footprints are shown on Plate 1 based on grading plans by Sikand Engineering.

In addition to our site evaluation, included herein are our geotechnical recommendations for design and construction within the lots. A list of the applicable reports addressing the lots and tract are presented in the Reference section at the end of this report.

This update is based wholly on information contained in the referenced reports and a recent site visit by a geologist from this office. The site visit was performed to visually evaluate changes in the surface condition of the construction area since the referenced reports (see attached reference list). The lots were previously graded as a super pads with a shallow slope for drainage. They remain suitable for the proposed construction provided recommendations presented herein are incorporated into the design and construction of the site improvements. The buildings may be supported on conventional footings. Minor removal and recompaction will be required to prepare the lots for the proposed construction as addressed later herein.

## 2. PROPOSED CONSTRUCTION

The lots will be developed for light industrial buildings at the approximate locations shown on Plate 1. Typically the buildings will have office space at the front of the units with warehouse/light manufacturing in the rear with loading docks for truck access. The buildings are anticipated to be of conventional tilt-up panel construction with concrete interior slabs on grade. Foundation loads could range from 5 to 10 kips per linear foot and may be supported on conventional footings. Interior column loads could be roughly 100 kips or greater depending upon the column spacing. Grading will consist of minor cuts and fills to provide level building pads and parking and drive areas and to remove the upper weathered desiccated soils. Additional grading will be needed to remove daylight lines within building footprints.

**3. SCOPE OF SERVICES**

The scope of services provided was performed to evaluate the geotechnical site conditions affecting the proposed building design and construction in general accordance with our proposal dated December 31, 2018 (Proposal Number: 6700-28). All phases of the evaluation were conducted by or under the supervision of a State registered geotechnical engineer.

Geotechnical information obtained from our research and prior site observation and testing programs were used in engineering analyses to develop geotechnical recommendations for site development and construction. Recommendations resulting from our completed scope of services are presented herein.

**4. SITE LOCATION AND DESCRIPTION**

The lots are on either side of Conejo Center Drive and Rancho Conejo Boulevard in the Newbury Park area of Thousand Oaks California. This area is north of the US 101 Freeway near the north end of a gently rolling mesa above Arroyo Conejo.

The lots remain basically as originally rough graded with weathering and desiccation of the upper surface soils. Rough grading left the pads slightly slope towards the street for drainage. Numerous rodent holes are within the pad surfaces. Some minor disturbance of the ground surface has been caused by vehicle traffic.

A brief description of the observed condition of the building areas area as follows:

1A to 1B – Sparse grasses – burned. Ground surface probed to 1.5 feet. Rodent burrows. Slopes from Conejo Center to pads soft to 2 feet. Locally rutted from sheet flow towards storm drain inlet at Conejo Center. On 1B three 4 inch metal pipes with grout vertical – near subdrain.

1C to 1D – Moderate to dense growth of seasoned weeds and grasses. Vegetation to 4 feet high. Ground surface probed to 1 to 1.5 feet. Minor debris piles on pad D. Seepage and surficial slope failure via rodent burrows 2 foot wide and deep.

1E to 1G – Slope to Conejo Center – soft probed to 2 feet, rodents.

2 – Vegetation burned. Sparse scorched weeds and grasses. Scattered soil stockpiles. Ground surface probed to 1 to 1.5 feet. Cut slope (Tcv) performing well.

3 – Abundant stockpiles. Soil, rock, locally heavily rutted. Cannot see Pad. Ground surface probed to 1 to 1.5 feet. Cut slope (Tcv) performing well.

4A to 4B – Sparse to moderate vegetation. Ground surface probed to 1 to 1.5 feet. Locally to heavily rutted from off road vehicles. Erosion to upper pad. Scattered debris. Water lowing on pad from toe of cut slope. Scattered soil piles. Fill slope northwest of 4A Upper terrace drain buried. Slope performing well. Scorched weeds and grasses – moderate. Rodent burrows, locally 6 inch diameter and 18 inches deep. Northeast cut slope (Qt) eroded due to off running.

5A – Recently burned, few pepper and oak trees partially burned, space weeds and grasses. Ground surface probed to one foot. Pad rutted from off road vehicles, locally. Fill slope to south, minor rodents, terraces clear, scattered oak trees, moderate weeds and grasses, and performing well. Natural slopes devoid of vegetation – all burned.

5B – Burned, sparse scorched weeds and grasses – locally heavily rutted from off road vehicles. Ground surface probed to one foot. Natural slopes devoid of vegetation and burned.

Lots 6A and 6B – Sparse seasoned weeds and grasses. Ground surface probed to two feet. Locally rutted from off road vehicles. Fill slope in good condition. Scorched weeds and grasses. Access road rutted.

**5. REGIONAL GEOLOGY**

The site is within the Conejo Valley basin area of Ventura County. The Conejo Valley basin is a non-structural basin bounded on the south and west by the western Santa Monica Mountains and on the north and east by highlands formed of the Conejo Volcanics. The basin is part of the Transverse Ranges Geomorphic Province, a series of sub parallel east to west trending ridgelines and valleys. This province is tectonically characterized by active compression in a north south direction with associated east to west trending reverse/thrust faulting, folding, and normal faulting.

**6. SITE GEOLOGY**

Prior to the grading of the lots, the area was a wide mesa with drainages along the northern edge. This mesa was predominately comprise of a thick sequence of Older Alluvium (Terrace Deposits). During grading the higher areas of the mesa were cut and the low lying areas were filled with engineered compacted fill. The limits of the engineered fill are shown on Plate 1. At depth, the Older Alluvium is underlain by bedrock of the Conejo Volcanics.

**6.1 BEDROCK**

Bedrock directly underlying the Older Alluvium at depth and within the bedrock cut slopes consists of the Conejo Volcanics of Miocene age. The usage of the name Conejo Volcanics follows Taliaferro (1924), Yerkes and Campbell (1979), and Dibblee and Ehrenspeck (1990) and is equivalent to the middle member of the Topanga Formation of Durrell (1954). Conejo Volcanics in the immediate vicinity is represented primarily by very thick units of basalt agglomerate/breccia. Overall, the basaltic agglomerate/breccia lacks distinct internal stratification and appears massive. The Conejo Volcanics is a wide spread rock unit in the Thousand Oaks/Newbury Park area and is generally considered the region's most stable bedrock unit.

Conejo Volcanics in the immediate vicinity is represented primarily by very thick units of basalt and basalt agglomerate/breccia. An orange-tan varnish develops locally on reddish brown weathering basalt. Fresh breaks show the basalt to range in color from dark grayish black to greenish black. The basalt is rarely vesicular or amygdaloidal. Jointing is irregular and randomly oriented. Discontinuous fracturing of the basalt is common. Northeast trending "bedding" joints are locally well developed that dip at low angle to the northwest (4° to 23°). Deep weathering of the basalt is typical and exposure is limited to steep canyon slopes or road cuts.

Basaltic agglomerate/breccia is relatively resistant to erosion and supports steep slopes and outcrops of bold relief. An orange-tan varnish is also commonly developed on exposed agglomerate outcrops which have an overall grey color. Basaltic clasts are closely packed, generally subrounded to angular and range from granule-size to large blocks. Overall, the basaltic agglomerate/breccia lacks distinct internal stratification and appears massive. The contact between the basalt and basalt agglomerate/breccia unit is poorly exposed, but the outcrop pattern suggests that these units dip at moderate angle to the north. Northeast trending, high angle, porphyritic basalt dikes are relatively common.

**6.2 OLDER ALLUVIUM**

Covering a large area of the mesa is a thick sequence (locally over 100+ feet thick) of sediments referred to as Older Alluvium (referenced in previous reports as Terrace Deposits). Overall, this sequence is graded (i.e., upward fining) and sub-horizontally stratified. Silty clay, clayey sand, fine to coarse sand,

and gravelly sand are characteristic of these deposits. Clasts range from subrounded to subangular, are gravel to cobble-size and consist of various volcanic types. Coarser facies range from grayish to orangish brown and tan, while light gray and greenish grey are typical of the finer sediments. The sediments (soils) are generally in a dense to hard condition (from a geotechnical engineering standpoint).

Caliche (calcium carbonate) is common in the finer grained sediments of the Older Alluvium. Calcareous occurrence is variable ranging from large indurated blocks to small nodules and from punky irregular masses to faint "veinlets." Calcareous crusts are common on clasts.

Based on off-site exposures and prior subsurface investigation for adjacent projects, the Older Alluvium/bedrock contact is relatively sharp and gently undulates under the "mesa". Vertebrate fossils have been recovered from Older Alluvium near the site. Preliminary analysis of the faunal remains and the geologic context and unconsolidated nature (geologically) of this unit suggest it is of Pleistocene age.

**6.3 ENGINEERED FILL SOILS**

The lots were graded in phases, with completion in 2000, using cuts and fills with surface soil removal and/or recompaction for which the approximate limits of the fill is shown on Plate 1. The maximum 50± feet deep engineered fill soils were substantially placed as recommended from a geotechnical standpoint based on our compaction tests and observations. Fill compaction within the upper 25 feet of grade was to a minimum of 93% relative compaction. Fills below 25 feet were compacted to at least 95% relative compaction. Fills within 45 feet horizontal of all slope faces were compacted to at least 90% relative compaction with a minimum average compaction of 93%. Relative compaction is the ratio of the in-place dry soil density to the maximum dry soil density as determined in general conformance with ASTM test method D 1557.

Fills consist predominately of sandy silty clay and clayey silt and sand. Prior to placing the compacted fill, native overburden was removed to either bedrock or Older Alluvial soils having a minimum relative compaction of 90 percent. Removal of native soils within areas to receive engineered fill, where applicable, extended approximately 2 to 3 feet below existing grades. These removals were in addition to the removal of any encountered non-engineered fill. The upper 12 inches of exposed soil were processed after completion of the removals and recompacted.

**6.4 SUBDRAINS**

Eight and ten inch diameter subdrains were installed in the main drainage at the approximate locations shown on Plate 1 that received fills exceeding 10 feet in thickness. The drains were constructed in general accordance with recommendations provided by Gorian and Associates, Inc. as warranted by field conditions.

**6.5 ROCK DISPOSAL**

Oversized rock disposal areas were constructed at the base of the deeper canyon fills. Rock from various bedrock cuts was placed per the rock disposal detail contained in the referenced geotechnical reports. Observations were conducted during rock fill operations to determine that fill placement was substantially per the placement requirements and that no observable voids were present.

**6.6 CUT SLOPES**

Cut slopes were designed at a 1½(horizontal):1(vertical) slope ratio up to a maximum height of 40 feet. The cut slopes expose Conejo Volcanics, Quaternary terrace deposits, and/or colluvium/topsoil.

The Conejo Volcanics consist chiefly of intercalated basalt and basaltic flow breccia. Bedding is rarely defined, but where present dips at moderate angle (~30°) to the northeast. These rocks are cut by a series of high angle porphyritic basaltic dikes that trend to the northeast. In addition, hydrothermal alternation appears to be present in several zones and along some fractures. A prominent pattern of intersecting high angle northeast and northwest trending fractures and joints is present. The volcanic rocks are typically very hard and represent one of the most stable rock units in the Thousand Oaks area.

Overlying the volcanic rocks is a mantle of older alluvial deposits (referred here as terrace deposits) that consist of approximately horizontally interbedded clay, silt, sand and sand with gravel. These beds are commonly tabular and laterally extensive. As discussed in a previous grading report for the adjacent Parcel Map L.D. 644 (Gorian, 1992b), these deposits are non-marine and of Pleistocene age. In addition, these sediments appear to be, at least in part, temporally correlative with the Saugus Formation (Sunshine Ranch Member).

Topsoil/colluvium is locally exposed along the top of some cut slopes adjacent to the natural areas. The topsoil/colluvium typically consists of very dark grayish brown to black expansive silty clay.

No adverse geologic conditions were observed for the on-site cut slopes and overall geologic structure is considered favorable for the cut slopes.

### 6.7 FILL AND FILL-OVER-CUT SLOPES

Fill and fill-over-cut slopes were constructed at 2 and 1½(horizontal):1(vertical) gradients. A minimum 15-foot wide keyway was cut into firm material at the toe of each fill slope. Benching into firm native soil or bedrock was performed where necessary as fill placement progressed. The maximum 65 feet high fill slope faces were overfilled and trimmed back or compacted during grading and subsequently gridrolled or trackwalked on the surface.

### 6.8 GROUNDWATER

Perched water is present locally in the Older Alluvium and at the Older Alluvium-bedrock contact as encountered during previous subsurface explorations and grading adjacent to the site by this office. On-site exploration by others (McLaren 1988) encountered groundwater of depths ranging from 12 to greater than 88 feet below existing grade. In the *Seismic Hazard Zone Report of the Newbury Park 7.5 Minute Quadrangle, Ventura County, California* (CDMG, 2002, rev. 1-13-06) it appears the historic high groundwater could be 10 feet or more in depth.

Groundwater is not anticipated to be encountered during the proposed site development. However, groundwater levels can fluctuate depending upon the season and rainfall, such as in a perched condition and can vary based on seasonal rains and landscape watering. In addition, seepage can occur from fractures within the Conejo Volcanics.

## 7. GENERAL FAULTING AND SEISMICITY

The Conejo Valley/Santa Monica Mountains area is in a seismically active region prone to occasional damaging earthquakes. The destructive power of earthquakes can be grouped into fault-rupture, ground shaking (strong motion), and secondary effects of ground shaking such as tsunami, liquefaction, settlement, landslides, etc. The hazard of fault-rupture is generally thought to be associated with a relatively narrow zone along well-defined pre-existing active or potentially active faults. No doubt there are and will be exceptions to this, because it is not possible to predict the precise location of a new fault where none existed before (CDMG, 1975).

No active faults are known to cross the site nor is it currently within an Alquist-Priolo Earthquake Fault Zone as defined by the State (CGS, 2018). However, the potential for on-site ground rupture due to faulting is considered remote during the life expectancy of the project. The closest fault to the site is the Simi Santa Rosa Fault.

The property will be subjected to ground motion from occasional earthquakes in the region. Significant earthquakes have occurred within a 40-mile radius of the site within the last 45 years. The 1994

Northridge earthquake produced strong ground motion at the site and a peak horizontal acceleration of approximately 0.25 (g) to 0.3 (g) for the soil / rock site (Chang, et al., 1994). Significant earthquakes will likely occur in this area within the life expectancy of the proposed project and the site will experience strong ground shaking from these events.

Secondary effects of strong ground motion include tsunami, seiche, liquefaction, settlement, landslides, etc. Tsunami (seismic sea wave) and seiche (standing wave) are not hazards inherent to the site due to its distant proximity to the ocean or any large bodies of water. Earthquake induced landslides, liquefaction, and seismic settlement affecting the proposed site development are discussed below.

## 8. LIQUEFACTION AND SEISMICALLY INDUCED LANDSLIDE HAZARD

The proposed development is not within an area shown to have a potential for liquefaction or landsliding on the State's Seismic Hazard Zones Map (CDMG, 2002). The alluvium and engineered fill underlying the site are not considered susceptible to liquefaction or seismic induced settlement. Geomorphic features typical of significant landslides were not identified on or directly off-site the site.

Areas prone to seismically induced landslides are slopes with steep gradients covered with weakly indurated bedrock, loose weak soils, or debris from previous landslides. These soil conditions combined with strong ground shaking caused by an earthquake can cause the cohesive strength of soils to weaken and move down slope under the force of gravity.

## 9. CONCLUSIONS AND RECOMMENDATIONS

### 9.1 GENERAL

The lots were graded as a super pads as addressed in the referenced report dated September 1, 2000. The grading resulted in the pads being in either cut or fill. The engineered compacted fill remains suitable for the support of the proposed construction. However, cut/fill daylight lines do exist at the approximate locations shown on Plate 1 that will require undercutting of limited areas of the building areas as addressed herein. In addition, the upper surface soils are weathered and will need surface removal and recompaction prior to building construction. No adverse geological conditions were encountered that would preclude the project development. The lots may be developed as previously described earlier in this report provided recommendations presented herein are followed and incorporated into the project design and construction.

### 9.2 GEOTECHNICAL SEISMIC DESIGN

As previously discussed, active faults identified by the State are not onsite nor is the site within an Alquist-Priolo Earthquake Fault Zone. Nevertheless, the site is within a seismically active region prone to occasional damaging earthquakes.

Structures within the site may be designed using a simplified code based approach and ground motion procedures for seismic design using the procedures in the current California Building Code (CBC). Seismic ground motion values based on ASCE/SEI 7-10 are initially determined on site class B (rock) conditions. The values are adjusted to obtain the maximum considered earthquake (MCE) spectral acceleration values for the site based on its site class of C. The seismic design parameters for the site's coordinates (latitude 34.2037 N and longitude 118.9331 W) were obtained from the USGS web based spectral acceleration response maps and calculator: (http://earthquake.usgs.gov/hazards/designmaps/) and are presented on the following page.

The purpose of the building code earthquake provisions is primarily to safeguard against major structural failures and loss of life, not to limit damage nor maintain function. Therefore, values provided in the building code should be considered minimum design values and should be used with the understanding site acceleration could be higher than addressed by code based parameters. Cracking of walls and possible structural damage should be anticipated in a significant seismic event.

| SEISMIC PARAMETER | VALUE PER CBC |
|---|---|
| Short Period Mapped Acceleration ($S_s$) | 1.69g |
| Long Period Mapped Acceleration ($S_1$) | 0.62g |
| Site Class Definition | C |
| Site Coefficient ($F_a$) | 1.0 |
| Site Coefficient ($F_v$) | 1.3 |
| $S_{MS} = F_a S_s$ | 1.69g |
| $S_{M1} = F_v S_1$ | 0.81g |
| $S_{DS} = 2/3 S_{MS}$ | 1.13g |
| $S_{D1} = 2/3 S_{M1}$ | 0.54g |
| $PGA_m$ | 0.65g |

### 9.3 SITE PREPARATION

#### 9.3.1 General

The lots were originally graded as supper pads with slopes along the property lines. The upper surface of the pads have become weathered or disturbed. Therefore, reconditioning of the upper soil zone will be necessary prior to construction of the proposed buildings. In addition, areas of undercutting will be necessary where a daylight line exists within the building areas. All aspects of grading including site preparation, grading, and fill placement should be performed per the City of Thousand Oaks standards.

#### 9.3.2 Existing Utilities

Existing utilities are present in the street with laterals to the lot. Therefore, protection of existing utilities to remain will be necessary during remedial grading and care should be taken to avoid surcharging them with proposed construction or building loads.

#### 9.3.3 Site Clearing

The site should be cleared of unnecessary improvements, stockpiles, vegetation, and debris prior to beginning remedial removal operations. Material generated during site clearing should be disposed of off-site. The removal should include soils disturbed during the removal process. Roots over 1/2 inch diameter should be removed when encountered within the areas of soil removal. Brush should be cut from the slopes and not pulled resulting in disturbance of the slope surface.

#### 9.3.4 Soil Removals

The upper soils have become weathered or disturbed. Therefore, within all areas of construction or grading soil removals should extend uniformly to firm in-place previously placed engineered fill or native soils. Anticipated removals are 18 inches from the present grade. After the removals are completed, the exposed soil should be observed by this office to evaluate if additional removals are needed. No fill soils should be placed until the geotechnical observation of removal areas is complete.

#### 9.3.5 Monitoring Wells

Soils disturbed due to removal of monitoring wells (if encountered) should be removed to firm in place soils. The bottom of the removal areas should be observed by this office prior to processing and fill placement.

**9.3.6 Existing Slopes**

The existing slopes have performed relatively well. However, if loose soils or slough is present on the slope faces the materials should be removed and the surface compacted prior to planting with appropriate landscaping. In addition, where a slope is eroded significantly or broken down due to past activities it should be rebuilt.

**9.3.7 Building Pad Undercutting**

The building pad should be undercut where a daylight line or shallow fills are be present within the building pad and 5 feet beyond. Daylight lines or shallow fills within the building areas should be removed so that there is a minimum of 5.5 feet of compacted fill below the pad grade or three feet of compacted fill below the deepest foundation, whichever is the greater. The removals should extend to a minimum of 5 feet past the building line or a distance equal to the removal depth, whichever is the greater. Where the existing fill within the building pad meets the above undercut requirement, the removal may be stopped and only the surface removal is needed.

**9.3.8 In-Place Soil Processing**

Prior to placing fill, the exposed soil surface should be processed. Processing consists of scarifying the exposed surface to a depth of 6 inches, conditioning the scarified material to slightly above the optimum moisture content, and compacting the scarified material.

**9.3.9 Fill Placement and Compaction**

Excavated on-site soils and fill may be reused provided the soils are cleaned of major vegetation, trash, and debris prior to placement as fill. Fill soils should be placed in 6 to 8 inch lifts, brought to slightly above optimum moisture content, and compacted to a minimum of 90% relative compaction. Relative compaction is the ratio of the in-place (in situ) dry soil density to the maximum dry soil density as determined in general accordance with ASTM test method D 1557.

**9.3.10 Utility Trenches**

Utility trenches, including those associated with site drainage piping systems, should be compacted to at least 90% relative compaction.

**9.3.11 Soil Shrinkage**

Shrinkage is the volume loss of soils from cut to fill and from removal areas and will vary depending upon placement and compaction of the soils. Bulking is the volume expansion of the earth materials from cut to fill. The amount of volume change will depend on the material in situ density, the final compacted density achieved, losses due to spillage, etc. Subsidence is considered to account for densification on the upper 6 inches of surface soils over the site and stripping of vegetation from the site.

Estimated shrinkage and subsidence values are estimated to be 2 to 5 percent and 2 to 3 inches, respectively. Below the weathered zone, shrinkage should be negligible, since this was previously compacted fill or cut.

Estimated factors based on an assumption the fills will be placed and compacted as recommended herein. The values are provided for gross estimating purposes only. If quantities are critical, test strips should be performed and monitored at the site using actual grading equipment.

**9.3.12 Maximum Density and Optimum Moisture**

Below are the maximum density and optimum moisture of the onsite soils from the original grading of the lots.

| SOIL TYPE | VISUAL SOIL CLASSIFICATION | Maximum Dry Density - pcf | Optimum Moisture Content - % |
|---|---|---|---|
| I | Dark brown sandy silty clay | 103.0 | 20.0 |
| II | Yellow brown clayey silt and sand with gravel | 111.0 | 17.0 |
| III | Light brown clayey silt and sand | 117.0 | 13.0 |
| IV | Light brown clayey silt and sand | 111.0 | 16.0 |
| V | Grey brown sandy silty clay | 104.0 | 20.5 |
| VI | Grey brown sandy silty clay | 107.0 | 18.0 |
| VII | Dark grey brown sandy silty clay | 108.5 | 17.5 |
| VIII | Light brown clayey silt and sand with rock fragments | 119.0 | 13.5 |
| IX | Dark brown silty clay | 108.5 | 18.0 |
| X | Dark brown silty clay with rock fragments | 109.0 | 17.5 |
| XI | Tan to white sandy clay with rock fragments | 98.5 | 25.5 |
| XII | Tan silty fine sand with rock fragments | 114.0 | 17.0 |
| XIII | Red brown sandy clay | 118.0 | 14.0 |
| XIV | Tan to medium brown sandy clay | 114.0 | 15.5 |
| XV | Grey brown sandy silt and clay | 109.5 | 18.0 |
| XVI | Tan clayey fine sand | 117.0 | 14.5 |
| XVII | Tan silty sand | 116.5 | 15.0 |
| XVIII | Light brown clayey sand | 122.5 | 11.5 |
| XIX | Aggregate base | 123.0 | 10.5 |
| XX | Aggregate base | 125.0 | 10.0 |
| XXI | Yellow brown silty sand and gravel | 122.0 | 14.0 |

**9.3.13 Excavations**

During construction, the contractor is responsible for the excavation and maintenance of safe and stable slope angles considering the subsurface conditions and the methods of operations. Temporary excavations should be made per the applicable requirements of current excavation regulations. Surcharge loads should be setback from the top of the temporary excavations a minimum horizontal distance of 10 feet. Appropriate barricades should be placed at the top of all temporary excavations that are approached by pedestrians or vehicle traffic. All excavation backfill should be properly placed and compacted.

**9.4 SLOPES**

The lots were originally graded with cut and fill slopes along the perimeter of the lots. These slope have performed relatively well however have become weathered and in areas the surface has been perforated by rodent burrows. Excessive erosion on the existing slopes should be repaired. Additional recommendations for repair of erosion can be provided by this office after observation of the eroded area. New slopes should be constructed at a constructed at a 2(horizontal):1(vertical) gradient or flatter.

**9.4.1 Cut Slopes**

Cut slopes are expected to expose competent alluvial or previously placed engineered compacted fills. No significant adverse geologic conditions are anticipated. Erosion mitigation may be required where friable sands are encountered on the face of a cut slope within the alluvium. Vegetation and/or matting designed to reduce erosion, or other erosion mitigation measures should be used within these areas.

**9.4.2 Fill Slopes**

Fill slopes should be keyed and benched into firm competent native materials per the City of Thousand Oaks Building Code. All keyways should be a minimum of 15 feet wide and cut to a minimum depth of 2 feet at the toe into firm competent in place materials (or as directed by this firm). Keyways should be tilted into the slope and should be at least 3 feet deep at the heel (measured from below the slope toe elevation). A representative of this office should observe the keyways prior to fill placement.

Select grading will be required when placing fill materials within 15 feet of slope faces. Fill soils near slope faces should have enough clay to develop at least 250 pounds per square foot of cohesive shear strength for a 2(horizontal):1(vertical) slope. This is a minimum cohesion based on standard practice to provide for surficial slope stability. However, highly expansive clayey soils should not be placed near a slope face.

Where possible the outer slope faces should be overfilled and trimmed back to provide for firm, well-compacted surfaces. The slope faces should be tested and reworked as necessary to achieve the required compaction.

### 9.4.3 Slope Maintenance

Slopes require maintenance or protection to reduce the risk of erosion and degradation with time due to natural or man-made conditions. Future performance of slopes will depend on control of rodents and maintenance of drainage structures and slope vegetation as discussed below. Drainage should be provided away from the top or toe of the slopes.

Slope planting should consist of dense, deep rooting, drought resistant groundcover and shrubs or trees. A reliable irrigation system should be installed, adjusted so over-watering does not occur, and periodically checked for leakage. Over-watering of slopes can cause expansion, erosion, and surficial failures, and should be avoided. Care should be taken to maintain a uniform, near optimum moisture content below the slope surface, and to avoid over drying, or excess irrigation. These conditions can reduce the potential for soil softening and strength loss, which could lead to slumping of the slope face. All drainage structures should be kept in good condition and cleaned the entire length to the outlet in an approved drainage course. Burrowing animals (e.g., ground squirrels) can destroy slopes; therefore, where present, immediate measures should be taken to eliminate them.

## 9.5 SOIL EXPANSIVENESS

Soils within the lot should be considered to be in the 91 to 130 expansion range. Final expansion tests should be performed at the conclusion of grading within each building pad.

Expansive soils contain clay particles that change in volume (shrink or swell) due to a change in the soil moisture content. The amount of volume change depends upon the soil swell potential (amount of expansive clay in the soil), availability of water to the soil, and the soil confining pressure. Swelling occurs when soils containing clay become wet due to excessive water from poor surface drainage, over-irrigation of lawns and planters, and sprinkler or plumbing leaks. Swelling clay soils can cause distress to residential structures, walks, drains, and patio slabs.

Swelling clay soils can cause distress to construction (generally as uplift). Construction on expansive soil has an inherent risk that should be acknowledged and understood by the property owner. The geotechnical recommendations presented herein are intended to reduce the potential for expansive soil action. However, these recommendations are not intended, nor designed to provide complete and full mitigation of expansive soil conditions. If requested, additional recommendations can be provided to further reduce the risk of expansive soil movement. Soil movement can be roughly 1± inches depending upon the expansion potential and surcharge loading. The following should be maintained within the lots.

a) Positive drainage should be consistently provided and maintained away from all structures. Drainage should not be changed creating an adverse drainage condition. Ponding or trapping of water in localized areas adjacent foundations can cause differential moisture levels in subsurface soils.

b) Landscape watering should be held to a minimum and irrigation systems should be maintained. Sprinkler or plumbing leaks should be immediately repaired so the subgrade soils underlying or adjacent the structures do not become saturated. Trees should be spaced so that roots will not extend under foundations or slabs.

## 9.6 FOUNDATIONS

### 9.6.1 General

The buildings described herein may be supported on conventional shallow foundations. Foundation systems and slabs-on-grade should be designed by a structural engineer in accordance with the current applicable building codes. Presented below are the minimum requirements for foundation design and construction from a geotechnical standpoint. The recommendations are based on highly expansive soils (expansion index range of 91-130). The actual expansion potential of the soils exposed at the surface should be determined at the conclusion of grading.

### 9.6.2 Conventional Foundations

Footings should have a minimum width of 12 and 24 inches for continuous and isolated footings, respectively. The embedment should be a minimum of 30 inches for interior and exterior footings. These dimensions apply for either continuous footings and/or individual spread footings, and satisfy the minimum requirements of the City of Thousand Oaks Building Code. The lowest adjacent grade is the lowest soil grade adjacent the footings, interior or exterior. However, the embedment of interior footings may be measured from the top of the interior concrete slab on-grade. Steel reinforcement should be per the structural engineer's recommendations. However, minimum reinforcement for continuous footings should consist of two number five bars in the top and bottom for 91-130 expansion range (minimum total of four bars). The project structural engineer may require additional reinforcement to meet the structural design requirements. Slab reinforcement should be extended into the footings to within 3 inches of the bottom.

Footings may be designed using an allowable bearing pressure of 3000 pounds per square foot (psf). This may be increased by 400 psf for each additional foot of width and 750 psf for each additional foot of depth (below inside floor level) to a maximum of 6000 psf. These pressures apply for dead plus live loads and may be increased by one-third when considering wind or seismic loads. Footings adjacent a retaining wall (such as loading dock walls) should be stepped down below a 2(horizontal):1(vertical) plane projecting upward from the bottom of the retaining wall footings.

In addition, footings should be deepened below infrastructure / utilities if a conflict between a footing and utility exists. One known condition is the storm drain along the southern edge of Building 6B. Where a post-construction detention / water quality basin is constructed adjacent a building the drainage should be directed away from the building and the buildings footings should be deepened so that the embedment starts below the bottom of any basin.

For support of lightly loaded structures such as site walls outside of the buildings, footings may be designed to impose an allowable bearing pressure of 1,500 pounds per square foot (psf). Footings should have a minimum width of one foot. Footing embedment measured below the lowest adjacent interior or exterior grade should be 30 inches. Footing reinforcement should be a minimum of two number 5 bars in the top and bottom (total of 4 bars).

Lateral forces on foundations may be resisted by passive earth pressure and base friction. Footings bearing against engineered compacted fill or competent native soils may be designed using a lateral passive earth pressure equal to that exerted by an equivalent fluid weighing 350 pounds per cubic foot (pcf). Base friction may be computed at 0.4 times the normal load. Base friction and passive earth pressure may be combined without reduction.

**9.6.3 Footings on or Adjacent Slopes**
Footings on or near the top or toe of slopes should be deepened or setback to provide footing support and to reduce the impact of changes that can occur on slope faces. Deepened footings or setbacks should be used for all buildings and accessory structures (including fences) sensitive to differential movement. The setbacks presented in the current Uniform Building Code Chapter 18 should be used as a minimum.

**9.6.4 Foundation Settlement**
Settlement of footings should be evaluated once building footing locations and structural loads are known. However, footing settlement for static loading is anticipated on the order of 1 inch or less, with a maximum differential settlement of 1/2± inch over a span of approximately 30 feet or between adjacent individual footings. This is provided building construction is started directly after footing excavation, footings are cast soon after the footing excavation, and construction is completed in a timely manner. Settlements due to static loading are expected to occur rapidly as the loads are applied.

Minor wall cracking could occur within the structure associated with expansion and contraction of the structural wood members due to thermal or moisture changes. In addition, wall or slab cracking may be associated with settlement or expansive soil movement. All structures settle during construction and some minor settlement of the structures can occur after construction during the life of the project. Additional settlement/soil movement could occur if the soils become saturated due to excessive water infiltration generally caused by excessive irrigation, poor drainage, etc.

**9.6.5 Footing Excavations**
Footings and edges should be cut square and level and cleaned of slough and soils silted into the excavations during the premoistening operations. Soil excavated from the footing trenches should not be spread over areas of construction unless placed as a properly compacted fill. This office should observe the footing excavations prior to placing reinforcing steel. The footings should be cast as soon as possible to avoid deep desiccation of the footing subsoils.

**9.6.6 Footing Subgrade Moisture**
Subgrade soils for footings loaded to greater than 3000 pounds per square foot (psf) should be kept near the optimum soil moisture content until the footings are poured and should not be saturated due to the high soil bearing pressures provided. Saturated soils should be removed from the footing excavation prior to casting the footings.

Where the footings are loaded to 3000 pounds per square foot (psf) or less, the footing subgrade soils should be moistened to a minimum of 3% over the optimum moisture content to a minimum depth of 18 inches. The above moisture should be obtained and maintained at least a suggested 2 days prior to casting the concrete. Subgrade soil premoistening should be observed by this office prior to placing concrete. Soils silted into the footing excavations during the premoistening operations should be removed prior to casting the concrete.

**9.7 SLABS-ON-GRADE**

**9.7.1 Site Preparation**
Concrete slabs on-grade may be supported on firm in-place soils. Subgrade soils should be recompacted prior to placing the sand subbase, if the soils were disturbed during footing or utility construction.

**9.7.2 Design Data**
Concrete slabs on-grade should be at least five inches thick and underlain by a minimum of six inches of sand or sand-rock base. Slab reinforcement should consist of a minimum of number 3 bars placed on 18 inch centers. The reinforcement should be placed and kept at slab mid-depth. The slab reinforcement

should be extended into the footings / grade beams to within 3 inches of the footing / grade beam bottom. Concrete slabs on grade should be provided with tooled crack control joints at 10-15 foot centers or as specified by the structural engineer.

The above slab designs are for a lightly loaded slab only. Heavily loaded slabs should be designed by the project structural engineer for a modulus of subgrade reaction of 120 pcf.

**9.7.3 Premoistening**

Soils under lightly loaded slabs on-grade should be premoistened to 3% over the optimum moisture content for a depth of 18 inches. The subgrade soils should be observed for moisture by a representative of this office prior to concrete placement.

**9.7.4 Moisture Vapor Retarder Layer**

A properly installed moisture retarder is recommended for at grade slabs to minimize vapor transmission through interior slabs on-grade within commercial spaces. This applies to areas that will be covered with moisture sensitive floor coverings or where moisture through the floor would be problematic.

Ten-mil plastic sheeting is commonly used as a moisture retarder. However, to provide improved resistance to moisture vapor transmission a retarder layer specifically manufactured per ASTM E 1745-97 *Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs* should be considered below the interior concrete slabs on-grade. The class of moisture vapor retarder layer should be strong enough to withstand abrasion during construction. The retarder should be installed per ASTM E1643-98(2005) *Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs*.

Perforations through the moisture vapor retarder such as at pipes, conduits, columns, grade beams, and wall footing penetrations should be sealed per the manufacture's specifications or ASTM E1643-98(2005) *Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs*. Proper construction practices should be followed during construction of slabs on-grade. Repair and seal tears or punctures in the moisture barrier that may result from the construction process prior to concrete placement.

Minimizing shrinkage cracks in the slab on-grade can further minimize moisture vapor emissions. A properly cured slab utilizing low-slump concrete will reduce the risk of shrinkage cracks in the slab as described herein.

The concrete contractor should be made aware of the moisture vapor retarder and required to protect the layer. Perforations made in the layer should be properly sealed prior to concrete placement. In addition, if the concrete is placed directly on top of the layer the concrete contractor should make the necessary changes in the concrete placement and curing. Placing the concrete directly on top of the moisture vapor retarder layer allows the layer to be observed for damage directly prior to concrete placement.

The slabs should be tested for moisture content prior to the selection of the flooring and adhesives. Moisture in the slabs should not exceed the flooring manufacture's specifications. The concrete surface should be sealed per the manufacture's specifications if the moisture readings are excessive. It may be necessary to select floor coverings that are applicable to high moisture conditions.

Where cuts are made into the slab for future construction, the moisture vapor retarder layer should be repaired per the manufacture's recommendation. Information regarding the need to repair the moisture vapor retarder layer and information on the selection of acceptable floor coverings should be conveyed to the building tenants.

### 9.7.5 Concrete

Concrete shrinks as it cures resulting in shrinkage tension within the concrete mass. Development of tension results in cracks within the concrete, since, concrete is weak in tension. Therefore, concrete should be placed using procedures to minimize concrete cracking. Concrete shrinkage cracks can become excessive if water is added to the concrete above the allowable limit and proper finishing and curing practices are not followed during construction. Concrete mixing, placement, finishing, and curing should be performed per appropriate methods such as provided by the American Concrete Institute). The concrete slump during concrete placement should not exceed the design slump specified by the structural engineer or as a suggested value of 5 inches. Concrete slabs on grade should be provided with tooled crack control joints at 10-15 foot centers or as specified by the structural engineer.

## 9.8 SOIL CORROSION

Previously soil samples from the general area were submitted to a subcontracted corrosion engineer for corrosion testing. Tested soils are considered negligible for sulfate exposure. However, the testing indicated the soils are considered corrosive to unprotected ferrous metals and corrosion engineer suggests concrete used for construction be designed with Type II cement. Additional corrosion tests can be performed during grading upon request.

## 9.9 RETAINING WALLS

### 9.9.1 General

Retaining walls may be designed using the foundation recommendations previously provided herein.

### 9.9.2 Lateral Earth Pressures

Retaining walls that are allowed to yield at the top may be designed for an active pressure of 45 and 65 pcf for a level backfill and 2(horizontal):1(vertical) condition, respectively considering expansive backfill conditions. Aerial surcharge may be treated as additional height of backfill where one foot of additional height is assumed for each 125 psf of aerial surcharge. Lateral force from an adjacent foundation surcharge loading should be determined using acceptable methods. A pressure distribution of the surcharge to a retaining wall can be provided where surcharge conditions are identified from adjacent foundations.

### 9.9.3 Lateral Seismic Pressure

Lateral seismic soil pressure should be applied in the design of retaining walls when the wall height exceeds 6 feet. Seismic pressure may be taken as equal to $3/8*K_h*\gamma*H^2$ where $\gamma$ = 120 pcf, $K_h = S_{ds}/2.5$, and H = height of retained soil (ft.).

### 9.9.4 Waterproofing

Retaining walls should be waterproofed prior to installing the drainage system and wall backfill.

### 9.9.5 Drainage

A drainage system should be constructed behind the retaining walls to mitigate possible buildup of hydrostatic pressures. The drainage system may consist of either a drainage composite or granular drain consisting of a minimum 12 inch wide zone of 3/4 ± inch rock separated from the native materials by a single layer of filter cloth. The drainage system should extend to within 2 feet of finish grade with the upper 2 feet backfilled with native material. The drainage system should be hydraulically connected to a perimeter pipe drain consisting of a minimum 4 inch diameter perforated PVC (Schedule 40) pipe or equivalent. The pipe may be laid horizontally on the footing with the pipe invert at least 6 inches below any adjacent top of slab-on-grade. The outlet pipe from the perimeter drain should be a non-perforated 4 inch diameter PVC (Schedule 40) pipe that is sloped to and connected to a storm drain system or sump. An as-built plan should be prepared detailing the location of the wall drainage system.

**9.9.6 Backfilling**

Retaining walls should be backfilled when possible with soils having a soil expansion of less than 50, which may require select grading or import. The backfill should be placed in 6-inch lifts at slightly over optimum moisture content and compacted to at least 90 percent relative compaction. If the backcut is flatter than ½(h):1(v), the backfill should be benched into the backcut slope. Light equipment should be used immediately behind the walls to prevent possible over-stressing. Bracing needed to resist wall movement should be in-place prior to placing the backfill.

**9.10 EXTERIOR SLABS AND WALKWAYS (Hardscape)**

Lightly loaded hardscape exterior concrete slabs-on-grade (non-auto traffic) and walkways should be a minimum of 4 inches thick and underlain by a minimum of 4 inches of sand. Exterior slabs should be reinforced with minimum No. 3 bars on 24 inch centers in each direction. The reinforcement should be placed at mid-depth of the slab. Sidewalks may be constructed of non-reinforced concrete provided the sidewalks are cut into square panels (i.e., 4 foot wide walks should be cut into 4 foot by 4 foot squares). A deepened edge should be considered on all exterior slabs (non-auto traffic) to prevent water from entering the sand base. The edge should extend a minimum of 8 inches into the subgrade soils.

Slabs-on-grade should have tooled crack control joints at intervals of 10 to 15 feet or per the structural engineer's recommendation. Recommendations for concrete placement were previously provided herein.

Concrete slab subgrade soils should be properly placed and compacted for support of concrete flatwork. Prior to placing concrete, subgrade soils should be premoistened to a minimum of 3% over the optimum moisture content for a minimum depth of 18 inches. Proper premoistening can reduce the risk of slab subgrade expansion, if used in addition to other preventive measures. Where critical, subgrade soil premoistening should be observed by the project geotechnical consultant prior to placing concrete.

Exterior slabs can experience differential uplift caused by non-uniform expansion of subgrade soils due to varied migration of water beneath slabs. Differential uplift can occur at the corner, edge, or center of slab. Therefore, all planter areas should be graded in a manner that enables excess water to drain onto, rather than beneath, adjacent concrete flatwork, or to drain positively away.

**9.11 PRELIMINARY PAVEMENT DESIGN**

The structural sections shown on the following page are based on an R value of 18. Repair of existing pavement should meet the existing section. The final structural section designs may be confirmed at the conclusion of grading based on actual R-Value tests performed on the upper subgrade soils.

Portland cement concrete pavement within entrance drive and other trafficked areas may consist of 6 inches of concrete underlain by a minimum of 6 inches of Class II aggregate base. In areas of high abrasion loads due to startups and stops, tight truck turns, and high wheel loads a thicker sections should be considered consisting of 8 inches of concrete underlain by a minimum of 6 inches of Class II aggregate base. Concrete reinforcement should consist of #3 bars at 18 inches on center each way. The concrete sections are based on a minimum 28 day compressive strength of 3500 pounds per square inch (psi) and a modulus of rupture of 500 psi.

The upper 6 inches of subgrade, and base material, should be compacted to at least 95 percent of the maximum dry density, just prior to placing asphalt. Planter areas should be graded so that water drains onto, rather than beneath, the adjacent AC pavement and curbs.

**Asphaltic Concrete Pavement Designs**

| Facility | "R" Value | Traffic Index | Recommended Structural Section |
|---|---|---|---|
| Parking stalls | 18 | 4.0 | 3 inches of asphaltic concrete on 6 inches of aggregate base |
| Drive areas (vehicle traffic) | 18 | 5.0 | 3 inches of asphaltic concrete on 8 inches of aggregate base |
| Drive areas (medium truck access) | 18 | 6.0 | 3 inches of asphaltic concrete on 11 inches of aggregate base<br>or<br>4 inches of asphaltic concrete on 9 inches of aggregate base |

**9.12 SITE DRAINAGE**

Positive drainage should be provided away from structures during and after construction per the grading plan or applicable building codes. Water should not be allowed to gather or pond against foundations. In addition, planters near a structure should be constructed so that irrigation water will not saturate footing and slab subgrade soils.

Where a post-construction detention / water quality basin is constructed adjacent a building, the drainage should be directed away from the building and the buildings footings should be deepened so that the embedment starts below the bottom of any basin.

**9.13 RECOMMENDED GEOTECHNICAL SERVICES FOR FINAL DESIGN**

Final plans and specifications should be reviewed by this office to evaluate if the general intent of the geotechnical recommendations has been applied in the design.

**10. CLOSURE**

This report was prepared under the direction of State registered geotechnical engineer for Thousand Oaks Master, LLC and their design consultants solely for design and construction of the project as described herein. No warranty, express or implied, is made as to conclusions and professional advice included in this report. Gorian and Associates, Inc. disclaim any and all responsibility and liability for problems that may occur if the recommendations presented in this report are not followed.

This report may not contain sufficient information for other uses or the purposes of other parties. Recommendations should not be extrapolated to other areas or used for other facilities without consulting Gorian and Associates, Inc. Services of this office should not be construed to relieve the owner or contractors of their responsibilities or liabilities.

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The recommendations are based on interpretations of the subsurface conditions concluded from information gained from prior testing and observation and a surficial site reconnaissance. The interpretations may differ from actual subsurface conditions, which can vary horizontally and vertically across the site. Due to possible subsurface variations, this office should observe all aspects of field construction addressed in this report. Persons using this report for bidding or construction purposes should perform such independent investigations as they deem necessary.

oOo

Please contact our office if you have questions regarding the information or recommendations contained in this report or require additional consultation.

Respectfully,

**Gorian and Associates, Inc.**

By: Jerome J. Blunck, GE 151
Principal Geotechnical Engineer

## REFERENCES


California Division of Mines and Geology (now California Geological Survey, CGS ), 1975, Guidelines for Evaluating the Hazard of Surface Rupture. California Division of Mines and Geology Note Number 49.

California Division of Mines and Geology (now California Geological Survey, CGS), 1995, Supplement No. 1 to Special Publication 42 (1994 edition).

California Geological Survey (CGS), 2002, Seismic Hazard Zones, Newbury Park Quadrangle. Official map released February 7, 2002.

California Geological Survey (CGS), 2002, Seismic Hazard Zone Report for the Newbury Park 7.5-minute Quadrangle, Ventura County, California. CGS Seismic Hazard Zone Report 055, last revision date 1/13/06.

California Geological Survey, (CGS), 2008, Guidelines for Evaluating and Mitigating Seismic Hazards in California. California Division of Mines and Geology Special Publication 117A (revised March 2009).

California Geological Survey (CGS), 2018, Earthquake Fault Zones, A Guide for Government Agencies, Property Owners / Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California. California Geological Survey Special Publication 42, Revised 2018. http://www.conservation.ca.gov/cgs/Documents/CGS_SP42_2018.pdf

Cao, T., Bryant, W.A., Rowshandel, B., Brannum, D., and Willis, C.J., June 2003, The Revised 2002 California Probabilistic Seismic Hazard Maps. <http://www.consrv.ca.gov/cgs/rghm/psha/fault_parameters/pdf/2002_CA_Hazard_Maps.pdf>

Chang, S.W., Bray, J.D., and Seed, R.B., 1994, Ground Motions and Local Site Effects. in Stewart, J.P., Bray, J.D., Seed, R.B. and Sitar, N. eds., Preliminary Report on the Principal Geotechnical Aspects of the January 17, 1994 Northridge Earthquake, Earthquake Engineering Research Center, University of California at Berkeley, Report No. UBC/EERC-94/08

Dibblee Thomas W., Jr. and Ehrenspeck, Helmut E., 1990, Geologic Map of the Camarillo and Newbury Park Quadrangles, Ventura County , Dibble Geological Foundation Map #DF28.

Durrell, Cordell, 1954, Geology of the Santa Monica Mountains and Simi Hills, Southern California; in: Jahns, Ed. Geology of Southern California, California Division of Mines Bulletin 170.

Geotechnical Associates, Inc. (1994a), Geotechnical Review and Grading Plan Recommendations for Rough Grading of the Continuation High School Site, Associated Access Road Grading, and Rough Grading of the R.V. Site, Tentative Tract 4823, MGM Ranch Industrial Park, City of Thousand Oaks, County of Ventura, California. Work Order: G1-3-20, Log Number 8. Dated April 20.

Geotechnical Associates, Inc. (1994b), Supplement to Referenced Report Presenting Geotechnical Recommendations for Retaining Wall Design, Tentative Tract 4823, MGM Ranch Industrial Park, City of Thousand Oaks, County of Ventura, California. Work Order: G1-3-20, Log Number 10. Dated April 20.

Geotechnical Associates, Inc. (1994c), R-1 Canyon Area, Adjacent Storm Drain Outlet Structure, Tract 4823, Temporary Access Road for School Site, City of Thousand Oaks, California. Work Order: G1-3-R1/20, Log Number 80. Dated October 15.

Geotechnical Associates, Inc. (1994d), Final rough grading compaction test report, proposed continuation high school site, Lot 4 and portions of Lot 3, Tract 4823, MGM Ranch, City of Thousand Oaks, California. Work Order: G1-3-20, Log Number: 060. Dated November 30.

Geotechnical Associates, Inc. (1995a), Rough grading compaction test report, Interim grading of portions of Lots 8, 9, 12-15, and 19-21 and construction of temporary access road (stations 11+35 to 41+49) within Tract 4823, MGM Ranch Industrial Park, City of Thousand Oaks, California. Work Order: G1-3-20, Log Number: 125. Dated January 9.

Geotechnical Associates, Inc. (1995b), Compaction test summary, Subgrade and aggregate base materials for temporary access road (stations 11+35 to 41+49) Tract 4823-3, MGM Ranch Industrial Park, City of Thousand Oaks, California. Work Order: G1-3-20, Log Number: 126. Dated January 9.

Geotechnical Associates, Inc. (1997) Update – Geotechnical Review of 40 Scale Grading Plans, Tract 4823-3, MGM Ranch Industrial Park, Thousand Oaks, California. Work Order: G1-3-28, Log Number: 922. Dated January 15.

Geotechnical Associates, Inc. (1999) Recommended Repair of West Facing 1½(h):1(v) Fill Slope, Adjacent R-1 Canyon Storm Drain Outlet, Tract 4823-3, MGM Ranch Industrial Park, City of Thousand Oaks, California. Work Order: G1-3-20, Log Number: 2311. Dated November 8.

Geotechnical Associates, Inc., September 1, 2000, Rough Grading Compaction Test Report, Lots 4 Through 19 and Conejo Center Drive, Tract 4823-3, City of Thousand Oaks, California. Work Order: G1-3-0-20, Log Number: 2481.

Gorian and Associates, Inc. (1988), Preliminary Geotechnical Investigation, Tentative Tract 4366, A Portion of Specific Plan No. 7, MGM Ranch in the Locale of Thousand Oaks, County of Ventura, California, Work Order: 1550-2-10, Log Number: 12299. Dated April 14.

Gorian and Associates, Inc. (1991b), Geotechnical site Investigation, Tentative Parcel Map L.D. 644, MGM Ranch, City of Thousand Oaks, County of Ventura, California. Work Order: 1550-3-13, Log Number: 15104. Dated June 17.

Gorian and Associates, Inc. (1991c), Geotechnical Site Investigation, SUP Vesting Tentative Tract Number 4823, MGM Ranch, City of Thousand Oaks, County of Ventura, California. Work Order: 1550-3-14, Log Number: 15283. Dated September 11.

Gorian and Associates, Inc. (1992a), Final Rough Grading Compaction Test Report, Proposed Industrial Development Parcels 1 and 2, Parcel Map L.D. 644 and Adjacent Portions of Rancho Conejo Boulevard, MGM Ranch Industrial Park, City of Thousand Oaks, County of Ventura, California. Work Order: 1550-3-20, Log Number: 15530. Dated January 24.

Gorian and Associates, Inc. (1992b), Final Rough Grading Compaction Test Report, Proposed Industrial Development Off-Site Grading, GP 73, L.D. 644 SUP 91-782, MGM Ranch Industrial Park, City of Thousand Oaks, County of Ventura, California. Work Order: 1550-3-20, Log Number: 15531. Dated January 24.

Gorian and Associates, Inc. (1992c), Addendum Letter -- Geotechnical Evaluation of Proposed 1½(h):1(v) Fill Slope Adjacent Lot 10 and Corporate Center Drive, Vesting Tentative Tract 4823, MGM Ranch, City of Thousand Oaks, California. Work Order: 1550-3-14, Log Number: 15589. Dated February 7.

Gorian and Associates, Inc. (1992d), Geotechnical Review and Grading Recommendations, 10 Acre Site for Lots 5, 6, 7, and Portions of Off-Site Areas Located on Lots 1 - 4, 8 - 10, 12, and 13, Stage Grading, Vesting Tentative Tract 4823, MGM Ranch, City of Thousand Oaks, County of Ventura, California. Work Order: 1550-3-15, Log Number: 16180. Dated November 19.

Gorian and Associates, Inc. (1992e), Geotechnical Review of Grading Plan, 10 Acre Site South and Westerly of Rancho Conejo Boulevard and Corporate Center Drive, Rough Grading, Tract 4823-1, MGM Ranch, City of Thousand Oaks, County of Ventura, California. Work Order: 1550-3-15, Log Number: 16207. Dated November 19.

Gorian and Associates, Inc. (1993b), Geotechnical Review and Grading Recommendations for Tract 4823-2 and Associated Stage Grading (Lots 14, 15, 19, 20, & 21), MGM Ranch, City of Thousand Oaks, County of Ventura, California. Work Order: 1550-3-16, Log Number: 16276. Dated January 22.

Gorian and Associates, Inc. (1993c), Grading Plan Review, Tract 4823-2, City of Thousand Oaks, California. Work Order: 1550-3-16, Log Number: 16367. Dated March 16.

Gorian and Associates, Inc. (1993d), Final Rough Grading Compaction Test Report for Tract 4823-1, Adjacent Portions of Rancho Conejo Boulevard and Corporate Center Drive, and Off-site Areas Stage Grading For Portions of Vesting Tentative Tract 4823, City of Thousand Oaks, California. Work Order: 1550-3-25, Log Number: 16402. Dated April 2.

Gorian and Associates, Inc. (1993e), Additional Subdrain Placement, Tract 4823-2, City of Thousand Oaks, California. Work Order: 1550-3-16, Log Number: 16463. Dated May 12.

Gorian and Associates, Inc. (1993f), Rough Grading Compaction Test Report for Lot 2 of Tract 4823-2 and Adjacent Portions of Conejo Center Drive, City of Thousand Oaks, California. Work Order: 1550-3-26, Log Number: 16557. Dated August 6.

Gorian and Associates, Inc. (1993g) Geotechnical Site Investigation 50± Acres SUP Vesting Tentative Tract Northrop Facility, Ventura Division, City of Thousand Oaks, California. Work Order: 1420-2-10, Log Number: 16573. Dated August 6.

Jennings, C.W., Compiler, 1994, Fault Activity Map of California and Adjacent Areas. California Division of Mines and Geology, California Geologic Data Map Series, Map No. 8.

McLaren Environmental Engineering April 14, 1988, Site Characterization and Evaluation of Cleanup Alternatives.

Petersen, M.D., Bryant, W.A., Cramer, C.H., Cao, T., Reichle, M.S., Frankel, A.D., Lienkaemper, J.J., McCrory, P.A., and Schwartz, D.P., 1996, Probabilistic Seismic Hazard Assessment for the State of California, California Division of Mines and Geology Open-File Report 96-08.

Petersen, M.D., Beeby, D., Bryant., W., Cao, C., Cramer, C., Davis, J., Reichle, M., Saucedo, G., Tan, S., Taylor, G., Toppozanda, T., Treiman, J., Wills, C., with Digital Representation by D. Branum, G. Faneros, E. Foster, R. Martin, 1999, Seismic Shaking Hazard Maps of California. California Division of Mines and Geology Map Sheet 48.

Southern California Earthquake Center, 1999, Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction in California.

Southern California Earthquake Center, 2002, Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Landslide Hazards in California.

Taliaferro, N.L., 1924, Notes on the Geology of Ventura County, California; in: N.L. Taliaferro, F.S. Hudson, and W.N. Craddock, The Oil Fields of Ventura County California; American Association of Petroleum Geologists Bulletin, v.8 pp.789-810

United States Geological Survey (USGS) interactive web application, 2008 Interactive Deaggregations. <https://geohazards.usgs.gov/deaggint/2008/>

United States Geological Survey (USGS) interactive web application, Seismic Design Maps and Tools for Engineers, U.S. Design Maps Web Application. <http://geohazards.usgs.gov/designmaps/us/>

Yerkes, R.F. and Campbell, R.H. (1979), Stratigraphic Nomenclature of the Central Santa Monica Mountains, Los Angeles County, California. U.S. Geologic Survey Bulletin 1457-E.

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|---|---|---|
| **Gorian & Associates, Inc.** Applied Earth Sciences | | |
| Job No: 1550-3-SP-200 | | Date: Feb. 2018 |
| Scale: 1" = 80' | Drawn by: Approved by: | PLATE 1 |

# GEOTECHNICAL MAP

Based On
Pre-Application Submittal
Grading Plans
Tract 4823-1 & -3
Provided By
Sikand
Engineering/Planning/Surveying


GEOTECHNICAL EXPLANATION

| | |
|---|---|
| afc | ENGINEERED COMPACTED FILL (various phases of fill placement) |
| Qc | COLLUVIUM |
| Qt | TERRACE DEPOSITS |
| Tcv | CONEJO VOLCANICS |
| | CONTACT BETWEEN GEOLOGIC UNITS |
| | APPROXIMATE LIMIT OF COMPACTED FILL |
| | APPROXIMATE LOCATION OF SUBDRAIN |

# Appendix F
## Stormwater Calculations

# STORMWATER CALCULATIONS

FOR:

## CONEJO SUMMIT PROJECT

PREPARED BY:

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Date: February 10, 2020

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## INTRODUCTION

The following study has been prepared by Sikand Engineering Associates, to determine the required Stormwater Quality and detention facilities for all buildings of the proposed Conejo Summit Industrial project. The project will consist of 15 industrial buildings with loading docks in the Newbury Park area of Thousand Oaks to be constructed on existing vacant lots. Because of existing adjacent groundwater contamination from neighboring properties, infiltration was not considered in treatment of storm water. Water quality solutions were chosen in order of viability, from natural bioswales to biological contact in proprietary media to catch basin filters.

# BUILDING 1A

## Detention Calculations

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 ------------------------------------------- 950 CF/Acre

Aproject1 consists of subareas 1A-1, 1A-2, & 1A-4 ------------------------------------------------ 2.49 Acre

Vsump1 ---------------------------------------------------------------------------------------------- 2.49*950=2362 CF

Aproject2 consists of subarea 1A-3 & 1B-4 ------------------------------------------------------------ 0.53 Acre

Vsump2 ---------------------------------------------------------------------------------------------- 0.53*950=502 CF

Assume 48" CMP
Cross Sectional Area=12.57 SF

Length of 48" CMP for Detention1 = 2362 CF/12.57 SF = 187' < **190'** provided

Length of 48" CMP for Detention2 = 502 CF /12.57 SF= 40' < **45'** provided

Per storm drain system master plan:

Subarea 910D $Q_{10}$=1.99 cfs/Ac
$Q_{100}$=3.30 cfs/Ac

1A-1: $Q_{10}$=1.99 cfs/Ac * 0.79 Ac = 1.58 cfs $Q_{100}$=3.30 cfs/Ac * 0.79 Ac = 2.62 cfs

1A-2: $Q_{10}$=1.99 cfs/Ac * 1.57 Ac = 3.13 cfs $Q_{100}$=3.30 cfs/Ac * 1.57 Ac = 5.19 cfs

1A-3: $Q_{10}$=1.99 cfs/Ac * 0.32 Ac = 0.63 cfs $Q_{100}$=3.30 cfs/Ac * 0.32 Ac = 1.05 cfs

1A-4: $Q_{10}$=1.99 cfs/Ac * 0.12 Ac = 0.24 cfs $Q_{100}$=3.30 cfs/Ac * 0.12 Ac = 0.39 cfs

1B-4: $Q_{10}$=1.99 cfs/Ac * 0.21 Ac = 0.42 cfs $Q_{100}$=3.30 cfs/Ac * 0.21 Ac = 0.69 cfs

# Stormwater Quality Treatment Calculations

## Area 1A-1

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.79 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.769

I -------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .122 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.30 cfs/Ac)/1.2x0.79 Ac = 2.18 cfs x10% = -------------------- **.218 cfs**

**Treatment device used for Area 1A-1: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.009

b=2'

SQDF=.218 cfs

V=.27 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.27=113' of swale required < **120'** of bioswale provided

## Area 1A-2

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 1.57 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.926

I ------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .291 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.30 cfs/Ac)/1.2x1.57 Ac = 4.33 cfs x10% = -------------------- **.433 cfs**

**Treatment device used for Area 1A-2: OldCastle BioPod Biofilter Underground**

BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.433 cfs/ .00401 fps = 108 sq. ft. of infiltration area. Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. Therefore, we will use the 8’x16’ BioPod Underground Biofilter, BPU-816 model, which provides 112 sf of area.

## Area 1A-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.32 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.758

I ------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .047 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.30 cfs/Ac)/1.2x0.32 Ac = 0.880 cfs x10% = ------------------ **.088 cfs**

**Treatment device used for Area 1A-3: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.088 cfs/ .00401 fps = 22 sq. ft. of infiltration area. Therefore, we will use the 4’x6.5’ BioPod Biofilter Planter, BPP-46-SI model, which provides 26 sf of area.

## Area 1A-4

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.12 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------- 0.818

I ------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .019 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.12 Ac = 0.330 cfs x10% = ------------------ **.033 cfs**

**Treatment device used for Area 1A-4: OldCastle Catch Basin Filter**

Area 1A-4 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

## Area 1B-4

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.21 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------- 0.846

I ------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .034 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.21 Ac = 0.580 cfs x10% = ------------------ **.058 cfs**

**Treatment device used for Area 1B-4: OldCastle Catch Basin Filter**

Area 1B-4 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

# BUILDING 1B

## Detention Calculations

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 ---------------------------------------------- 950 CF/Acre

Aproject consists of subareas 1B-1 & 1B-2 ----------------------------------------------------------- 0.65 Acre

Vsump ------------------------------------------------------------------------------------------------ 0.65*950=613 CF

Assume 48" CMP
Cross Sectional Area=12.57 SF

Length of 48" CMP for Detention = 613 CF/12.57 SF = 49' < 5**5'** provided

Per storm drain system master plan:

Subarea 910D $Q_{10}$=1.99 cfs/Ac
$Q_{100}$=3.30 cfs/Ac

1B-1: $Q_{10}$=1.99 cfs/Ac * 0.53 Ac = 1.05 cfs $Q_{100}$=3.30 cfs/Ac * 0.53 Ac = 1.74 cfs

1B-2: $Q_{10}$=1.99 cfs/Ac * 0.12 Ac = 0.23 cfs $Q_{100}$=3.30 cfs/Ac * 0.12 Ac = 0.39 cfs

# Stormwater Quality Treatment Calculations

## Area 1B-1

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.53 Acres

Soil Type ------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.903

I -------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .095 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.53 Ac = 1.45 cfs x10% = -------------------- **.145 cfs**

**Treatment device used for Area 1B-1: OldCastle BioPod Biofilter Underground**

Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.145 cfs/ .00401 fps = 36 sq. ft. of infiltration area. Therefore, we will use the 4'x13' BioPod Underground Biofilter, BPU-413 model, which provides 44 sf of area.

## Area 1B-2

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.12 Acres

Soil Type -------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.781

I ------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .018 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.12 Ac = 0.32 cfs x10% = ----------------- **.032 cfs**

**Treatment device used for Area 1B-2: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.018

b=2'

SQDF=.032 cfs

V=.18 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.18=76' of swale required = 76' of bioswale provided

# BUILDING 1C

## Detention Calculations

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 -------------------------------------------- 950 CF/Acre

Aproject consists of subareas 1C-1 & 1C-2 -------------------------------------------------------- 1.90 Acre

Vsump ------------------------------------------------------------------------------------------------- 1.90*950=1809 CF

Assume 48” CMP
Cross Sectional Area=12.57 SF

Length of 48” CMP for Detention = 1809 CF/12.57 SF = 144’ < **150’** provided

Per storm drain system master plan:

Subarea 910D $Q_{10}$=1.99 cfs/Ac
$Q_{100}$=3.30 cfs/Ac

1C-1: $Q_{10}$=1.99 cfs/Ac * 1.59 Ac = 3.16 cfs $Q_{100}$=3.30 cfs/Ac * 1.59 Ac = 5.24 cfs

1C-2: $Q_{10}$=1.99 cfs/Ac * 0.13 Ac = 0.26 cfs $Q_{100}$=3.30 cfs/Ac * 0.13 Ac = 0.42 cfs

1C-3: $Q_{10}$=1.99 cfs/Ac * 0.19 Ac = 0.37 cfs $Q_{100}$=3.30 cfs/Ac * 0.19 Ac = 0.62 cfs

# Stormwater Quality Treatment Calculations

## Area 1C-1

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 1.59 Acres

Soil Type ------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 -------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------- 0.913

I ---------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------- .290 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x1.59 Ac = 4.37 cfs x10% = ------------------- **.437 cfs**

**Treatment device used for Area 1C-1: OldCastle BioPod Biofilter Underground**

. Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.437 cfs/ .00401 fps = 109 sq. ft. of infiltration areaTherefore, we will use the 8'x16' BioPod Underground Biofilter, BPU-816 model, which provides 112 sf of area.

## Area 1C-2

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.13 Acres

Soil Type ------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 -------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------- 0.804

I ---------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------- .020 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.13 Ac = 0.35 cfs x10% = ----------------- **.035 cfs**

**Treatment device used for Area 1C-2: OldCastle Catch Basin Filter**

Area 1C-2 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

## Area 1C-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.19 Acres

Soil Type ----------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.679

I ------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------- .025 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.19 Ac = 0.51 cfs x10% = ------------------ **.051 cfs**

**Treatment device used for Area 1C-3: OldCastle Catch Basin Filter**

Area 1C-3 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

# BUILDING 1D

## Detention Calculations

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 --------------------------------------------- 950 CF/Acre

Aproject consists of subareas 1D-1, 1D-2 & 1D-3 ------------------------------------------------- 1.73 Acre

Vsump --------------------------------------------------------------------------------------------------- 1.73*950=1642 CF

Assume 48" CMP
Cross Sectional Area=12.57 SF

Length of 48" CMP for Detention = 1642 CF/12.57 SF = 130' < **136'** provided

Per storm drain system master plan:

Subarea 910D $Q_{10}$=1.99 cfs/Ac
$Q_{100}$=3.30 cfs/Ac

1D-1: $Q_{10}$=1.99 cfs/Ac * 1.33 Ac = 2.65 cfs $Q_{100}$=3.30 cfs/Ac * 1.33 Ac = 4.39 cfs

1D-2: $Q_{10}$=1.99 cfs/Ac * 0.35 Ac = 0.69 cfs $Q_{100}$=3.30 cfs/Ac * 0.35 Ac = 1.14 cfs

1D-3: $Q_{10}$=1.99 cfs/Ac * 0.06 Ac = 0.11 cfs $Q_{100}$=3.30 cfs/Ac * 0.06 Ac = 0.18 cfs

# Stormwater Quality Treatment Calculations

## Area 1D-1

### Stormwater Quality Design Flow (SQDF)

Area ---------------------------------------------------------------------------------------------------------- 1.33 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.708

I ---------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .222 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x1.33 Ac = 3.66 cfs x10% = -------------------- **.366 cfs**

**Treatment device used for Area 1D-1: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.366 cfs/ .00401 fps = 91 sq. ft. of infiltration area. Therefore, we will use the 8’x12’ BioPod Biofilter Planter, BPP-812-SI model, which provides 96 sf of area.

## Area 1D-2

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.06 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ---------------------------------------------------------------------------------------------- 0.729

I -------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------------- .008 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.06 Ac = 0.15 cfs x10% = ------------------ **.015 cfs**

**Treatment device used for Area 1D-2: OldCastle Catch Basin Filter**

Area 1D-2 does not have sufficient area for a vegetated swale or a BioPod Tree Filter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

## Area 1D-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.35 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ---------------------------------------------------------------------------------------------- 0.708

I -------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------------- .048 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.35 Ac = 0.95 cfs x10% = ------------------- **.095 cfs**

**Treatment device used for Area 1D-3: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.005

b=2′

SQDF=.095 cfs

V=.17 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.17=71′ of swale required < **81′** of bioswale provided

# <u>BUILDING 1E</u>

## Detention Calculations

Soil Type ------------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 -------------------------------------------- 950 CF/Acre

Aproject consists of subareas 1E-1, 1E-2, 1E-3, 1E-4, 1E-5, & 1B-3 --------------------------- 3.99 Acre

Vsump ----------------------------------------------------------------------------------------- 3.99*950=3790 CF

Assume 48” CMP
Cross Sectional Area=12.57 SF

Length of 48” CMP for Detention = 3790 CF/12.57 SF = 301 < **308’** provided

Per storm drain system master plan:

| | |
|---|---|
| Subarea 910D | $Q_{10}$=1.99 cfs/Ac<br>$Q_{100}$=3.30 cfs/Ac |

1E-1: $Q_{10}$=1.99 cfs/Ac * 1.35 Ac = 2.68 cfs $Q_{100}$=3.30 cfs/Ac * 1.35 Ac = 4.45 cfs

1E-2: $Q_{10}$=1.99 cfs/Ac * 0.98 Ac = 1.94 cfs $Q_{100}$=3.30 cfs/Ac * 0.98 Ac = 3.23 cfs

1E-3: $Q_{10}$=1.99 cfs/Ac * 0.78 Ac = 1.56 cfs $Q_{100}$=3.30 cfs/Ac * 0.78 Ac = 2.59 cfs

1E-4: $Q_{10}$=1.99 cfs/Ac * 0.16 Ac = 0.31 cfs $Q_{100}$=3.30 cfs/Ac * 0.16 Ac = 0.52 cfs

1E-5: $Q_{10}$=1.99 cfs/Ac * 0.11 Ac = 0.23 cfs $Q_{100}$=3.30 cfs/Ac * 0.11 Ac = 0.38 cfs

1B-3: $Q_{10}$=1.99 cfs/Ac * 0.61 Ac = 1.21 cfs $Q_{100}$=3.30 cfs/Ac * 0.61 Ac = 2.00 cfs

# Stormwater Quality Treatment Calculations

## Area 1B-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.61 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.904

I ------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A -------------------------------------------------------------------------------------------------- .110 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.61 Ac = 1.67 cfs x10% = ------------------- **.167 cfs**

**Treatment device used for Area 1B-3: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.167 cfs/ .00401 fps = 42 sq. ft. of infiltration area. Therefore, we will use the 4’x13’ BioPod Biofilter Planter, BPP-413-SI model, which provides 52 sf of area.

## Area 1E-1

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 1.35 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.909

I ------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A -------------------------------------------------------------------------------------------------- .245 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.49 Ac = 1.35 cfs x10% = ------------------- **.371 cfs**

**Treatment device used for Area 1E-1: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.371 cfs/ .00401 fps = 93 sq. ft. of infiltration area. Therefore, we will use the 8'x16' BioPod Biofilter Planter, BPP-816-SI model, which provides 128 sf of area.

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## Area 1E-2

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.98 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.908

I ----------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------- .166 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.98 Ac = 2.69 cfs x10% = -------------------- **.269 cfs**

**Treatment device used for Area 1E-2: OldCastle BioPod Biofilter Underground**

Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.269 cfs/ .00401 fps = 67 sq. ft. of infiltration area. Therefore, we will use the 8'x12' BioPod Underground Biofilter, BPU-812 model, which provides 80 sf of area.

## Area 1E-3

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.78 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ---------------------------------------------------------------------------------------- 0.820

I ------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .129 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.30 cfs/Ac)/1.2x0.78 Ac = 2.16 cfs x10% = -------------------- **.216 cfs**

**Treatment device used for Area 1E-3: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.216 cfs/ .00401 fps = 54 sq. ft. of infiltration area. Therefore, we will use the 4'x17' BioPod Biofilter Planter, BPP-417-SI model, which provides 68 sf of area.

## Area 1E-4

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.16 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ---------------------------------------------------------------------------------------- 0.777

I ------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .025 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.30 cfs/Ac)/1.2x0.16 Ac = 0.430 cfs x10% = ------------------ **.043 cfs**

**Treatment device used for Area 1E-4: OldCastle Catch Basin Filter**

Area 1E-4 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

## Area 1E-5

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.11 Acres

Soil Type ----------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.698

I ------------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .016 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.11 Ac = 0.32 cfs x10% = -------------------- **.032 cfs**

**Treatment device used for Area 1E-5: OldCastle Catch Basin Filter**

Area 1E-5 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

# BUILDING 1F

## Detention Calculations

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 ------------------------------------------ 950 CF/Acre

Aproject consists of subareas 1F-1, 1F-2, 1F-3, 1F-4, 1F-5 & 1F-6 ----------------------------- 4.78 Acre

Vsump ---------------------------------------------------------------------------------------------- 4.78*950=4500 CF

Assume 48” CMP
Cross Sectional Area=12.57 SF

Length of 48” CMP for Detention = 4500 CF/12.57 SF = 357’ < 377’ provided

Per storm drain system master plan:

Subarea 882C $Q_{10}$=1.85 cfs/Ac
$Q_{100}$=3.15 cfs/Ac

1F-1: $Q_{10}$=1.85 cfs/Ac * 1.59 Ac = 2.94 cfs $Q_{100}$=3.15 cfs/Ac * 1.59 Ac = 5.01 cfs

1F-2: $Q_{10}$=1.85 cfs/Ac * 1.32 Ac = 2.44 cfs $Q_{100}$=3.15 cfs/Ac * 1.32 Ac = 4.16 cfs

1F-3: $Q_{10}$=1.85 cfs/Ac * 0.49 Ac = 0.91 cfs $Q_{100}$=3.15 cfs/Ac * 0.49 Ac = 1.55 cfs

1F-4: $Q_{10}$=1.85 cfs/Ac * 0.24 Ac = 0.45 cfs $Q_{100}$=3.15 cfs/Ac * 0.24 Ac = 0.76 cfs

1F-5: $Q_{10}$=1.85 cfs/Ac * 0.14 Ac = 0.25 cfs $Q_{100}$=3.15 cfs/Ac * 0.14 Ac = 0.43 cfs

1F-6: $Q_{10}$=1.85 cfs/Ac * 0.96 Ac = 1.77 cfs $Q_{100}$=3.15 cfs/Ac * 0.96 Ac = 3.01 cfs

# Stormwater Quality Treatment Calculations

## Area 1F-1

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 1.59 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ----------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.941

I ------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .263 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.15 cfs/Ac)/1.2x1.59 Ac = 4.17 cfs x10% = -------------------- **.417 cfs**

**Treatment device used for Area 1F-1: OldCastle BioPod Biofilter Underground**

Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.417 cfs/ .00401 fps = 104 sq. ft. of infiltration area. Therefore, we will use the 8'x16' BioPod Underground biofilter, BPU-816 model, which provides 112 sf of area.

## Area 1F-2

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 1.32 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ----------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.903

I ------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .231 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.15 cfs/Ac)/1.2x1.32 Ac = 3.47 cfs x10% = ------------------- **.347 cfs**

**Treatment device used for Area 1F-2: OldCastle BioPod Biofilter Underground**

Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.347 cfs/ .00401 fps = 87 sq. ft. of infiltration area. Therefore, we will use the 8'x16' BioPod Underground biofilter, BPU-816 model, which provides 112 sf of area.

## Area 1F-3

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.49 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.898

I --------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A -------------------------------------------------------------------------------------------------- .088 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.15 cfs/Ac)/1.2x0.49 Ac = 1.286 cfs x10% = ------------------ **.129 cfs**

**Treatment device used for Area 1F-3: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.129 cfs/ .00401 fps = 32 sq. ft. of infiltration area. Therefore, we will use the 6'x6' BioPod Biofilter Planter, BPP-66-SI model, which provides 36 sf of area.

## Area 1F-4

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.24 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) -------------------------------------------------------------------------------------- 0.819

I --------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .040 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.15 cfs/Ac)/1.2x0.24 Ac = 0.64 cfs x10% = ------------------ **.064 cfs**

**Treatment device used for Area 1F-4: OldCastle Catch Basin Filter**

Area 1F-4 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

## Area 1F-5

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.14 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) -------------------------------------------------------------------------------------- 0.789

I --------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .021 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.15 cfs/Ac)/1.2x0.14 Ac = 0.36 cfs x10% = ------------------ **.036 cfs**

**Treatment device used for Area 1F-5: OldCastle Catch Basin Filter**

Area 1F-5 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

## Area 1F-6

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.96 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ----------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.827

I ------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .204 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.15 cfs/Ac)/1.2x0.96 Ac =2.51 cfs x10% = ------------------ **.251 cfs**

**Treatment device used for Area 1F-6: OldCastle BioPod Biofilter Underground**

Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.251 cfs/ .00401 fps = 63 sq. ft. of infiltration area. Therefore, we will use the 8’x12’ BioPod Underground biofilter, BPU-812 model, which provides 96 sf of area.

# BUILDING 1G

## Detention Calculations

Soil Type ------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 ------------------------------------------- 950 CF/Acre

Aproject consists of subareas 1G-1, 1G-2, 1G-3, 1G-4 & Open Space Hillside (0.68 Ac) - 3.52 Acre

Vsump -------------------------------------------------------------------------------------------- 3.52*950=3340 CF

Assume 48” CMP
Cross Sectional Area=12.57 SF

Length of 48” CMP for Detention = 3340 CF/12.57 SF = 265’ < **274’** provided

Per storm drain system master plan:

Subarea 882C $Q_{10}$=1.85 cfs/Ac
$Q_{100}$=3.15 cfs/Ac

1G-1: $Q_{10}$=1.85 cfs/Ac * 1.59 Ac = 3.11 cfs $Q_{100}$=3.15 cfs/Ac * 1.59 Ac = 5.30 cfs

1G-2: $Q_{10}$=1.85 cfs/Ac * 0.43 Ac = 0.80 cfs $Q_{100}$=3.15 cfs/Ac * 0.43 Ac = 1.36 cfs

1G-3: $Q_{10}$=1.85 cfs/Ac * 0.31 Ac = 0.57 cfs $Q_{100}$=3.15 cfs/Ac * 0.31 Ac = 0.97 cfs

1G-4: $Q_{10}$=1.85 cfs/Ac * 0.15 Ac = 0.29 cfs $Q_{100}$=3.15 cfs/Ac * 0.15 Ac = 0.49 cfs

# Stormwater Quality Treatment Calculations

## Area 1G-1

**Stormwater Quality Design Flow (SQDF)**

Area -------------------------------------------------------------------------------------------------------- 1.59 Acres

Soil Type -------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------- 0.802

I ------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A -------------------------------------------------------------------------------------------------- .270 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.15 cfs/Ac)/1.2x1.59 Ac = 4.18 cfs x10% = ------------------- **.418 cfs**

**Treatment device used for Area 1G-1: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.005

b=8'

SQDF=.418 cfs

V=.20 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.20=84' of swale required = **84'** of bioswale provided

## Area 1G-2

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.43 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.727

I ----------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .063 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.15 cfs/Ac)/1.2x0.43 Ac = 1.13 cfs x10% = ------------------ **.113 cfs**

**Treatment device used for Area 1G-2: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.026

b=3′

SQDF=.113 cfs

V=.28 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.28=118′ of swale required < **170′** of bioswale provided

## Area 1G-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.31 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------- 0.520

I ---------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A -------------------------------------------------------------------------------------------------- .031 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.15 cfs/Ac)/1.2x0.31 Ac = 0.81 cfs x10% = ----------------- **.081 cfs**

**Treatment device used for Area 1G-3: OldCastle Catch Basin Filter**

Area 1G-3 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

## Area 1G-4

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.15 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------- 0.770

I ---------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A -------------------------------------------------------------------------------------------------- .023 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.15 cfs/Ac)/1.2x0.15 Ac = 0.41 cfs x10% = ----------------- **.041 cfs**

**Treatment device used for Area 1G-4: OldCastle Catch Basin Filter**

Area 1G-4 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

# BUILDING 2

## Detention Calculations

Soil Type ------------------------------------------------------------------------------------------------------------------ 002

SUMP Volume per City of Thousand Oaks Figure 7 -------------------------------------------- 950 CF/Acre

Aproject consists of subareas 2-1, 2-2, 2-3, 2-4 & Open Space hillside (.42 Ac) ----------- 2.64 Acre

Vsump -------------------------------------------------------------------------------------------- 2.64*950=2504 CF

Assume 48" CMP
Cross Sectional Area=12.57 SF

Length of 48" CMP for Detention = 2504 CF/12.57 SF = 199' < **204'** provided

Per storm drain system master plan:

Subarea 883C $Q_{10}$=1.83 cfs/Ac
$Q_{100}$=3.17 cfs/Ac

2-1: $Q_{10}$=1.83 cfs/Ac * 1.49 Ac = 2.73 cfs $Q_{100}$=3.17 cfs/Ac * 1.49 Ac = 4.73 cfs

2-2: $Q_{10}$=1.83 cfs/Ac * 0.32 Ac = 0.58 cfs $Q_{100}$=3.17 cfs/Ac * 0.32 Ac = 1.00 cfs

2-3: $Q_{10}$=1.83 cfs/Ac * 0.28 Ac = 0.51 cfs $Q_{100}$=3.17 cfs/Ac * 0.28 Ac = 0.88 cfs

2-4: $Q_{10}$=1.83 cfs/Ac * 0.13 Ac = 0.24 cfs $Q_{100}$=3.17 cfs/Ac * 0.13 Ac = 0.42 cfs

# Stormwater Quality Treatment Calculations

## Area 2-1

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 1.49 Acres

Soil Type -------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.918

I ------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------------- .274 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x1.49 Ac = 3.95 cfs x10% = -------------------- **.395 cfs**

**Treatment device used for Area 2-1: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.005

b=3'

SQDF=.395 cfs

V=.25 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.25=105' of swale required < **130'** of bioswale provided

# Area 2-2

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.32 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.464

I -------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .029 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x0.32 Ac = 0.83 cfs x10% = ------------------ **.083 cfs**

**Treatment device used for Area 2-2: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.010

b=3'

SQDF=.083 cfs

V=.19 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.19=80' of swale required < **85'** of bioswale provided

## Area 2-3

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.28 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 --------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------- 0.916

I ----------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .051 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x0.28 Ac = 0.74 cfs x10% = ------------------- **.074 cfs**

**Treatment device used for Area 2-3: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.010

b=2′

SQDF=.074 cfs

V=.20 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.20=84′ of swale required < **144′** of bioswale provided

## Area 2-4

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.13 Acres

Soil Type ------------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 -------------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.732

I ---------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .019 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.17 cfs/Ac)/1.2x0.13 Ac = 0.35 cfs x10% = ------------------ **.035 cfs**

**Treatment device used for Area 2-4: OldCastle Catch Basin Filter**

Area 2-4 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

# BUILDING 3

## Detention Calculations

Soil Type ------------------------------------------------------------------------------------------------------------------ 002

SUMP Volume per City of Thousand Oaks Figure 7 -------------------------------------------- 950 CF/Acre

Aproject1 consists of subareas 3-4 &3-5 ------------------------------------------------------------- 0.83 Acre

Vsump1 ------------------------------------------------------------------------------------------------ 0.83*950=786 CF

Aproject2 consists of subarea 3-1, 3-2 & 3-3 ------------------------------------------------------- 3.03 Acre

Vsump2 ---------------------------------------------------------------------------------------------- 3.03*950=2877 CF

Assume 48" CMP
Cross Sectional Area=12.57 SF

Length of 48" CMP for Detention1 = 786 CF/12.57 SF = 62' < **70'** provided

Length of 48" CMP for Detention2 = 2877 CF /12.57 SF= 228' < **230'** provided

Per storm drain system master plan:

Subarea 883C $Q_{10}$=1.83 cfs/Ac
$Q_{100}$=3.17 cfs/Ac

3-1: $Q_{10}$=1.83 cfs/Ac * 1.39 Ac = 2.55 cfs $Q_{100}$=3.17 cfs/Ac * 1.39 Ac = 4.41 cfs

3-2: $Q_{10}$=1.83 cfs/Ac * 0.83 Ac = 1.52 cfs $Q_{100}$=3.17 cfs/Ac * 0.83 Ac = 2.64 cfs

3-3: $Q_{10}$=1.83 cfs/Ac * 0.80 Ac = 1.47 cfs $Q_{100}$=3.17 cfs/Ac * 0.80 Ac = 2.55 cfs

3-4: $Q_{10}$=1.83 cfs/Ac * 0.34 Ac = 0.62 cfs $Q_{100}$=3.17 cfs/Ac * 0.34 Ac = 1.08 cfs

3-5: $Q_{10}$=1.83 cfs/Ac * 0.49 Ac = 0.89 cfs $Q_{100}$=3.17 cfs/Ac * 0.49 Ac = 1.54 cfs

# Stormwater Quality Treatment Calculations

## Area 3-1

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------- 1.39 Acres

Soil Type ------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ---------------------------------------------------------------------------------------- 0.837

I -------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .233 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x1.39 Ac = 3.68 cfs x10% = -------------------- **.368 cfs**

**Treatment device used for Area 3-1: OldCastle BioPod Biofilter Underground**

Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.368 cfs/ .00401 fps = 92 sq. ft. of infiltration area. Therefore, we will use the 8’x16’ BioPod Underground biofilter, BPU-816 model, which provides 112 sf of area.

## Area 3-2

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------- 0.83 Acres

Soil Type ------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ---------------------------------------------------------------------------------------- 0.688

I -------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .115 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x1.64 Ac = 4.332 cfs x10% = ----------------- **.220 cfs**

**Treatment device used for Area 3-2: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.220 cfs/ .00401 fps = 55 sq. ft. of infiltration area. Therefore, we will use the 4'x15' BioPod Biofilter Planter, BPP-415-SI model, which provides 60 sf of area.

# Area 3-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.80 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.892

I ---------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------ .143 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.17 cfs/Ac)/1.2x0.80 Ac = 2.12 cfs x10% = ----------------- **.212 cfs**

**Treatment device used for Area 3-3: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.212 cfs/ .00401 fps = 53 sq. ft. of infiltration area. Therefore, we will use the 4'x15' BioPod Biofilter Planter, BPP-415-SI model, which provides 60 sf of area.

# Area 3-4

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.34 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.921

I ---------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------ .063 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.17 cfs/Ac)/1.2x0.09 Ac = 0.238 cfs x10% = ----------------- **.090 cfs**

**Treatment device used for Area 3-4: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.090 cfs/ .00401 fps = 22 sq. ft. of infiltration area. Therefore, we will use the 4'x6.5' BioPod Biofilter Planter, BPP-46-SI model, which provides 26 sf of area.

## Area 3-5

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.49 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.812

I ------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .079 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.17 cfs/Ac)/1.2x0.49 Ac = 1.29 cfs x10% = -------------------- **.129 cfs**

**Treatment device used for Area 3-3: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.129 cfs/ .00401 fps = 32 sq. ft. of infiltration area. Therefore, we will use the 6'x8' BioPod Biofilter Planter, BPP-68-SI model, which provides 48 sf of area.

# <u>BUILDING 4A</u>

## Detention Calculations

Soil Type ------------------------------------------------------------------------------------------------------------ 002

SUMP Volume per City of Thousand Oaks Figure 7 ------------------------------------------- 950 CF/Acre

Aproject1 consists of subareas 4A-1 ---------------------------------------------------------------- 1.26 Acre

Vsump1 ------------------------------------------------------------------------------------------ 1.26*950=1196 CF

Assume 48" CMP
Cross Sectional Area=12.57 SF

Length of 48" CMP for Detention1 = 1196 CF/12.57 SF = 95' < **100'** provided

Per storm drain system master plan:

| | |
|---|---|
| Subarea 883C | $Q_{10}$=1.83 cfs/Ac |
| | $Q_{100}$=3.17 cfs/Ac |

4A-1: $Q_{10}$=1.83 cfs/Ac * 1.26 Ac = 2.30 cfs $Q_{100}$=3.17 cfs/Ac * 1.26 Ac = 3.99 cfs

# Stormwater Quality Treatment Calculations

## Area 4A-1

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 1.26 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------ 0.827

I ---------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------- .208 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x1.26 Ac = 3.33 cfs x10% = -------------------- **.333 cfs**

**Treatment device used for Area 4A-1: OldCastle BioPod Biofilter Underground**

Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.333 cfs/ .00401 fps = 83 sq. ft. of infiltration area. Therefore, we will use the 8’x16’ BioPod Underground biofilter, BPU-816 model, which provides 112 sf of area.

# <u>BUILDING 4B</u>

## Detention Calculations

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 ------------------------------------------- 950 CF/Acre

Aproject1 consists of subareas 4A-2 & 4B-1 ------------------------------------------------------- 1.38 Acre

Vsump1 ------------------------------------------------------------------------------------------ 2.86*950=1315 CF

Aproject2 consists of subareas 4B-2 & 4B-3 ------------------------------------------------------- 1.32 Acre

Vsump2 ------------------------------------------------------------------------------------------ 2.86*950=1252 CF

Assume 48″ CMP
Cross Sectional Area=12.57 SF

Length of 48″ CMP for Detention1 = 1315 CF/12.57 SF = 104′ < **110′** provided

Length of 48″ CMP for Detention2 = 2718 CF/12.57 SF = 99′ < **104′** provided

Per storm drain system master plan:

Subarea 883C $Q_{10}$=1.83 cfs/Ac
$Q_{100}$=3.17 cfs/Ac

4A-2: $Q_{10}$=1.83 cfs/Ac * 0.48 Ac = 0.88 cfs $Q_{100}$=3.17 cfs/Ac * 0.48 Ac = 1.53 cfs

4B-1: $Q_{10}$=1.83 cfs/Ac * 0.90 Ac = 1.65 cfs $Q_{100}$=3.17 cfs/Ac * 0.90 Ac = 2.85 cfs

4B-2: $Q_{10}$=1.83 cfs/Ac * 0.92 Ac = 1.68 cfs $Q_{100}$=3.17 cfs/Ac * 0.92 Ac = 2.92 cfs

4B-3: $Q_{10}$=1.83 cfs/Ac * 0.40 Ac = 1.26 cfs $Q_{100}$=3.17 cfs/Ac * 0.40 Ac = 0.73 cfs

# Stormwater Quality Treatment Calculations

## Area 4A-2

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.48 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.913

I ----------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .075 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x0.48 Ac =1.28 cfs x10% = -------------------- **.128 cfs**

**Treatment device used for Area 4A-1: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.128 cfs/ .00401 fps = 32 sq. ft. of infiltration area. Therefore, we will use the 6'x6' BioPod Biofilter Planter, BPP-66-SI model, which provides 36 sf of area.

## Area 4B-1

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.90 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.913

I ----------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .170 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x0.90 Ac = 2.38 cfs x10% = -------------------- **.238 cfs**

**Treatment device used for Area 4B-1: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.238 cfs/ .00401 fps = 59 sq. ft. of infiltration area. Therefore, we will use the 6'x12' BioPod Biofilter Planter, BPP-612-SI model, which provides 72 sf of area.

## Area 4B-2

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.92 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.911

I ------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------------- .159cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x0.92 Ac = 2.43 cfs x10% = -------------------- **.243 cfs**

**Treatment device used for Area 4B-2: OldCastle BioPod Biofilter Underground**

Because of the limited feasible landscape area in this tributary area, an underground biofiltration device will be used. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.243 cfs/ .00401 fps = 61 sq. ft. of infiltration area. Therefore, we will use the 8'x12' BioPod Underground biofilter, BPU-812 model, which provides 96 sf of area.

## Area 4B-3

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.40 Acres

Soil Type ------------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ----------------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) --------------------------------------------------------------------------------------------- 0.724

I ------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .068 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.17 cfs/Ac)/1.2x0.40 Ac = 1.05 cfs x10% = ------------------ **.105 cfs**

**Treatment device used for Area 4B-3: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.105 cfs/ .00401 fps = 26 sq. ft. of infiltration area. Therefore, we will use the 4’x8’ BioPod Biofilter Planter, BPP-48-SI model, which provides 32 sf of area.

# BUILDING 5A

## Detention Calculations

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 -------------------------------------------- 950 CF/Acre

Aproject consists of subareas 5A-1, 5A-2, 5A-3, 5A-4, 5A-5 & 5A-6 --------------------------- 5.22 Acre

Vsump ---------------------------------------------------------------------------------------------- 5.22*950=4958 CF

Assume 48” CMP
Cross Sectional Area=12.57 SF

Length of 48” CMP for Detention = 4958 CF/12.57 SF = 394’ < **400’** provided

Per storm drain system master plan:

Subarea 910D $Q_{10}$=1.99 cfs/Ac
$Q_{100}$=3.30 cfs/Ac

5A-1: $Q_{10}$=1.99 cfs/Ac * 0.87 Ac = 1.60 cfs $Q_{100}$=3.30 cfs/Ac * 0.87 Ac = 2.77 cfs

5A-2: $Q_{10}$=1.99 cfs/Ac * 1.41 Ac = 2.59 cfs $Q_{100}$=3.30 cfs/Ac * 1.41 Ac = 4.48 cfs

5A-3: $Q_{10}$=1.99 cfs/Ac * 1.07 Ac = 2.14 cfs $Q_{100}$=3.30 cfs/Ac * 1.07 Ac = 3.54 cfs

5A-4: $Q_{10}$=1.99 cfs/Ac * 1.34 Ac = 2.66 cfs $Q_{100}$=3.30 cfs/Ac * 1.34 Ac = 4.41 cfs

5A-5: $Q_{10}$=1.99 cfs/Ac * 0.13 Ac = 0.26 cfs $Q_{100}$=3.30 cfs/Ac * 0.13 Ac = 0.43 cfs

5A-6: $Q_{10}$=1.99 cfs/Ac * 0.39 Ac = 0.78 cfs $Q_{100}$=3.30 cfs/Ac * 0.39 Ac = 1.29 cfs

# Stormwater Quality Treatment Calculations

## Area 5A-1

### Stormwater Quality Design Flow (SQDF)

Area ---------------------------------------------------------------------------------------------------------- 0.87 Acres

Soil Type ----------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ----------------------------------------------------------------------------------------- 0.916

I ---------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .160 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.87 Ac = 2.31 cfs x10% = -------------------- **.231 cfs**

**Treatment device used for Area 5A-1: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.005

b=2'

SQDF=.231 cfs

V=.22 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.22=93' of swale required < 99' of bioswale provided

## Area 5A-2

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 1.41 Acres

Soil Type ------------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.879

I ---------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .249 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x1.41 Ac = 3.73 cfs x10% = -------------------- **.373 cfs**

**Treatment device used for Area 5A-2: OldCastle BioPod Biofilter Planter**

BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.373 cfs/ .00401 fps = 93 sq. ft. of infiltration area. Therefore, we will use the 8’x16’ BioPod Biofilter Planter, BPP-816-SI model, which provides 128 sf of area.

## Area 5A-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 1.07 Acres

Soil Type ------------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.804

I ------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .173 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x1.07 Ac = 2.95 cfs x10% = -------------------- **.295 cfs**

**Treatment device used for Area 5A-3: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.005

b=3'

SQDF=.295 cfs

V=.23 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.23=97' of swale required < **140'** of bioswale provided

# Area 5A-4

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 1.34 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------- 0.844

I --------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------------- .226 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x1.34 Ac = 3.67 cfs x10% = ------------------- **.367 cfs**

**Treatment device used for Area 5A-4: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.005

b=2'

SQDF=.367 cfs

V=.26 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.25 =109' of swale required < **120'** of bioswale provided

## Area 5A-5

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.13 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ---------------------------------------------------------------------------------------------- 0.659

I ------------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .017 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.13 Ac = 0.36 cfs x10% = ------------------ **.036 cfs**

**Treatment device used for Area 5A-5: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.005

b=2′

SQDF=.036 cfs

V=.12 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.12 =50′ of swale required < **70′** of bioswale provided

## Area 5A-6

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------------- 0.39 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------------ 0.811

I ------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A -------------------------------------------------------------------------------------------------------- .064 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.39 Ac = 1.80 cfs x10% = ------------------ **.108 cfs**

**Treatment device used for Area 5A-6: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.108 cfs/ .00401 fps = 27 sq. ft. of infiltration area. Therefore, we will use the 4’x8’ BioPod Biofilter Planter, BPP-48-SI model, which provides 32 sf of area.

# <u>BUILDING 5B</u>

## Detention Calculations

Soil Type ------------------------------------------------------------------------------------------------------------------ 002

SUMP Volume per City of Thousand Oaks Figure 7 -------------------------------------------- 950 CF/Acre

Aproject consists of subarea 5B-1, 5B-2, &5B-3 --------------------------------------------------- 1.16 Acre

Vsump ------------------------------------------------------------------------------------------------- 1.16*950=1103 CF

Assume 48" CMP
Cross Sectional Area=12.57 SF

Length of 48" CMP for Detention = 1103 CF/12.57 SF = 88' < **90'** provided

Per storm drain system master plan:

Subarea 910D $Q_{10}$=1.99 cfs/Ac
$Q_{100}$=3.30 cfs/Ac

5B-1: $Q_{10}$=1.99 cfs/Ac * 0.65 Ac = 1.29 cfs $Q_{100}$=3.30 cfs/Ac * 0.65 Ac = 2.14 cfs

5B-2: $Q_{10}$=1.99 cfs/Ac * 0.39 Ac = 0.77 cfs $Q_{100}$=3.30 cfs/Ac * 0.39 Ac = 1.27 cfs

5B-3: $Q_{10}$=1.99 cfs/Ac * 0.13 Ac = 0.25 cfs $Q_{100}$=3.30 cfs/Ac * 0.13 Ac = 0.42 cfs

# Stormwater Quality Treatment Calculations

## Area 5B-1

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.65 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------- 0.904

I ------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A -------------------------------------------------------------------------------------------------- .117 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.65 Ac = 1.78 cfs x10% = -------------------- **.178 cfs**

**Treatment device used for Area 5B-1: OldCastle BioPod Biofilter Planter**

Although there is some landscape area for the surface flow, there is not enough space for a natural bioswale. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.178 cfs/ .00401 fps = 44 sq. ft. of infiltration area. Therefore, we will use the 4’x13’ BioPod Biofilter Planter, BPP-413-SI model, which provides 52 sf of area.

## Area 5B-2

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.39 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------- 0.765

I ---------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------- .059 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.30 cfs/Ac)/1.2x0.39 Ac = 1.06 cfs x10% = ------------------- **.106 cfs**

**Treatment device used for Area 5B-2: Bioswale**

Vegetated Swale Calculations

n=0.2
s=0.005
b=2'
SQDF=.106 cfs
V=.18 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.18 =76' of swale required < **96'** of bioswale provided

## Area 5B-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.13 Acres

Soil Type ---------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------- 0.950

I ---------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------- .024 cfs

Or use 10% of $Q_{50} = Q_{100}/1.2$ = (3.15 cfs/Ac)/1.2x0.13 Ac = 0.35 cfs x10% = ----------------- **.035 cfs**

**Treatment device used for Area 5B-3: OldCastle Catch Basin Filter**

Area 5B-3 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

# <u>BUILDING 6A</u>

## Detention Calculations

Soil Type ------------------------------------------------------------------------------------------------------------ 002

SUMP Volume per City of Thousand Oaks Figure 7 ------------------------------------------- 950 CF/Acre

Aproject consists of subarea 6A-1, 6A-2, 6A-3, & 6A-4 ------------------------------------------- 2.66 Acre

Vsump ---------------------------------------------------------------------------------------------- 2.66*950=2525 CF

Assume 48” CMP
Cross Sectional Area=12.57 SF

Length of 48” CMP for Detention = 2525 CF/12.57 SF = 200’ < **210’** provided

Per storm drain system master plan:

Subarea 910D $Q_{10}$=1.99 cfs/Ac
$Q_{100}$=3.30 cfs/Ac

6A-1: $Q_{10}$=1.99 cfs/Ac * 0.36 Ac = 0.72 cfs $Q_{100}$=3.30 cfs/Ac * 0.36 Ac = 1.19 cfs

6A-2: $Q_{10}$=1.99 cfs/Ac * 1.55 Ac = 3.08 cfs $Q_{100}$=3.30 cfs/Ac * 1.55 Ac = 5.10 cfs

6A-3: $Q_{10}$=1.99 cfs/Ac * 0.66 Ac = 1.32 cfs $Q_{100}$=3.30 cfs/Ac * 0.66 Ac = 2.19 cfs

6A-4: $Q_{10}$=1.99 cfs/Ac * 0.09 Ac = 0.17 cfs $Q_{100}$=3.30 cfs/Ac * 0.09 Ac = 0.29 cfs

# Stormwater Quality Treatment Calculations

## Area 6A-1

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.36 Acres

Soil Type ------------------------------------------------------------------------------------------------------------ 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ---------------------------------------------------------------------------------------- 0.845

I ------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------- .061 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.36 Ac = 0.99 cfs x10% = -------------------- **.099 cfs**

**Treatment device used for Area 6A-1: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.010

b=3'

SQDF=.099 cfs

V=.20 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.20=84' of swale required = **84'** of bioswale provided

## Area 6A-2

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 1.55 Acres

Soil Type ------------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------- 0.826

I ---------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .255 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x1.55 Ac = 4.25 cfs x10% = -------------------- **.425 cfs**

**Treatment device used for Area 6A-2: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.020

b=3′

SQDF=.425 cfs

V=.41 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.41=172′ of swale required < **276′** of bioswale provided

## Area 6A-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.66 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ----------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.720

I --------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .095 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.66 Ac = 1.82 cfs x10% = -------------------- **.182 cfs**

**Treatment device used for Area 6A-3: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.005

b=3'

SQDF=.281 cfs

V=.19 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.19=80' of swale required < **156'** of bioswale provided

## Area 6A-4

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.09 Acres

Soil Type ------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.850

I ----------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .015 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.09 Ac = 0.24 cfs x10% = -------------------- **.024 cfs**

**Treatment device used for Area 6A-4: OldCastle Catch Basin Filter**

Area 6A-4 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

# <u>BUILDING 6B</u>

## Detention Calculations

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

SUMP Volume per City of Thousand Oaks Figure 7 ------------------------------------------- 950 CF/Acre

Aproject1 consists of subareas 6B-1, 6B-3, & 6B-4 ------------------------------------------------- 4.51 Acre

Vsump1 ----------------------------------------------------------------------------------------------- 4.51*950=4283 CF

Aproject2 consists of subarea 6B-2 ----------------------------------------------------------------- 0.78 Acre

Vsump2 ------------------------------------------------------------------------------------------------- 0.78*950=740 CF

Assume 48" CMP
Cross Sectional Area=12.57 SF

Length of 48" CMP for Detention1 = 4283 CF/12.57 SF = 340' < **350'** provided

Length of 48" CMP for Detention2 = 740 CF/12.57 SF = 59' < **65'** provided

Per storm drain system master plan:

Subarea 910D  $Q_{10}$=1.99 cfs/Ac
$Q_{100}$=3.30 cfs/Ac

6B-1: $Q_{10}$=1.99 cfs/Ac * 4.06 Ac = 8.09 cfs  $Q_{100}$=3.30 cfs/Ac * 4.06 Ac = 13.41 cfs

6B-2: $Q_{10}$=1.99 cfs/Ac * 0.78 Ac = 1.55 cfs  $Q_{100}$=3.30 cfs/Ac * 0.78 Ac = 2.57 cfs

6B-3: $Q_{10}$=1.99 cfs/Ac * 0.33 Ac = 0.66 cfs  $Q_{100}$=3.30 cfs/Ac * 1.09 Ac = 5.44 cfs

6B-4: $Q_{10}$=1.99 cfs/Ac * 0.11 Ac = 0.23 cfs  $Q_{100}$=3.30 cfs/Ac * 0.11 Ac = 0.38 cfs

# Stormwater Quality Treatment Calculations

## Area 6B-1

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 4.06 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.813

I --------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ---------------------------------------------------------------------------------------------------- .661 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x4.06 Ac = 11.18 cfs x10% = ----------------- **1.118 cfs**

**Treatment device used for Area 6B-1: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.005

b=3’

SQDF=1.118 cfs

V=.34 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.34=143’ of swale required < **360’** of bioswale provided

## Area 6B-2

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.78 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 --------------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------ 0.849

I ------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A ------------------------------------------------------------------------------------------------------ .132 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.78 Ac = 2.14 cfs x10% = -------------------- **.214 cfs**

**Treatment device used for Area 6B-2: OldCastle BioPod Biofilter Surface**

Although there is no space for landscape or vegetation to treat the surface flow, there is space for a BioPod surface biofilter, which provides the biological contact needed for water quality without the surface vegetation. BioPod Biofilters use biological contact through proprietary media to achieve an infiltration rate of 1.80 gpm/sf (see attached documentation in Appendix B). 1.80 gpm/ sf is equivalent to .00401 ft/sec.

.214 cfs/ .00401 fps = 53 sq. ft. of infiltration area. Therefore, we will use the 6’x12’ BioPod Biofilter Surface, BPS-612-SI model, which provides 72 sf of area.

# Area 6B-3

**Stormwater Quality Design Flow (SQDF)**

Area ---------------------------------------------------------------------------------------------------------- 0.33 Acres

Soil Type ---------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ------------------------------------------------------------------------------------------------------ 0.1

C=0.95*Imp+Cp(1-Imp) ---------------------------------------------------------------------------------------------- 0.815

I ------------------------------------------------------------------------------------------------------------------------------ 0.2

SQDF=C*I*A ----------------------------------------------------------------------------------------------------- .054 cfs

Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.33 Ac = 0.91 cfs x10% = -------------------- **.091 cfs**

**Treatment device used for Area 6B-3: Bioswale**

Vegetated Swale Calculations

n=0.2

s=0.010

b=2′

SQDF=.091 cfs

V=.21 fps (per attached flow master calculations in Appendix A)

Using 7 minute residence time

L=60*7*.21=88′ of swale required < **90′** of bioswale provided

## Area 6B-4

**Stormwater Quality Design Flow (SQDF)**

Area ------------------------------------------------------------------------------------------------------------ 0.11 Acres

Soil Type ------------------------------------------------------------------------------------------------------------------- 002

Cp for soil type 2 ---------------------------------------------------------------------------------------------------------- 0.1

C=0.95*Imp+Cp(1-Imp) ------------------------------------------------------------------------------------------- 0.818

I ------------------------------------------------------------------------------------------------------------------------------- 0.2

SQDF=C*I*A -------------------------------------------------------------------------------------------------------- .019 cfs

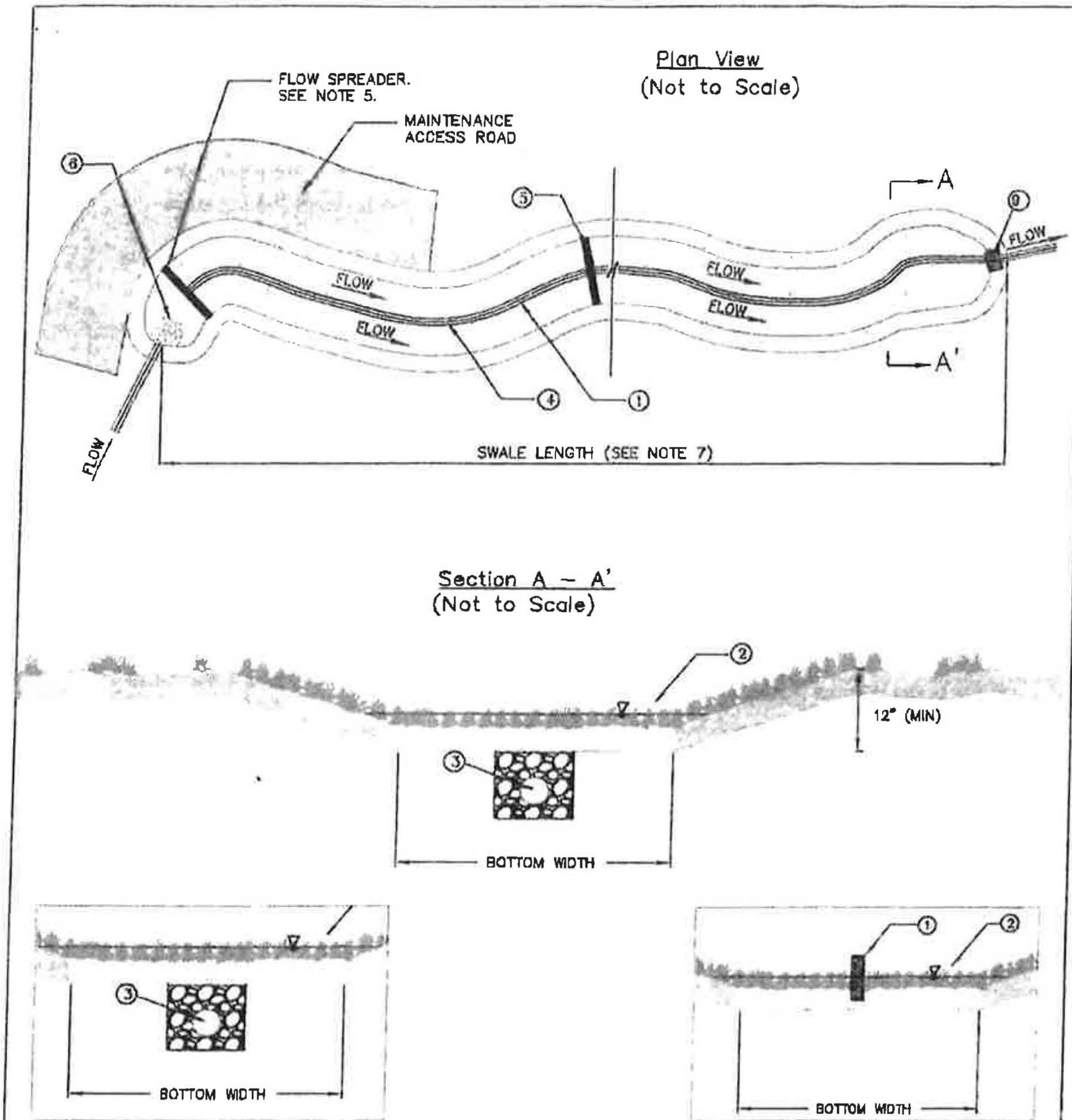
Or use 10% of $Q_{50}$ = $Q_{100}$/1.2 = (3.30 cfs/Ac)/1.2x0.11 Ac = 0.31 cfs x10% = ------------------- **.031 cfs**

**Treatment device used for Area 6B-4: OldCastle Catch Basin Filter**

Area 6B-4 does not have sufficient area for a vegetated swale or a BioPod BioFilter. Because the required flow is a small volume, a catch basin filter will be used to treat the storm water (See Appendix C for spec sheet).

# APPENDIX A

## BIOSWALE CALCULATION WORKSHEETS




NOTES:

1. SWALE DIVIDER REQUIRED FOR BOTTOM WIDTHS > 10'. MINIMUM REQUIRED BOTTOM WIDTH IS 2' EXCLUDING WIDTH OF LOW FLOW CHANNEL. MAXIMUM BOTTOM WIDTH WITH DIVIDER IS 16'.
2. DEPTH OF FLOW FOR WATER QUALITY TREATMENT MUST NOT EXCEED TWO–THIRDS OF VEGETATION HEIGHT OR NOT GREATER THAN 2" FOR FREQUENTLY MOWED TURF.
3. IF AN UNDERDRAIN IS REQUIRED, IT MUST CONSIST OF AN AT LEAST 6" DIAMETER PERFORATED PIPE IN COARSE AGGREGATE BED CONNECTED TO STORM DRAIN. GRAVEL BED MUST EXTEND 6" BELOW AND 12" TO THE SIDE AND TOP OF THE PIPE.
4. IF NO UNDERDRAIN, LOW FLOW DRAIN SHALL EXTEND ENTIRE LENGTH OF SWALE AND SHALL HAVE A DEPTH OF 6" MINIMUM AND WIDTH NO MORE THAN 5% SWALE BOTTOM WIDTH. ANCHORED PLATE FLOW SPREADER IF USED, SHALL HAVE V–NOTCHES (MAX TOP WIDTH = 5% OF SWALE WIDTH) OR HOLES TO ALLOW PREFERENTIAL EXIT OF LOW FLOWS.
5. INSTALL CHECK DAMS OR GRADE CONTROL STRUCTURES FOR SLOPES > 2% AT 50' MAXIMUM SPACING TO ACHIEVE A MAXIMUM EFFECTIVE LONGITUDINAL SLOPE OF 2%. FLOW SPREADERS SHALL BE PROVIDED AT INLET AND AT THE BASE OF EACH CHECK DAM.
6. INSTALL ENERGY DISSIPATOR AT THE INLET OF VEGETATED SWALE.
7. SWALE LENGTH SHALL LENGTH REQUIRED TO PROVIDE 7 MINUTES RESIDENCE TIME.
8. INSTALL APPROPRIATE OUTLET STRUCTURE. ACCOMODATE LOW FLOW CHANNEL AND/OR UNDERDRAIN (IF PRESENT).
9. AMEND SOILS WITH 2" OF COMPOST TILLED INTO 8" OF NATIVE SOIL UNLESS NATIVE SOIL ORGANIC CONTENT > 10%.

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Figure 6-12: Vegetated Swale

# 1A-1 BIOSWALE WORKSHEET

## Project Description

| | | | |
|---|---|---|---|
| Friction Method | Manning Formula | | |
| Solve For | Normal Depth | | |

## Input Data

| | | | |
|---|---|---|---|
| Roughness Coefficient | | 0.200 | |
| Channel Slope | | 0.00900 | ft/ft |
| Left Side Slope | | 2.00 | ft/ft (H:V) |
| Right Side Slope | | 2.00 | ft/ft (H:V) |
| Bottom Width | | 2.00 | ft |
| Discharge | | 0.22 | ft³/s |

## Results

| | | | |
|---|---|---|---|
| Normal Depth | | 0.31 | ft |
| Flow Area | | 0.80 | ft² |
| Wetted Perimeter | | 3.38 | ft |
| Hydraulic Radius | | 0.24 | ft |
| Top Width | | 3.23 | ft |
| Critical Depth | | 0.07 | ft |
| Critical Slope | | 1.47241 | ft/ft |
| Velocity | | 0.27 | ft/s |
| Velocity Head | | 0.00 | ft |
| Specific Energy | | 0.31 | ft |
| Froude Number | | 0.10 | |
| Flow Type | Subcritical | | |

## GVF Input Data

| | | | |
|---|---|---|---|
| Downstream Depth | | 0.00 | ft |
| Length | | 0.00 | ft |
| Number Of Steps | | 0 | |

## GVF Output Data

| | | | |
|---|---|---|---|
| Upstream Depth | | 0.00 | ft |
| Profile Description | | | |
| Profile Headloss | | 0.00 | ft |
| Downstream Velocity | | Infinity | ft/s |
| Upstream Velocity | | Infinity | ft/s |
| Normal Depth | | 0.31 | ft |
| Critical Depth | | 0.07 | ft |
| Channel Slope | | 0.00900 | ft/ft |

# 1B-2 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.01800 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 2.00 | ft |
| Discharge | 0.03 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.08 | ft |
| Flow Area | 0.18 | ft² |
| Wetted Perimeter | 2.37 | ft |
| Hydraulic Radius | 0.08 | ft |
| Top Width | 2.33 | ft |
| Critical Depth | 0.02 | ft |
| Critical Slope | 2.18734 | ft/ft |
| Velocity | 0.18 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.08 | ft |
| Froude Number | 0.11 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.08 | ft |
| Critical Depth | 0.02 | ft |
| Channel Slope | 0.01800 | ft/ft |

# 1D-3 BIOSWALE WORKSHEET

## Project Description

| | | | |
|---|---|---|---|
| Friction Method | Manning Formula | | |
| Solve For | Normal Depth | | |

## Input Data

| | | | |
|---|---|---|---|
| Roughness Coefficient | | 0.200 | |
| Channel Slope | | 0.00500 | ft/ft |
| Left Side Slope | | 2.00 | ft/ft (H:V) |
| Right Side Slope | | 2.00 | ft/ft (H:V) |
| Bottom Width | | 2.00 | ft |
| Discharge | | 0.10 | ft³/s |

## Results

| | | | |
|---|---|---|---|
| Normal Depth | | 0.23 | ft |
| Flow Area | | 0.56 | ft² |
| Wetted Perimeter | | 3.02 | ft |
| Hydraulic Radius | | 0.18 | ft |
| Top Width | | 2.91 | ft |
| Critical Depth | | 0.04 | ft |
| Critical Slope | | 1.73773 | ft/ft |
| Velocity | | 0.17 | ft/s |
| Velocity Head | | 0.00 | ft |
| Specific Energy | | 0.23 | ft |
| Froude Number | | 0.07 | |
| Flow Type | Subcritical | | |

## GVF Input Data

| | | | |
|---|---|---|---|
| Downstream Depth | | 0.00 | ft |
| Length | | 0.00 | ft |
| Number Of Steps | | 0 | |

## GVF Output Data

| | | | |
|---|---|---|---|
| Upstream Depth | | 0.00 | ft |
| Profile Description | | | |
| Profile Headloss | | 0.00 | ft |
| Downstream Velocity | | Infinity | ft/s |
| Upstream Velocity | | Infinity | ft/s |
| Normal Depth | | 0.23 | ft |
| Critical Depth | | 0.04 | ft |
| Channel Slope | | 0.00500 | ft/ft |

# 1G-1 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.00500 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 8.00 | ft |
| Discharge | 0.44 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.26 | ft |
| Flow Area | 2.19 | ft² |
| Wetted Perimeter | 9.15 | ft |
| Hydraulic Radius | 0.24 | ft |
| Top Width | 9.03 | ft |
| Critical Depth | 0.05 | ft |
| Critical Slope | 1.64621 | ft/ft |
| Velocity | 0.20 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.26 | ft |
| Froude Number | 0.07 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.26 | ft |
| Critical Depth | 0.05 | ft |
| Channel Slope | 0.00500 | ft/ft |

# 1G-2 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.02600 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 3.00 | ft |
| Discharge | 0.11 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.12 | ft |
| Flow Area | 0.40 | ft² |
| Wetted Perimeter | 3.55 | ft |
| Hydraulic Radius | 0.11 | ft |
| Top Width | 3.50 | ft |
| Critical Depth | 0.03 | ft |
| Critical Slope | 1.81044 | ft/ft |
| Velocity | 0.28 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.13 | ft |
| Froude Number | 0.15 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.12 | ft |
| Critical Depth | 0.03 | ft |
| Channel Slope | 0.02600 | ft/ft |

# 2-1 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.00500 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 3.00 | ft |
| Discharge | 0.40 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.41 | ft |
| Flow Area | 1.59 | ft² |
| Wetted Perimeter | 4.85 | ft |
| Hydraulic Radius | 0.33 | ft |
| Top Width | 4.66 | ft |
| Critical Depth | 0.08 | ft |
| Critical Slope | 1.39647 | ft/ft |
| Velocity | 0.25 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.42 | ft |
| Froude Number | 0.08 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.41 | ft |
| Critical Depth | 0.08 | ft |
| Channel Slope | 0.00500 | ft/ft |

# 2-2 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.01000 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 3.00 | ft |
| Discharge | 0.08 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.14 | ft |
| Flow Area | 0.45 | ft² |
| Wetted Perimeter | 3.61 | ft |
| Hydraulic Radius | 0.12 | ft |
| Top Width | 3.55 | ft |
| Critical Depth | 0.03 | ft |
| Critical Slope | 1.93031 | ft/ft |
| Velocity | 0.19 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.14 | ft |
| Froude Number | 0.09 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.14 | ft |
| Critical Depth | 0.03 | ft |
| Channel Slope | 0.01000 | ft/ft |

# 2-3 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.01000 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 2.00 | ft |
| Discharge | 0.07 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.16 | ft |
| Flow Area | 0.37 | ft² |
| Wetted Perimeter | 2.72 | ft |
| Hydraulic Radius | 0.14 | ft |
| Top Width | 2.64 | ft |
| Critical Depth | 0.03 | ft |
| Critical Slope | 1.82929 | ft/ft |
| Velocity | 0.20 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.16 | ft |
| Froude Number | 0.09 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.16 | ft |
| Critical Depth | 0.03 | ft |
| Channel Slope | 0.01000 | ft/ft |

# 5A-1 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.00500 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 2.00 | ft |
| Discharge | 0.23 | $ft^3/s$ |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.37 | ft |
| Flow Area | 1.03 | $ft^2$ |
| Wetted Perimeter | 3.67 | ft |
| Hydraulic Radius | 0.28 | ft |
| Top Width | 3.50 | ft |
| Critical Depth | 0.07 | ft |
| Critical Slope | 1.45562 | ft/ft |
| Velocity | 0.22 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.37 | ft |
| Froude Number | 0.07 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.37 | ft |
| Critical Depth | 0.07 | ft |
| Channel Slope | 0.00500 | ft/ft |

# 5A-3 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.00500 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 3.00 | ft |
| Discharge | 0.30 | $ft^3/s$ |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.35 | ft |
| Flow Area | 1.30 | $ft^2$ |
| Wetted Perimeter | 4.57 | ft |
| Hydraulic Radius | 0.28 | ft |
| Top Width | 4.40 | ft |
| Critical Depth | 0.07 | ft |
| Critical Slope | 1.47986 | ft/ft |
| Velocity | 0.23 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.35 | ft |
| Froude Number | 0.07 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.35 | ft |
| Critical Depth | 0.07 | ft |
| Channel Slope | 0.00500 | ft/ft |

# 5A-4 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.00500 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 2.00 | ft |
| Discharge | 0.37 | $ft^3/s$ |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.48 | ft |
| Flow Area | 1.42 | $ft^2$ |
| Wetted Perimeter | 4.15 | ft |
| Hydraulic Radius | 0.34 | ft |
| Top Width | 3.92 | ft |
| Critical Depth | 0.10 | ft |
| Critical Slope | 1.33460 | ft/ft |
| Velocity | 0.26 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.48 | ft |
| Froude Number | 0.08 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.48 | ft |
| Critical Depth | 0.10 | ft |
| Channel Slope | 0.00500 | ft/ft |

# 5A-5 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.00500 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 2.00 | ft |
| Discharge | 0.04 | $ft^3/s$ |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.13 | ft |
| Flow Area | 0.29 | $ft^2$ |
| Wetted Perimeter | 2.58 | ft |
| Hydraulic Radius | 0.11 | ft |
| Top Width | 2.52 | ft |
| Critical Depth | 0.02 | ft |
| Critical Slope | 2.12911 | ft/ft |
| Velocity | 0.12 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.13 | ft |
| Froude Number | 0.06 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.13 | ft |
| Critical Depth | 0.02 | ft |
| Channel Slope | 0.00500 | ft/ft |

# 5B-2 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.00500 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 2.00 | ft |
| Discharge | 0.11 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.24 | ft |
| Flow Area | 0.60 | ft² |
| Wetted Perimeter | 3.08 | ft |
| Hydraulic Radius | 0.19 | ft |
| Top Width | 2.97 | ft |
| Critical Depth | 0.04 | ft |
| Critical Slope | 1.69923 | ft/ft |
| Velocity | 0.18 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.24 | ft |
| Froude Number | 0.07 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.24 | ft |
| Critical Depth | 0.04 | ft |
| Channel Slope | 0.00500 | ft/ft |

# 6A-1 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.01000 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 3.00 | ft |
| Discharge | 0.10 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.15 | ft |
| Flow Area | 0.50 | ft² |
| Wetted Perimeter | 3.68 | ft |
| Hydraulic Radius | 0.14 | ft |
| Top Width | 3.61 | ft |
| Critical Depth | 0.03 | ft |
| Critical Slope | 1.85929 | ft/ft |
| Velocity | 0.20 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.15 | ft |
| Froude Number | 0.09 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.15 | ft |
| Critical Depth | 0.03 | ft |
| Channel Slope | 0.01000 | ft/ft |

# 6A-2 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.02000 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 3.00 | ft |
| Discharge | 0.43 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.29 | ft |
| Flow Area | 1.04 | ft² |
| Wetted Perimeter | 4.30 | ft |
| Hydraulic Radius | 0.24 | ft |
| Top Width | 4.16 | ft |
| Critical Depth | 0.08 | ft |
| Critical Slope | 1.37731 | ft/ft |
| Velocity | 0.41 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.29 | ft |
| Froude Number | 0.14 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.29 | ft |
| Critical Depth | 0.08 | ft |
| Channel Slope | 0.02000 | ft/ft |

# 6A-3 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.00500 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 3.00 | ft |
| Discharge | 0.18 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.27 | ft |
| Flow Area | 0.94 | ft² |
| Wetted Perimeter | 4.19 | ft |
| Hydraulic Radius | 0.22 | ft |
| Top Width | 4.06 | ft |
| Critical Depth | 0.05 | ft |
| Critical Slope | 1.63588 | ft/ft |
| Velocity | 0.19 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.27 | ft |
| Froude Number | 0.07 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.27 | ft |
| Critical Depth | 0.05 | ft |
| Channel Slope | 0.00500 | ft/ft |

# 6B-1 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.00500 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 3.00 | ft |
| Discharge | 1.12 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.73 | ft |
| Flow Area | 3.28 | ft² |
| Wetted Perimeter | 6.28 | ft |
| Hydraulic Radius | 0.52 | ft |
| Top Width | 5.94 | ft |
| Critical Depth | 0.16 | ft |
| Critical Slope | 1.14442 | ft/ft |
| Velocity | 0.34 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.74 | ft |
| Froude Number | 0.08 | |
| Flow Type | Subcritical | |

## GVF Input Data

| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.73 | ft |
| Critical Depth | 0.16 | ft |
| Channel Slope | 0.00500 | ft/ft |

# 6B-3 BIOSWALE WORKSHEET

## Project Description

| | |
|---|---|
| Friction Method | Manning Formula |
| Solve For | Normal Depth |

## Input Data

| | | |
|---|---|---|
| Roughness Coefficient | 0.200 | |
| Channel Slope | 0.01000 | ft/ft |
| Left Side Slope | 2.00 | ft/ft (H:V) |
| Right Side Slope | 2.00 | ft/ft (H:V) |
| Bottom Width | 2.00 | ft |
| Discharge | 0.09 | ft³/s |

## Results

| | | |
|---|---|---|
| Normal Depth | 0.18 | ft |
| Flow Area | 0.43 | ft² |
| Wetted Perimeter | 2.81 | ft |
| Hydraulic Radius | 0.15 | ft |
| Top Width | 2.73 | ft |
| Critical Depth | 0.04 | ft |
| Critical Slope | 1.75304 | ft/ft |
| Velocity | 0.21 | ft/s |
| Velocity Head | 0.00 | ft |
| Specific Energy | 0.18 | ft |
| Froude Number | 0.09 | |
| Flow Type | Subcritical | |

## GVF Input Data

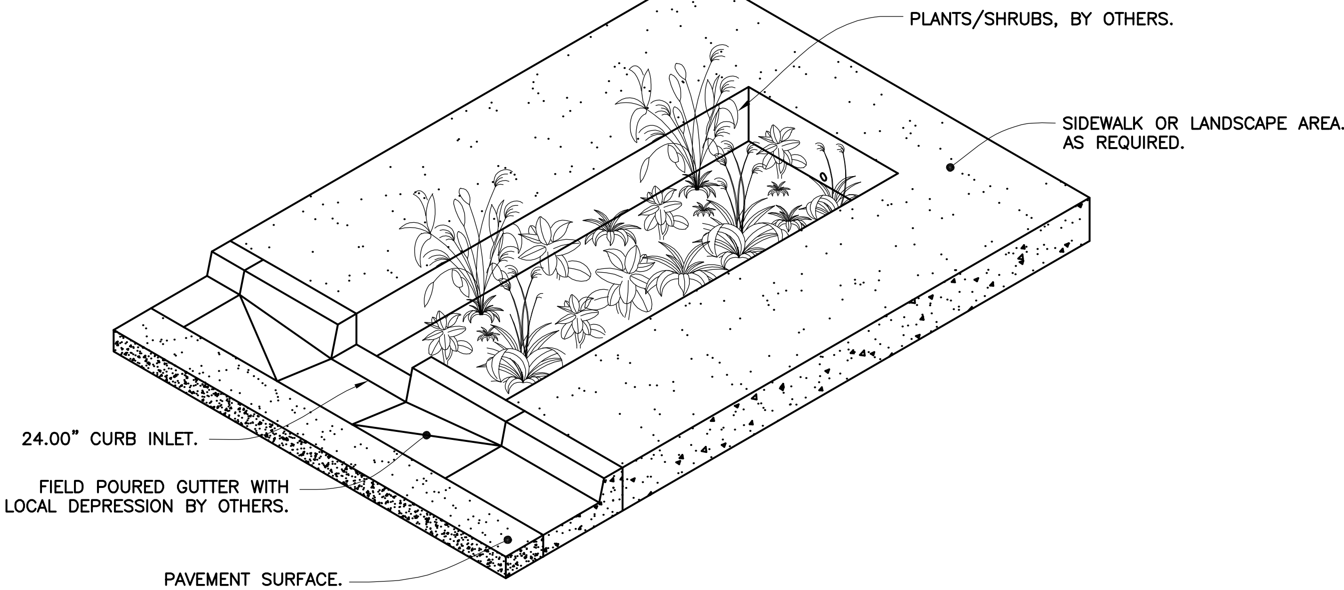
| | | |
|---|---|---|
| Downstream Depth | 0.00 | ft |
| Length | 0.00 | ft |
| Number Of Steps | 0 | |

## GVF Output Data

| | | |
|---|---|---|
| Upstream Depth | 0.00 | ft |
| Profile Description | | |
| Profile Headloss | 0.00 | ft |
| Downstream Velocity | Infinity | ft/s |
| Upstream Velocity | Infinity | ft/s |
| Normal Depth | 0.18 | ft |
| Critical Depth | 0.04 | ft |
| Channel Slope | 0.01000 | ft/ft |

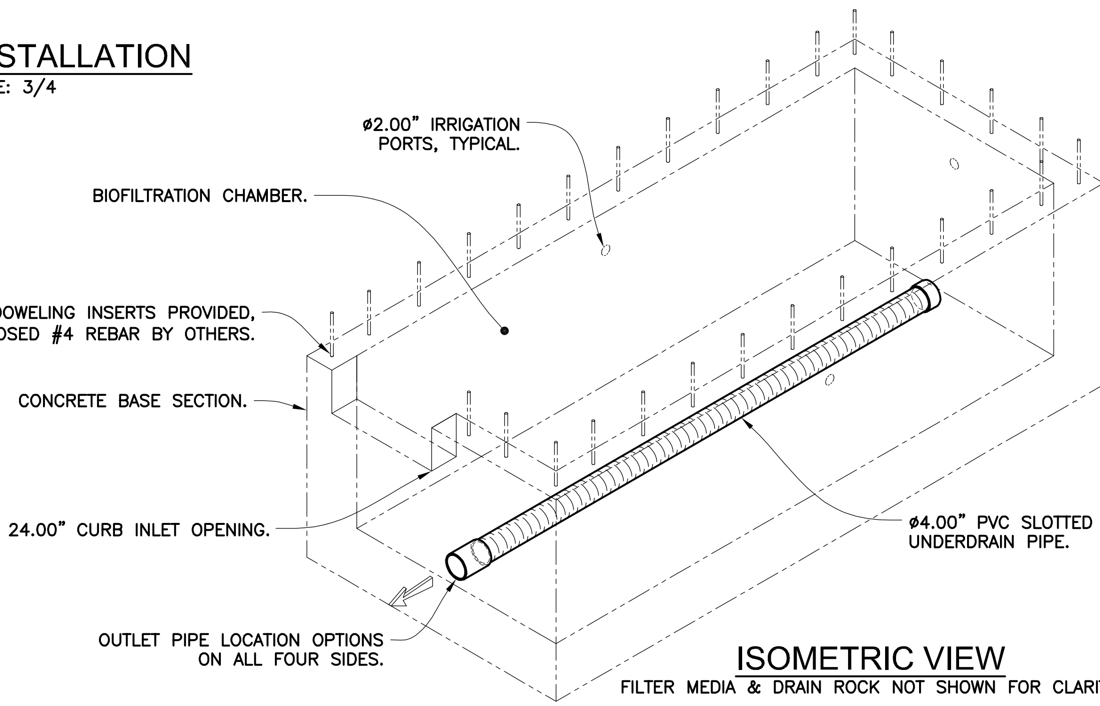
# APPENDIX B

## BIOPOD BIOFILTER SPECIFICATIONS




## TYPICAL INSTALLATION

SCALE: 3/4




## ISOMETRIC VIEW

FILTER MEDIA & DRAIN ROCK NOT SHOWN FOR CLARITY.

NOTES:

1. RIGHT CONFIGURATION SHOWN, MIRROR LEFT CONFIGURATION ARE AVAILABLE TO ACCOMMODATE OTHER OUTLET PIPE LOCATIONS.
2. SEPARATE BYPASS STRUCTURE IS REQUIRED IF PEAK FLOW RATE EXCEEDS TREATMENT CAPACITY OF THE BioPod™.
3. CONTACT OLDCASTLE® INFRASTRUCTURE FOR ENGINEERING ASSISTANCE AND DETAIL DRAWINGS.
4. CONCRETE COMPONENTS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C890 & C913.

US Patents Pending

Bioretention/
Biofiltration

# *BioPod™ Biofilter Planter* - *SoCal Sizing*

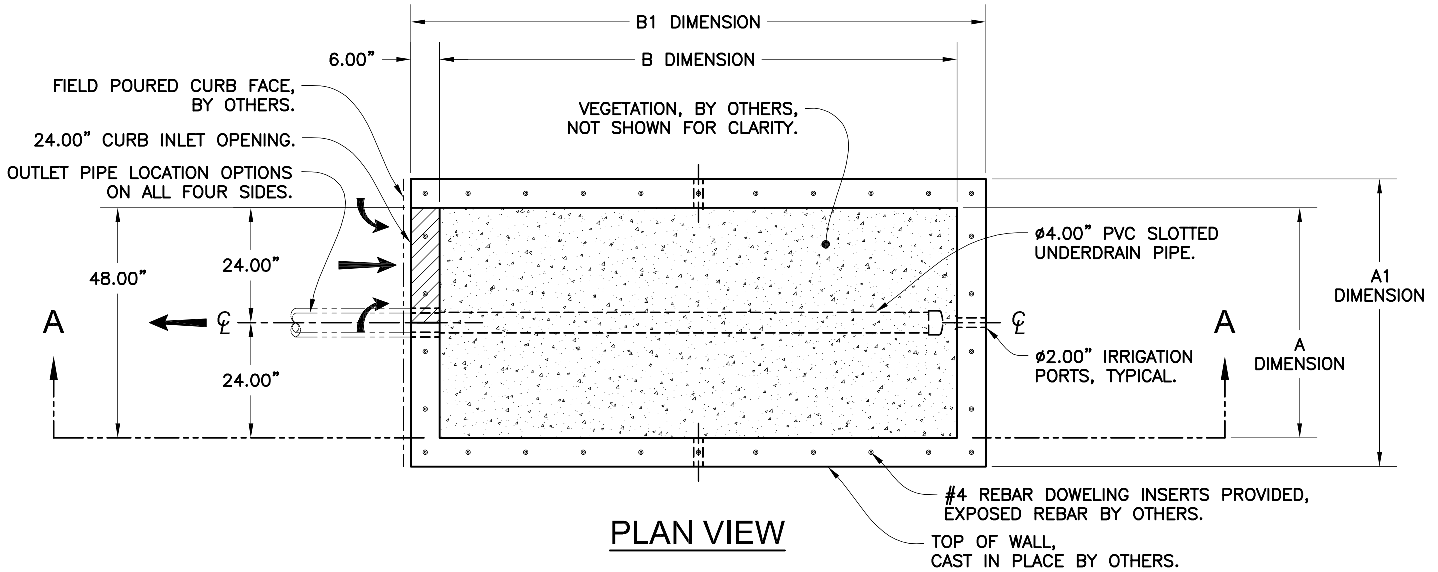
*End Inlet & External Bypass*

Oldcastle®
INFRASTRUCTURE

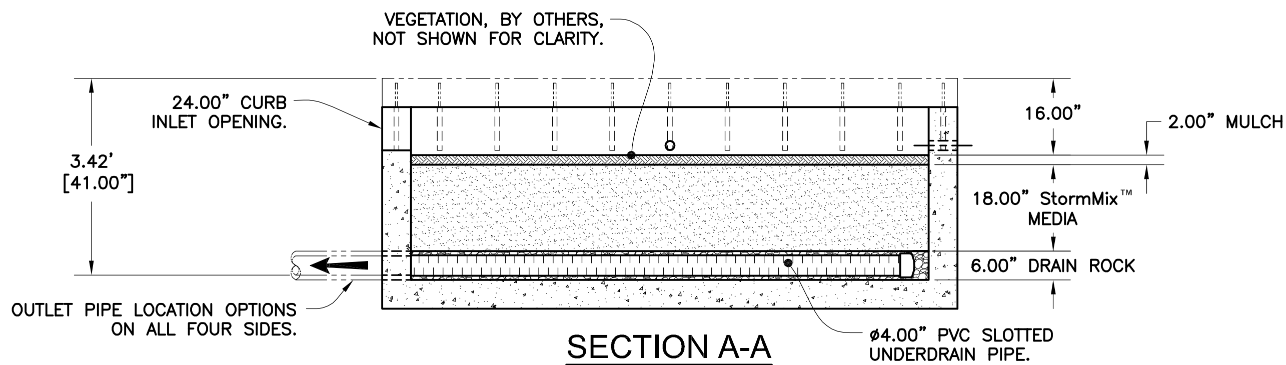
Ph: 800.579.8819 | oldcastlestormwater.com



| DRAWING NO. | REV | ECO | DATE | |
|---|---|---|---|---|
| BPP-EI-SoCal | A | ECO-0155 JPR 10/4/18 | JPR 6/12/18 | SHEET 1 OF 2 |




PLAN VIEW




SECTION A-A

| MODEL | VAULT SIZE [1] (ID) | | VAULT FOOTPRINT [1] (OD) | | TREATMENT FLOW CAPACITY [2] (GPM/CFS) | TREATMENT FLOW CAPACITY [3] (GPM/CFS) |
|---|---|---|---|---|---|---|
| | A DIM | B DIM | A1 DIM | B1 DIM | | |
| BPP-44-EI | 4' | 4' | 5' | 5' | 25.6 / 0.057 | 28.8 / 0.064 |
| BPP-46.5-EI | 4' | 6.5' | 5' | 7.5' | 38.4 / 0.086 | 43.2 / 0.096 |
| BPP-48-EI | 4' | 8' | 5' | 9' | 51.2 / 0.114 | 57.6 / 0.128 |
| BPP-413-EI | 4' | 13' | 5' | 14' | 83.2 / 0.185 | 93.6 / 0.209 |
| BPP-415-EI | 4' | 15' | 5' | 16' | 96.0 / 0.214 | 108.0 / 0.241 |
| BPP-417-EI | 4' | 17' | 5' | 18' | 108.8 / 0.242 | 122.4 / 0.273 |
| BPP-419-EI | 4' | 19' | 5' | 20' | 121.6 / 0.271 | 136.8 / 0.305 |
| BPP-421-EI | 4' | 21' | 5' | 22' | 134.4 / 0.299 | 151.2 / 0.337 |
| BPP-66-EI | 6' | 6' | 7' | 7' | 57.6 / 0.128 | 64.8 / 0.144 |
| BPP-68-EI | 6' | 8' | 7' | 9' | 76.8 / 0.171 | 86.4 / 0.193 |
| BPP-612-EI | 6' | 12' | 7' | 13' | 115.2 / 0.257 | 129.6 / 0.289 |
| BPP-88-EI | 8' | 8' | 9' | 9' | 102.4 / 0.228 | 115.2 / 0.257 |
| BPP-812-EI | 8' | 12' | 9' | 13' | 153.6 / 0.342 | 172.8 / 0.385 |
| BPP-816-EI | 8' | 16' | 9' | 17' | 204.8 / 0.456 | 230.4 / 0.513 |

[1] All Dimensions Are Nominal
[2] Based on an WA Ecology GULD Approval for Basic, Enhanced & Phosphorus. At 1.60 gpm/sf Media Surface Area.
[3] Based on an NJCAT Verification & NJ DEP Certification. At 1.80 gpm/sf Media Surface Area.

US Patents Pending

Bioretention/ Biofiltration

***BioPod™ Biofilter Planter*** *- SoCal Sizing*

*End Inlet & External Bypass*

Oldcastle® INFRASTRUCTURE

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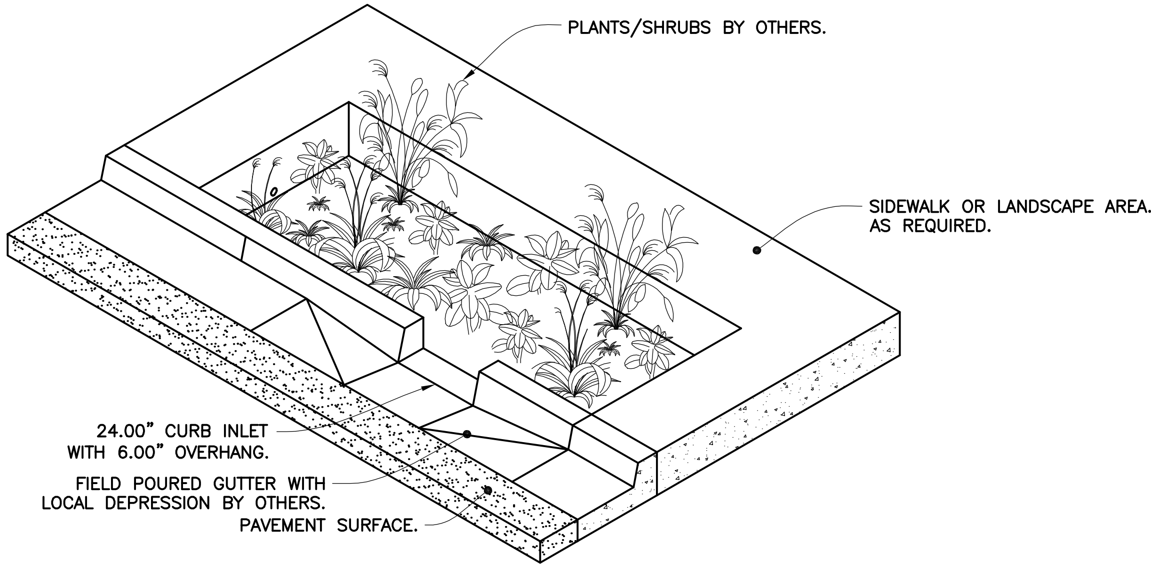
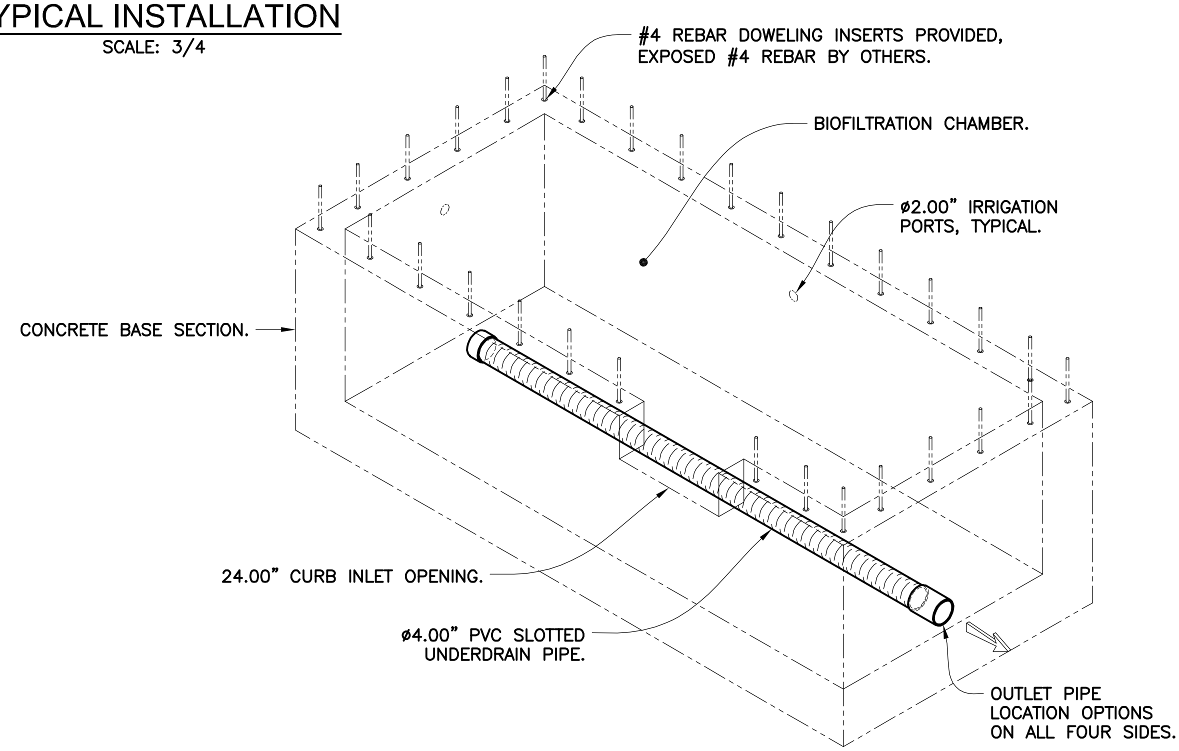
| DRAWING NO. | REV | ECO | DATE | |
|---|---|---|---|---|
| BPP-EI-SoCal | A | ECO-0155 JPR 10/4/18 | JPR 6/12/18 | SHEET 2 OF 2 |




## TYPICAL INSTALLATION
SCALE: 3/4




## ISOMETRIC VIEW
FILTER MEDIA & DRAIN ROCK NOT SHOWN FOR CLARITY.

NOTES:

1. RIGHT CONFIGURATION SHOWN, MIRROR LEFT CONFIGURATION ARE AVAILABLE TO ACCOMMODATE OTHER OUTLET PIPE LOCATIONS.
2. SEPARATE BYPASS STRUCTURE IS REQUIRED IF PEAK FLOW RATE EXCEEDS TREATMENT CAPACITY OF THE BioPod™.
3. CONTACT OLDCASTLE® INFRASTRUCTURE FOR ENGINEERING ASSISTANCE AND DETAIL DRAWINGS.
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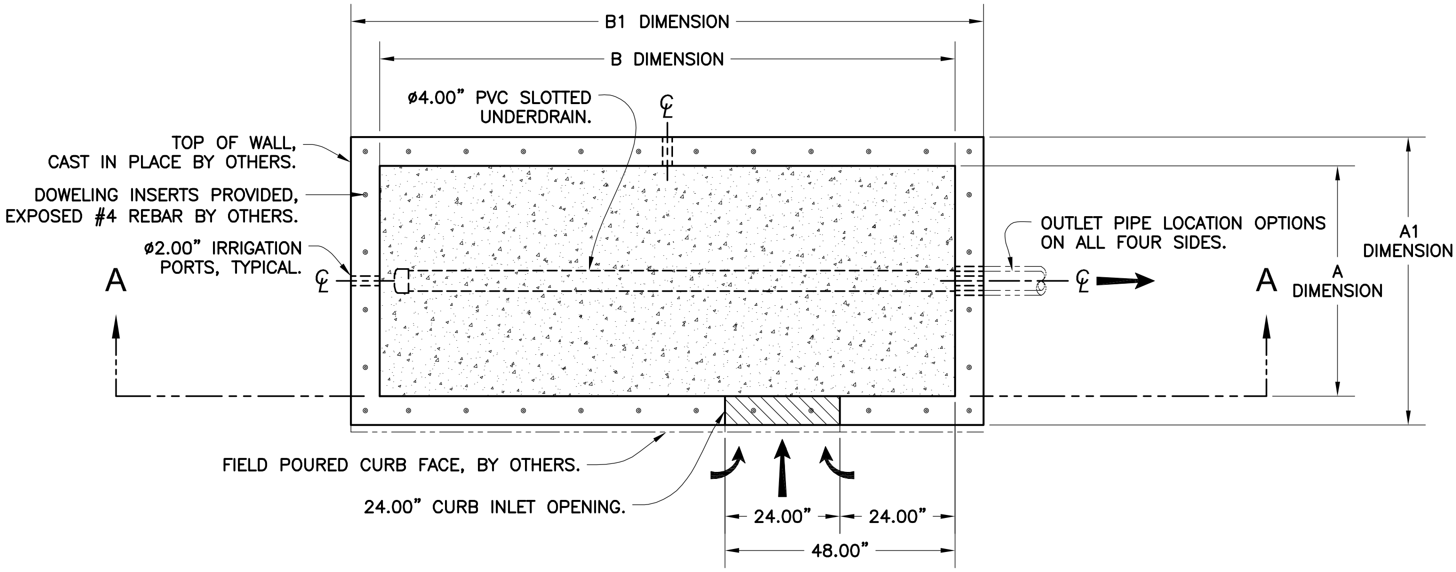
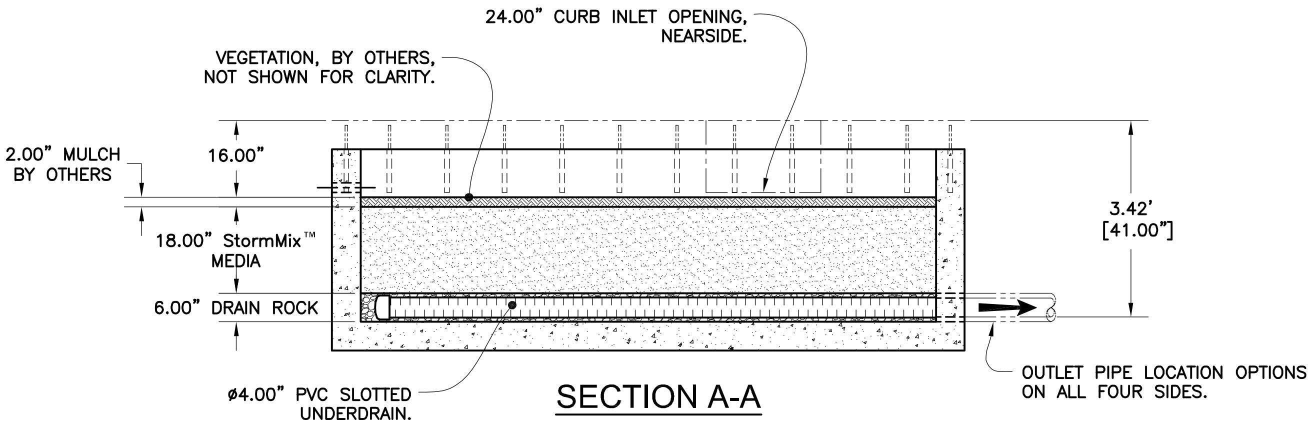



## PLAN VIEW




## SECTION A-A

| MODEL | VAULT SIZE [1] (ID) | | VAULT FOOTPRINT [1] (OD) | | TREATMENT FLOW CAPACITY [2] (GPM/CFS) | TREATMENT FLOW CAPACITY [3] (GPM/CFS) |
|---|---|---|---|---|---|---|
| | A DIM | B DIM | A1 DIM | B1 DIM | | |
| BPP-44-SI | 4' | 4' | 5' | 5' | 25.6 / 0.057 | 28.8 / 0.064 |
| BPP-46-SI | 4' | 6.5' | 5' | 7.5' | 38.4 / 0.086 | 43.2 / 0.096 |
| BPP-48-SI | 4' | 8' | 5' | 9' | 51.2 / 0.114 | 57.6 / 0.128 |
| BPP-413-SI | 4' | 13' | 5' | 14' | 83.2 / 0.185 | 93.6 / 0.209 |
| BPP-415-SI | 4' | 15' | 5' | 16' | 96.0 / 0.214 | 108.0 / 0.241 |
| BPP-417-SI | 4' | 17' | 5' | 18' | 108.8 / 0.242 | 122.4 / 0.273 |
| BPP-419-SI | 4' | 19' | 5' | 20' | 121.6 / 0.271 | 136.8 / 0.305 |
| BPP-421-SI | 4' | 21' | 5' | 22' | 134.4 / 0.299 | 151.2 / 0.337 |
| BPP-66-SI | 6' | 6' | 7' | 7' | 57.6 / 0.128 | 64.8 / 0.144 |
| BPP-68-SI | 6' | 8' | 7' | 9' | 76.8 / 0.171 | 86.4 / 0.193 |
| BPP-612-SI | 6' | 12' | 7' | 13' | 115.2 / 0.257 | 129.6 / 0.289 |
| BPP-88-SI | 8' | 8' | 9' | 9' | 102.4 / 0.228 | 115.2 / 0.257 |
| BPP-812-SI | 8' | 12' | 9' | 13' | 153.6 / 0.342 | 172.8 / 0.385 |
| BPP-816-SI | 8' | 16' | 9' | 17' | 204.8 / 0.456 | 230.4 / 0.513 |

[1] All Dimensions Are Nominal
[2] Based on an WA Ecology GULD Approval for Basic, Enhanced & Phosphorus. At 1.60 gpm/sf Media Surface Area.
[3] Based on an NJCAT Verification & NJ DEP Certification. At 1.80 gpm/sf Media Surface Area.

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## Side Inlet & External Bypass

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| DRAWING NO. | REV | ECO | DATE | |
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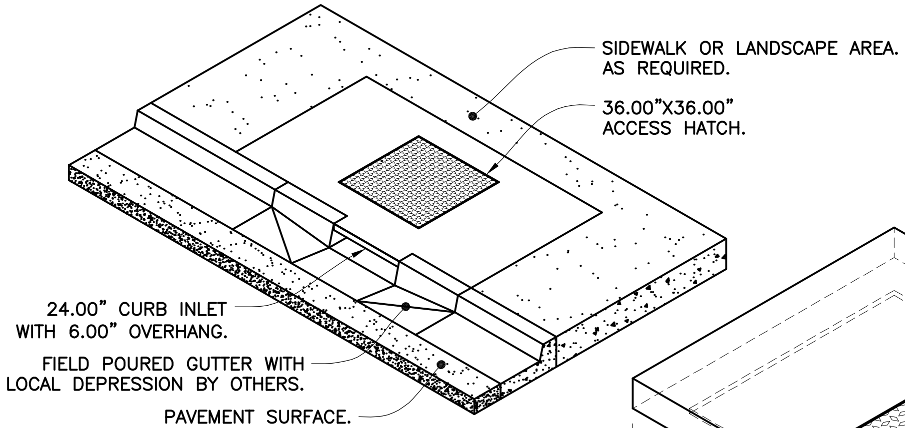
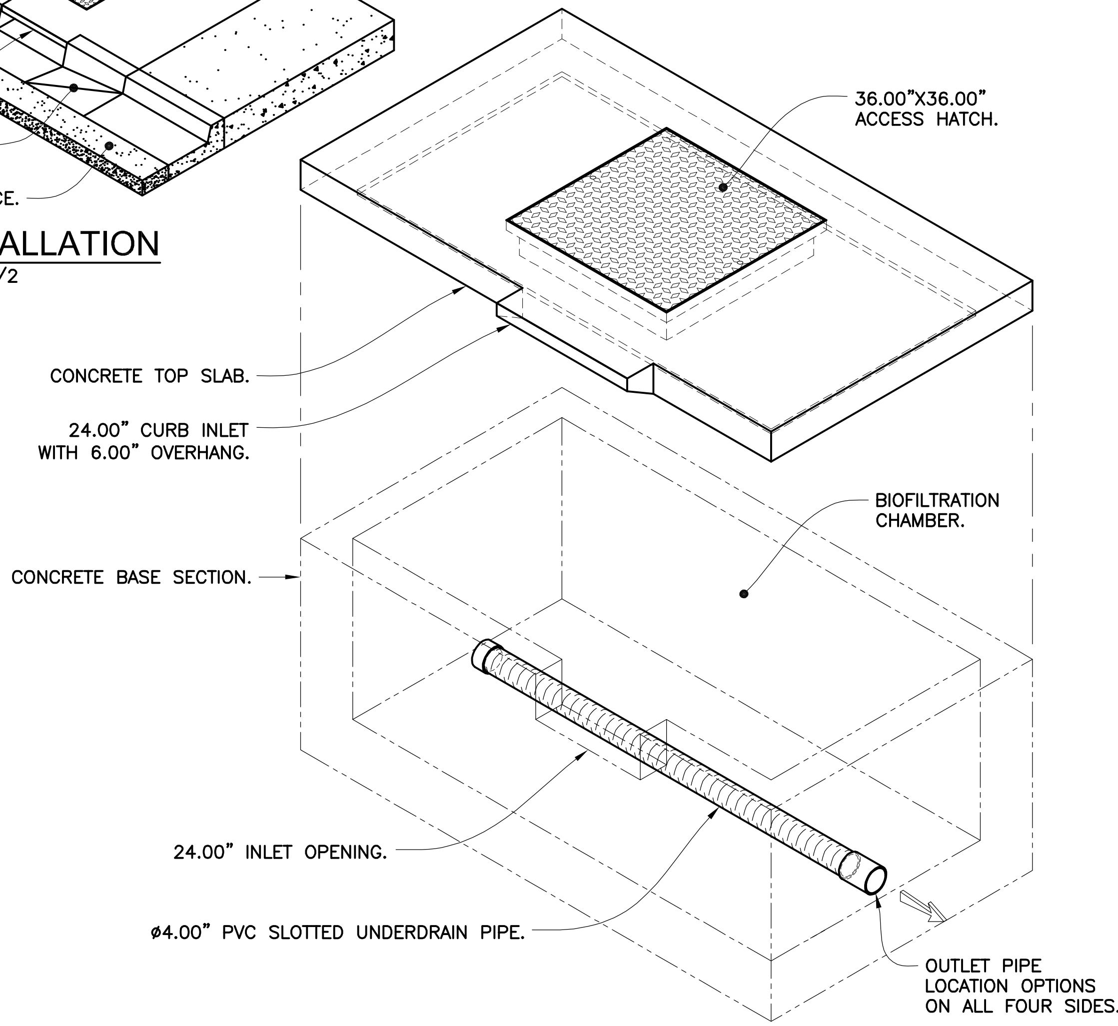
| BPP-SI-SoCal | A | ECO-0155 JPR 10/4/18 | JPR 6/12/18 | SHEET 2 OF 2 |




## TYPICAL INSTALLATION

SCALE: 1/2




## ISOMETRIC VIEW

FILTER MEDIA & DRAIN ROCK NOT SHOWN FOR CLARITY.

NOTES:

1. RIGHT CONFIGURATION SHOWN, MIRROR LEFT CONFIGURATION ARE AVAILABLE TO ACCOMMODATE OTHER OUTLET PIPE LOCATIONS.
2. SEPARATE BYPASS STRUCTURE IS REQUIRED IF PEAK FLOW RATE EXCEEDS TREATMENT CAPACITY OF THE BioPod™.
3. DIAMOND PLATE ACCESS HATCH STANDARD, SLIP RESISTANT OPTION AVAILABLE.
4. CONTACT OLDCASTLE® INFRASTRUCTURE FOR ENGINEERING ASSISTANCE AND DETAIL DRAWINGS.
5. CONCRETE COMPONENTS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C890 & C913.

US Patents Pending

Bioretention/
Biofiltration

# *BioPod™ Biofilter Surface - SoCal Sizing*

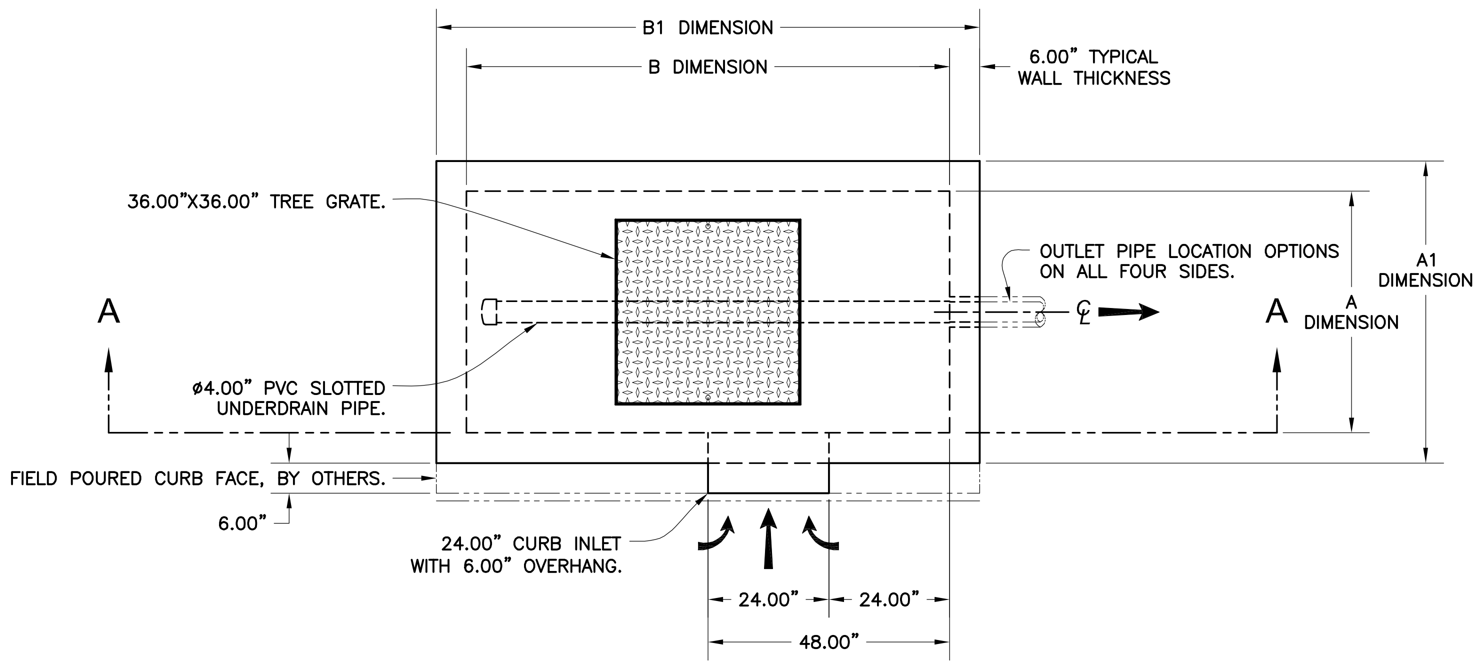
*Side Inlet & External Bypass*

Oldcastle®
INFRASTRUCTURE

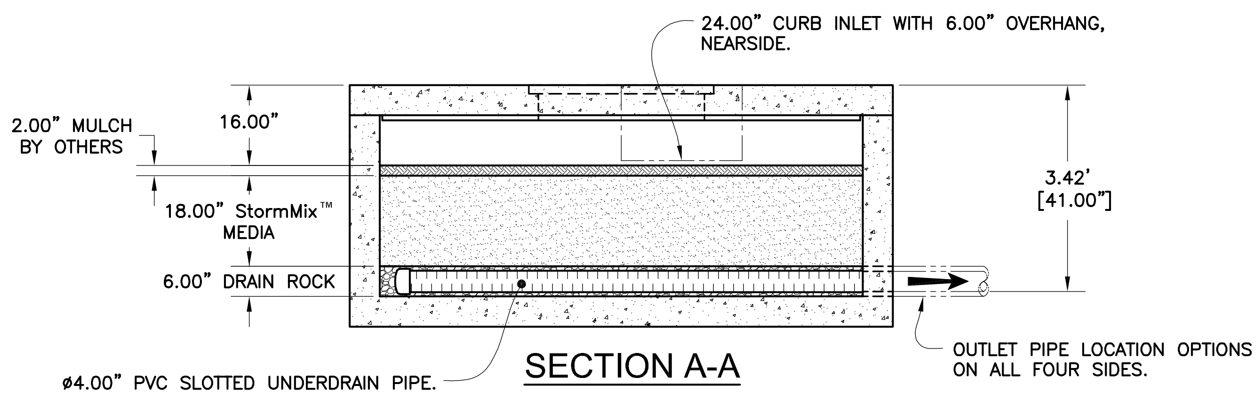
Ph: 800.579.8819 | oldcastlestormwater.com



| DRAWING NO. | REV | ECO | DATE | |
|---|---|---|---|---|
| BPS-SI-SoCal | NR | ECO-0149 NEW 10/4/18 | JPR 6/12/18 | SHEET 1 OF 2 |




PLAN VIEW




SECTION A-A

| MODEL | VAULT SIZE [1] (ID) | | VAULT FOOTPRINT [1] (OD) | | TREATMENT FLOW CAPACITY [2] (GPM/CFS) | TREATMENT FLOW CAPACITY [3] (GPM/CFS) |
|---|---|---|---|---|---|---|
| | A DIM | B DIM | A1 DIM | B1 DIM | | |
| BPS-44-SI | 4' | 4' | 5' | 5' | 25.6 / 0.057 | 28.8 / 0.064 |
| BPS-46.5-SI | 4' | 6.5' | 5' | 7.5' | 38.4 / 0.086 | 43.2 / 0.096 |
| BPS-48-SI | 4' | 8' | 5' | 9' | 51.2 / 0.114 | 57.6 / 0.128 |
| BPS-413-SI | 4' | 13' | 5' | 14' | 83.2 / 0.185 | 93.6 / 0.209 |
| BPS-66-SI | 6' | 6' | 7' | 7' | 57.6 / 0.128 | 64.8 / 0.144 |
| BPS-68-SI | 6' | 8' | 7' | 9' | 76.8 / 0.171 | 86.4 / 0.193 |
| BPS-612-SI | 6' | 12' | 7' | 13' | 115.2 / 0.257 | 129.6 / 0.289 |
| BPS-88-SI | 8' | 8' | 9' | 9' | 102.4 / 0.228 | 115.2 / 0.257 |
| BPS-812-SI | 8' | 12' | 9' | 13' | 153.6 / 0.342 | 172.8 / 0.385 |
| BPS-816-SI | 8' | 13' | 9' | 14' | 166.4 / 0.371 | 187.2 / 0.417 |

[1] All Dimensions Are Nominal
[2] Based on an WA Ecology GULD Approval for Basic, Enhanced & Phosphorus.
At 1.60 gpm/sf Media Surface Area.
[3] Based on an NJCAT Verification & NJ DEP Certification. At 1.80 gpm/sf Media Surface Area.

US Patents Pending

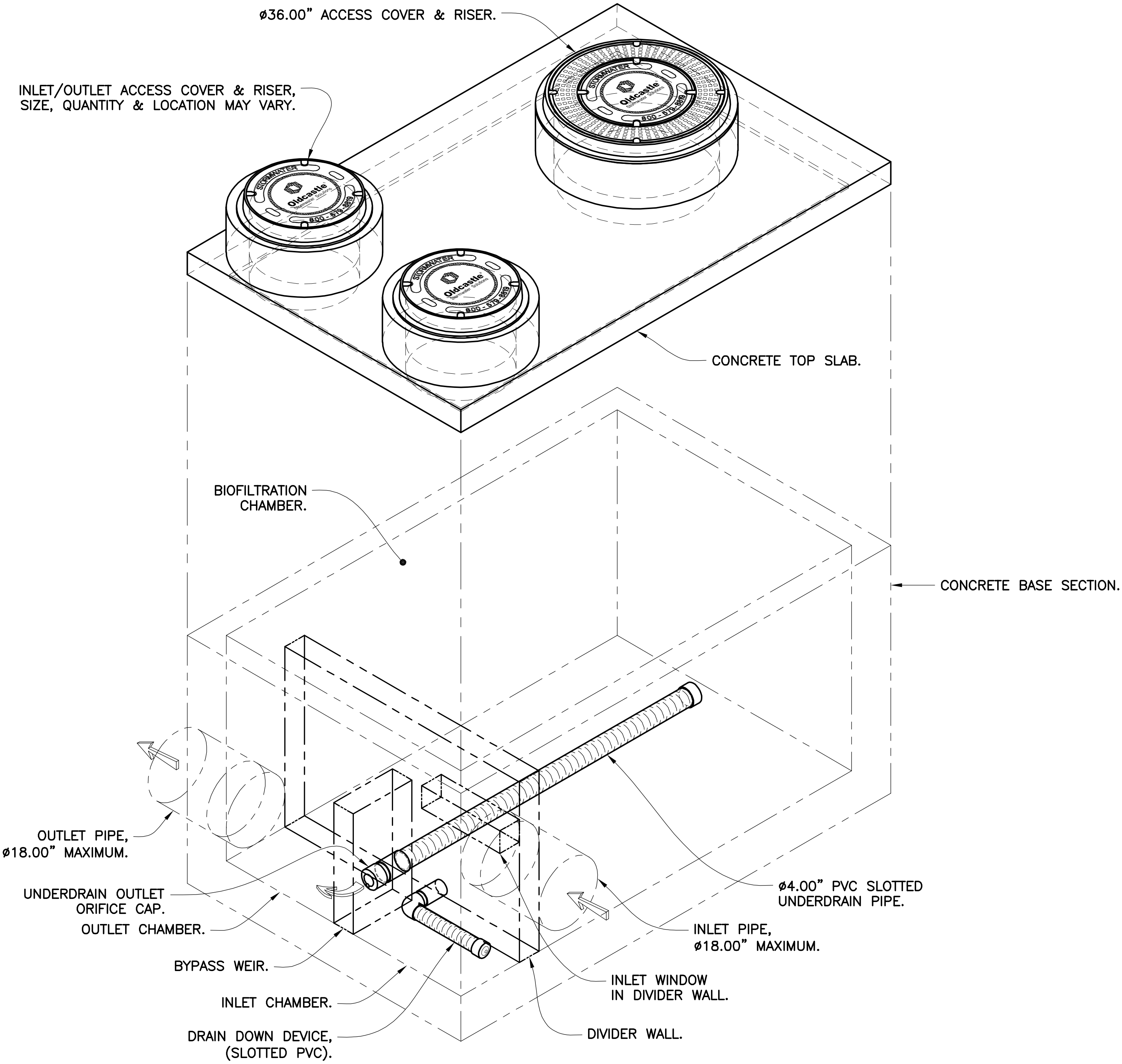
Bioretention/ Biofiltration

***BioPod™ Biofilter Surface*** *- SoCal Sizing*
*Side Inlet & External Bypass*

Oldcastle® INFRASTRUCTURE
Ph: 800.579.8819 | oldcastlestormwater.com



| DRAWING NO. | REV | ECO | DATE | |
|---|---|---|---|---|
| BPS-SI-SoCal | NR | ECO-0149 NEW 10/4/18 | JPR 6/12/18 | SHEET 2 OF 2 |




## ISOMETRIC VIEW

FILTER MEDIA & DRAIN ROCK NOT SHOWN FOR CLARITY.
SCALE: 1X

NOTES:

1. CONTACT OLDCASTLE STORMWATER FOR ENGINEERING ASSISTANCE AND DETAIL DRAWINGS.
2. CONCRETE COMPONENTS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C890 & C913.

US Patents Pending

Bioretention/
Biofiltration

# BioPod™ Biofilter

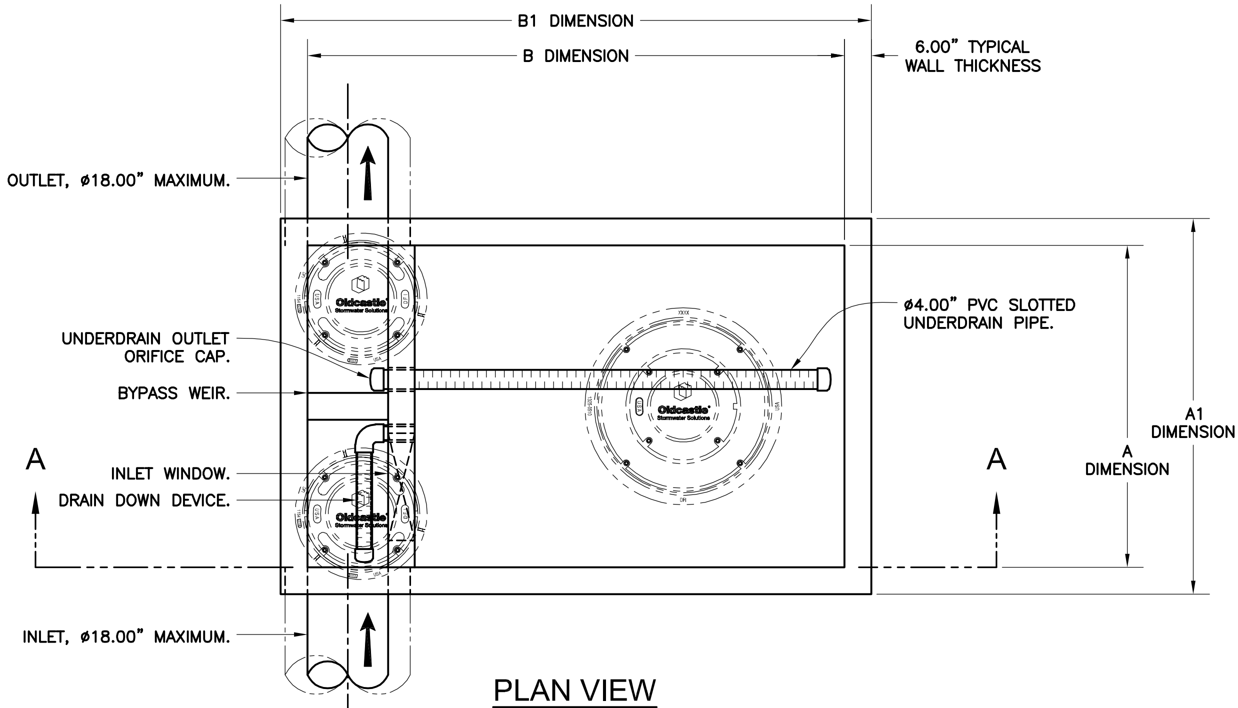
## Underground - SoCal Sizing
## Vault with Internal Bypass

Oldcastle® INFRASTRUCTURE

Ph: 800.579.8819 | oldcastlestormwater.com

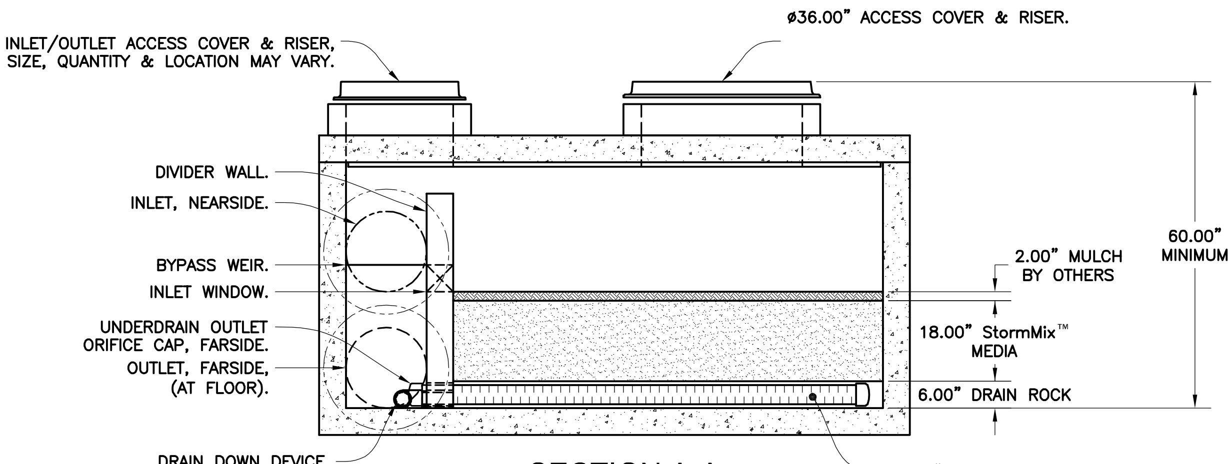


| DRAWING NO. | REV | ECO | DATE | |
|---|---|---|---|---|
| BPU-IB-SoCal | NA | ECO−0156 NEW 10/4/18 | JPR 10/4/18 | SHEET 1 OF 2 |




PLAN VIEW

TOP SLAB NOT SHOWN IN THIS VIEW FOR CLARITY, ACCESS COVERS SHOWN IN PHANTOM.




SECTION A-A

| MODEL | VAULT SIZE [1] (ID) | | VAULT FOOTPRINT [1] (OD) | | TREATMENT FLOW CAPACITY [2] (GPM/CFS) | TREATMENT FLOW CAPACITY [3] (GPM/CFS) |
|---|---|---|---|---|---|---|
| | A DIM | B DIM | A1 DIM | B1 DIM | | |
| BPU-46.5 | 4' | 6.5' | 5' | 7.5' | 28.8 / 0.064 | 32.4 / 0.072 |
| BPU-48 | 4' | 8' | 5' | 9' | 38.4 / 0.086 | 43.2 / 0.096 |
| BPU-413 | 4' | 13' | 5' | 14' | 70.4 / 0.157 | 79.2 / 0.176 |
| BPU-66 | 6' | 6' | 7' | 7' | 38.4 / 0.086 | 43.2 / 0.096 |
| BPU-68 | 6' | 8' | 7' | 9' | 57.6 / 0.128 | 64.8 / 0.144 |
| BPU-612 | 6' | 12' | 7' | 13' | 96.0 / 0.214 | 108.0 / 0.241 |
| BPU-88 | 8' | 8' | 9' | 9' | 76.8 / 0.171 | 86.4 / 0.193 |
| BPU-812 | 8' | 12' | 9' | 13' | 128.0 / 0.285 | 144.0 / 0.321 |
| BPU-816 | 8' | 16' | 9' | 14' | 179.2 / 0.399 | 201.6 / 0.449 |

[1] All Dimensions Are Nominal
[2] Based on an WA Ecology GULD Approval for Basic, Enhanced & Phosphorus. At 1.60 gpm/sf Media Surface Area.
[3] Based on an NJCAT Verification & NJ DEP Certification. At 1.80 gpm/sf Media Surface Area.

US Patents Pending

Bioretention/ Biofiltration

# BioPod™ Biofilter

## Underground - SoCal Sizing

## Vault with Internal Bypass

Oldcastle® INFRASTRUCTURE

Ph: 800.579.8819 | oldcastlestormwater.com

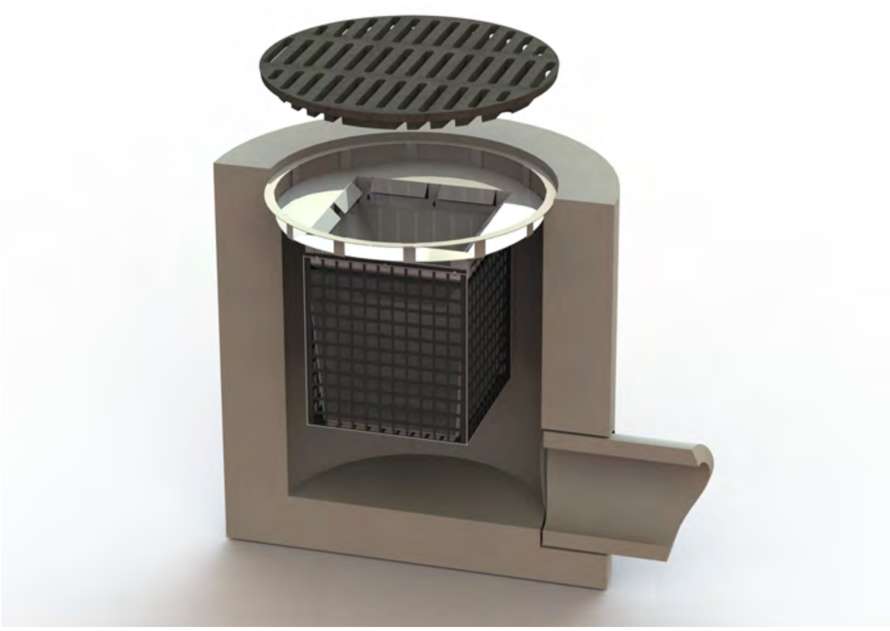


| DRAWING NO. | REV | ECO | DATE | |
|---|---|---|---|---|
| BPU-IB-SoCal | NR | ECO–0156 NEW 10/4/18 | JPR 10/4/18 | SHEET 1 OF 2 |

# APPENDIX C
## CATCH BASIN FILTER SPECIFICATIONS

# FLOGARD+PLUS®
## Catch Basin Insert Filter

SUBMITTAL PACKAGE



**Oldcastle Precast - Stormwater**
(800) 579-8819
OldcastleStormwater.com

Oldcastle Precast®

Stormwater

# TABLE OF CONTENTS

# SECTION 1

## FEATURES & BENEFITS

# FLOGARD® CATCH BASIN INSERT FILTER

*Removes Pollutants from Runoff Prior to Entering Waterways*

**Efficient System**
Catches pollutants where they are easiest to catch, at the inlet.

**Variable Design**
Able to be retrofitted or used in new projects.

**Treatment Train**
Can be incorporated as part of a "Treatment Train".

**No Standing Water**
Helps to minimize bacteria and odor problems.

**Focused Treatment**
Removes petroleum hydrocarbons, trash and Total Suspended Solids (TSS).

**Maximum Flexibility**
Available in a variety of standard sizes to fit round and square inlets.

**Economical**
Earn a higher return on system investment.

*Two-part stainless-steel insert to filter solids and oils/grease*

*Easy to install, inspect and maintain, even on small and confined sites*

**By the Numbers*:**

Filter will remove up to 80% of Total Suspended Solids (TSS), at least 70% of oils and grease, and up to 40% of Total Phosphorus (TP) associated with organic debris as well as Polycyclic Aromatic Hydrocarbons (PAH) from oil leaks and spills.

**Approx. for urban street application*

## Catch Basin Filter Test Results Summary

| Testing Agency | % TSS Removal | % Oil & Grease Removal | % PAH Removal |
|---|---|---|---|
| UCLA | 80 | 70 to 80 | |
| U of Auckland Tonking & Taylor, Ltd. (for City of Auckland) | 78 to 95 | | |
| U of Hawaii (for City of Honolulu) | 80 | | 20 to 40 |



INLET FILTRATION

# Multi-Purpose Catch Basin Insert Retains Sediment, Debris, Trash and Oils/Grease

FloGard® Catch Basin Insert Filters are recommended for areas subject to silt and debris as well as low-to-moderate levels of petroleum hydrocarbons (oils and grease). Examples of such areas include vehicle parking lots, aircraft ramps, truck and bus storage yards, business parks, residential and public streets.

## Catch Basin Filter Competitive Feature Comparison

| Evaluation of Catch Basin Filters (Based on flow-comparable units) (Scale 1-10) | Oldcastle Stormwater | Other Insert Filter Types** |
|---|---|---|
| Flow Rate | 10 | 7 |
| Removal Efficiency* | 80% | 45% |
| Capacity - Sludge & Oil | 7 | 7 |
| Service Life | 10 | 3 |
| Installation - Ease of Handling / Installation | 8 | 6 |
| Ease of Inspections & Maintenance | 7 | 7 |
| Value | 10 | 2 |

*approximate, based on field sediment removal testing in urban street application **average

| Long-Term Value Comparison (Based on flow-comparable units) (Scale 1-10) | Oldcastle Stormwater | Other Insert Filter Types |
|---|---|---|
| Unit Value - Initial ($/cfs treated) | 10 | 4 |
| Installation Value ($/cfs treated) | 10 | 7 |
| Absorbent Replacement (annual avg ($/cfs treated) | 10 | 2 |
| Materials Replacement Value (annual avg ($/cfs treated) | 10 | 10 |
| Maintenance Value (annual avg ($/cfs treated) | 10 | 7 |
| Total First Year ROI ($/cfs treated) | 10 | 5 |
| Total Annual Avg Value ($/cfs treated, avg over 20 yrs)* | 10 | 5 |

Combination Inlet

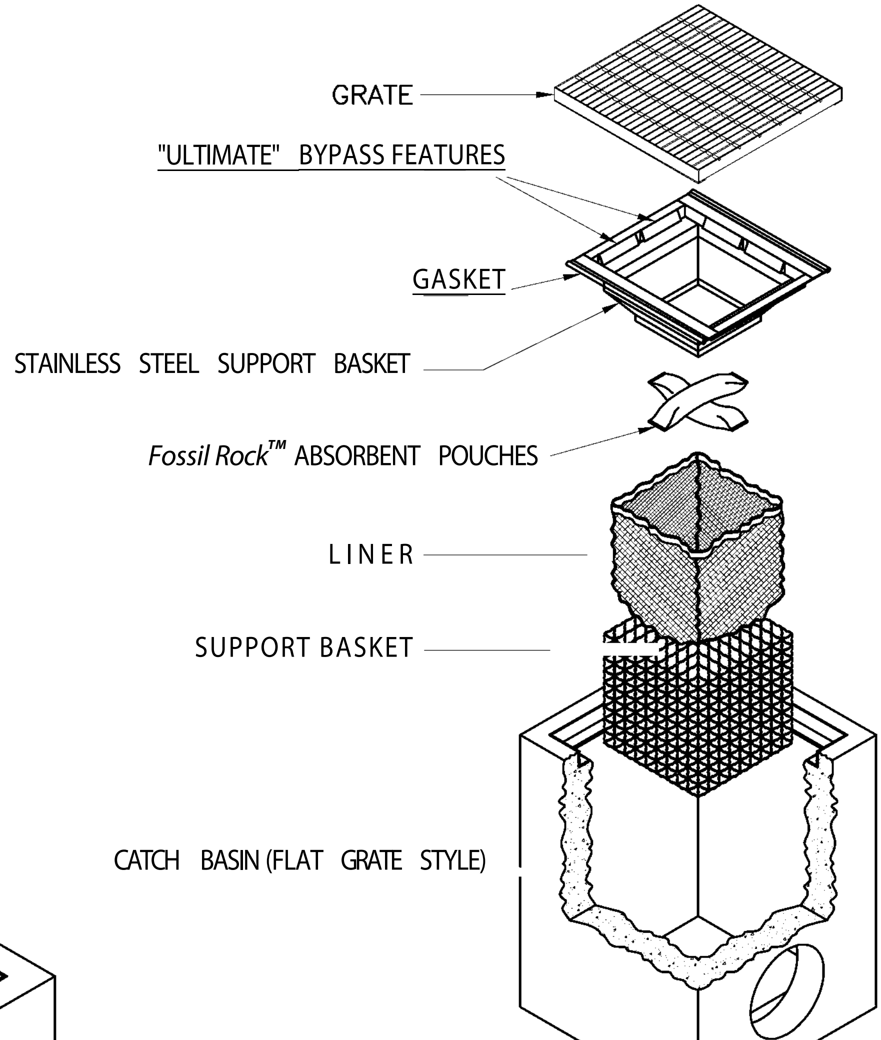
Flat-Grated Inlet

Captured debris from FloGard Catch Basin Insert Filter in Dana Point, California

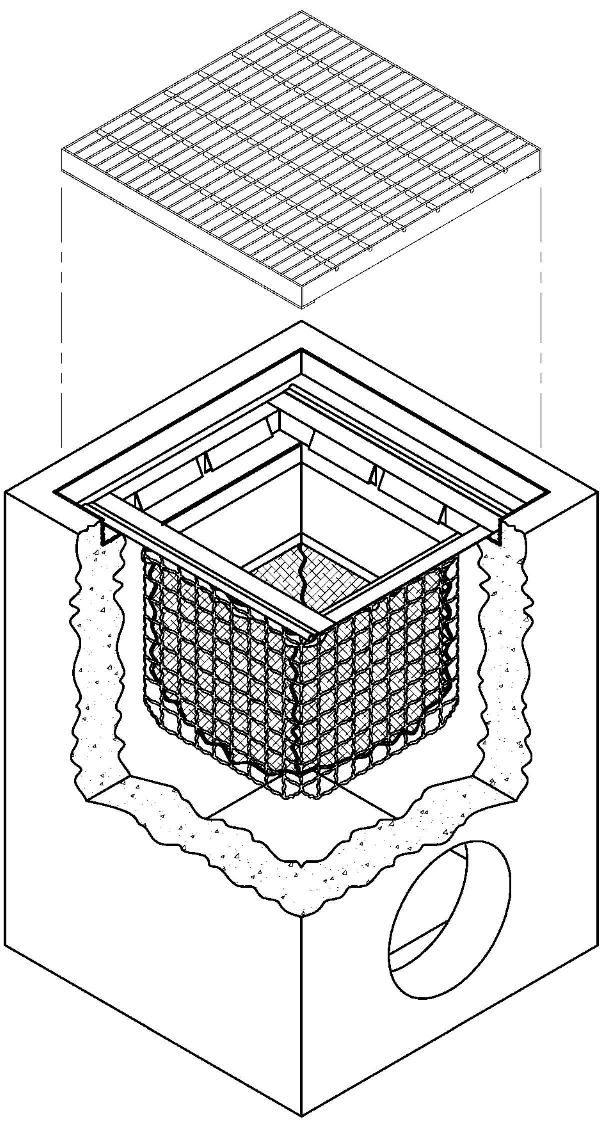
Circular Frame Catch Basin

# SECTION 2

# ACCESSORIES




DETAIL A
EXPLODED VIEW



FloGard® FILTER
-INSTALLED INTO CATCH BASIN-

NOTES:

1. Filter insert shall have a high flow bypass feature.

2. Filter support frame shall be constructed from stainless steel Type 304.

3. Filter medium shall be *Fossil Rock* installed and maintained in accordance with manufacturer specifications.

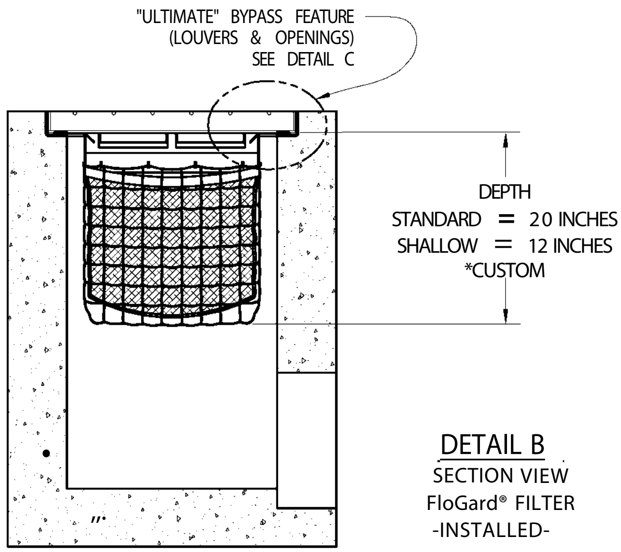
4. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.

U.S. PATENT# 6,00,023 & 6,877,029

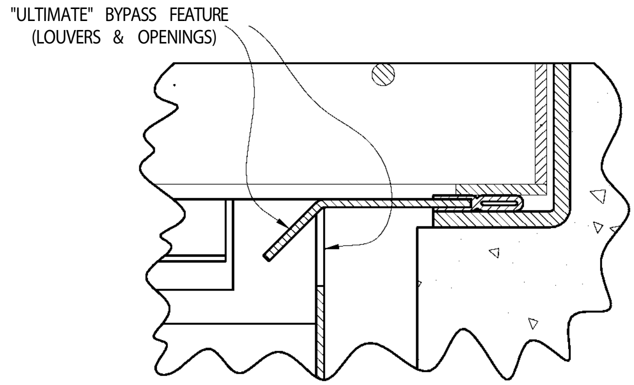
# SECTION 3

# PRODUCT SPECIFICATIONS

U.S. PATENT# 6,00,023 & 6,877,029




DETAIL B
SECTION VIEW
FloGard® FILTER
-INSTALLED-




DETAIL C
"ULTIMATE" BYPASS
FEATURE

* **MANY** OTHER STANDARD & CUSTOM SIZES & DEPTHS AVAILABLE UPON REQUEST.

## SPECIFIER CHART

| MODEL NO. STANDARD DEPTH | STANDARD & SHALLOW DEPTH | | | STANDARD DEPTH -20 Inches- | | MODEL NO. SHALLOW DEPTH | SHALLOW DEPTH -12 Inches- | |
|---|---|---|---|---|---|---|---|---|
| | INLET ID Inside Dimension (inch x inch) | GRATE OD Outside Dimension (inch x inch) | TOTAL BYPASS CAPACITY (cu. ft./ sec.) | SOLIDS STORAGE CAPACITY (cu. ft.) | FILTERED FLOW (cu. ft./ sec.) | | SOLIDS STORAGE CAPACITY (cu. ft.) | FILTERED FLOW (cu. ft./ sec.) |
| FGP-12F | 12 X 12 | 12X 14 | **2.8** | 0.3 | 0.4 | FGP-12F8 | .15 | .25 |
| FGP-16F | 16X 16 | 16X 19 | 4.7 | 0.8 | 0.7 | FGP-16F8 | .45 | .4 |
| FGP-18F | 18X 18 | 18X20 | 4.7 | 0.8 | 0.7 | FGP-18F8 | .45 | .4 |
| FGP-1824F | **16X22** | **18X24** | 5.0 | 1.5 | 1.2 | FGP-1824F8 | .85 | .7 |
| FGP-1836F | 18X36 | 18X40 | 6.9 | 2.3 | 1.6 | FGP-1836F8 | 1.3 | .9 |
| FGP-2024F | **18X22** | **20X24** | 5.9 | 1.2 | 1.0 | FGP-2024F8 | .7 | .55 |
| FGP-21F | **22X22** | **22X24** | 6.1 | **2.2** | 1.5 | FGP-21F8 | 1.25 | .85 |
| FGP-24F | **24X24** | **24X27** | 6.1 | **2.2** | 1.5 | FGP-24F8 | 1.25 | .85 |
| FGP-2430F | **24X30** | **26X30** | 7.0 | **2.8** | 1.8 | FGP-2430F8 | 1.6 | 1.05 |
| FGP-2436F | **24X36** | **24X40** | 8.0 | **3.4** | 2.0 | FGP-2436F8 | 1.95 | 1.15 |
| FGP-2448F | **24X48** | **26X48** | 9.3 | 4.4 | **2.4** | FGP-2448F8 | 2.5 | 1.35 |
| FGP-28F | **28X28** | **32X32** | 6.3 | **2.2** | 1.5 | FGP-28F8 | 1.25 | **.85** |
| FGP-30F | 30X30 | 30X34 | 8.1 | 3.6 | 2.0 | FGP-30F8 | 2.05 | 1.15 |
| FGP-36F | **36X36** | 36X40 | 9.1 | 4.6 | 2.4 | FGP-36F8 | 2.65 | 1.35 |
| FGP-3648F | **36X48** | **40X48** | 11.5 | 6.8 | **3.2** | FGP-3648F8 | 3.9 | 1.85 |
| FGP-48F | **48X48** | **48X54** | 13.2 | 9.5 | 3.9 | FGP-48F8 | 5.45 | **2.25** |
| FGP-SD24F | **24X24** | **28X28** | 6.1 | **2.2** | 1.5 | FGP-SD24F8 | 1.25 | .85 |

Oldcastle®

# Measurement Chart for FloGard Inserts
## (Square/Rectangular Flat Grated Inlets)

**THE FOLLOWING MEASUREMENTS ARE REQUIRED TO PLACE AN ORDER**

## CONTACT INFORMATION

| CONTACT DETAILS | | |
|---|---|---|
| | Company: | |
| | Job Name: | |
| | Job Address: | City/State/Zip: |
| | Contact Name: | |
| | Email: | Phone: |

## INLET, FRAME & GRATE INFORMATION

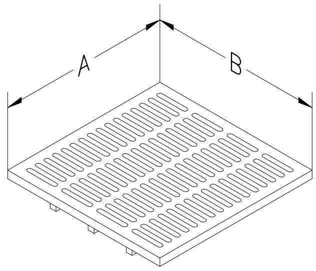
| TYPE | | |
|---|---|---|
| | Inlet Type (e.g. PA Type M): | Grate MFG/Model (e.g. Neenah R-2060): |
| | Frame Model #: | Grate Type (Check One): ☐ Cast Iron ☐ Steel |

## PLEASE PROVIDE MEASUREMENTS WITHIN 1/8" TO GUARANTEE ACCURATE INSTALLATION*

**Grate**

A ________ Grate outside dimensions

B ________ Grate outside dimensions



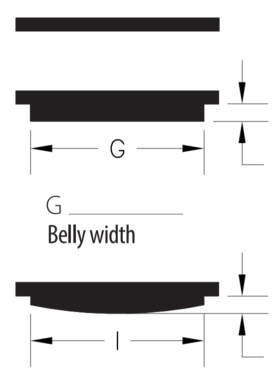

**Grate type (pick one):**

Flat ☐

Square belly ☐

Round belly ☐

**Grate section**



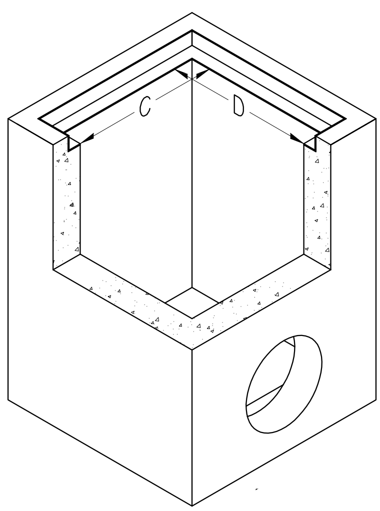

G ________ Belly width

H ________ Belly depth

I ________ Belly width

J ________ Belly depth

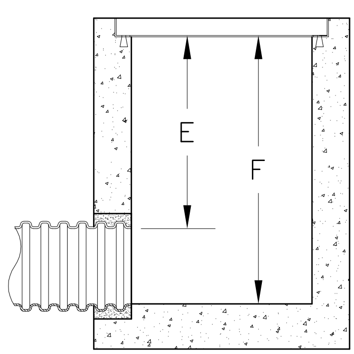
**Catch Basin**




C ________ Frame clear opening or wall to wall inside the catch basin, whichever is less

D ________ Frame clear opening or wall to wall inside the catch basin, whichever is less

**Section through Catch Basin**




E ________ Bottom of frame to top of outlet pipe

F ________ Bottom of frame to floor of catch basin

**Inlet Pipes?**

Do you have inlet pipes? Y ☐ N ☐ If yes, bottom of grate to top of pipe ________ Pipe inside diameter ________ Need to be filtered? Y ☐ N ☐

**Notes:** If any obstructions or protrusions exist within the catch basin, please provide photos and accurate measurements to ensure proper installation. Submittal of this form represents that the customer acknowledges that all details provided are accurate, and that any issues resulting from inaccurate information herein are the responsibility of said customer. *** Use second page for additional catch basins.**


*Please email completed forms to contactstormwater@oldcastle.com*

*www.oldcastlestormwater.com Phone: (800) 579-8819*

Oldcastle®

# Measurement Chart for FloGard Inserts
## (Square/Rectangular Flat Grated Inlets)

**THE FOLLOWING MEASUREMENTS ARE REQUIRED TO PLACE AN ORDER**

**PLEASE PROVIDE MEASUREMENTS WITHIN 1/8" TO GUARANTEE ACCURATE INSTALLATION**

A - Grate outside dimensions
B - Grate outside dimensions
C - Frame clear opening or wall to wall inside the catch basin, whichever is less
D - Frame clear opening or wall to wall inside the catch basin, whichever is less
E - Measure from bottom of frame to top of outlet pipe
F - Bottom of frame to floor of catch basin
* If grate has "belly" please include measurements for G & H or I & J, depending on belly style.

| Quantity/ Drain # | Grate outside dimensions | | Frame clear opening or wall to wall inside the catch basin | | Bottom of frame to top of pipe | Bottom of frame to floor of catch basin | Square belly grate: Square belly width | Square belly grate: Square belly depth | Round belly grate: Round belly width | Round belly grate: Round belly depth |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | I | J |
| | | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |

**NOTES:**

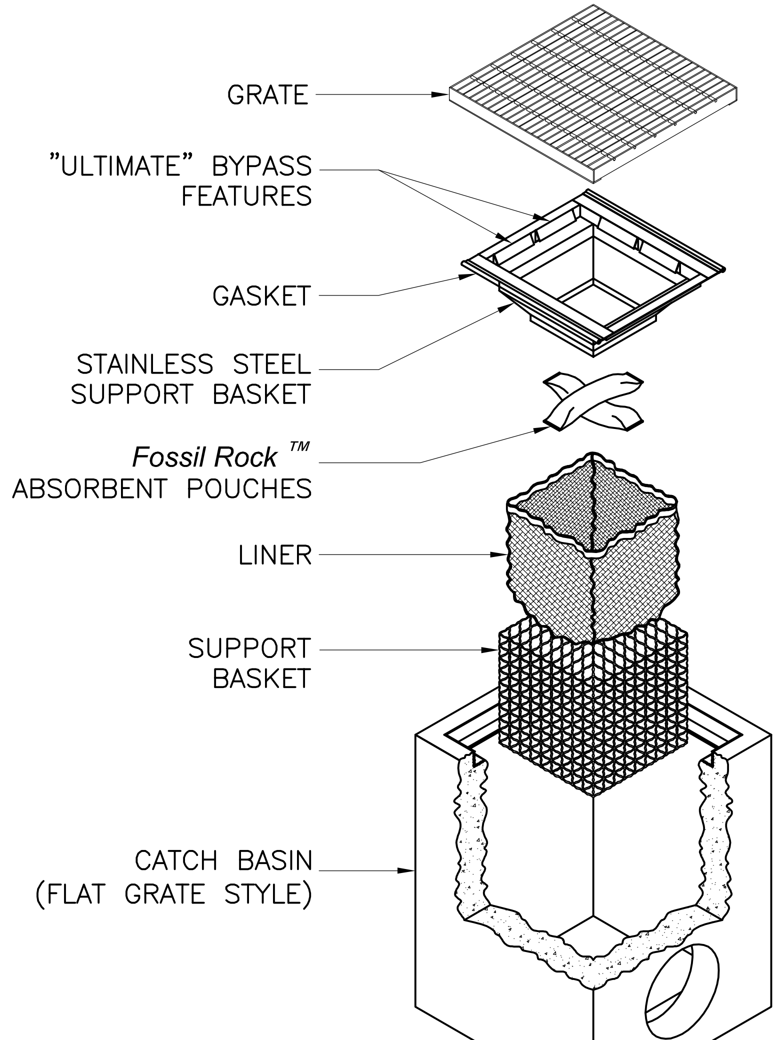
**Notes:** If any obstructions or protrusions exist within the catch basin, please provide photos and accurate measurements to ensure proper installation. Submittal of this form represents that the customer acknowledges that all details provided are accurate, and that any issues resulting from inaccurate information herein are the responsibility of said customer.

# FLOGARD+PLUS®
## Catch Basin Insert Filter

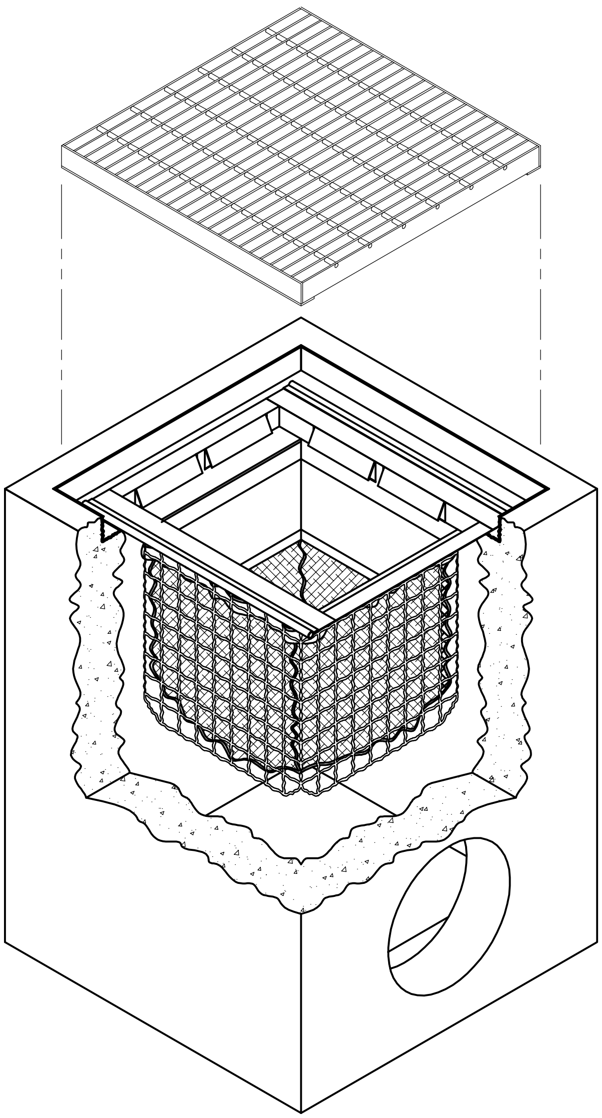
DRAINAGE PROTECTION SYSTEMS

DPS

FGP-0001




**DETAIL A**
EXPLODED VIEW



FloGard® FILTER
-INSTALLED INTO CATCH BASIN-

NOTES:

1. Filter insert shall have a high flow bypass feature.

2. Filter support frame shall be constructed from stainless steel Type 304.

3. Filter medium shall be *Fossil Rock* ™, installed and maintained in accordance with manufacturer specifications.

4. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.

U.S. PATENT # 6,00,023 & 6,877,029

Inlet Filtration

# *FloGard®*

## *Catch Basin Insert Filter*

## *Grated Inlet Style*

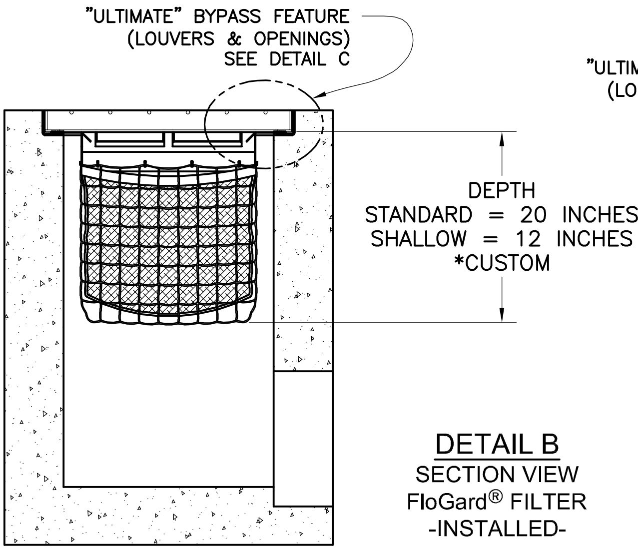
Oldcastle® Stormwater Solutions

7921 Southpark Plaza, Suite 200 | Littleton, CO | 80120 | Ph: 800.579.8819 | oldcastlestormwater.com

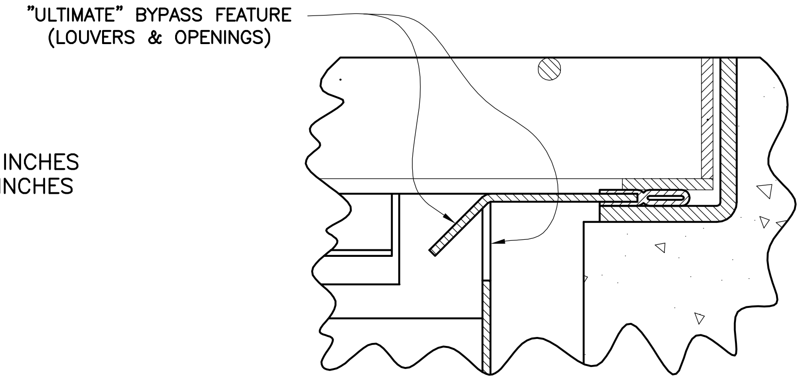


| DRAWING NO. | REV | ECO | DATE | |
|---|---|---|---|---|
| FGP-0001 | G | ECO–0142 JPR 7/13/16 | JPR 11/3/06 | SHEET 1 OF 2 |

U.S. PATENT # 6,00,023 & 6,877,029




DETAIL B
SECTION VIEW
FloGard® FILTER
-INSTALLED-




DETAIL C
"ULTIMATE"
BYPASS FEATURES

* MANY OTHER STANDARD & CUSTOM SIZES & DEPTHS AVAILABLE UPON REQUEST.

## SPECIFIER CHART

| MODEL NO. STANDARD DEPTH | STANDARD & SHALLOW DEPTH (Data in these columes is the same for both STANDARD & SHALLOW versions) | | | STANDARD DEPTH -20 Inches- | | MODEL NO. SHALLOW DEPTH | SHALLOW DEPTH -12 Inches- | |
|---|---|---|---|---|---|---|---|---|
| | INLET ID Inside Dimension (inch x inch) | GRATE OD Outside Dimension (inch x inch) | TOTAL BYPASS CAPACITY (cu. ft. / sec.) | SOLIDS STORAGE CAPACITY (cu. ft.) | FILTERED FLOW (cu. ft. / sec.) | | SOLIDS STORAGE CAPACITY (cu. ft.) | FILTERED FLOW (cu. ft. / sec.) |
| FGP-12F | 12 X 12 | 12 X 14 | 2.8 | 0.3 | 0.4 | FGP-12F8 | .15 | .25 |
| FGP-16F | 16 X 16 | 16 X 19 | 4.7 | 0.8 | 0.7 | FGP-16F8 | .45 | .4 |
| FGP-18F | 18 X 18 | 18 X 20 | 4.7 | 0.8 | 0.7 | FGP-18F8 | .45 | .4 |
| FGP-1824F | 16 X 22 | 18 X 24 | 5.0 | 1.5 | 1.2 | FGP-1824F8 | .85 | .7 |
| FGP-1836F | 18 X 36 | 18 X 40 | 6.9 | 2.3 | 1.6 | FGP-1836F8 | 1.3 | .9 |
| FGP-2024F | 18 X 22 | 20 X 24 | 5.9 | 1.2 | 1.0 | FGP-2024F8 | .7 | .55 |
| FGP-21F | 22 X 22 | 22 X 24 | 6.1 | 2.2 | 1.5 | FGP-21F8 | 1.25 | .85 |
| FGP-24F | 24 X 24 | 24 X 27 | 6.1 | 2.2 | 1.5 | FGP-24F8 | 1.25 | .85 |
| FGP-2430F | 24 X 30 | 26 X 30 | 7.0 | 2.8 | 1.8 | FGP-2430F8 | 1.6 | 1.05 |
| FGP-2436F | 24 X 36 | 24 X 40 | 8.0 | 3.4 | 2.0 | FGP-2436F8 | 1.95 | 1.15 |
| FGP-2448F | 24 X 48 | 26 X 48 | 9.3 | 4.4 | 2.4 | FGP-2448F8 | 2.5 | 1.35 |
| FGP-28F | 28 X 28 | 32 X 32 | 6.3 | 2.2 | 1.5 | FGP-28F8 | 1.25 | .85 |
| FGP-30F | 30 X 30 | 30 X 34 | 8.1 | 3.6 | 2.0 | FGP-30F8 | 2.05 | 1.15 |
| FGP-36F | 36 X 36 | 36 X 40 | 9.1 | 4.6 | 2.4 | FGP-36F8 | 2.65 | 1.35 |
| FGP-3648F | 36 X 48 | 40 X 48 | 11.5 | 6.8 | 3.2 | FGP-3648F8 | 3.9 | 1.85 |
| FGP-48F | 48 X 48 | 48 X 54 | 13.2 | 9.5 | 3.9 | FGP-48F8 | 5.45 | 2.25 |
| FGP-SD24F | 24 X 24 | 28 X 28 | 6.1 | 2.2 | 1.5 | FGP-SD24F8 | 1.25 | .85 |

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| DRAWING NO. | REV | ECO | DATE | |
|---|---|---|---|---|
| FGP-0001 | G | ECO-0142 JPR 7/13/16 | JPR 11/3/06 | SHEET 2 OF 2 |

# Appendix G
## Noise Calculations

# Project: Conejo Summit

**Construction Noise Impact on Sensitive Receptors**

***Parameters***

| | | |
|---|---|---|
| **Construction Hours:** | 8 | Daytime hours (7 am to 7 pm) |
| | 0 | Evening hours (7 pm to 10 pm) |
| | 0 | Nighttime hours (10 pm to 7 am) |
| **Leq to L10 factor** | 3 | |

| | | | | R1 | | | | |
|---|---|---|---|---|---|---|---|---|
| ***Construction Phase*** **Equipment Type** | **No. of Equip.** | **Reference Noise Level at 50ft, Lmax** | **Acoustical Usage Factor** | **Distance (ft)** | **Lmax** | **Leq** | **L10** | **Estimated Noise Shielding, dBA** |
| ***Phase 1 and 2 Grading*** | | | | | ***61*** | ***57*** | | |
| Dump/Haul Trucks | 1 | 76 | 40% | 1250 | 48 | 44 | 47 | 0 |
| Dump/Haul Trucks | 10 | 76 | 40% | 1250 | 58 | 54 | 57 | 0 |
| Water Trucks | 2 | 80 | 10% | 1750 | 47 | 37 | 40 | 5 |
| Scrapers | 4 | 84 | 40% | 1750 | 54 | 50 | 53 | 5 |
| Dozer | 2 | 82 | 40% | 1750 | 49 | 45 | 48 | 5 |
| Graders | 1 | 85 | 40% | 1750 | 49 | 45 | 48 | 5 |
| Excavator | 1 | 81 | 40% | 2250 | 43 | 39 | 42 | 5 |
| Tractor/Loader/Backhoe | 2 | 80 | 25% | 2250 | 45 | 39 | 42 | 5 |
| Roller | 2 | 80 | 20% | 2250 | 45 | 38 | 41 | 5 |
| Dump/Haul Trucks | 10 | 76 | 40% | 2250 | 48 | 44 | 47 | 5 |
| ***Phase 3, 4, and 7 Grading*** | | | | | ***55*** | ***51*** | | |
| Dump/Haul Trucks | 4 | 76 | 40% | 2250 | 49 | 45 | 48 | 0 |
| Scrapers | 1 | 84 | 40% | 2250 | 51 | 47 | 50 | 0 |
| Dozer | 1 | 82 | 40% | 2250 | 44 | 40 | 43 | 5 |
| Graders | 1 | 85 | 40% | 2750 | 45 | 41 | 44 | 5 |
| Excavator | 1 | 81 | 40% | 2750 | 41 | 37 | 40 | 5 |
| Tractor/Loader/Backhoe | 1 | 80 | 25% | 2750 | 40 | 34 | 37 | 5 |
| Roller | 1 | 80 | 20% | 3250 | 39 | 32 | 35 | 5 |
| Paver | 1 | 77 | 50% | 3250 | 36 | 33 | 36 | 5 |
| Other Equipment | 1 | 85 | 50% | 3250 | 44 | 41 | 44 | 5 |
| ***Phase 5 and 6 Grading*** | | | | | ***55*** | ***51*** | | |
| Dump/Haul Trucks | 4 | 76 | 40% | 2000 | 50 | 46 | 49 | 0 |
| Scrapers | 1 | 84 | 40% | 2000 | 52 | 48 | 51 | 0 |
| Dozer | 1 | 82 | 40% | 2500 | 43 | 39 | 42 | 5 |
| Graders | 1 | 85 | 40% | 2500 | 46 | 42 | 45 | 5 |
| Excavator | 1 | 81 | 40% | 2500 | 42 | 38 | 41 | 5 |
| Tractor/Loader/Backhoe | 1 | 80 | 25% | 3000 | 39 | 33 | 36 | 5 |
| Roller | 1 | 80 | 20% | 3000 | 39 | 32 | 35 | 5 |
| ***Building Construction - Phase 1*** | | | | | ***62*** | ***57*** | | |
| Forklift | 2 | 75 | 10% | 1250 | 50 | 40 | 43 | 0 |
| Cranes | 2 | 81 | 16% | 1250 | 56 | 48 | 51 | 0 |
| Dozer | 1 | 82 | 40% | 1250 | 54 | 50 | 53 | 0 |
| Graders | 1 | 85 | 40% | 1250 | 57 | 53 | 56 | 0 |
| Dump/Haul Trucks | 1 | 76 | 40% | 1750 | 40 | 36 | 39 | 5 |
| Excavator | 1 | 81 | 40% | 1750 | 45 | 41 | 44 | 5 |
| Other Equipment | 1 | 85 | 50% | 1750 | 49 | 46 | 49 | 5 |
| Paver | 1 | 77 | 50% | 1750 | 41 | 38 | 41 | 5 |
| Air Compressor | 1 | 78 | 40% | 1750 | 42 | 38 | 41 | 5 |
| Roller | 1 | 80 | 20% | 1750 | 44 | 37 | 40 | 5 |
| Front End Loader | 1 | 79 | 40% | 2250 | 41 | 37 | 40 | 5 |
| Water Trucks | 1 | 80 | 10% | 2250 | 42 | 32 | 35 | 5 |
| ***Building Construction - Phase 2*** | | | | | ***62*** | ***57*** | | |
| Forklift | 2 | 75 | 10% | 1250 | 50 | 40 | 43 | 0 |

| | | | | R1 | | | | |
|---|---|---|---|---|---|---|---|---|
| ***Construction Phase*** **Equipment Type** | **No. of Equip.** | **Reference Noise Level at 50ft, Lmax** | **Acoustical Usage Factor** | **Distance (ft)** | **Lmax** | **Leq** | **L10** | **Estimated Noise Shielding, dBA** |
| Cranes | 2 | 81 | 16% | 1250 | 56 | 48 | 51 | 0 |
| Dozer | 1 | 82 | 40% | 1250 | 54 | 50 | 53 | 0 |
| Graders | 1 | 85 | 40% | 1250 | 57 | 53 | 56 | 0 |
| Dump/Haul Trucks | 1 | 76 | 40% | 1750 | 40 | 36 | 39 | 5 |
| Excavator | 1 | 81 | 40% | 1750 | 45 | 41 | 44 | 5 |
| Air Compressor | 1 | 78 | 40% | 1750 | 42 | 38 | 41 | 5 |
| Other Equipment | 1 | 85 | 50% | 1750 | 49 | 46 | 49 | 5 |
| Paver | 1 | 77 | 50% | 1750 | 41 | 38 | 41 | 5 |
| Roller | 1 | 80 | 20% | 1750 | 44 | 37 | 40 | 5 |
| Front End Loader | 1 | 79 | 40% | 2250 | 41 | 37 | 40 | 5 |
| Water Trucks | 1 | 80 | 10% | 2250 | 42 | 32 | 35 | 5 |
| ***Building Construction - Phase 3*** | | | | | ***57*** | ***52*** | | |
| Forklift | 1 | 75 | 10% | 2250 | 42 | 32 | 35 | 0 |
| Cranes | 2 | 81 | 16% | 2250 | 51 | 43 | 46 | 0 |
| Dozer | 1 | 82 | 40% | 2250 | 49 | 45 | 48 | 0 |
| Graders | 1 | 85 | 40% | 2250 | 52 | 48 | 51 | 0 |
| Dump/Haul Trucks | 1 | 76 | 40% | 2750 | 36 | 32 | 35 | 5 |
| Excavator | 1 | 81 | 40% | 2750 | 41 | 37 | 40 | 5 |
| Air Compressor | 1 | 78 | 40% | 2750 | 38 | 34 | 37 | 5 |
| Other Equipment | 1 | 85 | 50% | 2750 | 45 | 42 | 45 | 5 |
| Paver | 1 | 77 | 50% | 2750 | 37 | 34 | 37 | 5 |
| Roller | 1 | 80 | 20% | 2750 | 40 | 33 | 36 | 5 |
| Front End Loader | 1 | 79 | 40% | 3250 | 38 | 34 | 37 | 5 |
| Water Trucks | 1 | 80 | 10% | 3250 | 39 | 29 | 32 | 5 |
| ***Building Construction - Phase 4*** | | | | | ***55*** | ***50*** | | |
| Forklift | 1 | 75 | 10% | 2600 | 41 | 31 | 34 | 0 |
| Cranes | 2 | 81 | 16% | 2600 | 50 | 42 | 45 | 0 |
| Dozer | 1 | 82 | 40% | 2600 | 48 | 44 | 47 | 0 |
| Graders | 1 | 85 | 40% | 2600 | 51 | 47 | 50 | 0 |
| Dump/Haul Trucks | 1 | 76 | 40% | 3100 | 35 | 31 | 34 | 5 |
| Air Compressor | 1 | 78 | 40% | 3600 | 36 | 32 | 35 | 5 |
| Excavator | 1 | 81 | 40% | 3100 | 40 | 36 | 39 | 5 |
| Other Equipment | 1 | 85 | 50% | 3100 | 44 | 41 | 44 | 5 |
| Paver | 1 | 77 | 50% | 3100 | 36 | 33 | 36 | 5 |
| Roller | 1 | 80 | 20% | 3100 | 39 | 32 | 35 | 5 |
| Front End Loader | 1 | 79 | 40% | 3600 | 37 | 33 | 36 | 5 |
| Water Trucks | 1 | 80 | 10% | 3600 | 38 | 28 | 31 | 5 |
| ***Building Construction- Phase 5*** | | | | | ***58*** | ***53*** | | |
| Forklift | 1 | 75 | 10% | 2000 | 43 | 33 | 36 | 0 |
| Cranes | 2 | 81 | 16% | 2000 | 52 | 44 | 47 | 0 |
| Dozer | 1 | 82 | 40% | 2000 | 50 | 46 | 49 | 0 |
| Graders | 1 | 85 | 40% | 2000 | 53 | 49 | 52 | 0 |
| Dump/Haul Trucks | 1 | 76 | 40% | 2500 | 37 | 33 | 36 | 5 |
| Air Compressor | 1 | 78 | 40% | 3000 | 37 | 33 | 36 | 5 |
| Excavator | 1 | 81 | 40% | 2500 | 42 | 38 | 41 | 5 |
| Other Equipment | 1 | 85 | 50% | 2500 | 46 | 43 | 46 | 5 |
| Paver | 1 | 77 | 50% | 2500 | 38 | 35 | 38 | 5 |
| Roller | 1 | 80 | 20% | 2500 | 41 | 34 | 37 | 5 |
| Front End Loader | 1 | 79 | 40% | 3000 | 38 | 34 | 37 | 5 |
| Water Trucks | 1 | 80 | 10% | 3000 | 39 | 29 | 32 | 5 |
| ***Building Construction- Phase 6*** | | | | | ***55*** | ***50*** | | |
| Forklift | 1 | 75 | 10% | 2600 | 41 | 31 | 34 | 0 |
| Cranes | 2 | 81 | 16% | 2600 | 50 | 42 | 45 | 0 |
| Dozer | 1 | 82 | 40% | 2600 | 48 | 44 | 47 | 0 |
| Graders | 1 | 85 | 40% | 2600 | 51 | 47 | 50 | 0 |
| Dump/Haul Trucks | 1 | 76 | 40% | 3100 | 35 | 31 | 34 | 5 |

| | | | | R1 | | | | |
|---|---|---|---|---|---|---|---|---|
| ***Construction Phase*** **Equipment Type** | **No. of Equip.** | **Reference Noise Level at 50ft, Lmax** | **Acoustical Usage Factor** | **Distance (ft)** | **Lmax** | **Leq** | **L10** | **Estimated Noise Shielding, dBA** |
| Air Compressor | 1 | 78 | 40% | 3600 | 36 | 32 | 35 | 5 |
| Excavator | 1 | 81 | 40% | 3100 | 40 | 36 | 39 | 5 |
| Other Equipment | 1 | 85 | 50% | 3100 | 44 | 41 | 44 | 5 |
| Paver | 1 | 77 | 50% | 3100 | 36 | 33 | 36 | 5 |
| Roller | 1 | 80 | 20% | 3100 | 39 | 32 | 35 | 5 |
| Front End Loader | 1 | 79 | 40% | 3600 | 37 | 33 | 36 | 5 |
| Water Trucks | 1 | 80 | 10% | 3600 | 38 | 28 | 31 | 5 |
| ***Building Construction- Phase 7*** | | | | | ***56*** | ***51*** | | |
| Forklift | 1 | 75 | 10% | 2500 | 41 | 31 | 34 | 0 |
| Cranes | 2 | 81 | 16% | 2500 | 50 | 42 | 45 | 0 |
| Dozer | 1 | 82 | 40% | 2500 | 48 | 44 | 47 | 0 |
| Graders | 1 | 85 | 40% | 2500 | 51 | 47 | 50 | 0 |
| Dump/Haul Trucks | 1 | 76 | 40% | 3000 | 35 | 31 | 34 | 5 |
| Air Compressor | 1 | 78 | 40% | 3500 | 36 | 32 | 35 | 5 |
| Excavator | 1 | 81 | 40% | 3000 | 40 | 36 | 39 | 5 |
| Other Equipment | 1 | 85 | 50% | 3000 | 44 | 41 | 44 | 5 |
| Paver | 1 | 77 | 50% | 3000 | 36 | 33 | 36 | 5 |
| Roller | 1 | 80 | 20% | 3000 | 39 | 32 | 35 | 5 |
| Front End Loader | 1 | 79 | 40% | 3500 | 37 | 33 | 36 | 5 |
| Water Trucks | 1 | 80 | 10% | 3500 | 38 | 28 | 31 | 5 |
| **Overlapping Phase Noise Levels** | | | | | | | | |
| All Grading + Building Construction Phases 1 + 2 | | | | | ***65*** | ***62*** | | |
| **Maximum Combined Noise Levels** | | | | | **65** | **62** | | |

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

## TRAFFIC NOISE ANALYSIS TOOL

**Conejo Summit**
**Construction Noise**

| | Ground Type | Distance from Roadway to Receiver (feet) | Speed (mph) | | | Peak Hour Volume | | | Peak Hour Noise Level (Leq(h) dBA) | Noise Level dBA CNEL |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Auto | MT | HT | Auto | MT | HT | | |
| Rancho Conejo Blvd between Conejo Spectrum St and Corporate C | Hard | 80 | 35 | 30 | 30 | 22 | 0 | 10 | 54.3 | 54.6 |

## TRAFFIC NOISE ANALYSIS TOOL

**Conejo Summit**
**Project Traffic**
**Fehr & Peers**

| | Ground Type | Distance from Roadway to Receiver (feet) | Speed (mph) | | | Peak Hour Volume | | | Peak Hour Noise Level (Leq(h) dBA) | Noise Level dBA CNEL |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Auto | MT | HT | Auto | MT | HT | | |
| Rancho Conejo Blvd between Conejo Spectrum St and Corporate C | Hard | 80 | 35 | 30 | 30 | 96 | 2 | 2 | 53.1 | 53.4 |

# Appendix H
## Traffic Studies

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# TECHNICAL MEMORANDUM

| | |
|---|---|
| **To:** City of Thousand Oaks | **From:** Iteris, Inc.<br>801 S. Grand Avenue, Suite 750<br>Los Angeles, CA 90017 |

**Date:** December 21, 2020

**RE:** Shapell Industrial Project – CEQA Transportation Analysis

## EXECUTIVE SUMMARY

Under the California Environmental Quality Act (CEQA), assessment of transportation impacts uses a metric of the average length of vehicle trips taken by users of the proposed Shapell Industrial project site as compared to the citywide average. The trip lengths (vehicle miles traveled) were calculated from a computerized travel demand model which estimates the project-related and citywide vehicle miles traveled in a dynamic relationship with other land uses in the southern California region. Based on the analysis, the site workers would average longer trips taken by vehicles than the citywide average—necessitating mitigation actions to reduce vehicle trips and trip lengths. A mitigation program was developed in conjunction with City staff and the project applicant to reduce the project to less than significant impacts under CEQA.

## INTRODUCTION

This memorandum presents Iteris' California Environmental Quality Act (CEQA) analysis of the Shapell Industrial project in the City of Thousand Oaks. The Shapell Industrial project consists of 754,222 square feet of light industrial park land use. The project site is surrounded by industrial, institutional, and open space land-uses. Access to the site is planned off Rancho Conejo Boulevard and Conejo Center Drive.

CEQA analysis for determining potential significant transportation impacts from vehicles transitioned in 2020 from an automobile delay or capacity measure to a Vehicle Miles Traveled (VMT) metric as required by Senate Bill (SB) 743. VMT is an area-wide performance measure which helps compare the overall performance of a project or project alternatives and is also used as a metric to ultimately assess the transportation environmental impacts of a project. VMT analysis shifts the focus towards impacts caused by the distance traveled by vehicles rather than the localized congestion created by vehicles (i.e., intersection-level delay).

VMT is generally calculated using a travel demand model that captures the movement of all trips over a highway network. For this analysis, the time period was defined as a 24-hour period on a typical weekday. It should be noted that travel-demand modeling outputs are unique, thus differ between model runs even when minimal land use or circulation network edits are made. As a result, the outputs generated for this project should only be applied to this analysis. This is discussed in more detail later in this memorandum.

## METHODOLOGY

Iteris utilized the Ventura County Transportation Model (VCTM) to generate the VMT statistics, following the City's administrative policy on CEQA transportation analysis. This land-use based model, which is a subarea model of the Southern California Association of Government's (SCAG) travel demand model, is consistent with the 2016 SCAG RTP/SCS travel-demand model assumptions and inputs. The model consists of a 2012 base year scenario and 2040 future year scenario. For the purposes of this analysis, the 2012 base year scenario is utilized. It should be noted the 2012 base year of the 2016 model is the regionwide standard for existing and baseline conditions analysis.

The VCTM consists of a detailed traffic analysis zone (TAZ) structure in the City of Thousand Oaks. The model consists of 110 TAZ's within the City. **Figure 1** shows the location of the proposed project's TAZ (60169101) in relation to the regional area.

## CEQA ANALYSIS

This section describes the potential screening, thresholds of significance, and VMT impact evaluation for the proposed project.

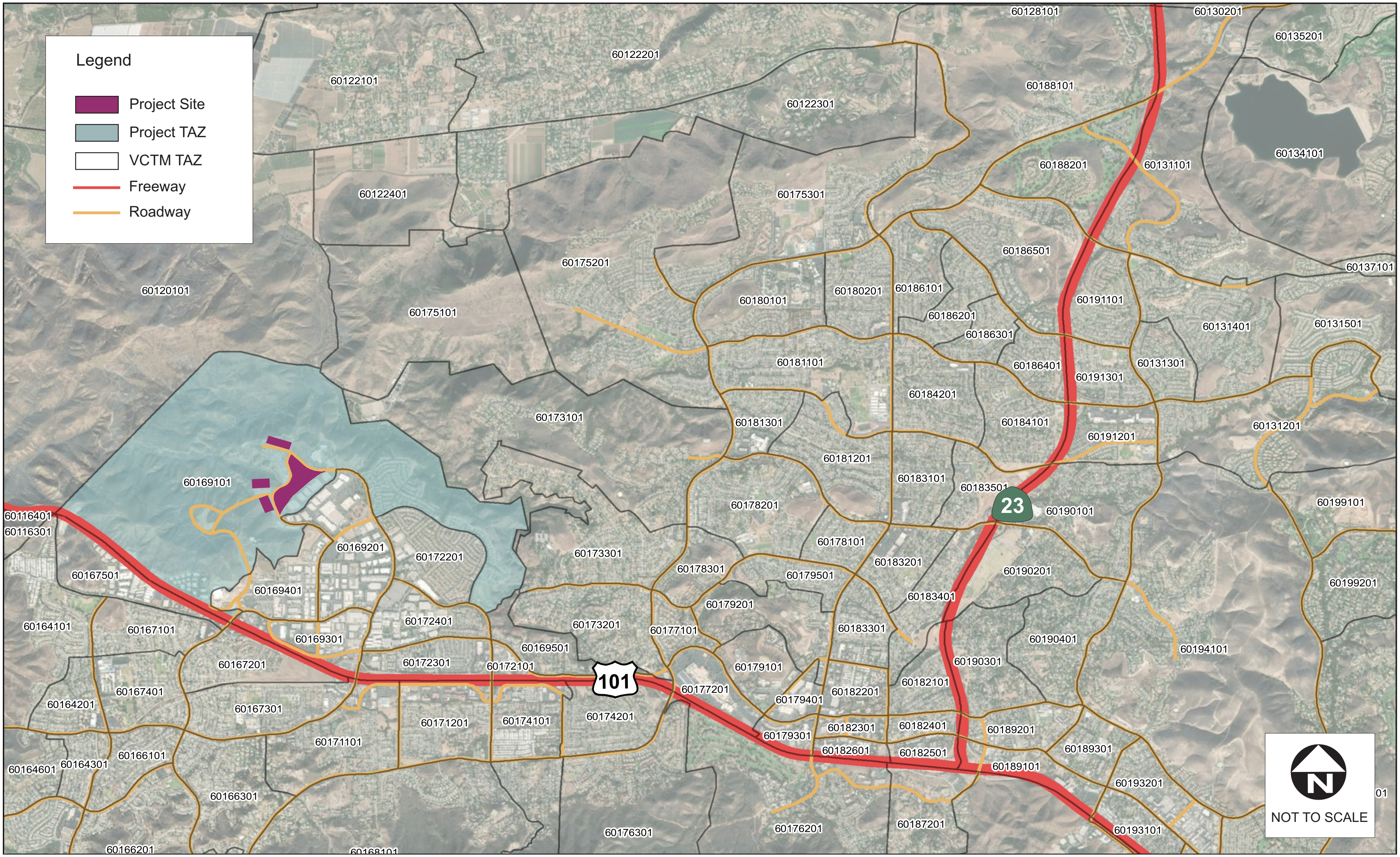
### Screening Criteria

The City utilizes a screening criteria in order to provide CEQA relief to projects that support the State's GHG emission goals, and those projects are presumed as less than significant. The proposed Shapell industrial project does not meet any of the screening criteria, thus is required to undergo a CEQA Transportation Assessment.

### Thresholds of Significance

The City has adopted an administrative policy stating that thresholds of significance will be determined on a case by case basis. For the purposes of this project, the thresholds of significance will be as follows:

- A significant impact would occur if the VMT per capita or VMT per employee exceeds the citywide average VMT per capita or per employee of the baseline.




Shapell Industrial Project
VMT Analysis
City of Thousand Oaks

Figure 1
Project Location and Transportation Analysis Zones (TAZ)

### VMT Impact Evaluation

The proposed project is non-residential, thus the VMT will be reported as Employment VMT per employee, calculated as such: (Home-Based Work Attraction VMT + Work-Based Production) / Number of Employees. In order to determine the project's potential level of impact, a new VCTM scenario including the proposed project land use within TAZ 60169101 was prepared, utilizing the existing/baseline year of the model. From this model scenario output, the following two metrics were determined for significant impact determination:

- Regional average daily VMT per employee; and
- Project TAZ daily VMT per employee.

Based on the City's adopted guidelines, the "region" for CEQA analysis purposes is assumed to be the City of Thousand Oaks. The new VCTM scenario resulted in the following outputs:

- The Citywide average daily VMT per employee, as calculated for use in this analysis only, is 14.58; and
- The Project TAZ daily VMT per employee is 16.52.

The project TAZ's daily VMT per employee is 13.3% greater than the citywide average. Based on the thresholds of significance, the proposed project would result in a significant transportation impact and the project would need to mitigate its daily VMT per employee to a less than significant level. The 985 Project employees estimated to generate a total 16,275 daily vehicle miles and to be at the citywide the 985 Project employees would need to generate an estimated 14,361 vehicle miles per day—a difference of 1,914 vehicle miles. In order to be mitigated to a less than significant level, the total number of estimated project-related vehicle miles would need to be reduced by more than 1,915 vehicle miles.

As mentioned, it should be noted that travel-demand modeling outputs are unique, thus differ between model runs even when minimal land use or circulation network edits are made. Therefore, the approach to analyzing a project's VMT impact is to only compare outputs (citywide average vs. project TAZ) that are extracted from the same model run. As described in this memo, the key measure for significant impact determination is the relative percentage difference between the two outputs from the same model run, rather than the absolute numbers themselves, as the citywide average output will be slightly different between separate model runs (i.e., not a static value). Thus, the citywide average output should only be applied to this analysis.

## MITIGATION

CEQA requires that an environmental impact report identify feasible alternatives and mitigation measures that could avoid or substantially reduce a project's significant environmental impacts. Mitigation options as generally recommended by the Office of Planning and Research (OPR) include provision of on-site transportation infrastructure, on-site transportation demand management, off-site infrastructure improvements, including roadway improvements which may also include active transportation and multimodal infrastructure, or off-site multimodal improvements.

Based on discussions with the City, the following feasible mitigations measures are recommended in order to reduce the project's significant impact:

- Infrastructure improvements to add an access road allowing bicycle access to/from the north
- Active Transportation Improvements
- Bicycle Program
- On-site Transportation Demand Management

A series of mitigation measure strategies are recommended in order to reduce the project TAZ's daily VMT. Based on analysis of potential mitigation measure effectiveness, the following strategies would be required to be conditions of the proposed project in order for the impact to be less than significant:

- Provision of Pedestrian Network Improvements
- Provision of Bicycle Parking and End of Trip Facilities
- Provision of Electrical Vehicle Charging Stations
- Implementation of Preferential Rideshare Parking Program
- Academy Drive Connection Fair Share Participation
- Hill Canyon Wastewater Treatment Plan Access Road and Bicycle Trail Fair Share Participation

The mitigation measures, their estimated daily reduction in VMT from project-related trips and additional description of the mitigation measure is shown in **Table 1**. The detailed methodology of the VMT reduction estimation is included in **Appendix A** at the end of the memorandum.

**Table 1: Mitigation Measures**

| Mitigation Strategy | Estimated Daily VMT Reduction | Description |
|---|---|---|
| Provide Pedestrian Network | (152) | Install paths to connect buildings. |
| Provide Bike Parking in Non-Residential Projects | (102) | Bike racks and lockers |
| Provide End of Trip Facilities | (54) | Bike lockers storage |
| Electrical Vehicle Charging Stations | (843) | 51 total stations, 3.4 per 15 buildings |
| Implement Preferential Rideshare Parking Program | (248) | One space per building (15) |
| Academy Drive Connection | (86) | Fair share participation |
| Hill Canyon Wastewater Treatment Plan Access Road | (432) | New connection to reduce trip length to Wastewater facility and project site access, fair share participation |
| Hill Canyon Road Bicycle Trail Component | (24) | |
| **Total Reduction** | (1,941) | Reduction is higher than amount necessary to be less than significant |

Implementation of these mitigation measures is estimated to reduce the project TAZ's daily VMT per employee below the citywide average. Thus, the project would achieve less than significant transportation impacts after mitigation. Detailed VMT reduction calculations are provided in **Appendix A**.

## CONCLUSIONS

The Shapell Industrial project consists of 754,222 square feet of light industrial park land use. The project does not meeting any CEQA transportation screening criteria, thus is required to undergo a CEQA Transportation Assessment. Based on the described thresholds of significance, the proposed Shapell Industrial project would result in a significant transportation impact requiring mitigation. A series of mitigation measure strategies are recommended in order to reduce the project TAZ's daily VMT, which include both on-site and off-site physical infrastructure improvements. Implementation of these mitigation measures is estimated to reduce the project TAZ's daily VMT per employee below the citywide average. Thus, the project would achieve less than significant transportation impacts after mitigation.

Citywide

| ID | Purpose | Productions | Attractions |
|---|---|---|---|
| | **Thousand Oaks** | | |
| 1 | Home-based Work | 1,439,022 | 917,425 |
| 2 | Home-based School | 41,008 | 36,727 |
| 3 | Home-based University | 57,119 | 5,929 |
| 4 | Home-based Shopping | 132,556 | 225,000 |
| 5 | Home-based Social-Recreational | 269,434 | 400,742 |
| 6 | Home-based Serve Passenger | 67,713 | 133,886 |
| 7 | Home-based Other | 266,533 | 512,656 |
| 8 | Work-Based Other | 110,923 | 115,346 |
| 9 | Other Based Other | 352,468 | 316,578 |
| | Total VMT | 2,736,776 | 2,664,289 |
| | Total Home-based VMT | | 2,273,386 |
| | Total Work-based VMT | | 1,028,348 |
| | Total Population | 126,943 | |
| | Total Employees | 70,532 | |
| | **Total Home-based VMT/Capita** | **17.91** | |
| | **Total Work-based VMT/Employee** | **14.58** | |

Shapell Site

| ID | Purpose | Productions | Attractions |
|---|---|---|---|
| | **TAZ:** | **60169101** | |
| 1 | Home-based Work | 8,960 | 20,358 |
| 2 | Home-based School | 962 | - |
| 3 | Home-based University | 1,275 | - |
| 4 | Home-based Shopping | 1,175 | - |
| 5 | Home-based Social-Recreational | 2,633 | 1,302 |
| 6 | Home-based Serve Passenger | 687 | 1,066 |
| 7 | Home-based Other | 2,380 | 3,875 |
| 8 | Work-Based Other | 1,353 | 1,897 |
| 9 | Other Based Other | 1,742 | 1,369 |
| | Total VMT | 21,167 | 29,868 |
| | Total Home-based VMT | | 18,071 |
| | Total Work-based VMT | | 21,711 |
| | Total Population | 1,112 | |
| | Total Employees | 1,314 | |
| | **Total Home-based VMT/Capita** | **16.25** | |
| | **Total Work-based VMT/Employee** | **16.52** | |

# Appendix A: VMT Reduction Calculations

| # | Strategy | VMT Reduction Potential | Purpose | Elements | Literature Range of Effectiveness | Calculation | Est. VMT Red. |
|---|---|---|---|---|---|---|---|
| 1 | Provide Pedestrian Network | Mode Shift to walking | Improve pedestrian network conditions to facilitate walking | ● Build a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site<br>● Minimize barriers to pedestrian access and interconnectivity<br>● Eliminate physical barriers such as walls, landscaping, and slopes that impede pedestrian circulation | 2% vehicle miles traveled (VMT) reduction | 2% x total VMT | **(152)** |
| 2 | Provide Bike Parking in Non-Residential Projects | Mode shift to biking | Provide strengthened street network characteristics and bicycle facilities | ● Provide bicycle parking at each building | 0.625% Shift to Bicycles | 0.625% shift to bicycles with bicycle parking at each building | **(102)** |
| 3 | Provide End of Trip Facilities (such as on-site food service, gym, shower) | Mode shift to biking | Providing convenience and security needed to encourage bicycle commuting. | ● Provide "end-of-trip" facilities for bicycle riders including bicycle lockers | 1/3 % reduction in commute vehicle trips | 1/3% x Total VMT | **(54)** |
| 4 | Electrical Vehicle Charging Station | Increase ZEV VMT | To transition from gasoline/diesel vehicles to electric vehicles | ● Build electrical charging infrastructure<br>● Build solar energy generation and battery storage | Substitute fuel trips 1:1 based on charging capability | # of Charging Locations x average VMT/VMT (51 stations) | **(843)** |
| 5 | Implement Preferential Rideshare Parking Program | Increase carpooling | Create parking space for shared vehicles | ● Provide preferential parking in convenient locations (such as near public transportation or building front doors) in terms of free or reduced parking fees, priority parking, or reserved parking for commuters who carpool, vanpool, ride-share or use alternatively fueled vehicles | Assume carpooling/rideshare by number of spaces provided | Assume 1 space per building (15) | **(248)** |
| 6 | Academy Drive Connection Fair Share | Reduction in commute distance from West | New connection with shorter distance to western destinations | Reduction based on reduced distance from Academy Drive connection for employees from the West, from 2.5 miles to 1.1 miles from Wendy Drive interchange x estimated employees from the West (30% of employees with 10+ mile commute - consistent with traffic study) | 20% of reduced commute distance of employee commuters from the west | 20% x 431 VMT reduction from Academy Drive connection | **(86)** |
| 7 | Hill Canyon Wastewater Treatment Plan Access Road | Wastewater Facility Access for Employees | Shorter access to employment site | Completion of an access road to the Hill Canyon Wastewater Treatment Plan for HCTP employees to access the Shapell properties 1-2 times a year for inspection | Reduction based on shorter distance between HCTC and Shapell Properties | 13.0 miles between HCTC and Shapell, 1 mile with access road, 12 mile diff., round trip 24 mile, 1.2 trips per year X 15 buildings = 432 | **(432)** |
| 8 | Hill Canyon Road Bicycle Trail | New Bicycle Path Connection | Improve bicycle connectivity | Biycle access from new Hill Canyon Wastewater access road to Hill Canyon Road | 1% increase in share of workers commuting by bicycle (for each additional mile of bike lanes per square mile) | 3 miles x 1% increase of City average of 0.5% bicycle commuters = .015% increase x total VMT | **(24)** |

City of Thousand Oaks

# SHAPELL TRAFFIC STUDY

PREPARED BY: Kimley»Horn

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### APPENDIX

## LIST OF FIGURES



## LIST OF TABLES

# EXECUTIVE SUMMARY

The proposed location for the Shapell Development is in the City of Thousand Oaks and totals approximately 754,222 square feet of light industrial space. This traffic impact study analyzes the Shapell Development and its impacts on four neighboring signalized intersections:

- Rancho Conejo / Hillcrest Drive
- Camino Dos Rios / Teller
- Ventu Park Road / Hillcrest Drive
- Broadbeck / Camino Dos Rios

This study has been prepared with information provided by the City's Traffic Impact Mitigation Fee Nexus Study (TIMF) to address the traffic-related impacts of the proposed Shapell Development in the City of Thousand Oaks. The Trip Generation Analysis was produced using the 10th Edition of the ITE Trip General Manual.

**Existing (2020) Conditions**

For the Existing (2020) conditions, all study intersections operate at an acceptable level of service with the exception of the intersection of Ventu Park Rd at Hillcrest Dr during the PM peak hour, which operates at a LOS D.

**Existing (2020) + Project Conditions**

For the Existing (2020) + Project conditions, the project has a significant impact on the intersections of Rancho Conejo Blvd at Hillcrest Dr (AM peak hour) and Ventu Park Rd at Hillcrest Dr (AM and PM peak hours). It is recommended to make signal timing changes at both intersections to better accommodate the vehicular demand and it's also recommended to change the lane assignment of the southbound approach of ther intersection of Ventu Park Rd at Hillcrest Dr to be a through, through, through-right approach.

**Build Out (2040) Conditions**

Recommended improvements from the Existing (2020) + Project scenario were included in the Build Out (2040) conditions. In the Build Out (2040) scenario, all study intersections continue to operate at an acceptable LOS, except for the intersection of Ventu Park Rd at Hillcrest Dr. It is anticipated that when the Academy Drive extension is built and connects to the project site, it would alleviate the traffic experienced on Ventu Park Rd and therefore decrease the delay seen at the intersection of Ventu Park Rd at Hillcrest Dr.

## INTRODUCTION

The City of Thousand Oaks is the second largest city in Ventura County covering approximately 56 square miles and holding a population of 130,196 people[1]. Over the years, the City has experienced growth in both residential and employment opportunities. Companies are looking to Thousand Oaks as a viable location for business as it there is more space compared to the City of Los Angeles and there is access to nearby residents.

In the 1980s, the City of Thousand Oaks adopted Specific Plan No. 7. The Specific Plan envisioned a Project, which is now ready for implementation. The Project is a light industrial park that totals approximately 754,222 square feet. The site has already been graded with utilities stubbed to lots. The Project will provide site improvements such as site access improvements, parking, landscaping and utility infrastructure. The Project site is surrounded by industrial, institutional, and open space land-uses. Site access is planned from Rancho Conejo Boulevard and Conejo Center Drive. Planned projects for the future include extension of Academy Drive which will connect to Conejo Center Drive between Lot's 10 and 11/12. The Project will construct the public road improvements for this future connection.

## TRAFFIC STUDY

This traffic impact study has been prepared to address the traffic-related impacts of the proposed Shapell Development in the City of Thousand Oaks. This traffic study has been conducted using the Traffic Impact Mitigation Fee Nexus Study (TIMF), completed in 2019. The TIMF Study provides existing and build-out scenarios of the Study Area. The Trip Generation Analysis was produced using the 10th Edition of the ITE Trip General Manual.

This report includes a description of existing traffic conditions in the surrounding area, estimated project trip generation and distribution, future traffic growth, and an assessment of project-related impacts on the roadway system in the future.

## STUDY METHODOLOGY

This document analyzes study area traffic conditions under five conditions:

- Existing (2020)
- Existing (2020) + Project
- Build Out (2040)

The project study area and site location for this traffic impact study were defined by City of Thousand Oaks staff. The year 2020 is the defined year for existing conditions. Traffic volumes for the Existing (2020) conditions were interpolated between the 2016 counts and the approved 2040 volumes found in the TIMF. Approved 2040 traffic volumes from the TIMF were used for the Build Out (2040) analysis. The City has mentioned that there will be an Academy Drive extension project that would connect to the study area but does not have a set construction date. This will be further discussed in the Build Out (2040) chapter.

Existing operations and peak-hour project traffic impacts were analyzed at four intersections within the vicinity of the project. **Table 1** presents the intersections analyzed, their type of intersection control, and in which jurisdiction they lie.

---

1 https://www.toaks.org/business/economic-development/business-resources/demographics

**TABLE 1 - STUDY AREA INTERSECTIONS**

| Intersection | | Control | Jurisdiction |
|---|---|---|---|
| 1 | Rancho Conejo Blvd at Hillcrest Dr | Signalized | City of Thousand Oaks |
| 2 | Camino Dos Rios/Teller Rd at Hillcrest Dr | Signalized | City of Thousand Oaks |
| 3 | Ventu Park Road at Hillcrest Drive | Signalized | City of Thousand Oaks |
| 4 | Broadbeck at Camino Dos Rios | Signalized | City of Thousand Oaks |


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**Vicinity Map**

Legend

Intersection Analysis Locations

Figure
**1**


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**Conceptual Site Plan**

Figure
**2**

### Level of Service Analysis Criteria

The study area intersections were analyzed using Synchro Version 10 and ICU spreadsheets to determine the Level of Service (LOS) using both the Highway Capacity Manual (HCM) and the Intersection Capacity Utilization (ICU) methods, respectively. Under the HCM Methodology, study intersections were analyzed using HCM 2000 to be consistent with the TIMF.

**Table 2** presents the average intersection delay (per vehicle), capacity ratio, and the corresponding LOS, using the ICU and HCM methods.

**TABLE 2 - LEVEL OF SERVICE (LOS) DEFINITIONS**

| ICU Value | HCM Value (sec/veh) | Level of Service (LOS) |
|---|---|---|
| 0 to 0.60 | $\leq$ 10 | A |
| >0.60 to 0.70 | > 10 – 20 | B |
| >0.70 to 0.80 | > 20 – 35 | C |
| >0.80 to 0.90 | > 35 – 55 | D |
| >0.90 to 1.00 | > 55 – 80 | E |
| >1.00 to 1.10 | > 80 | F |

*ICU Data Source: Thousand Oaks City Guidelines.*

*HCM Data Source: Highway Capacity Manual, 6th Edition for Signalized Intersections*

The traffic impact study guidelines utilized by the City of Thousand Oaks state that a project will have a significant traffic impact if the project increases demand on an intersection or roadway segment by at least 2% of capacity, at a pre-project LOS of C, D, E, or F.

As stated in the TIMF Study, the City has established a minimum of LOS C as acceptable at study intersections, with the exception of Rancho Conejo Blvd at Hillcrest Drive where LOS D is acceptable.

Analysis of Existing (2020) traffic conditions is based upon traffic counts and the approved 2040 volumes provided by the TIMF Study. The peak-hour intersection counts were conducted on a typical weekday between the hours of 7:00 AM and 9:00 AM, and 4:00 PM and 6:00 PM mostly between the years of 2015-2017**.** Growth rates were calculated between the counts and the approved 2040 volumes to interpolate traffic volumes for the Existing (2020) conditions.

# EXISTING (2020) CONDITIONS

A description of study area roadways and an analysis of existing intersection operating conditions are provided in the following pages.

## Study Area Roadway Descriptions

Descriptions of study area roadways that provide primary travel routes to and from the project site are provided below:

**Rancho Conejo Boulevard** is a six-lane divided north-south roadway that leads to the Project Site. Rancho Conejo Boulevard is a designated bikeway with exclusive bike lanes on both side of the street. The posted speed limit is 45 miles per hour. Rancho Conejo Boulevard has an interchange at the Ventura (US-101) Freeway.

**Hillcrest Drive** is an east-west secondary arterial roadway that has two travel lanes in each direction and narrows to one lane in each direction as it curves to parallel the Ventura Freeway. The posted speed limit is 35 miles per hour. Hillcrest Drive links Camino Dos Rios with Rancho Conejo Boulevard and its access ramps with the Ventura (US-101) Freeway.

**Ventu Park Road** is a six-lane divided north-south roadway. North of Hillcrest Drive Ventu Park Road has a dedicated bike lane. The posted speed limit is 40 miles per hour.

**Broadbeck Drive** is a four-lane divided north-south roadway with right-turn pockets at the intersection. Broadbeck Drive dead ends at Academy Drive and turns into a driveway at Camino Dos Rios.

**Camino Dos Rios** is a six-lane divided east-west arterial south of the project site. Camino Dos Rios is a designated bikeway with exclusive bike lanes on both side of the street. The posted speed limit is 40 miles per hour. Camino Dos Rios becomes Teller Road east of the Hillcrest Drive intersection.

**Teller Road** is a four-lane east-west roadway west of the project site. The posted speed limit is 40 miles per hour. East of Lawrence Drive, Teller Road becomes a two-lane roadway with a posted speed limit of 25 miles per hour.

**Lawrence Drive** is a two-lane north-south roadway. The posted speed limit is 25 miles per hour. Lawrence Drive provides local access to many of the commercial and industrial sites in the area.

## Existing (2020) Intersection Operations

**Figure 3** illustrates the existing lane configurations and control type at the study intersections. The existing AM and PM peak-hour traffic volumes for the study intersections are illustrated on **Figure 4**.

Existing (2020) intersection peak-hour operations were evaluated using the HCM and ICU methodology. The HCM results are summarized in **Table 3**, while the ICU results are summarized in **Table 4**. For the Existing (2020) conditions, all study intersections operate at an acceptable level of service with the exception of the intersection of Ventu Park Rd at Hillcrest Dr during the PM peak hour, which operates at a LOS D.

HCM LOS analysis worksheets for the Existing (2020) conditions are provided in **Appendix A**, while ICU LOS analysis worksheets are provided in **Appendix B.**

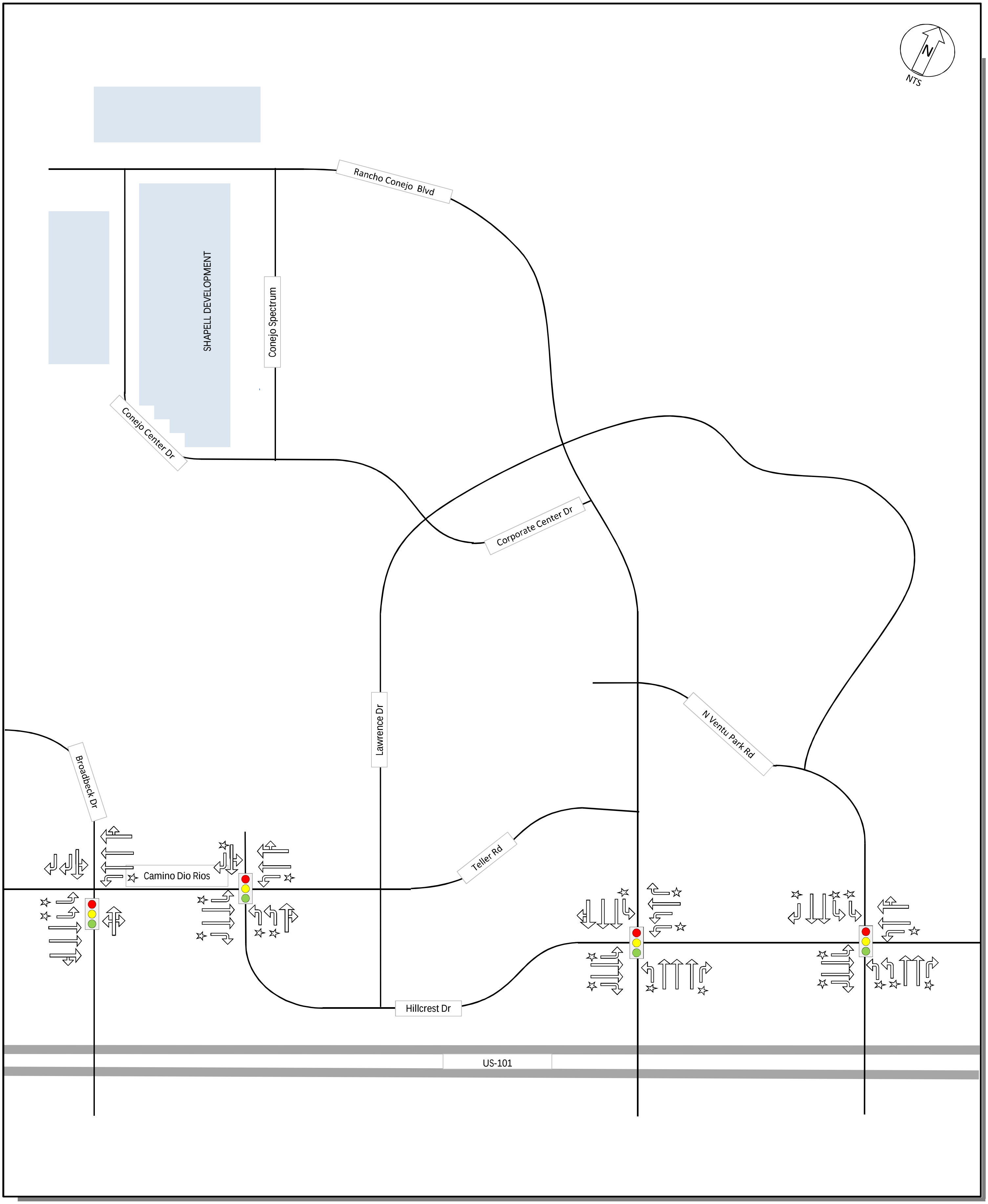
## TABLE 3 - EXISTING (2020) INTERSECTION LEVEL OF SERVICE - HCM

| Intersection | | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|
| | | Delay[1] | V/C | LOS | Delay[1] | V/C | LOS |
| 1 | Rancho Conejo Blvd at Hillcrest Dr | 21.8 | 0.70 | C | 33.1 | 0.83 | C |
| 2 | Camino Dos Rios/Teller Rd at Hillcrest Dr | 9.6 | 0.34 | A | 26.9 | 0.43 | C |
| 3 | Ventu Park Rd at Hillcrest Dr | 32.3 | 0.70 | C | 51.8 | 0.84 | D |
| 4 | Broadbeck Dr at Camino Dos Rios | 11.7 | 0.34 | B | 16.5 | 0.37 | B |

1 Delay recorded in seconds per vehicle

## TABLE 4 - EXISTING (2020) INTERSECTION LEVEL OF SERVICE - ICU

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | V/C | LOS | V/C | LOS |
| 1 | Rancho Conejo Blvd at Hillcrest Dr | 0.43 | A | 0.59 | A |
| 2 | Camino Dos Rios/Teller Rd at Hillcrest Dr | 0.28 | A | 0.36 | A |
| 3 | Ventu Park Rd at Hillcrest Dr | 0.55 | A | 0.71 | C |
| 4 | Broadbeck Dr at Camino Dos Rios | 0.26 | A | 0.30 | A |

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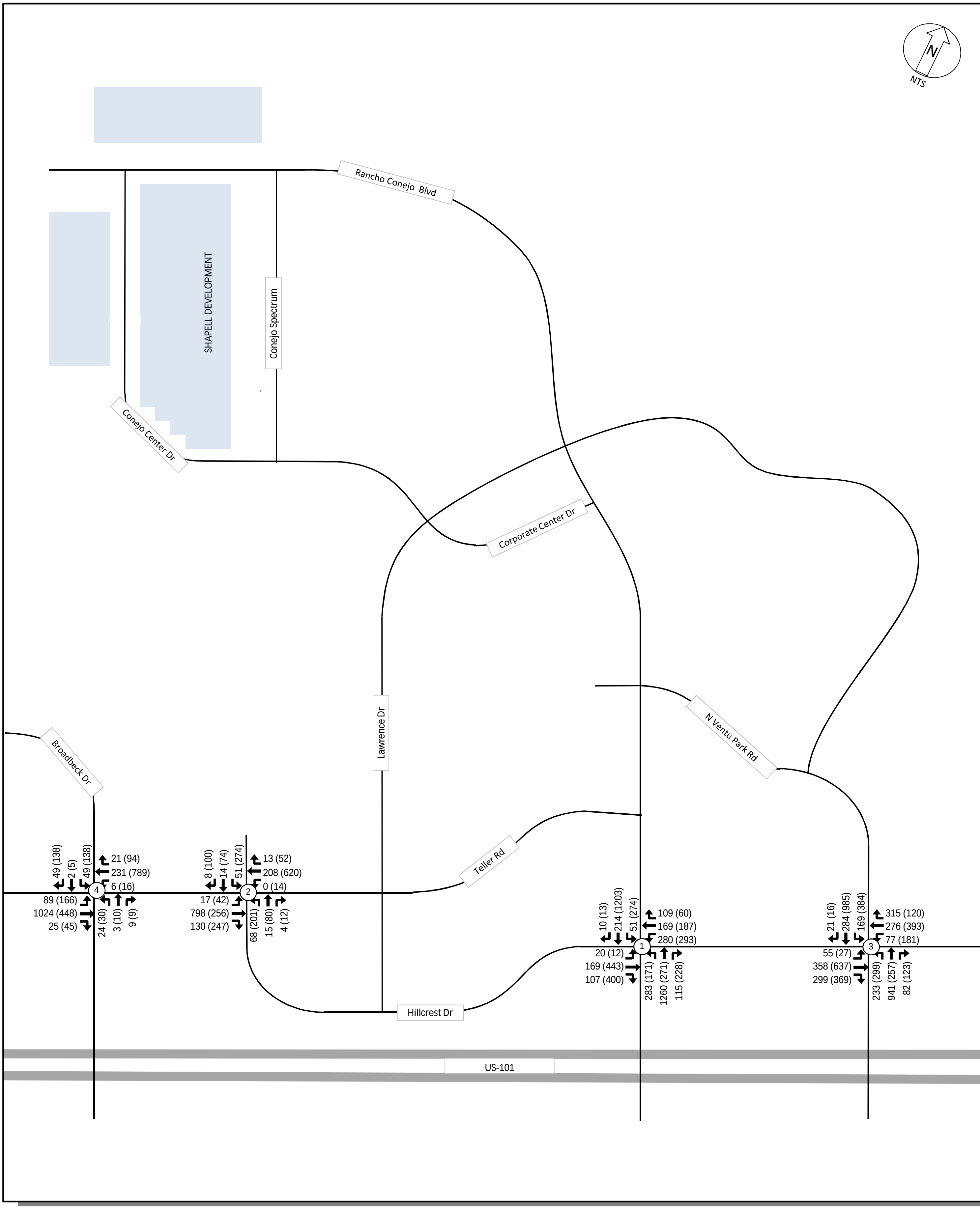
**Existing (2020) Lane Use and Traffic Control Devices**

Legend

Lane Use

Signalized Intersection

Figure
**3**

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**Existing (2020) Turning Movement Volumes**

Legend
A(B) = Existing Traffic Volumes
A = Weekday AM Peak Hour Volumes
B = Weekday PM Peak Hour Volumes

Figure
**4**

# PROJECT TRAFFIC

## Project Trip Generation

Traffic volumes generated by the proposed Shapell Project were developed using the 10th Edition of the ITE Trip Generation Handbook. Information regarding trip generation was taken from General Light Industrial Land Use, which has the code of 110. Due to the size of the develop, the intensity for the Shapell Project is 754.22 KSF. Trip generation was developed using the fitted curve equation from the following time periods:

- Weekday (Daily)
- Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 AM
- Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 PM

**Table 5** displays the trips generated from the Shapell Development.

### TABLE 5 - PROJECT TRIP GENERATION

| | | | | AM Peak Hour of Adjacent Street | | | PM Peak Hour of Adjacent Street | |
|---|---|---|---|---|---|---|---|---|---|
| **Land Use** | **Intensity** | | **Daily Trips** | **Total** | **In** | **Out** | **Total** | **In** | **Out** |
| **[ITE Code] Existing Site Traffic** | | | | | | | | | |
| 110 General Light Industrial | 754.22 | KSF | 2,916 | 199 | 163 | 24 | 149 | 19 | 130 |
| **Proposed Subtotal** | | | **2,916** | **199** | **163** | **24** | **149** | **19** | **130** |
| Internal Capture Trips | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Driveway Volumes** | | | **2,916** | **199** | **163** | **24** | **149** | **19** | **130** |
| Pass-By Trips[1] | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Proposed Site Trips** | | | **2,916** | **199** | **163** | **24** | **149** | **19** | **130** |

***Notes: Trip generation for the following uses are based on ITE's Trip Generation, 10th Edition.***

| | |
|---|---|
| ***[ITE 710] General Office Building*** | *X is KSF* |
| Weekday Daily | (T) = 3.79(X)+57.96 (50% in, 50% out) |
| Weekday AM Peak Hour | Ln (T) = 0.74 Ln (X) + 0.39 (82% in, 18% out) |
| Weekday PM Peak Hour | Ln (T) = 0.69 Ln (X) + 0.43 (13% in, 87% out) |

## Project Trip Distribution

Project trip distribution was developed based upon input from City staff, knowledge of the local roadway network, the type of development proposed, and other land uses within the vicinity of the site. **Figure 5** and **Figure 7** illustrate the trip distribution percentages and project traffic volumes for the proposed project, respectively.

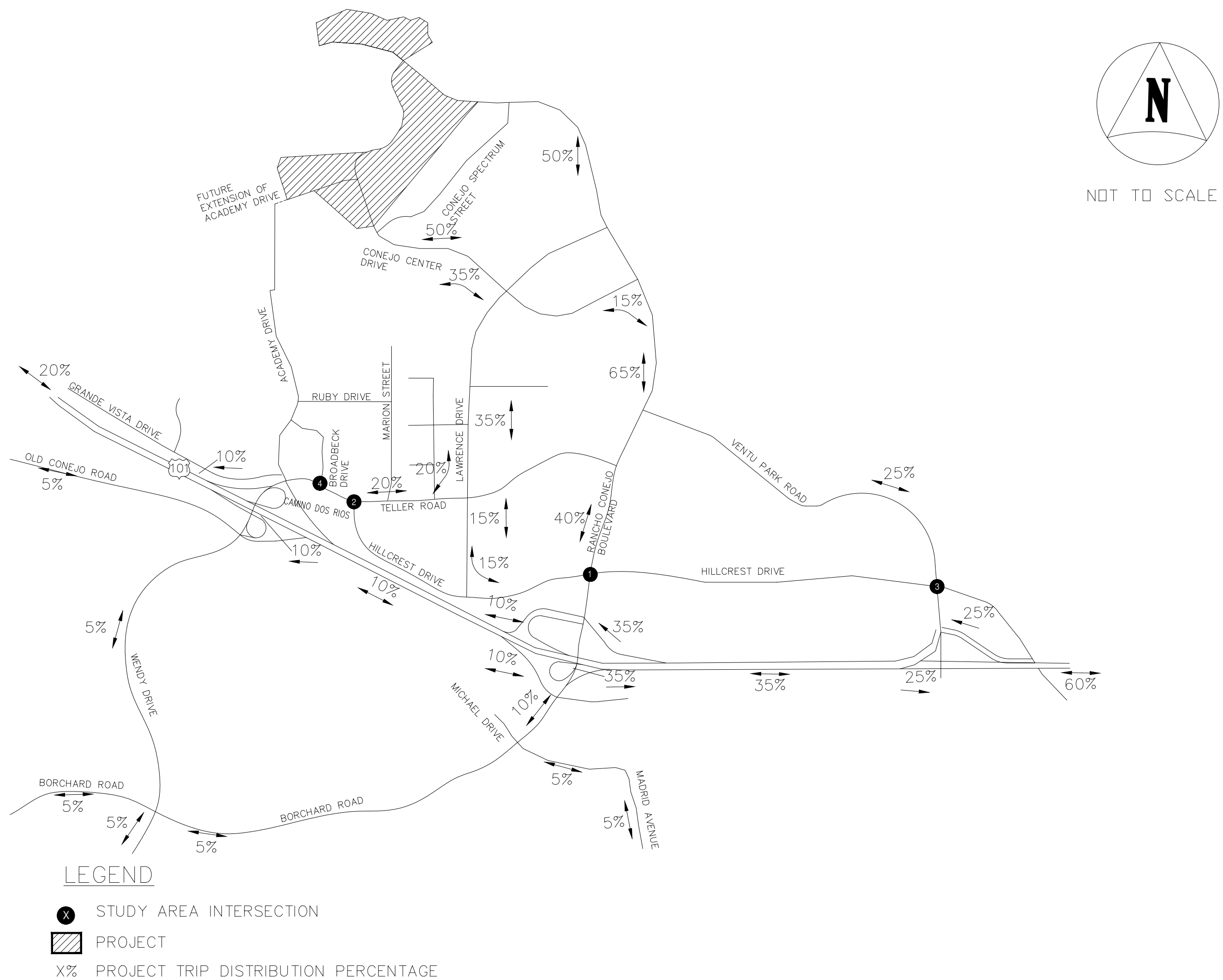


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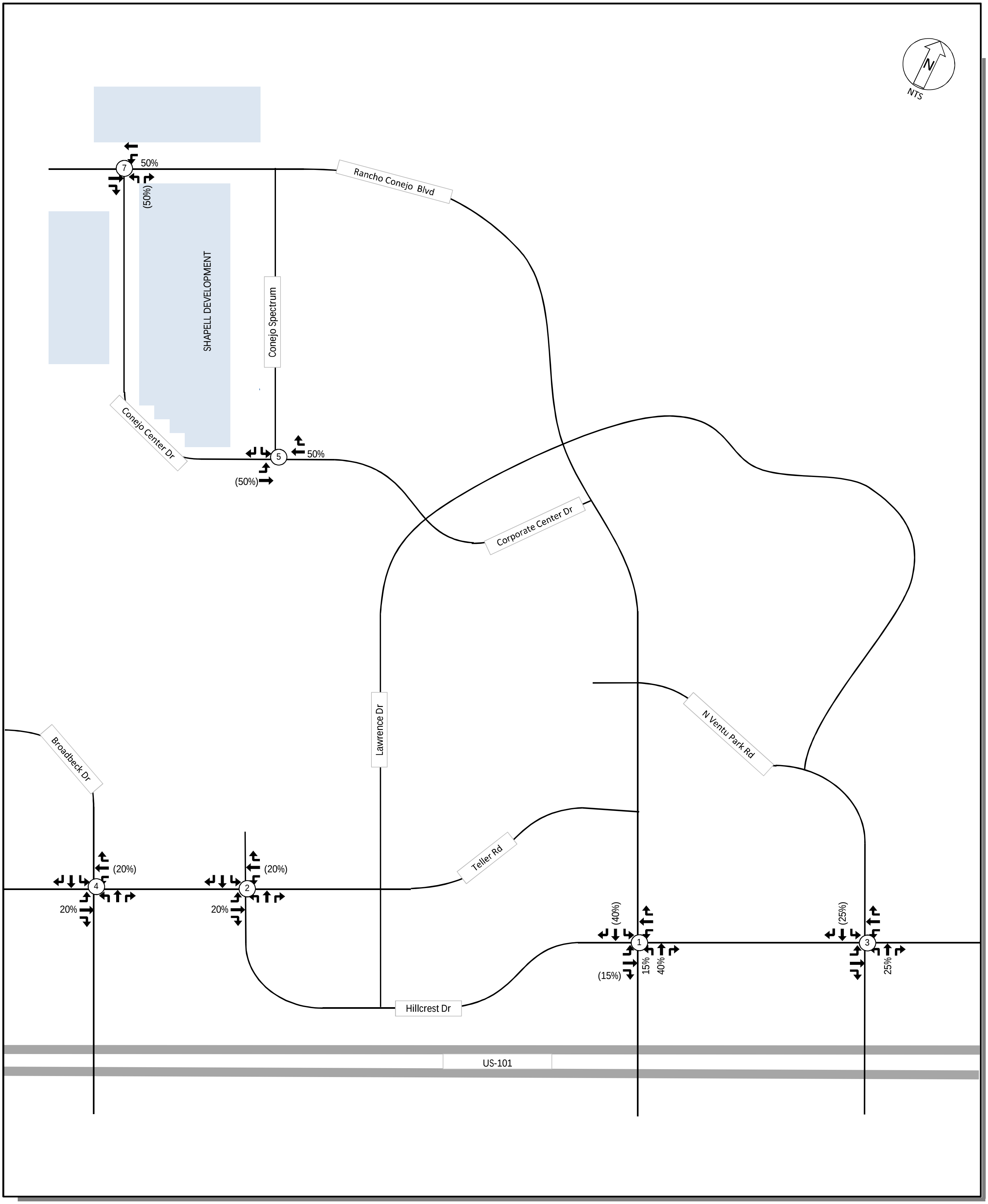
**FIGURE 5 -** General Site Trip Distribution

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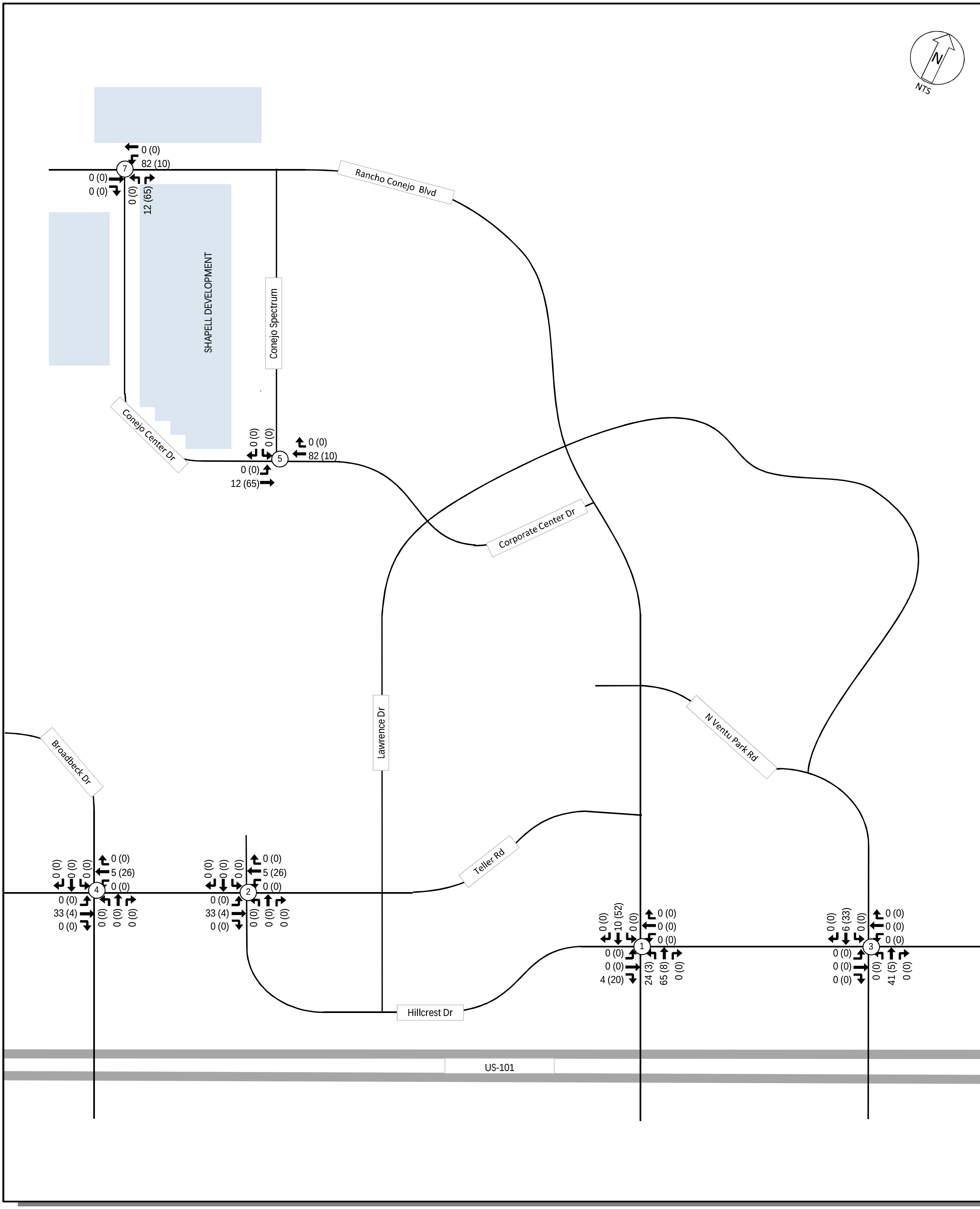
**Site Trip Distribution**

Legend
A%(B%) = Site Trip Distribution
A% = % Site Trips Entering
(B%) = % Site Trips Exiting

Figure
**6**

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**Project Generated Turning Movement Volumes**

Legend
A(B) = Project Generated Traffic Volumes
A = Weekday AM Peak Hour Volumes
B = Weekday PM Peak Hour Volumes

Figure
**7**

## EXISTING (2020) + PROJECT CONDITIONS

Project traffic was added to Existing (2020) traffic volumes at the four study area intersections and analyzed for peak-hour operations. **Figure 8** illustrates the AM and PM peak-hour volumes for the Existing (2020) + Project condition. HCM LOS analysis worksheets are provided in **Appendix A**, while ICU LOS analysis worksheets are provided in **Appendix B.**

The HCM results are summarized in **Table 6**, while the ICU results are summarized in **Table 7**.

**TABLE 6 - EXISTING (2020) + PROJECT INTERSECTION LEVEL OF SERVICE - HCM**

| | | Existing (2020) | | Existing (2020) + Project | | | | | | | | Impact? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM | PM | AM Peak Hour | | | | PM Peak Hour | | | | |
| | Intersection | V/C | V/C | Delay[1] | V/C | Diff | LOS | Delay[1] | V/C | Diff | LOS | |
| 1 | Rancho Conejo Blvd at Hillcrest Dr | 0.70 | 0.83 | 22.7 | 0.72 | **0.02** | C | 34.2 | 0.84 | 0.01 | C | **Yes** |
| 2 | Camino Dos Rios/Teller Rd at Hillcrest Dr | 0.34 | 0.43 | 9.5 | 0.35 | 0.01 | A | 27.0 | 0.44 | 0.01 | C | No |
| 3 | Ventu Park Rd at Hillcrest Dr | 0.70 | 0.84 | 34.0 | 0.72 | **0.02** | C | **55.9** | 0.85 | 0.01 | **E** | **Yes** |
| 4 | Broadbeck Dr at Camino Dos Rios | 0.34 | 0.37 | 11.6 | 0.34 | 0.00 | B | 16.3 | 0.38 | 0.01 | B | No |

1 Delay recorded in seconds per vehicle

**TABLE 7 - EXISTING (2020) + PROJECT INTERSECTION LEVEL OF SERVICE - ICU**

| | | Existing (2020) | | | | Existing (2020) + Project | | | | | | Impact? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | | PM Peak Hour | | | |
| | Intersection | V/C | LOS | V/C | LOS | V/C | Diff | LOS | V/C | Diff | LOS | |
| 1 | Rancho Conejo Blvd at Hillcrest Dr | 0.43 | A | 0.59 | A | 0.45 | 0.02 | A | 0.61 | 0.02 | B | No |
| 2 | Camino Dos Rios/Teller Rd at Hillcrest Dr | 0.28 | A | 0.36 | A | 0.29 | 0.01 | A | 0.37 | 0.01 | A | No |
| 3 | Ventu Park Rd at Hillcrest Dr | 0.55 | A | 0.71 | C | 0.57 | 0.02 | A | 0.72 | 0.01 | A | No |
| 4 | Broadbeck Dr at Camino Dos Rios | 0.26 | A | 0.30 | A | 0.27 | 0.01 | A | 0.31 | 0.01 | A | No |

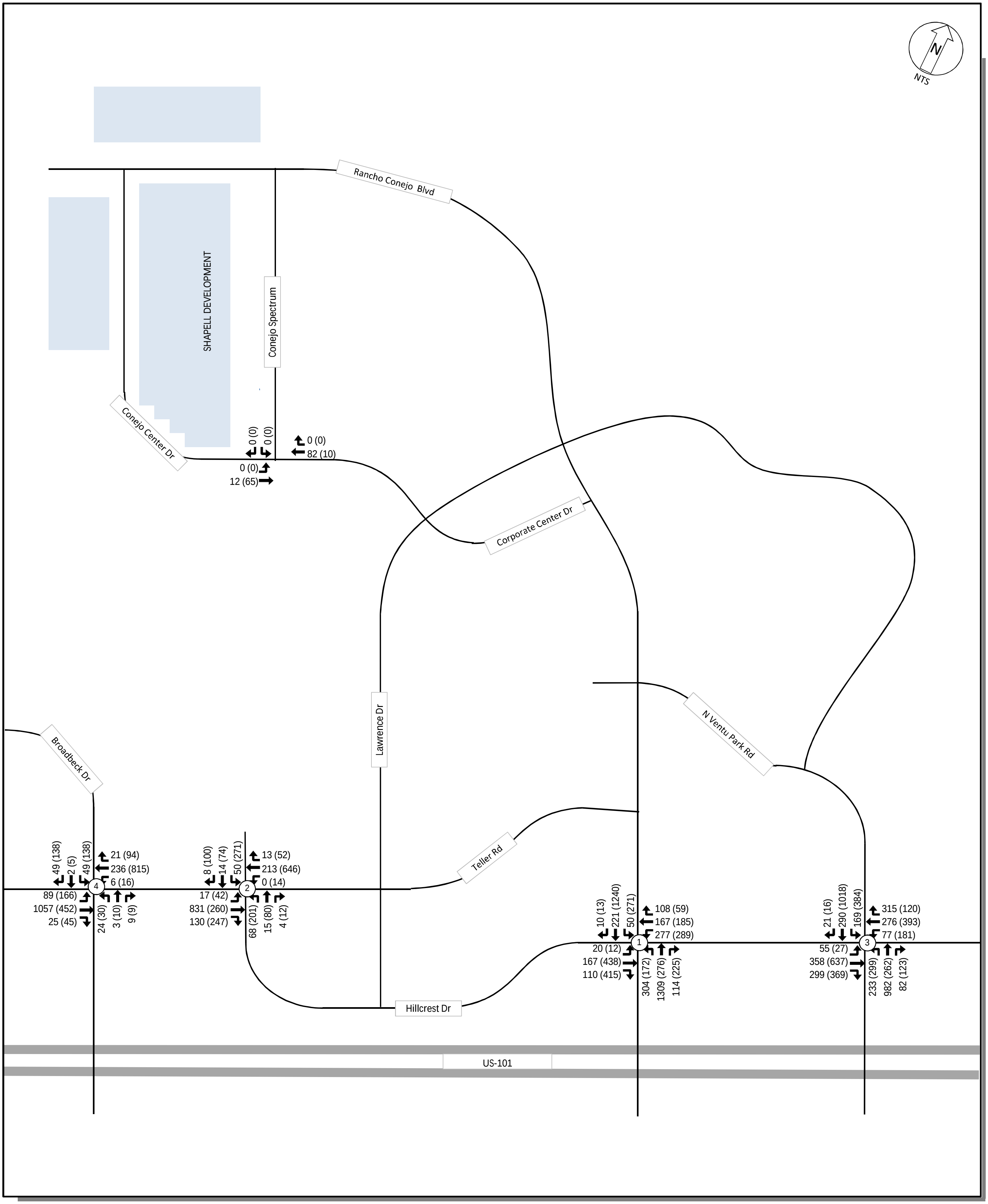
## Significant Impact and Recommended Mitigation

For the Existing (2020) + Project conditions, the project has a significant impact on the intersections of Rancho Conejo Blvd at Hillcrest Dr (AM peak hour) and Ventu Park Rd at Hillcrest Dr (AM and PM peak hours). It is recommended to make signal timing changes at both intersections to better accommodate the vehicular demand and it's also recommended to change the lane assignment of the southbound approach of the intersection of Ventu Park Rd at Hillcrest Dr to be a through, through, through-right approach per direction given by the TIMF Study. **Table 8** summarizes the HCM results after mitigation.

**TABLE 8 - EXISTING (2020) + PROJECT INTERSECTION LEVEL OF SERVICE – HCM (MITIGATION)**

| | | Existing (2020) | | Existing (2020) + Project + Mitigation | | | | | | | | Impact? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM | PM | AM Peak Hour | | | | PM Peak Hour | | | | |
| | Intersection | V/C | V/C | Delay[1] | V/C | Diff | LOS | Delay[1] | V/C | Diff | LOS | |
| 1 | Rancho Conejo Blvd at Hillcrest Dr | 0.70 | 0.83 | 22.8 | 0.70 | 0.00 | C | 34.2 | 0.84 | 0.01 | C | No |
| 2 | Camino Dos Rios/Teller Rd at Hillcrest Dr | 0.34 | 0.43 | 9.5 | 0.35 | 0.01 | A | 27.0 | 0.44 | 0.01 | C | No |
| 3 | Ventu Park Rd at Hillcrest Dr | 0.70 | 0.84 | 32.3 | 0.71 | 0.01 | C | 35.8 | 0.74 | -0.10 | D | No |
| 4 | Broadbeck Dr at Camino Dos Rios | 0.34 | 0.37 | 11.6 | 0.34 | 0.00 | B | 16.3 | 0.38 | 0.01 | B | No |

1 Delay recorded in seconds per vehicle

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**Existing (2020) + Project Turning Movement Volumes**

Legend
A(B) = Project Generated Traffic Volumes
A = Weekday AM Peak Hour Volumes
B = Weekday PM Peak Hour Volumes

Figure
**8**

## BUILD OUT (2040) CONDITIONS

Build Out (2040) conditions were determined based on the TIMF Study. The TIMF Study determined Build Out (sometimes referred to as Future) volumes from the 2035 Specific Plan. These volumes from the 2035 Specific Plan were grown further by 0.376% annually for 5 years for a total increase of 1.88% to 2040. If 2035 Specific Plan volumes were not available for the intersection location, the existing traffic volumes were grown by 0.376% annually from the year they were collected to 2040. The Build Out (2040) conditions already include the Shapell development but does not include the future extension of Academy Dr. **Figure 9** illustrates the AM and PM peak-hour volumes for the Build Out (2040) condition. Recommended improvements from the Existing (2020) + Project scenario were included in the Build Out (2040) conditions.

The HCM results are summarized in **Table 9**, while the ICU results are summarized in **Table 10**. For the Build Out (2040) all study intersections operate at an acceptable level of service. HCM LOS analysis worksheets are provided in **Appendix A**, while ICU LOS analysis worksheets are provided in **Appendix B.**

**TABLE 9 - BUILD OUT (2040) INTERSECTION LEVEL OF SERVICE - HCM**

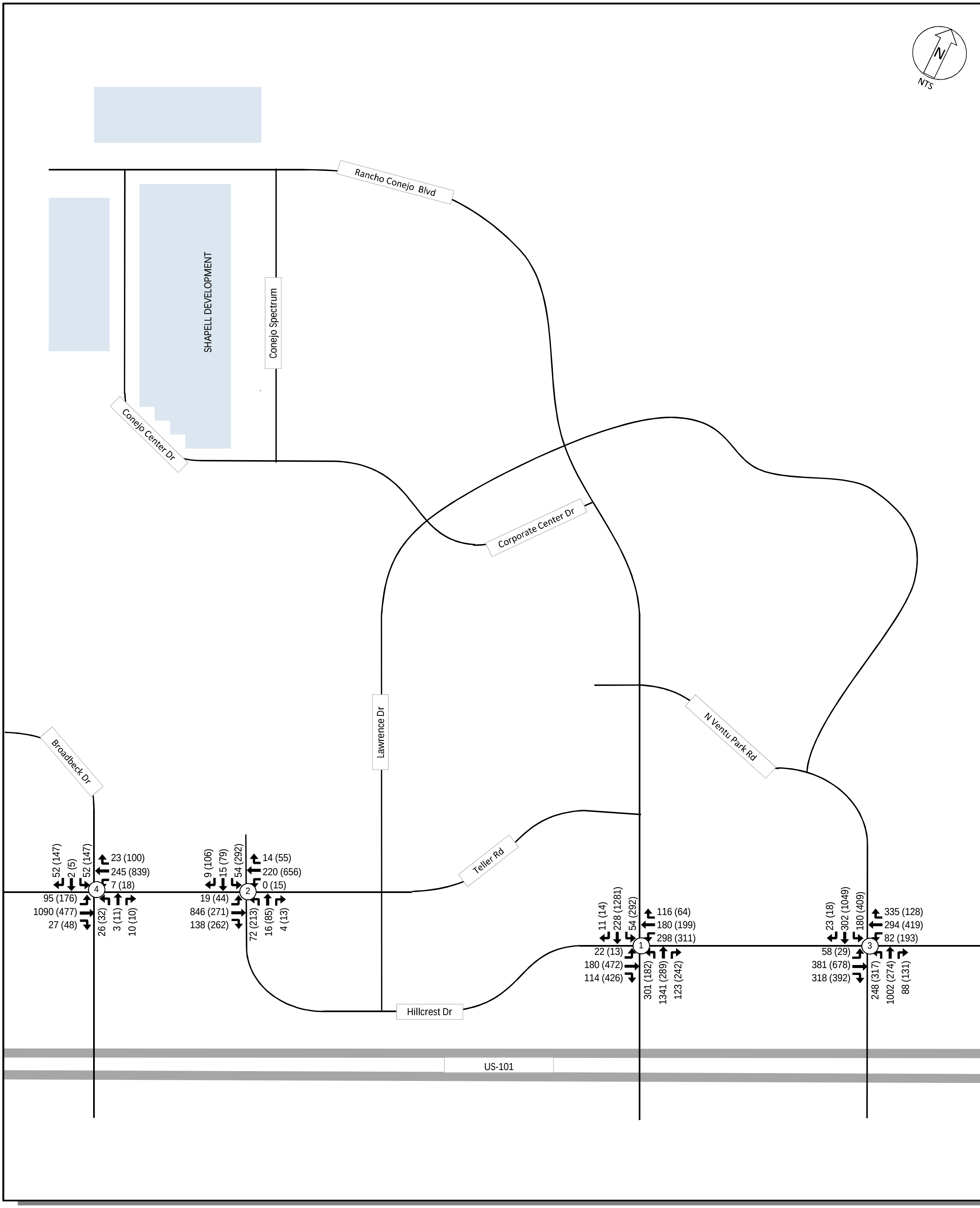
| Intersection | | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|
| | | Delay[1] | V/C | LOS | Delay[1] | V/C | LOS |
| 1 | Rancho Conejo Blvd at Hillcrest Dr | 23.7 | 0.73 | C | 37.7 | 0.89 | D |
| 2 | Camino Dos Rios/Teller Rd at Hillcrest Dr | 9.8 | 0.36 | A | 27.3 | 0.46 | C |
| 3 | Ventu Park Rd at Hillcrest Dr | 35.7 | 0.75 | D | 40.4 | 0.75 | D |
| 4 | Broadbeck Dr at Camino Dos Rios | 11.9 | 0.36 | B | 16.8 | 0.40 | B |

1 Delay recorded in seconds per vehicle

**TABLE 10 - BUILD OUT (2040) INTERSECTION LEVEL OF SERVICE - ICU**

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | V/C | LOS | V/C | LOS |
| 1 | Rancho Conejo Blvd at Hillcrest Dr | 0.46 | A | 0.63 | B |
| 2 | Camino Dos Rios/Teller Rd at Hillcrest Dr | 0.29 | A | 0.39 | A |
| 3 | Ventu Park Rd at Hillcrest Dr | 0.61 | B | 0.65 | B |
| 4 | Broadbeck Dr at Camino Dos Rios | 0.28 | A | 0.33 | A |

All study intersections continue to operate at an acceptable LOS, except for the intersection of Ventu Park Rd at Hillcrest Dr. It is anticipated that when the Academy Drive extension is built and connects to the project site, it would alleviate the traffic experienced on Ventu Park Rd and therefore decrease the delay seen at the intersection of Ventu Park Rd at Hillcrest Dr.

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**Build Out (2040) Turning Movement Volumes**

Legend
A(B) = Build Out (2040) Generated Traffic Volumes
A = Weekday AM Peak Hour Volumes
B = Weekday PM Peak Hour Volumes

Figure
**9**

## CONCLUSION AND RECOMMENDATIONS

The City of Thousand Oaks traffic impact analysis guidelines state that a significant project traffic impact occurs when the proposed project increases traffic demand on a signalized intersection by at least 0.02 of capacity at a pre-project LOS of C, D, E, or F. As stated in the TIMF Study, the City has established a minimum of LOS C as acceptable at study intersections, with the exception of Rancho Conejo Blvd at Hillcrest Dr where LOS D is acceptable.

For the Existing (2020) conditions, all study intersections operate at an acceptable level of service with the exception of the intersection of Ventu Park Rd at Hillcrest Dr during the PM peak hour, which operates at a LOS D.

For the Existing (2020) + Project conditions, the project has a significant impact on the intersections of Rancho Conejo Blvd at Hillcrest Dr (AM peak hour) and Ventu Park Rd at Hillcrest Dr (AM and PM peak hours). It is recommended to make signal timing changes at both intersections to better accommodate the vehicular demand and it’s also recommended to change the lane assignment of the southbound approach of ther intersection of Ventu Park Rd at Hillcrest Dr to be a through, through, through-right approach.

Recommended improvements from the Existing (2020) + Project scenario were included in the Build Out (2040) conditions. In the Build Out (2040) scenario, all study intersections continue to operate at an acceptable LOS, except for the intersection of Ventu Park Rd at Hillcrest Dr. It is anticipated that when the Academy Drive extension is built and connects to the project site, it would alleviate the traffic experienced on Ventu Park Rd and therefore decrease the delay seen at the intersection of Ventu Park Rd at Hillcrest Dr.

## APPENDIX A: Study Intersection LOS Analysis – Synchro Output Sheets

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 20 | 169 | 107 | 280 | 169 | 109 | 283 | 1260 | 115 | 51 | 214 | 10 |
| Future Volume (vph) | 20 | 169 | 107 | 280 | 169 | 109 | 283 | 1260 | 115 | 51 | 214 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5051 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5051 | |
| 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) | 22 | 184 | 116 | 304 | 184 | 118 | 308 | 1370 | 125 | 55 | 233 | 11 |
| RTOR Reduction (vph) | 0 | 0 | 75 | 0 | 0 | 85 | 0 | 0 | 56 | 0 | 6 | 0 |
| Lane Group Flow (vph) | 22 | 184 | 41 | 304 | 184 | 33 | 308 | 1370 | 69 | 55 | 238 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | 7 | 3 | 8 | 1 | 7 | 4 | |
| Permitted Phases | | | 2 | | | 6 | | | 8 | | | |
| Actuated Green, G (s) | 1.1 | 7.9 | 24.4 | 8.2 | 15.0 | 19.5 | 16.5 | 30.0 | 38.2 | 4.5 | 18.0 | |
| Effective Green, g (s) | 1.1 | 7.9 | 24.4 | 8.2 | 15.0 | 19.5 | 16.5 | 30.0 | 38.2 | 4.5 | 18.0 | |
| Actuated g/C Ratio | 0.02 | 0.11 | 0.35 | 0.12 | 0.22 | 0.28 | 0.24 | 0.43 | 0.55 | 0.07 | 0.26 | |
| Clearance Time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 28 | 404 | 558 | 407 | 404 | 446 | 422 | 2207 | 875 | 115 | 1315 | |
| v/s Ratio Prot | 0.01 | 0.05 | 0.02 | c0.09 | c0.10 | 0.00 | c0.17 | c0.27 | 0.01 | 0.03 | 0.05 | |
| v/s Ratio Perm | | | 0.01 | | | 0.02 | | | 0.03 | | | |
| v/c Ratio | 0.79 | 0.46 | 0.07 | 0.75 | 0.46 | 0.07 | 0.73 | 0.62 | 0.08 | 0.48 | 0.18 | |
| Uniform Delay, d1 | 33.9 | 28.6 | 14.8 | 29.4 | 23.5 | 18.2 | 24.2 | 15.1 | 7.2 | 31.2 | 19.8 | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 82.7 | 0.8 | 0.1 | 7.3 | 0.8 | 0.1 | 6.2 | 0.5 | 0.0 | 3.1 | 0.1 | |
| Delay (s) | 116.6 | 29.4 | 14.9 | 36.8 | 24.3 | 18.3 | 30.5 | 15.7 | 7.3 | 34.3 | 19.9 | |
| Level of Service | F | C | B | D | C | B | C | B | A | C | B | |
| Approach Delay (s) | | 30.1 | | | 29.4 | | | 17.6 | | | 22.5 | |
| Approach LOS | | C | | | C | | | B | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 21.8 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.70 | | |
| Actuated Cycle Length (s) | 69.1 | Sum of lost time (s) | 18.5 |
| Intersection Capacity Utilization | 57.0% | ICU Level of Service | B |
| 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) | 17 | 798 | 130 | 0 | 208 | 13 | 68 | 15 | 4 | 7 | 14 | 8 |
| Future Volume (vph) | 17 | 798 | 130 | 0 | 208 | 13 | 68 | 15 | 4 | 7 | 14 | 8 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | 5.5 | | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | | 0.95 | | 0.97 | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | | 0.99 | | 1.00 | 0.97 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | | 1.00 | | 0.95 | 1.00 | | | 0.98 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | | 3508 | | 3433 | 1807 | | | 1831 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | | 1.00 | | 0.95 | 1.00 | | | 0.98 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | | 3508 | | 3433 | 1807 | | | 1831 | 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) | 18 | 867 | 141 | 0 | 226 | 14 | 74 | 16 | 4 | 8 | 15 | 9 |
| RTOR Reduction (vph) | 0 | 0 | 25 | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 8 |
| Lane Group Flow (vph) | 18 | 867 | 116 | 0 | 238 | 0 | 74 | 16 | 0 | 0 | 23 | 1 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | 8 | 1 | 6 | | 8 | 8 | | 7 | 7 | 5 |
| Permitted Phases | | | 2 | | | | | | | | | 7 |
| Actuated Green, G (s) | 4.6 | 90.5 | 98.7 | | 81.9 | | 8.2 | 8.2 | | | 4.8 | 9.4 |
| Effective Green, g (s) | 4.6 | 90.5 | 98.7 | | 81.9 | | 8.2 | 8.2 | | | 4.8 | 9.4 |
| Actuated g/C Ratio | 0.04 | 0.75 | 0.82 | | 0.68 | | 0.07 | 0.07 | | | 0.04 | 0.08 |
| Clearance Time (s) | 4.0 | 5.5 | 5.5 | | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 67 | 2668 | 1374 | | 2394 | | 234 | 123 | | | 73 | 124 |
| v/s Ratio Prot | 0.01 | c0.24 | 0.01 | | 0.07 | | c0.02 | 0.01 | | | c0.01 | 0.00 |
| v/s Ratio Perm | | | 0.07 | | | | | | | | | 0.00 |
| v/c Ratio | 0.27 | 0.32 | 0.08 | | 0.10 | | 0.32 | 0.13 | | | 0.32 | 0.01 |
| Uniform Delay, d1 | 56.1 | 4.8 | 2.0 | | 6.5 | | 53.2 | 52.6 | | | 56.0 | 51.0 |
| Progression Factor | 1.26 | 0.74 | 0.78 | | 1.00 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 2.1 | 0.3 | 0.0 | | 0.1 | | 0.8 | 0.5 | | | 2.5 | 0.0 |
| Delay (s) | 72.9 | 3.9 | 1.6 | | 6.6 | | 54.0 | 53.0 | | | 58.5 | 51.0 |
| Level of Service | E | A | A | | A | | D | D | | | E | D |
| Approach Delay (s) | | 4.8 | | | 6.6 | | | 53.8 | | | 56.4 | |
| Approach LOS | | A | | | A | | | D | | | E | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 9.6 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.34 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 20.5 |
| Intersection Capacity Utilization | 39.8% | 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) | 55 | 358 | 299 | 77 | 276 | 315 | 233 | 941 | 82 | 169 | 284 | 21 |
| Future Volume (vph) | 55 | 358 | 299 | 77 | 276 | 315 | 233 | 941 | 82 | 169 | 284 | 21 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.92 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3256 | | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3256 | | 3433 | 3539 | 1583 | 3433 | 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) | 60 | 389 | 325 | 84 | 300 | 342 | 253 | 1023 | 89 | 184 | 309 | 23 |
| RTOR Reduction (vph) | 0 | 0 | 162 | 0 | 172 | 0 | 0 | 0 | 60 | 0 | 0 | 16 |
| Lane Group Flow (vph) | 60 | 389 | 163 | 84 | 470 | 0 | 253 | 1023 | 29 | 184 | 309 | 7 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | | | | | | 8 | | | 4 |
| Actuated Green, G (s) | 6.1 | 29.2 | 39.9 | 6.9 | 30.0 | | 10.7 | 30.3 | 30.3 | 8.8 | 27.4 | 27.4 |
| Effective Green, g (s) | 6.1 | 29.2 | 39.9 | 6.9 | 30.0 | | 10.7 | 30.3 | 30.3 | 8.8 | 27.4 | 27.4 |
| Actuated g/C Ratio | 0.06 | 0.31 | 0.42 | 0.07 | 0.32 | | 0.11 | 0.32 | 0.32 | 0.09 | 0.29 | 0.29 |
| Clearance Time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 1.4 | 2.0 | 1.4 | 1.4 | 2.0 | | 1.4 | 2.0 | 2.0 | 1.4 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 114 | 1097 | 670 | 129 | 1036 | | 389 | 1138 | 509 | 320 | 1029 | 460 |
| v/s Ratio Prot | 0.03 | 0.11 | 0.03 | c0.05 | c0.14 | | c0.07 | c0.29 | | 0.05 | 0.09 | |
| v/s Ratio Perm | | | 0.08 | | | | | | 0.02 | | | 0.00 |
| v/c Ratio | 0.53 | 0.35 | 0.24 | 0.65 | 0.45 | | 0.65 | 0.90 | 0.06 | 0.57 | 0.30 | 0.01 |
| Uniform Delay, d1 | 42.7 | 25.2 | 17.4 | 42.5 | 25.6 | | 40.0 | 30.5 | 22.1 | 40.9 | 26.0 | 23.8 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 2.0 | 0.9 | 0.1 | 8.6 | 0.1 | | 3.0 | 9.4 | 0.0 | 1.6 | 0.1 | 0.0 |
| Delay (s) | 44.7 | 26.1 | 17.5 | 51.1 | 25.7 | | 42.9 | 39.8 | 22.1 | 42.5 | 26.0 | 23.8 |
| Level of Service | D | C | B | D | C | | D | D | C | D | C | C |
| Approach Delay (s) | | 23.9 | | | 28.6 | | | 39.3 | | | 31.8 | |
| Approach LOS | | C | | | C | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 32.3 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.70 | | |
| Actuated Cycle Length (s) | 94.2 | Sum of lost time (s) | 20.0 |
| Intersection Capacity Utilization | 68.6% | 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) | 89 | 1024 | 25 | 6 | 231 | 21 | 24 | 3 | 9 | 66 | 2 | 49 |
| Future Volume (vph) | 89 | 1024 | 25 | 6 | 231 | 21 | 24 | 3 | 9 | 66 | 2 | 49 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Lane Util. Factor | 0.97 | 0.91 | | 1.00 | 0.91 | | 1.00 | 1.00 | | | 1.00 | 0.88 |
| Frt | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | 0.88 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.95 | 1.00 |
| Satd. Flow (prot) | 3433 | 5067 | | 1770 | 5021 | | 1770 | 1648 | | | 1776 | 2787 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.65 | 1.00 | | | 0.72 | 1.00 |
| Satd. Flow (perm) | 3433 | 5067 | | 1770 | 5021 | | 1219 | 1648 | | | 1346 | 2787 |
| 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) | 97 | 1113 | 27 | 7 | 251 | 23 | 26 | 3 | 10 | 72 | 2 | 53 |
| RTOR Reduction (vph) | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 9 | 0 | 0 | 0 | 45 |
| Lane Group Flow (vph) | 97 | 1139 | 0 | 7 | 270 | 0 | 26 | 4 | 0 | 0 | 74 | 8 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | pm+ov |
| Protected Phases | 5 | 2 | | 1 | 6 | | | 8 | | | 4 | 5 |
| Permitted Phases | | | | | | | 8 | | | 4 | | 4 |
| Actuated Green, G (s) | 8.2 | 95.2 | | 1.4 | 89.4 | | 9.4 | 9.4 | | | 9.9 | 18.1 |
| Effective Green, g (s) | 8.2 | 95.2 | | 1.4 | 89.4 | | 9.4 | 9.4 | | | 9.9 | 18.1 |
| Actuated g/C Ratio | 0.07 | 0.79 | | 0.01 | 0.75 | | 0.08 | 0.08 | | | 0.08 | 0.15 |
| Clearance Time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Vehicle Extension (s) | 2.0 | 3.0 | | 2.0 | 3.0 | | 2.0 | 2.0 | | | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 234 | 4019 | | 20 | 3740 | | 95 | 129 | | | 111 | 420 |
| v/s Ratio Prot | c0.03 | c0.22 | | 0.00 | 0.05 | | | 0.00 | | | | 0.00 |
| v/s Ratio Perm | | | | | | | 0.02 | | | | c0.05 | 0.00 |
| v/c Ratio | 0.41 | 0.28 | | 0.35 | 0.07 | | 0.27 | 0.03 | | | 0.67 | 0.02 |
| Uniform Delay, d1 | 53.6 | 3.3 | | 58.8 | 4.1 | | 52.1 | 51.1 | | | 53.4 | 43.4 |
| Progression Factor | 1.00 | 1.00 | | 1.03 | 0.87 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.4 | 0.2 | | 3.8 | 0.0 | | 0.6 | 0.0 | | | 11.1 | 0.0 |
| Delay (s) | 54.0 | 3.5 | | 64.4 | 3.6 | | 52.7 | 51.1 | | | 64.6 | 43.4 |
| Level of Service | D | A | | E | A | | D | D | | | E | D |
| Approach Delay (s) | | 7.4 | | | 5.2 | | | 52.1 | | | 55.7 | |
| Approach LOS | | A | | | A | | | D | | | E | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 11.7 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.34 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 14.0 |
| Intersection Capacity Utilization | 47.9% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 12 | 443 | 400 | 293 | 187 | 60 | 171 | 271 | 228 | 274 | 1203 | 13 |
| Future Volume (vph) | 12 | 443 | 400 | 293 | 187 | 60 | 171 | 271 | 228 | 274 | 1203 | 13 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5077 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5077 | |
| 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) | 13 | 482 | 435 | 318 | 203 | 65 | 186 | 295 | 248 | 298 | 1308 | 14 |
| RTOR Reduction (vph) | 0 | 0 | 84 | 0 | 0 | 33 | 0 | 0 | 41 | 0 | 1 | 0 |
| Lane Group Flow (vph) | 13 | 482 | 351 | 318 | 203 | 32 | 186 | 295 | 207 | 298 | 1321 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | 7 | 3 | 8 | 1 | 7 | 4 | |
| Permitted Phases | | | 2 | | | 6 | | | 8 | | | |
| Actuated Green, G (s) | 0.6 | 12.3 | 24.9 | 12.0 | 23.7 | 39.8 | 12.6 | 20.8 | 32.8 | 16.1 | 24.3 | |
| Effective Green, g (s) | 0.6 | 12.3 | 24.9 | 12.0 | 23.7 | 39.8 | 12.6 | 20.8 | 32.8 | 16.1 | 24.3 | |
| Actuated g/C Ratio | 0.01 | 0.15 | 0.31 | 0.15 | 0.30 | 0.50 | 0.16 | 0.26 | 0.41 | 0.20 | 0.30 | |
| Clearance Time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 13 | 546 | 494 | 516 | 553 | 790 | 279 | 1327 | 651 | 357 | 1547 | |
| v/s Ratio Prot | 0.01 | c0.14 | 0.11 | c0.09 | 0.11 | 0.01 | 0.11 | 0.06 | 0.05 | c0.17 | c0.26 | |
| v/s Ratio Perm | | | 0.11 | | | 0.01 | | | 0.08 | | | |
| v/c Ratio | 1.00 | 0.88 | 0.71 | 0.62 | 0.37 | 0.04 | 0.67 | 0.22 | 0.32 | 0.83 | 0.85 | |
| Uniform Delay, d1 | 39.6 | 33.0 | 24.2 | 31.7 | 22.1 | 10.2 | 31.6 | 23.1 | 15.9 | 30.5 | 26.0 | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 249.6 | 15.5 | 4.8 | 2.2 | 0.4 | 0.0 | 5.9 | 0.1 | 0.3 | 15.4 | 4.8 | |
| Delay (s) | 289.2 | 48.5 | 29.0 | 33.9 | 22.5 | 10.2 | 37.5 | 23.2 | 16.2 | 45.9 | 30.8 | |
| Level of Service | F | D | C | C | C | B | D | C | B | D | C | |
| Approach Delay (s) | | 42.7 | | | 27.3 | | | 24.4 | | | 33.6 | |
| Approach LOS | | D | | | C | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 33.1 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.83 | | |
| Actuated Cycle Length (s) | 79.7 | Sum of lost time (s) | 18.5 |
| Intersection Capacity Utilization | 69.0% | 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) | 42 | 256 | 247 | 14 | 620 | 52 | 201 | 80 | 12 | 29 | 74 | 100 |
| Future Volume (vph) | 42 | 256 | 247 | 14 | 620 | 52 | 201 | 80 | 12 | 29 | 74 | 100 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | 5.5 | 4.0 | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | | 1.00 | 0.98 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3498 | | 3433 | 1826 | | | 1837 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3498 | | 3433 | 1826 | | | 1837 | 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) | 46 | 278 | 268 | 15 | 674 | 57 | 218 | 87 | 13 | 32 | 80 | 109 |
| RTOR Reduction (vph) | 0 | 0 | 81 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 90 |
| Lane Group Flow (vph) | 46 | 278 | 187 | 15 | 727 | 0 | 218 | 96 | 0 | 0 | 112 | 19 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | 8 | 1 | 6 | | 8 | 8 | | 7 | 7 | 5 |
| Permitted Phases | | | 2 | | | | | | | | | 7 |
| Actuated Green, G (s) | 8.8 | 59.4 | 83.8 | 3.1 | 53.7 | | 24.4 | 24.4 | | | 12.6 | 21.4 |
| Effective Green, g (s) | 8.8 | 59.4 | 83.8 | 3.1 | 53.7 | | 24.4 | 24.4 | | | 12.6 | 21.4 |
| Actuated g/C Ratio | 0.07 | 0.49 | 0.70 | 0.03 | 0.45 | | 0.20 | 0.20 | | | 0.10 | 0.18 |
| Clearance Time (s) | 4.0 | 5.5 | 5.5 | 4.0 | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 129 | 1751 | 1105 | 45 | 1565 | | 698 | 371 | | | 192 | 282 |
| v/s Ratio Prot | c0.03 | 0.08 | 0.03 | 0.01 | c0.21 | | c0.06 | 0.05 | | | c0.06 | 0.01 |
| v/s Ratio Perm | | | 0.08 | | | | | | | | | 0.01 |
| v/c Ratio | 0.36 | 0.16 | 0.17 | 0.33 | 0.46 | | 0.31 | 0.26 | | | 0.58 | 0.07 |
| Uniform Delay, d1 | 52.9 | 16.6 | 6.2 | 57.4 | 23.1 | | 40.7 | 40.2 | | | 51.2 | 41.0 |
| Progression Factor | 1.16 | 0.87 | 0.54 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.7 | 0.2 | 0.3 | 4.3 | 1.0 | | 1.2 | 1.7 | | | 4.5 | 0.1 |
| Delay (s) | 63.3 | 14.6 | 3.7 | 61.8 | 24.1 | | 41.8 | 41.9 | | | 55.7 | 41.1 |
| Level of Service | E | B | A | E | C | | D | D | | | E | D |
| Approach Delay (s) | | 13.4 | | | 24.9 | | | 41.8 | | | 48.5 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 26.9 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.43 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 20.5 |
| Intersection Capacity Utilization | 49.5% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 27 | 637 | 369 | 181 | 393 | 120 | 299 | 257 | 123 | 384 | 985 | 16 |
| Future Volume (vph) | 27 | 637 | 369 | 181 | 393 | 120 | 299 | 257 | 123 | 384 | 985 | 16 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.96 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3415 | | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3415 | | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 27 | 637 | 369 | 181 | 393 | 120 | 299 | 257 | 123 | 384 | 985 | 16 |
| RTOR Reduction (vph) | 0 | 0 | 34 | 0 | 22 | 0 | 0 | 0 | 94 | 0 | 0 | 12 |
| Lane Group Flow (vph) | 27 | 637 | 335 | 181 | 491 | 0 | 299 | 257 | 29 | 384 | 985 | 4 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | | | | | | 8 | | | 4 |
| Actuated Green, G (s) | 3.7 | 30.7 | 42.9 | 11.0 | 38.0 | | 12.2 | 23.7 | 23.7 | 14.5 | 25.0 | 25.0 |
| Effective Green, g (s) | 3.7 | 30.7 | 42.9 | 11.0 | 38.0 | | 12.2 | 23.7 | 23.7 | 14.5 | 25.0 | 25.0 |
| Actuated g/C Ratio | 0.04 | 0.31 | 0.43 | 0.11 | 0.38 | | 0.12 | 0.24 | 0.24 | 0.15 | 0.25 | 0.25 |
| Clearance Time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 1.4 | 2.0 | 1.4 | 1.4 | 2.0 | | 1.4 | 2.0 | 2.0 | 1.4 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 66 | 1098 | 686 | 196 | 1312 | | 423 | 848 | 379 | 503 | 894 | 400 |
| v/s Ratio Prot | 0.02 | c0.18 | 0.06 | c0.10 | 0.14 | | 0.09 | 0.07 | | c0.11 | c0.28 | |
| v/s Ratio Perm | | | 0.15 | | | | | | 0.02 | | | 0.00 |
| v/c Ratio | 0.41 | 0.58 | 0.49 | 0.92 | 0.37 | | 0.71 | 0.30 | 0.08 | 0.76 | 1.10 | 0.01 |
| Uniform Delay, d1 | 46.5 | 28.7 | 20.1 | 43.5 | 21.9 | | 41.6 | 30.8 | 29.1 | 40.6 | 37.0 | 27.7 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.5 | 2.2 | 0.2 | 42.5 | 0.1 | | 4.4 | 0.1 | 0.0 | 6.1 | 61.9 | 0.0 |
| Delay (s) | 48.0 | 30.9 | 20.3 | 86.0 | 22.0 | | 46.0 | 30.9 | 29.2 | 46.7 | 98.9 | 27.7 |
| Level of Service | D | C | C | F | C | | D | C | C | D | F | C |
| Approach Delay (s) | | 27.6 | | | 38.7 | | | 37.2 | | | 83.6 | |
| Approach LOS | | C | | | D | | | D | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 51.8 | HCM 2000 Level of Service | D |
| HCM 2000 Volume to Capacity ratio | 0.84 | | |
| Actuated Cycle Length (s) | 98.9 | Sum of lost time (s) | 20.0 |
| Intersection Capacity Utilization | 80.1% | 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) | 166 | 448 | 45 | 16 | 789 | 94 | 30 | 10 | 9 | 102 | 5 | 138 |
| Future Volume (vph) | 166 | 448 | 45 | 16 | 789 | 94 | 30 | 10 | 9 | 102 | 5 | 138 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Lane Util. Factor | 0.97 | 0.91 | | 1.00 | 0.91 | | 1.00 | 1.00 | | | 1.00 | 0.88 |
| Frt | 1.00 | 0.99 | | 1.00 | 0.98 | | 1.00 | 0.93 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.95 | 1.00 |
| Satd. Flow (prot) | 3433 | 5016 | | 1770 | 5004 | | 1770 | 1730 | | | 1778 | 2787 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.53 | 1.00 | | | 0.72 | 1.00 |
| Satd. Flow (perm) | 3433 | 5016 | | 1770 | 5004 | | 982 | 1730 | | | 1341 | 2787 |
| 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) | 180 | 487 | 49 | 17 | 858 | 102 | 33 | 11 | 10 | 111 | 5 | 150 |
| RTOR Reduction (vph) | 0 | 5 | 0 | 0 | 8 | 0 | 0 | 9 | 0 | 0 | 0 | 118 |
| Lane Group Flow (vph) | 180 | 531 | 0 | 17 | 952 | 0 | 33 | 12 | 0 | 0 | 116 | 32 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | pm+ov |
| Protected Phases | 5 | 2 | | 1 | 6 | | | 8 | | | 4 | 5 |
| Permitted Phases | | | | | | | 8 | | | 4 | | 4 |
| Actuated Green, G (s) | 10.7 | 88.8 | | 2.9 | 82.0 | | 14.3 | 14.3 | | | 14.8 | 25.5 |
| Effective Green, g (s) | 10.7 | 88.8 | | 2.9 | 82.0 | | 14.3 | 14.3 | | | 14.8 | 25.5 |
| Actuated g/C Ratio | 0.09 | 0.74 | | 0.02 | 0.68 | | 0.12 | 0.12 | | | 0.12 | 0.21 |
| Clearance Time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Vehicle Extension (s) | 2.0 | 3.0 | | 2.0 | 3.0 | | 2.0 | 2.0 | | | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 306 | 3711 | | 42 | 3419 | | 117 | 206 | | | 165 | 592 |
| v/s Ratio Prot | c0.05 | 0.11 | | 0.01 | c0.19 | | | 0.01 | | | | 0.00 |
| v/s Ratio Perm | | | | | | | 0.03 | | | | c0.09 | 0.01 |
| v/c Ratio | 0.59 | 0.14 | | 0.40 | 0.28 | | 0.28 | 0.06 | | | 0.70 | 0.05 |
| Uniform Delay, d1 | 52.5 | 4.5 | | 57.7 | 7.4 | | 48.2 | 46.9 | | | 50.5 | 37.6 |
| Progression Factor | 1.00 | 1.00 | | 1.02 | 0.63 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.9 | 0.1 | | 2.2 | 0.2 | | 0.5 | 0.0 | | | 10.5 | 0.0 |
| Delay (s) | 54.4 | 4.6 | | 61.2 | 4.9 | | 48.7 | 46.9 | | | 61.0 | 37.7 |
| Level of Service | D | A | | E | A | | D | D | | | E | D |
| Approach Delay (s) | | 17.1 | | | 5.9 | | | 48.0 | | | 47.8 | |
| Approach LOS | | B | | | A | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 16.5 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.37 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 14.0 |
| Intersection Capacity Utilization | 46.2% | 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) | 20 | 169 | 111 | 280 | 169 | 109 | 307 | 1325 | 115 | 51 | 224 | 10 |
| Future Volume (vph) | 20 | 169 | 111 | 280 | 169 | 109 | 307 | 1325 | 115 | 51 | 224 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5052 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5052 | |
| 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) | 22 | 184 | 121 | 304 | 184 | 118 | 334 | 1440 | 125 | 55 | 243 | 11 |
| RTOR Reduction (vph) | 0 | 0 | 77 | 0 | 0 | 86 | 0 | 0 | 54 | 0 | 6 | 0 |
| Lane Group Flow (vph) | 22 | 184 | 44 | 304 | 184 | 32 | 334 | 1440 | 71 | 55 | 248 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | 7 | 3 | 8 | 1 | 7 | 4 | |
| Permitted Phases | | | 2 | | | 6 | | | 8 | | | |
| Actuated Green, G (s) | 1.0 | 7.9 | 25.9 | 8.3 | 15.2 | 19.7 | 18.0 | 32.4 | 40.7 | 4.5 | 18.9 | |
| Effective Green, g (s) | 1.0 | 7.9 | 25.9 | 8.3 | 15.2 | 19.7 | 18.0 | 32.4 | 40.7 | 4.5 | 18.9 | |
| Actuated g/C Ratio | 0.01 | 0.11 | 0.36 | 0.12 | 0.21 | 0.28 | 0.25 | 0.45 | 0.57 | 0.06 | 0.26 | |
| Clearance Time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 24 | 390 | 572 | 397 | 395 | 435 | 444 | 2301 | 899 | 111 | 1333 | |
| v/s Ratio Prot | 0.01 | 0.05 | 0.02 | c0.09 | c0.10 | 0.00 | c0.19 | c0.28 | 0.01 | 0.03 | 0.05 | |
| v/s Ratio Perm | | | 0.01 | | | 0.02 | | | 0.04 | | | |
| v/c Ratio | 0.92 | 0.47 | 0.08 | 0.77 | 0.47 | 0.07 | 0.75 | 0.63 | 0.08 | 0.50 | 0.19 | |
| Uniform Delay, d1 | 35.3 | 29.9 | 15.0 | 30.7 | 24.7 | 19.2 | 24.7 | 15.0 | 7.0 | 32.5 | 20.4 | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 145.1 | 0.9 | 0.1 | 8.6 | 0.9 | 0.1 | 7.1 | 0.5 | 0.0 | 3.5 | 0.1 | |
| Delay (s) | 180.3 | 30.8 | 15.1 | 39.3 | 25.5 | 19.3 | 31.8 | 15.5 | 7.0 | 35.9 | 20.5 | |
| Level of Service | F | C | B | D | C | B | C | B | A | D | C | |
| Approach Delay (s) | | 35.0 | | | 31.2 | | | 17.8 | | | 23.2 | |
| Approach LOS | | D | | | C | | | B | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 22.7 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.72 | | |
| Actuated Cycle Length (s) | 71.6 | Sum of lost time (s) | 18.5 |
| Intersection Capacity Utilization | 58.2% | ICU Level of Service | B |
| 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) | 17 | 831 | 130 | 0 | 213 | 13 | 68 | 15 | 4 | 7 | 14 | 8 |
| Future Volume (vph) | 17 | 831 | 130 | 0 | 213 | 13 | 68 | 15 | 4 | 7 | 14 | 8 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | 5.5 | | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | | 0.95 | | 0.97 | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | | 0.99 | | 1.00 | 0.97 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | | 1.00 | | 0.95 | 1.00 | | | 0.98 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | | 3509 | | 3433 | 1807 | | | 1831 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | | 1.00 | | 0.95 | 1.00 | | | 0.98 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | | 3509 | | 3433 | 1807 | | | 1831 | 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) | 18 | 903 | 141 | 0 | 232 | 14 | 74 | 16 | 4 | 8 | 15 | 9 |
| RTOR Reduction (vph) | 0 | 0 | 25 | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 8 |
| Lane Group Flow (vph) | 18 | 903 | 116 | 0 | 244 | 0 | 74 | 16 | 0 | 0 | 23 | 1 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | 8 | 1 | 6 | | 8 | 8 | | 7 | 7 | 5 |
| Permitted Phases | | | 2 | | | | | | | | | 7 |
| Actuated Green, G (s) | 4.6 | 90.5 | 98.7 | | 81.9 | | 8.2 | 8.2 | | | 4.8 | 9.4 |
| Effective Green, g (s) | 4.6 | 90.5 | 98.7 | | 81.9 | | 8.2 | 8.2 | | | 4.8 | 9.4 |
| Actuated g/C Ratio | 0.04 | 0.75 | 0.82 | | 0.68 | | 0.07 | 0.07 | | | 0.04 | 0.08 |
| Clearance Time (s) | 4.0 | 5.5 | 5.5 | | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 67 | 2668 | 1374 | | 2394 | | 234 | 123 | | | 73 | 124 |
| v/s Ratio Prot | 0.01 | c0.26 | 0.01 | | 0.07 | | c0.02 | 0.01 | | | c0.01 | 0.00 |
| v/s Ratio Perm | | | 0.07 | | | | | | | | | 0.00 |
| v/c Ratio | 0.27 | 0.34 | 0.08 | | 0.10 | | 0.32 | 0.13 | | | 0.32 | 0.01 |
| Uniform Delay, d1 | 56.1 | 4.9 | 2.0 | | 6.5 | | 53.2 | 52.6 | | | 56.0 | 51.0 |
| Progression Factor | 1.28 | 0.74 | 0.79 | | 1.00 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 2.1 | 0.3 | 0.0 | | 0.1 | | 0.8 | 0.5 | | | 2.5 | 0.0 |
| Delay (s) | 73.7 | 3.9 | 1.6 | | 6.6 | | 54.0 | 53.0 | | | 58.5 | 51.0 |
| Level of Service | E | A | A | | A | | D | D | | | E | D |
| Approach Delay (s) | | 4.8 | | | 6.6 | | | 53.8 | | | 56.4 | |
| Approach LOS | | A | | | A | | | D | | | E | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 9.5 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.35 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 20.5 |
| Intersection Capacity Utilization | 40.7% | 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) | 55 | 358 | 299 | 77 | 276 | 315 | 233 | 982 | 82 | 169 | 290 | 21 |
| Future Volume (vph) | 55 | 358 | 299 | 77 | 276 | 315 | 233 | 982 | 82 | 169 | 290 | 21 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.92 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3256 | | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3256 | | 3433 | 3539 | 1583 | 3433 | 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) | 60 | 389 | 325 | 84 | 300 | 342 | 253 | 1067 | 89 | 184 | 315 | 23 |
| RTOR Reduction (vph) | 0 | 0 | 159 | 0 | 172 | 0 | 0 | 0 | 60 | 0 | 0 | 16 |
| Lane Group Flow (vph) | 60 | 389 | 166 | 84 | 470 | 0 | 253 | 1067 | 29 | 184 | 315 | 7 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | | | | | | 8 | | | 4 |
| Actuated Green, G (s) | 6.1 | 29.2 | 39.9 | 6.9 | 30.0 | | 10.7 | 30.3 | 30.3 | 8.8 | 27.4 | 27.4 |
| Effective Green, g (s) | 6.1 | 29.2 | 39.9 | 6.9 | 30.0 | | 10.7 | 30.3 | 30.3 | 8.8 | 27.4 | 27.4 |
| Actuated g/C Ratio | 0.06 | 0.31 | 0.42 | 0.07 | 0.32 | | 0.11 | 0.32 | 0.32 | 0.09 | 0.29 | 0.29 |
| Clearance Time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 1.4 | 2.0 | 1.4 | 1.4 | 2.0 | | 1.4 | 2.0 | 2.0 | 1.4 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 114 | 1097 | 670 | 129 | 1036 | | 389 | 1138 | 509 | 320 | 1029 | 460 |
| v/s Ratio Prot | 0.03 | 0.11 | 0.03 | c0.05 | c0.14 | | c0.07 | c0.30 | | 0.05 | 0.09 | |
| v/s Ratio Perm | | | 0.08 | | | | | | 0.02 | | | 0.00 |
| v/c Ratio | 0.53 | 0.35 | 0.25 | 0.65 | 0.45 | | 0.65 | 0.94 | 0.06 | 0.57 | 0.31 | 0.01 |
| Uniform Delay, d1 | 42.7 | 25.2 | 17.5 | 42.5 | 25.6 | | 40.0 | 31.0 | 22.1 | 40.9 | 26.0 | 23.8 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 2.0 | 0.9 | 0.1 | 8.6 | 0.1 | | 3.0 | 13.9 | 0.0 | 1.6 | 0.1 | 0.0 |
| Delay (s) | 44.7 | 26.1 | 17.6 | 51.1 | 25.7 | | 42.9 | 44.9 | 22.1 | 42.5 | 26.1 | 23.8 |
| Level of Service | D | C | B | D | C | | D | D | C | D | C | C |
| Approach Delay (s) | | 23.9 | | | 28.6 | | | 43.1 | | | 31.7 | |
| Approach LOS | | C | | | C | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 34.0 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.72 | | |
| Actuated Cycle Length (s) | 94.2 | Sum of lost time (s) | 20.0 |
| Intersection Capacity Utilization | 69.7% | 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) | 89 | 1057 | 25 | 6 | 236 | 21 | 24 | 3 | 9 | 66 | 2 | 49 |
| Future Volume (vph) | 89 | 1057 | 25 | 6 | 236 | 21 | 24 | 3 | 9 | 66 | 2 | 49 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Lane Util. Factor | 0.97 | 0.91 | | 1.00 | 0.91 | | 1.00 | 1.00 | | | 1.00 | 0.88 |
| Frt | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | 0.88 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.95 | 1.00 |
| Satd. Flow (prot) | 3433 | 5068 | | 1770 | 5023 | | 1770 | 1648 | | | 1776 | 2787 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.65 | 1.00 | | | 0.72 | 1.00 |
| Satd. Flow (perm) | 3433 | 5068 | | 1770 | 5023 | | 1219 | 1648 | | | 1346 | 2787 |
| 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) | 97 | 1149 | 27 | 7 | 257 | 23 | 26 | 3 | 10 | 72 | 2 | 53 |
| RTOR Reduction (vph) | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 9 | 0 | 0 | 0 | 45 |
| Lane Group Flow (vph) | 97 | 1175 | 0 | 7 | 276 | 0 | 26 | 4 | 0 | 0 | 74 | 8 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | pm+ov |
| Protected Phases | 5 | 2 | | 1 | 6 | | | 8 | | | 4 | 5 |
| Permitted Phases | | | | | | | 8 | | | 4 | | 4 |
| Actuated Green, G (s) | 8.2 | 95.2 | | 1.4 | 89.4 | | 9.4 | 9.4 | | | 9.9 | 18.1 |
| Effective Green, g (s) | 8.2 | 95.2 | | 1.4 | 89.4 | | 9.4 | 9.4 | | | 9.9 | 18.1 |
| Actuated g/C Ratio | 0.07 | 0.79 | | 0.01 | 0.75 | | 0.08 | 0.08 | | | 0.08 | 0.15 |
| Clearance Time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Vehicle Extension (s) | 2.0 | 3.0 | | 2.0 | 3.0 | | 2.0 | 2.0 | | | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 234 | 4020 | | 20 | 3742 | | 95 | 129 | | | 111 | 420 |
| v/s Ratio Prot | c0.03 | c0.23 | | 0.00 | 0.05 | | | 0.00 | | | | 0.00 |
| v/s Ratio Perm | | | | | | | 0.02 | | | | c0.05 | 0.00 |
| v/c Ratio | 0.41 | 0.29 | | 0.35 | 0.07 | | 0.27 | 0.03 | | | 0.67 | 0.02 |
| Uniform Delay, d1 | 53.6 | 3.3 | | 58.8 | 4.1 | | 52.1 | 51.1 | | | 53.4 | 43.4 |
| Progression Factor | 1.00 | 1.00 | | 1.03 | 0.86 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.4 | 0.2 | | 3.8 | 0.0 | | 0.6 | 0.0 | | | 11.1 | 0.0 |
| Delay (s) | 54.0 | 3.5 | | 64.7 | 3.6 | | 52.7 | 51.1 | | | 64.6 | 43.4 |
| Level of Service | D | A | | E | A | | D | D | | | E | D |
| Approach Delay (s) | | 7.4 | | | 5.1 | | | 52.1 | | | 55.7 | |
| Approach LOS | | A | | | A | | | D | | | E | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 11.6 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.34 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 14.0 |
| Intersection Capacity Utilization | 48.5% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

## HCM Signalized Intersection Capacity Analysis
## 1: Rancho Conejo Blvd & Hillcrest Dr/Hillcrest Dr

Existing (2020) + Project
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 12 | 443 | 420 | 293 | 187 | 60 | 174 | 279 | 228 | 274 | 1255 | 13 |
| Future Volume (vph) | 12 | 443 | 420 | 293 | 187 | 60 | 174 | 279 | 228 | 274 | 1255 | 13 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5078 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5078 | |
| 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) | 13 | 482 | 457 | 318 | 203 | 65 | 189 | 303 | 248 | 298 | 1364 | 14 |
| RTOR Reduction (vph) | 0 | 0 | 84 | 0 | 0 | 33 | 0 | 0 | 41 | 0 | 1 | 0 |
| Lane Group Flow (vph) | 13 | 482 | 373 | 318 | 203 | 32 | 189 | 303 | 207 | 298 | 1377 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | 7 | 3 | 8 | 1 | 7 | 4 | |
| Permitted Phases | | | 2 | | | 6 | | | 8 | | | |
| Actuated Green, G (s) | 0.6 | 12.3 | 25.1 | 12.0 | 23.7 | 39.8 | 12.8 | 21.1 | 33.1 | 16.1 | 24.4 | |
| Effective Green, g (s) | 0.6 | 12.3 | 25.1 | 12.0 | 23.7 | 39.8 | 12.8 | 21.1 | 33.1 | 16.1 | 24.4 | |
| Actuated g/C Ratio | 0.01 | 0.15 | 0.31 | 0.15 | 0.30 | 0.50 | 0.16 | 0.26 | 0.41 | 0.20 | 0.30 | |
| Clearance Time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 13 | 544 | 496 | 514 | 551 | 787 | 283 | 1341 | 654 | 356 | 1548 | |
| v/s Ratio Prot | 0.01 | c0.14 | 0.12 | c0.09 | 0.11 | 0.01 | 0.11 | 0.06 | 0.05 | c0.17 | c0.27 | |
| v/s Ratio Perm | | | 0.12 | | | 0.01 | | | 0.08 | | | |
| v/c Ratio | 1.00 | 0.89 | 0.75 | 0.62 | 0.37 | 0.04 | 0.67 | 0.23 | 0.32 | 0.84 | 0.89 | |
| Uniform Delay, d1 | 39.7 | 33.2 | 24.7 | 31.9 | 22.2 | 10.3 | 31.6 | 23.1 | 15.8 | 30.7 | 26.5 | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 249.6 | 15.9 | 6.4 | 2.2 | 0.4 | 0.0 | 5.9 | 0.1 | 0.3 | 15.6 | 6.7 | |
| Delay (s) | 289.3 | 49.0 | 31.0 | 34.1 | 22.7 | 10.3 | 37.5 | 23.1 | 16.1 | 46.3 | 33.2 | |
| Level of Service | F | D | C | C | C | B | D | C | B | D | C | |
| Approach Delay (s) | | 43.7 | | | 27.5 | | | 24.4 | | | 35.5 | |
| Approach LOS | | D | | | C | | | C | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 34.2 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.84 | | |
| Actuated Cycle Length (s) | 80.0 | Sum of lost time (s) | 18.5 |
| 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) | 42 | 260 | 247 | 14 | 646 | 52 | 201 | 80 | 12 | 29 | 74 | 100 |
| Future Volume (vph) | 42 | 260 | 247 | 14 | 646 | 52 | 201 | 80 | 12 | 29 | 74 | 100 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | 5.5 | 4.0 | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | | 1.00 | 0.98 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3499 | | 3433 | 1826 | | | 1837 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3499 | | 3433 | 1826 | | | 1837 | 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) | 46 | 283 | 268 | 15 | 702 | 57 | 218 | 87 | 13 | 32 | 80 | 109 |
| RTOR Reduction (vph) | 0 | 0 | 81 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 87 |
| Lane Group Flow (vph) | 46 | 283 | 187 | 15 | 755 | 0 | 218 | 96 | 0 | 0 | 112 | 22 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | 8 | 1 | 6 | | 8 | 8 | | 7 | 7 | 5 |
| Permitted Phases | | | 2 | | | | | | | | | 7 |
| Actuated Green, G (s) | 8.8 | 59.4 | 83.8 | 3.1 | 53.7 | | 24.4 | 24.4 | | | 12.6 | 21.4 |
| Effective Green, g (s) | 8.8 | 59.4 | 83.8 | 3.1 | 53.7 | | 24.4 | 24.4 | | | 12.6 | 21.4 |
| Actuated g/C Ratio | 0.07 | 0.49 | 0.70 | 0.03 | 0.45 | | 0.20 | 0.20 | | | 0.10 | 0.18 |
| Clearance Time (s) | 4.0 | 5.5 | 5.5 | 4.0 | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 129 | 1751 | 1105 | 45 | 1565 | | 698 | 371 | | | 192 | 282 |
| v/s Ratio Prot | c0.03 | 0.08 | 0.03 | 0.01 | c0.22 | | c0.06 | 0.05 | | | c0.06 | 0.01 |
| v/s Ratio Perm | | | 0.08 | | | | | | | | | 0.01 |
| v/c Ratio | 0.36 | 0.16 | 0.17 | 0.33 | 0.48 | | 0.31 | 0.26 | | | 0.58 | 0.08 |
| Uniform Delay, d1 | 52.9 | 16.6 | 6.2 | 57.4 | 23.4 | | 40.7 | 40.2 | | | 51.2 | 41.1 |
| Progression Factor | 1.17 | 0.87 | 0.53 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.7 | 0.2 | 0.3 | 4.3 | 1.1 | | 1.2 | 1.7 | | | 4.5 | 0.1 |
| Delay (s) | 63.3 | 14.6 | 3.6 | 61.8 | 24.4 | | 41.8 | 41.9 | | | 55.7 | 41.2 |
| Level of Service | E | B | A | E | C | | D | D | | | E | D |
| Approach Delay (s) | | 13.4 | | | 25.1 | | | 41.8 | | | 48.5 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 27.0 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.44 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 20.5 |
| Intersection Capacity Utilization | 50.2% | 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) | 27 | 637 | 369 | 181 | 393 | 120 | 299 | 262 | 123 | 384 | 1018 | 16 |
| Future Volume (vph) | 27 | 637 | 369 | 181 | 393 | 120 | 299 | 262 | 123 | 384 | 1018 | 16 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.96 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3415 | | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3415 | | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 27 | 637 | 369 | 181 | 393 | 120 | 299 | 262 | 123 | 384 | 1018 | 16 |
| RTOR Reduction (vph) | 0 | 0 | 34 | 0 | 22 | 0 | 0 | 0 | 94 | 0 | 0 | 12 |
| Lane Group Flow (vph) | 27 | 637 | 335 | 181 | 491 | 0 | 299 | 262 | 29 | 384 | 1018 | 4 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | | | | | | 8 | | | 4 |
| Actuated Green, G (s) | 3.7 | 30.7 | 42.9 | 11.0 | 38.0 | | 12.2 | 23.7 | 23.7 | 14.5 | 25.0 | 25.0 |
| Effective Green, g (s) | 3.7 | 30.7 | 42.9 | 11.0 | 38.0 | | 12.2 | 23.7 | 23.7 | 14.5 | 25.0 | 25.0 |
| Actuated g/C Ratio | 0.04 | 0.31 | 0.43 | 0.11 | 0.38 | | 0.12 | 0.24 | 0.24 | 0.15 | 0.25 | 0.25 |
| Clearance Time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 1.4 | 2.0 | 1.4 | 1.4 | 2.0 | | 1.4 | 2.0 | 2.0 | 1.4 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 66 | 1098 | 686 | 196 | 1312 | | 423 | 848 | 379 | 503 | 894 | 400 |
| v/s Ratio Prot | 0.02 | c0.18 | 0.06 | c0.10 | 0.14 | | 0.09 | 0.07 | | c0.11 | c0.29 | |
| v/s Ratio Perm | | | 0.15 | | | | | | 0.02 | | | 0.00 |
| v/c Ratio | 0.41 | 0.58 | 0.49 | 0.92 | 0.37 | | 0.71 | 0.31 | 0.08 | 0.76 | 1.14 | 0.01 |
| Uniform Delay, d1 | 46.5 | 28.7 | 20.1 | 43.5 | 21.9 | | 41.6 | 30.9 | 29.1 | 40.6 | 37.0 | 27.7 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.5 | 2.2 | 0.2 | 42.5 | 0.1 | | 4.4 | 0.1 | 0.0 | 6.1 | 76.0 | 0.0 |
| Delay (s) | 48.0 | 30.9 | 20.3 | 86.0 | 22.0 | | 46.0 | 31.0 | 29.2 | 46.7 | 112.9 | 27.7 |
| Level of Service | D | C | C | F | C | | D | C | C | D | F | C |
| Approach Delay (s) | | 27.6 | | | 38.7 | | | 37.2 | | | 94.0 | |
| Approach LOS | | C | | | D | | | D | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 55.9 | HCM 2000 Level of Service | E |
| HCM 2000 Volume to Capacity ratio | 0.85 | | |
| Actuated Cycle Length (s) | 98.9 | Sum of lost time (s) | 20.0 |
| Intersection Capacity Utilization | 81.0% | 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) | 166 | 452 | 45 | 16 | 815 | 94 | 30 | 10 | 9 | 102 | 5 | 138 |
| Future Volume (vph) | 166 | 452 | 45 | 16 | 815 | 94 | 30 | 10 | 9 | 102 | 5 | 138 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Lane Util. Factor | 0.97 | 0.91 | | 1.00 | 0.91 | | 1.00 | 1.00 | | | 1.00 | 0.88 |
| Frt | 1.00 | 0.99 | | 1.00 | 0.98 | | 1.00 | 0.93 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.95 | 1.00 |
| Satd. Flow (prot) | 3433 | 5016 | | 1770 | 5007 | | 1770 | 1730 | | | 1778 | 2787 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.53 | 1.00 | | | 0.72 | 1.00 |
| Satd. Flow (perm) | 3433 | 5016 | | 1770 | 5007 | | 982 | 1730 | | | 1341 | 2787 |
| 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) | 180 | 491 | 49 | 17 | 886 | 102 | 33 | 11 | 10 | 111 | 5 | 150 |
| RTOR Reduction (vph) | 0 | 5 | 0 | 0 | 8 | 0 | 0 | 9 | 0 | 0 | 0 | 118 |
| Lane Group Flow (vph) | 180 | 535 | 0 | 17 | 980 | 0 | 33 | 12 | 0 | 0 | 116 | 32 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | pm+ov |
| Protected Phases | 5 | 2 | | 1 | 6 | | | 8 | | | 4 | 5 |
| Permitted Phases | | | | | | | 8 | | | 4 | | 4 |
| Actuated Green, G (s) | 10.7 | 88.8 | | 2.9 | 82.0 | | 14.3 | 14.3 | | | 14.8 | 25.5 |
| Effective Green, g (s) | 10.7 | 88.8 | | 2.9 | 82.0 | | 14.3 | 14.3 | | | 14.8 | 25.5 |
| Actuated g/C Ratio | 0.09 | 0.74 | | 0.02 | 0.68 | | 0.12 | 0.12 | | | 0.12 | 0.21 |
| Clearance Time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Vehicle Extension (s) | 2.0 | 3.0 | | 2.0 | 3.0 | | 2.0 | 2.0 | | | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 306 | 3711 | | 42 | 3421 | | 117 | 206 | | | 165 | 592 |
| v/s Ratio Prot | c0.05 | 0.11 | | 0.01 | c0.20 | | | 0.01 | | | | 0.00 |
| v/s Ratio Perm | | | | | | | 0.03 | | | | c0.09 | 0.01 |
| v/c Ratio | 0.59 | 0.14 | | 0.40 | 0.29 | | 0.28 | 0.06 | | | 0.70 | 0.05 |
| Uniform Delay, d1 | 52.5 | 4.5 | | 57.7 | 7.5 | | 48.2 | 46.9 | | | 50.5 | 37.6 |
| Progression Factor | 1.00 | 1.00 | | 1.03 | 0.61 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.9 | 0.1 | | 2.1 | 0.2 | | 0.5 | 0.0 | | | 10.5 | 0.0 |
| Delay (s) | 54.4 | 4.6 | | 61.7 | 4.8 | | 48.7 | 46.9 | | | 61.0 | 37.7 |
| Level of Service | D | A | | E | A | | D | D | | | E | D |
| Approach Delay (s) | | 17.1 | | | 5.7 | | | 48.0 | | | 47.8 | |
| Approach LOS | | B | | | A | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 16.3 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.38 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 14.0 |
| Intersection Capacity Utilization | 46.7% | 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) | 20 | 169 | 111 | 280 | 169 | 109 | 307 | 1325 | 115 | 51 | 224 | 10 |
| Future Volume (vph) | 20 | 169 | 111 | 280 | 169 | 109 | 307 | 1325 | 115 | 51 | 224 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5052 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5052 | |
| 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) | 22 | 184 | 121 | 304 | 184 | 118 | 334 | 1440 | 125 | 55 | 243 | 11 |
| RTOR Reduction (vph) | 0 | 0 | 76 | 0 | 0 | 85 | 0 | 0 | 48 | 0 | 6 | 0 |
| Lane Group Flow (vph) | 22 | 184 | 45 | 304 | 184 | 33 | 334 | 1440 | 77 | 55 | 248 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | 7 | 3 | 8 | 1 | 7 | 4 | |
| Permitted Phases | | | 2 | | | 6 | | | 8 | | | |
| Actuated Green, G (s) | 1.1 | 8.9 | 27.0 | 9.2 | 17.0 | 20.0 | 18.1 | 32.9 | 42.1 | 3.0 | 17.8 | |
| Effective Green, g (s) | 1.1 | 8.9 | 27.0 | 9.2 | 17.0 | 20.0 | 18.1 | 32.9 | 42.1 | 3.0 | 17.8 | |
| Actuated g/C Ratio | 0.02 | 0.12 | 0.37 | 0.13 | 0.23 | 0.28 | 0.25 | 0.45 | 0.58 | 0.04 | 0.25 | |
| Clearance Time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 26 | 434 | 589 | 435 | 436 | 436 | 441 | 2307 | 919 | 73 | 1240 | |
| v/s Ratio Prot | 0.01 | 0.05 | 0.02 | c0.09 | c0.10 | 0.00 | c0.19 | c0.28 | 0.01 | 0.03 | 0.05 | |
| v/s Ratio Perm | | | 0.01 | | | 0.02 | | | 0.04 | | | |
| v/c Ratio | 0.85 | 0.42 | 0.08 | 0.70 | 0.42 | 0.07 | 0.76 | 0.62 | 0.08 | 0.75 | 0.20 | |
| Uniform Delay, d1 | 35.6 | 29.4 | 14.7 | 30.3 | 23.6 | 19.4 | 25.2 | 15.1 | 6.7 | 34.4 | 21.7 | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 109.6 | 0.7 | 0.1 | 4.9 | 0.7 | 0.1 | 7.3 | 0.5 | 0.0 | 35.0 | 0.1 | |
| Delay (s) | 145.3 | 30.1 | 14.8 | 35.2 | 24.2 | 19.5 | 32.5 | 15.6 | 6.7 | 69.3 | 21.8 | |
| Level of Service | F | C | B | D | C | B | C | B | A | E | C | |
| Approach Delay (s) | | 32.2 | | | 28.8 | | | 18.0 | | | 30.2 | |
| Approach LOS | | C | | | C | | | B | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 22.8 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.70 | | |
| Actuated Cycle Length (s) | 72.5 | Sum of lost time (s) | 18.5 |
| Intersection Capacity Utilization | 58.2% | ICU Level of Service | B |
| 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) | 17 | 831 | 130 | 0 | 213 | 13 | 68 | 15 | 4 | 7 | 14 | 8 |
| Future Volume (vph) | 17 | 831 | 130 | 0 | 213 | 13 | 68 | 15 | 4 | 7 | 14 | 8 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | 5.5 | | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | | 0.95 | | 0.97 | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | | 0.99 | | 1.00 | 0.97 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | | 1.00 | | 0.95 | 1.00 | | | 0.98 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | | 3509 | | 3433 | 1807 | | | 1831 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | | 1.00 | | 0.95 | 1.00 | | | 0.98 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | | 3509 | | 3433 | 1807 | | | 1831 | 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) | 18 | 903 | 141 | 0 | 232 | 14 | 74 | 16 | 4 | 8 | 15 | 9 |
| RTOR Reduction (vph) | 0 | 0 | 25 | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 8 |
| Lane Group Flow (vph) | 18 | 903 | 116 | 0 | 244 | 0 | 74 | 16 | 0 | 0 | 23 | 1 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | 8 | 1 | 6 | | 8 | 8 | | 7 | 7 | 5 |
| Permitted Phases | | | 2 | | | | | | | | | 7 |
| Actuated Green, G (s) | 4.6 | 90.5 | 98.7 | | 81.9 | | 8.2 | 8.2 | | | 4.8 | 9.4 |
| Effective Green, g (s) | 4.6 | 90.5 | 98.7 | | 81.9 | | 8.2 | 8.2 | | | 4.8 | 9.4 |
| Actuated g/C Ratio | 0.04 | 0.75 | 0.82 | | 0.68 | | 0.07 | 0.07 | | | 0.04 | 0.08 |
| Clearance Time (s) | 4.0 | 5.5 | 5.5 | | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 67 | 2668 | 1374 | | 2394 | | 234 | 123 | | | 73 | 124 |
| v/s Ratio Prot | 0.01 | c0.26 | 0.01 | | 0.07 | | c0.02 | 0.01 | | | c0.01 | 0.00 |
| v/s Ratio Perm | | | 0.07 | | | | | | | | | 0.00 |
| v/c Ratio | 0.27 | 0.34 | 0.08 | | 0.10 | | 0.32 | 0.13 | | | 0.32 | 0.01 |
| Uniform Delay, d1 | 56.1 | 4.9 | 2.0 | | 6.5 | | 53.2 | 52.6 | | | 56.0 | 51.0 |
| Progression Factor | 1.28 | 0.74 | 0.79 | | 1.00 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 2.1 | 0.3 | 0.0 | | 0.1 | | 0.8 | 0.5 | | | 2.5 | 0.0 |
| Delay (s) | 73.7 | 3.9 | 1.6 | | 6.6 | | 54.0 | 53.0 | | | 58.5 | 51.0 |
| Level of Service | E | A | A | | A | | D | D | | | E | D |
| Approach Delay (s) | | 4.8 | | | 6.6 | | | 53.8 | | | 56.4 | |
| Approach LOS | | A | | | A | | | D | | | E | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 9.5 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.35 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 20.5 |
| Intersection Capacity Utilization | 40.7% | 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) | 55 | 358 | 299 | 77 | 276 | 315 | 233 | 982 | 82 | 169 | 290 | 21 |
| Future Volume (vph) | 55 | 358 | 299 | 77 | 276 | 315 | 233 | 982 | 82 | 169 | 290 | 21 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.92 | | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3256 | | 3433 | 3539 | 1583 | 3433 | 5033 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3256 | | 3433 | 3539 | 1583 | 3433 | 5033 | |
| 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) | 60 | 389 | 325 | 84 | 300 | 342 | 253 | 1067 | 89 | 184 | 315 | 23 |
| RTOR Reduction (vph) | 0 | 0 | 192 | 0 | 167 | 0 | 0 | 0 | 58 | 0 | 8 | 0 |
| Lane Group Flow (vph) | 60 | 389 | 133 | 84 | 475 | 0 | 253 | 1067 | 31 | 184 | 330 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | | | | | | 8 | | | |
| Actuated Green, G (s) | 6.2 | 28.8 | 40.0 | 6.9 | 29.5 | | 11.2 | 34.2 | 34.2 | 9.2 | 31.2 | |
| Effective Green, g (s) | 6.2 | 28.8 | 40.0 | 6.9 | 29.5 | | 11.2 | 34.2 | 34.2 | 9.2 | 31.2 | |
| Actuated g/C Ratio | 0.06 | 0.29 | 0.41 | 0.07 | 0.30 | | 0.11 | 0.35 | 0.35 | 0.09 | 0.32 | |
| Clearance Time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | |
| Vehicle Extension (s) | 1.4 | 2.0 | 1.4 | 1.4 | 2.0 | | 1.4 | 2.0 | 2.0 | 1.4 | 2.0 | |
| Lane Grp Cap (vph) | 111 | 1038 | 645 | 124 | 979 | | 391 | 1233 | 551 | 321 | 1600 | |
| v/s Ratio Prot | 0.03 | 0.11 | 0.02 | c0.05 | c0.15 | | c0.07 | c0.30 | | 0.05 | 0.07 | |
| v/s Ratio Perm | | | 0.06 | | | | | | 0.02 | | | |
| v/c Ratio | 0.54 | 0.37 | 0.21 | 0.68 | 0.49 | | 0.65 | 0.87 | 0.06 | 0.57 | 0.21 | |
| Uniform Delay, d1 | 44.6 | 27.5 | 18.8 | 44.5 | 28.1 | | 41.6 | 29.8 | 21.2 | 42.6 | 24.4 | |
| 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 | 2.9 | 1.0 | 0.1 | 10.9 | 0.1 | | 2.8 | 6.4 | 0.0 | 1.5 | 0.0 | |
| Delay (s) | 47.4 | 28.5 | 18.8 | 55.5 | 28.2 | | 44.3 | 36.2 | 21.2 | 44.1 | 24.4 | |
| Level of Service | D | C | B | E | C | | D | D | C | D | C | |
| Approach Delay (s) | | 25.9 | | | 31.4 | | | 36.7 | | | 31.4 | |
| Approach LOS | | C | | | C | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 32.3 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.71 | | |
| Actuated Cycle Length (s) | 98.1 | Sum of lost time (s) | 20.0 |
| Intersection Capacity Utilization | 69.7% | 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) | 89 | 1057 | 25 | 6 | 236 | 21 | 24 | 3 | 9 | 66 | 2 | 49 |
| Future Volume (vph) | 89 | 1057 | 25 | 6 | 236 | 21 | 24 | 3 | 9 | 66 | 2 | 49 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Lane Util. Factor | 0.97 | 0.91 | | 1.00 | 0.91 | | 1.00 | 1.00 | | | 1.00 | 0.88 |
| Frt | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | 0.88 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.95 | 1.00 |
| Satd. Flow (prot) | 3433 | 5068 | | 1770 | 5023 | | 1770 | 1648 | | | 1776 | 2787 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.65 | 1.00 | | | 0.72 | 1.00 |
| Satd. Flow (perm) | 3433 | 5068 | | 1770 | 5023 | | 1219 | 1648 | | | 1346 | 2787 |
| 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) | 97 | 1149 | 27 | 7 | 257 | 23 | 26 | 3 | 10 | 72 | 2 | 53 |
| RTOR Reduction (vph) | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 9 | 0 | 0 | 0 | 45 |
| Lane Group Flow (vph) | 97 | 1175 | 0 | 7 | 276 | 0 | 26 | 4 | 0 | 0 | 74 | 8 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | pm+ov |
| Protected Phases | 5 | 2 | | 1 | 6 | | | 8 | | | 4 | 5 |
| Permitted Phases | | | | | | | 8 | | | 4 | | 4 |
| Actuated Green, G (s) | 8.2 | 95.2 | | 1.4 | 89.4 | | 9.4 | 9.4 | | | 9.9 | 18.1 |
| Effective Green, g (s) | 8.2 | 95.2 | | 1.4 | 89.4 | | 9.4 | 9.4 | | | 9.9 | 18.1 |
| Actuated g/C Ratio | 0.07 | 0.79 | | 0.01 | 0.75 | | 0.08 | 0.08 | | | 0.08 | 0.15 |
| Clearance Time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Vehicle Extension (s) | 2.0 | 3.0 | | 2.0 | 3.0 | | 2.0 | 2.0 | | | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 234 | 4020 | | 20 | 3742 | | 95 | 129 | | | 111 | 420 |
| v/s Ratio Prot | c0.03 | c0.23 | | 0.00 | 0.05 | | | 0.00 | | | | 0.00 |
| v/s Ratio Perm | | | | | | | 0.02 | | | | c0.05 | 0.00 |
| v/c Ratio | 0.41 | 0.29 | | 0.35 | 0.07 | | 0.27 | 0.03 | | | 0.67 | 0.02 |
| Uniform Delay, d1 | 53.6 | 3.3 | | 58.8 | 4.1 | | 52.1 | 51.1 | | | 53.4 | 43.4 |
| Progression Factor | 1.00 | 1.00 | | 1.03 | 0.86 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.4 | 0.2 | | 3.8 | 0.0 | | 0.6 | 0.0 | | | 11.1 | 0.0 |
| Delay (s) | 54.0 | 3.5 | | 64.7 | 3.6 | | 52.7 | 51.1 | | | 64.6 | 43.4 |
| Level of Service | D | A | | E | A | | D | D | | | E | D |
| Approach Delay (s) | | 7.4 | | | 5.1 | | | 52.1 | | | 55.7 | |
| Approach LOS | | A | | | A | | | D | | | E | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 11.6 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.34 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 14.0 |
| Intersection Capacity Utilization | 48.5% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 12 | 443 | 420 | 293 | 187 | 60 | 174 | 279 | 228 | 274 | 1255 | 13 |
| Future Volume (vph) | 12 | 443 | 420 | 293 | 187 | 60 | 174 | 279 | 228 | 274 | 1255 | 13 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5078 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5078 | |
| 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) | 13 | 482 | 457 | 318 | 203 | 65 | 189 | 303 | 248 | 298 | 1364 | 14 |
| RTOR Reduction (vph) | 0 | 0 | 84 | 0 | 0 | 33 | 0 | 0 | 41 | 0 | 1 | 0 |
| Lane Group Flow (vph) | 13 | 482 | 373 | 318 | 203 | 32 | 189 | 303 | 207 | 298 | 1377 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | 7 | 3 | 8 | 1 | 7 | 4 | |
| Permitted Phases | | | 2 | | | 6 | | | 8 | | | |
| Actuated Green, G (s) | 0.6 | 12.3 | 25.1 | 12.0 | 23.7 | 39.8 | 12.8 | 21.1 | 33.1 | 16.1 | 24.4 | |
| Effective Green, g (s) | 0.6 | 12.3 | 25.1 | 12.0 | 23.7 | 39.8 | 12.8 | 21.1 | 33.1 | 16.1 | 24.4 | |
| Actuated g/C Ratio | 0.01 | 0.15 | 0.31 | 0.15 | 0.30 | 0.50 | 0.16 | 0.26 | 0.41 | 0.20 | 0.30 | |
| Clearance Time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 13 | 544 | 496 | 514 | 551 | 787 | 283 | 1341 | 654 | 356 | 1548 | |
| v/s Ratio Prot | 0.01 | c0.14 | 0.12 | c0.09 | 0.11 | 0.01 | 0.11 | 0.06 | 0.05 | c0.17 | c0.27 | |
| v/s Ratio Perm | | | 0.12 | | | 0.01 | | | 0.08 | | | |
| v/c Ratio | 1.00 | 0.89 | 0.75 | 0.62 | 0.37 | 0.04 | 0.67 | 0.23 | 0.32 | 0.84 | 0.89 | |
| Uniform Delay, d1 | 39.7 | 33.2 | 24.7 | 31.9 | 22.2 | 10.3 | 31.6 | 23.1 | 15.8 | 30.7 | 26.5 | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 249.6 | 15.9 | 6.4 | 2.2 | 0.4 | 0.0 | 5.9 | 0.1 | 0.3 | 15.6 | 6.7 | |
| Delay (s) | 289.3 | 49.0 | 31.0 | 34.1 | 22.7 | 10.3 | 37.5 | 23.1 | 16.1 | 46.3 | 33.2 | |
| Level of Service | F | D | C | C | C | B | D | C | B | D | C | |
| Approach Delay (s) | | 43.7 | | | 27.5 | | | 24.4 | | | 35.5 | |
| Approach LOS | | D | | | C | | | C | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 34.2 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.84 | | |
| Actuated Cycle Length (s) | 80.0 | Sum of lost time (s) | 18.5 |
| 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) | 42 | 260 | 247 | 14 | 646 | 52 | 201 | 80 | 12 | 29 | 74 | 100 |
| Future Volume (vph) | 42 | 260 | 247 | 14 | 646 | 52 | 201 | 80 | 12 | 29 | 74 | 100 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | 5.5 | 4.0 | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | | 1.00 | 0.98 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3499 | | 3433 | 1826 | | | 1837 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3499 | | 3433 | 1826 | | | 1837 | 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) | 46 | 283 | 268 | 15 | 702 | 57 | 218 | 87 | 13 | 32 | 80 | 109 |
| RTOR Reduction (vph) | 0 | 0 | 81 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 87 |
| Lane Group Flow (vph) | 46 | 283 | 187 | 15 | 755 | 0 | 218 | 96 | 0 | 0 | 112 | 22 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | 8 | 1 | 6 | | 8 | 8 | | 7 | 7 | 5 |
| Permitted Phases | | | 2 | | | | | | | | | 7 |
| Actuated Green, G (s) | 8.8 | 59.4 | 83.8 | 3.1 | 53.7 | | 24.4 | 24.4 | | | 12.6 | 21.4 |
| Effective Green, g (s) | 8.8 | 59.4 | 83.8 | 3.1 | 53.7 | | 24.4 | 24.4 | | | 12.6 | 21.4 |
| Actuated g/C Ratio | 0.07 | 0.49 | 0.70 | 0.03 | 0.45 | | 0.20 | 0.20 | | | 0.10 | 0.18 |
| Clearance Time (s) | 4.0 | 5.5 | 5.5 | 4.0 | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 129 | 1751 | 1105 | 45 | 1565 | | 698 | 371 | | | 192 | 282 |
| v/s Ratio Prot | c0.03 | 0.08 | 0.03 | 0.01 | c0.22 | | c0.06 | 0.05 | | | c0.06 | 0.01 |
| v/s Ratio Perm | | | 0.08 | | | | | | | | | 0.01 |
| v/c Ratio | 0.36 | 0.16 | 0.17 | 0.33 | 0.48 | | 0.31 | 0.26 | | | 0.58 | 0.08 |
| Uniform Delay, d1 | 52.9 | 16.6 | 6.2 | 57.4 | 23.4 | | 40.7 | 40.2 | | | 51.2 | 41.1 |
| Progression Factor | 1.17 | 0.87 | 0.53 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.7 | 0.2 | 0.3 | 4.3 | 1.1 | | 1.2 | 1.7 | | | 4.5 | 0.1 |
| Delay (s) | 63.3 | 14.6 | 3.6 | 61.8 | 24.4 | | 41.8 | 41.9 | | | 55.7 | 41.2 |
| Level of Service | E | B | A | E | C | | D | D | | | E | D |
| Approach Delay (s) | | 13.4 | | | 25.1 | | | 41.8 | | | 48.5 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 27.0 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.44 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 20.5 |
| Intersection Capacity Utilization | 50.2% | 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) | 27 | 637 | 369 | 181 | 393 | 120 | 299 | 262 | 123 | 384 | 1018 | 16 |
| Future Volume (vph) | 27 | 637 | 369 | 181 | 393 | 120 | 299 | 262 | 123 | 384 | 1018 | 16 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.96 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3415 | | 3433 | 3539 | 1583 | 3433 | 5073 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3415 | | 3433 | 3539 | 1583 | 3433 | 5073 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 27 | 637 | 369 | 181 | 393 | 120 | 299 | 262 | 123 | 384 | 1018 | 16 |
| RTOR Reduction (vph) | 0 | 0 | 58 | 0 | 20 | 0 | 0 | 0 | 93 | 0 | 1 | 0 |
| Lane Group Flow (vph) | 27 | 637 | 311 | 181 | 493 | 0 | 299 | 262 | 30 | 384 | 1033 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | | | | | | 8 | | | |
| Actuated Green, G (s) | 3.7 | 30.1 | 42.6 | 12.3 | 38.7 | | 12.5 | 25.2 | 25.2 | 15.1 | 26.8 | |
| Effective Green, g (s) | 3.7 | 30.1 | 42.6 | 12.3 | 38.7 | | 12.5 | 25.2 | 25.2 | 15.1 | 26.8 | |
| Actuated g/C Ratio | 0.04 | 0.30 | 0.42 | 0.12 | 0.38 | | 0.12 | 0.25 | 0.25 | 0.15 | 0.26 | |
| Clearance Time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | |
| Vehicle Extension (s) | 1.4 | 2.0 | 1.4 | 1.4 | 2.0 | | 1.4 | 2.0 | 2.0 | 1.4 | 2.0 | |
| Lane Grp Cap (vph) | 64 | 1047 | 663 | 214 | 1299 | | 421 | 876 | 392 | 509 | 1336 | |
| v/s Ratio Prot | 0.02 | c0.18 | 0.06 | c0.10 | 0.14 | | 0.09 | 0.07 | | c0.11 | c0.20 | |
| v/s Ratio Perm | | | 0.14 | | | | | | 0.02 | | | |
| v/c Ratio | 0.42 | 0.61 | 0.47 | 0.85 | 0.38 | | 0.71 | 0.30 | 0.08 | 0.75 | 0.77 | |
| Uniform Delay, d1 | 48.0 | 30.7 | 21.4 | 43.8 | 22.8 | | 42.9 | 31.1 | 29.3 | 41.5 | 34.6 | |
| 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 | 1.6 | 2.6 | 0.2 | 24.3 | 0.1 | | 4.7 | 0.1 | 0.0 | 5.6 | 2.6 | |
| Delay (s) | 49.6 | 33.4 | 21.6 | 68.1 | 22.9 | | 47.5 | 31.1 | 29.4 | 47.1 | 37.2 | |
| Level of Service | D | C | C | E | C | | D | C | C | D | D | |
| Approach Delay (s) | | 29.6 | | | 34.7 | | | 38.0 | | | 39.9 | |
| Approach LOS | | C | | | C | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 35.8 | HCM 2000 Level of Service | D |
| HCM 2000 Volume to Capacity ratio | 0.74 | | |
| Actuated Cycle Length (s) | 101.7 | Sum of lost time (s) | 20.0 |
| Intersection Capacity Utilization | 72.9% | 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) | 166 | 452 | 45 | 16 | 815 | 94 | 30 | 10 | 9 | 102 | 5 | 138 |
| Future Volume (vph) | 166 | 452 | 45 | 16 | 815 | 94 | 30 | 10 | 9 | 102 | 5 | 138 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Lane Util. Factor | 0.97 | 0.91 | | 1.00 | 0.91 | | 1.00 | 1.00 | | | 1.00 | 0.88 |
| Frt | 1.00 | 0.99 | | 1.00 | 0.98 | | 1.00 | 0.93 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.95 | 1.00 |
| Satd. Flow (prot) | 3433 | 5016 | | 1770 | 5007 | | 1770 | 1730 | | | 1778 | 2787 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.53 | 1.00 | | | 0.72 | 1.00 |
| Satd. Flow (perm) | 3433 | 5016 | | 1770 | 5007 | | 982 | 1730 | | | 1341 | 2787 |
| 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) | 180 | 491 | 49 | 17 | 886 | 102 | 33 | 11 | 10 | 111 | 5 | 150 |
| RTOR Reduction (vph) | 0 | 5 | 0 | 0 | 8 | 0 | 0 | 9 | 0 | 0 | 0 | 118 |
| Lane Group Flow (vph) | 180 | 535 | 0 | 17 | 980 | 0 | 33 | 12 | 0 | 0 | 116 | 32 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | pm+ov |
| Protected Phases | 5 | 2 | | 1 | 6 | | | 8 | | | 4 | 5 |
| Permitted Phases | | | | | | | 8 | | | 4 | | 4 |
| Actuated Green, G (s) | 10.7 | 88.8 | | 2.9 | 82.0 | | 14.3 | 14.3 | | | 14.8 | 25.5 |
| Effective Green, g (s) | 10.7 | 88.8 | | 2.9 | 82.0 | | 14.3 | 14.3 | | | 14.8 | 25.5 |
| Actuated g/C Ratio | 0.09 | 0.74 | | 0.02 | 0.68 | | 0.12 | 0.12 | | | 0.12 | 0.21 |
| Clearance Time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Vehicle Extension (s) | 2.0 | 3.0 | | 2.0 | 3.0 | | 2.0 | 2.0 | | | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 306 | 3711 | | 42 | 3421 | | 117 | 206 | | | 165 | 592 |
| v/s Ratio Prot | c0.05 | 0.11 | | 0.01 | c0.20 | | | 0.01 | | | | 0.00 |
| v/s Ratio Perm | | | | | | | 0.03 | | | | c0.09 | 0.01 |
| v/c Ratio | 0.59 | 0.14 | | 0.40 | 0.29 | | 0.28 | 0.06 | | | 0.70 | 0.05 |
| Uniform Delay, d1 | 52.5 | 4.5 | | 57.7 | 7.5 | | 48.2 | 46.9 | | | 50.5 | 37.6 |
| Progression Factor | 1.00 | 1.00 | | 1.03 | 0.61 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.9 | 0.1 | | 2.1 | 0.2 | | 0.5 | 0.0 | | | 10.5 | 0.0 |
| Delay (s) | 54.4 | 4.6 | | 61.7 | 4.8 | | 48.7 | 46.9 | | | 61.0 | 37.7 |
| Level of Service | D | A | | E | A | | D | D | | | E | D |
| Approach Delay (s) | | 17.1 | | | 5.7 | | | 48.0 | | | 47.8 | |
| Approach LOS | | B | | | A | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 16.3 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.38 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 14.0 |
| Intersection Capacity Utilization | 46.7% | 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) | 22 | 180 | 114 | 298 | 180 | 116 | 301 | 1341 | 123 | 54 | 228 | 11 |
| Future Volume (vph) | 22 | 180 | 114 | 298 | 180 | 116 | 301 | 1341 | 123 | 54 | 228 | 11 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5050 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5050 | |
| 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) | 24 | 196 | 124 | 324 | 196 | 126 | 327 | 1458 | 134 | 59 | 248 | 12 |
| RTOR Reduction (vph) | 0 | 0 | 80 | 0 | 0 | 92 | 0 | 0 | 57 | 0 | 6 | 0 |
| Lane Group Flow (vph) | 24 | 196 | 44 | 324 | 196 | 34 | 327 | 1458 | 77 | 59 | 254 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | 7 | 3 | 8 | 1 | 7 | 4 | |
| Permitted Phases | | | 2 | | | 6 | | | 8 | | | |
| Actuated Green, G (s) | 1.0 | 7.8 | 25.9 | 8.2 | 15.0 | 19.5 | 18.1 | 33.2 | 41.4 | 4.5 | 19.6 | |
| Effective Green, g (s) | 1.0 | 7.8 | 25.9 | 8.2 | 15.0 | 19.5 | 18.1 | 33.2 | 41.4 | 4.5 | 19.6 | |
| Actuated g/C Ratio | 0.01 | 0.11 | 0.36 | 0.11 | 0.21 | 0.27 | 0.25 | 0.46 | 0.57 | 0.06 | 0.27 | |
| Clearance Time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 24 | 382 | 567 | 389 | 387 | 427 | 443 | 2338 | 907 | 110 | 1370 | |
| v/s Ratio Prot | 0.01 | 0.06 | 0.02 | c0.09 | c0.11 | 0.00 | c0.18 | c0.29 | 0.01 | 0.03 | 0.05 | |
| v/s Ratio Perm | | | 0.01 | | | 0.02 | | | 0.04 | | | |
| v/c Ratio | 1.00 | 0.51 | 0.08 | 0.83 | 0.51 | 0.08 | 0.74 | 0.62 | 0.08 | 0.54 | 0.19 | |
| Uniform Delay, d1 | 35.6 | 30.4 | 15.3 | 31.3 | 25.3 | 19.7 | 24.9 | 14.8 | 6.9 | 32.8 | 20.2 | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 183.7 | 1.2 | 0.1 | 14.1 | 1.0 | 0.1 | 6.3 | 0.5 | 0.0 | 5.0 | 0.1 | |
| Delay (s) | 219.3 | 31.6 | 15.3 | 45.5 | 26.4 | 19.7 | 31.2 | 15.3 | 6.9 | 37.8 | 20.2 | |
| Level of Service | F | C | B | D | C | B | C | B | A | D | C | |
| Approach Delay (s) | | 38.8 | | | 34.7 | | | 17.4 | | | 23.5 | |
| Approach LOS | | D | | | C | | | B | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 23.7 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.73 | | |
| Actuated Cycle Length (s) | 72.2 | Sum of lost time (s) | 18.5 |
| Intersection Capacity Utilization | 59.1% | ICU Level of Service | B |
| 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) | 19 | 846 | 138 | 0 | 220 | 14 | 72 | 16 | 4 | 8 | 15 | 9 |
| Future Volume (vph) | 19 | 846 | 138 | 0 | 220 | 14 | 72 | 16 | 4 | 8 | 15 | 9 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | 5.5 | | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | | 0.95 | | 0.97 | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | | 0.99 | | 1.00 | 0.97 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | | 1.00 | | 0.95 | 1.00 | | | 0.98 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | | 3508 | | 3433 | 1810 | | | 1830 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | | 1.00 | | 0.95 | 1.00 | | | 0.98 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | | 3508 | | 3433 | 1810 | | | 1830 | 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) | 21 | 920 | 150 | 0 | 239 | 15 | 78 | 17 | 4 | 9 | 16 | 10 |
| RTOR Reduction (vph) | 0 | 0 | 26 | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 9 |
| Lane Group Flow (vph) | 21 | 920 | 124 | 0 | 252 | 0 | 78 | 17 | 0 | 0 | 25 | 1 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | 8 | 1 | 6 | | 8 | 8 | | 7 | 7 | 5 |
| Permitted Phases | | | 2 | | | | | | | | | 7 |
| Actuated Green, G (s) | 4.7 | 90.3 | 98.6 | | 81.6 | | 8.3 | 8.3 | | | 4.9 | 9.6 |
| Effective Green, g (s) | 4.7 | 90.3 | 98.6 | | 81.6 | | 8.3 | 8.3 | | | 4.9 | 9.6 |
| Actuated g/C Ratio | 0.04 | 0.75 | 0.82 | | 0.68 | | 0.07 | 0.07 | | | 0.04 | 0.08 |
| Clearance Time (s) | 4.0 | 5.5 | 5.5 | | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 69 | 2663 | 1373 | | 2385 | | 237 | 125 | | | 74 | 126 |
| v/s Ratio Prot | 0.01 | c0.26 | 0.01 | | 0.07 | | c0.02 | 0.01 | | | c0.01 | 0.00 |
| v/s Ratio Perm | | | 0.07 | | | | | | | | | 0.00 |
| v/c Ratio | 0.30 | 0.35 | 0.09 | | 0.11 | | 0.33 | 0.14 | | | 0.34 | 0.01 |
| Uniform Delay, d1 | 56.1 | 5.0 | 2.1 | | 6.6 | | 53.2 | 52.5 | | | 56.0 | 50.8 |
| Progression Factor | 1.27 | 0.73 | 0.77 | | 1.00 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 2.4 | 0.3 | 0.0 | | 0.1 | | 0.8 | 0.5 | | | 2.7 | 0.0 |
| Delay (s) | 73.6 | 4.0 | 1.6 | | 6.7 | | 54.0 | 53.0 | | | 58.7 | 50.8 |
| Level of Service | E | A | A | | A | | D | D | | | E | D |
| Approach Delay (s) | | 5.0 | | | 6.7 | | | 53.8 | | | 56.4 | |
| Approach LOS | | A | | | A | | | D | | | E | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 9.8 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.36 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 20.5 |
| Intersection Capacity Utilization | 41.3% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 58 | 381 | 318 | 82 | 294 | 335 | 248 | 1002 | 88 | 180 | 302 | 23 |
| Future Volume (vph) | 58 | 381 | 318 | 82 | 294 | 335 | 248 | 1002 | 88 | 180 | 302 | 23 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.92 | | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3257 | | 3433 | 3539 | 1583 | 3433 | 5031 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3257 | | 3433 | 3539 | 1583 | 3433 | 5031 | |
| 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) | 63 | 414 | 346 | 89 | 320 | 364 | 270 | 1089 | 96 | 196 | 328 | 25 |
| RTOR Reduction (vph) | 0 | 0 | 148 | 0 | 173 | 0 | 0 | 0 | 65 | 0 | 8 | 0 |
| Lane Group Flow (vph) | 63 | 414 | 198 | 89 | 511 | 0 | 270 | 1089 | 31 | 196 | 345 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | | | | | | 8 | | | |
| Actuated Green, G (s) | 6.2 | 29.2 | 40.4 | 7.1 | 30.1 | | 11.2 | 30.3 | 30.3 | 9.2 | 27.3 | |
| Effective Green, g (s) | 6.2 | 29.2 | 40.4 | 7.1 | 30.1 | | 11.2 | 30.3 | 30.3 | 9.2 | 27.3 | |
| Actuated g/C Ratio | 0.07 | 0.31 | 0.43 | 0.07 | 0.32 | | 0.12 | 0.32 | 0.32 | 0.10 | 0.29 | |
| Clearance Time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | |
| Vehicle Extension (s) | 1.4 | 2.0 | 1.4 | 1.4 | 2.0 | | 1.4 | 2.0 | 2.0 | 1.4 | 2.0 | |
| Lane Grp Cap (vph) | 115 | 1090 | 674 | 132 | 1034 | | 405 | 1131 | 505 | 333 | 1448 | |
| v/s Ratio Prot | 0.04 | 0.12 | 0.03 | c0.05 | c0.16 | | c0.08 | c0.31 | | 0.06 | 0.07 | |
| v/s Ratio Perm | | | 0.09 | | | | | | 0.02 | | | |
| v/c Ratio | 0.55 | 0.38 | 0.29 | 0.67 | 0.49 | | 0.67 | 0.96 | 0.06 | 0.59 | 0.24 | |
| Uniform Delay, d1 | 42.9 | 25.7 | 17.8 | 42.7 | 26.2 | | 40.0 | 31.7 | 22.4 | 41.0 | 25.8 | |
| 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 | 2.8 | 1.0 | 0.1 | 10.2 | 0.1 | | 3.2 | 18.3 | 0.0 | 1.7 | 0.0 | |
| Delay (s) | 45.8 | 26.7 | 17.9 | 52.9 | 26.3 | | 43.2 | 50.0 | 22.4 | 42.7 | 25.8 | |
| Level of Service | D | C | B | D | C | | D | D | C | D | C | |
| Approach Delay (s) | | 24.5 | | | 29.4 | | | 46.9 | | | 31.9 | |
| Approach LOS | | C | | | C | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 35.7 | HCM 2000 Level of Service | D |
| HCM 2000 Volume to Capacity ratio | 0.75 | | |
| Actuated Cycle Length (s) | 94.8 | Sum of lost time (s) | 20.0 |
| Intersection Capacity Utilization | 71.7% | 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) | 95 | 1090 | 27 | 7 | 245 | 23 | 26 | 3 | 10 | 70 | 2 | 52 |
| Future Volume (vph) | 95 | 1090 | 27 | 7 | 245 | 23 | 26 | 3 | 10 | 70 | 2 | 52 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Lane Util. Factor | 0.97 | 0.91 | | 1.00 | 0.91 | | 1.00 | 1.00 | | | 1.00 | 0.88 |
| Frt | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | 0.88 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.95 | 1.00 |
| Satd. Flow (prot) | 3433 | 5067 | | 1770 | 5020 | | 1770 | 1643 | | | 1776 | 2787 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.64 | 1.00 | | | 0.72 | 1.00 |
| Satd. Flow (perm) | 3433 | 5067 | | 1770 | 5020 | | 1184 | 1643 | | | 1344 | 2787 |
| 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) | 103 | 1185 | 29 | 8 | 266 | 25 | 28 | 3 | 11 | 76 | 2 | 57 |
| RTOR Reduction (vph) | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 10 | 0 | 0 | 0 | 48 |
| Lane Group Flow (vph) | 103 | 1213 | 0 | 8 | 287 | 0 | 28 | 4 | 0 | 0 | 78 | 9 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | pm+ov |
| Protected Phases | 5 | 2 | | 1 | 6 | | | 8 | | | 4 | 5 |
| Permitted Phases | | | | | | | 8 | | | 4 | | 4 |
| Actuated Green, G (s) | 8.3 | 94.9 | | 1.4 | 89.0 | | 9.7 | 9.7 | | | 10.2 | 18.5 |
| Effective Green, g (s) | 8.3 | 94.9 | | 1.4 | 89.0 | | 9.7 | 9.7 | | | 10.2 | 18.5 |
| Actuated g/C Ratio | 0.07 | 0.79 | | 0.01 | 0.74 | | 0.08 | 0.08 | | | 0.08 | 0.15 |
| Clearance Time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Vehicle Extension (s) | 2.0 | 3.0 | | 2.0 | 3.0 | | 2.0 | 2.0 | | | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 237 | 4007 | | 20 | 3723 | | 95 | 132 | | | 114 | 429 |
| v/s Ratio Prot | c0.03 | c0.24 | | 0.00 | 0.06 | | | 0.00 | | | | 0.00 |
| v/s Ratio Perm | | | | | | | 0.02 | | | | c0.06 | 0.00 |
| v/c Ratio | 0.43 | 0.30 | | 0.40 | 0.08 | | 0.29 | 0.03 | | | 0.68 | 0.02 |
| Uniform Delay, d1 | 53.6 | 3.5 | | 58.9 | 4.2 | | 51.9 | 50.8 | | | 53.3 | 43.1 |
| Progression Factor | 1.00 | 1.00 | | 1.04 | 0.87 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.5 | 0.2 | | 4.7 | 0.0 | | 0.6 | 0.0 | | | 12.7 | 0.0 |
| Delay (s) | 54.1 | 3.6 | | 65.9 | 3.7 | | 52.6 | 50.8 | | | 66.0 | 43.1 |
| Level of Service | D | A | | E | A | | D | D | | | E | D |
| Approach Delay (s) | | 7.6 | | | 5.4 | | | 52.0 | | | 56.3 | |
| Approach LOS | | A | | | A | | | D | | | E | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 11.9 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.36 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 14.0 |
| Intersection Capacity Utilization | 49.4% | 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) | 13 | 472 | 426 | 311 | 199 | 64 | 182 | 289 | 242 | 292 | 1281 | 14 |
| Future Volume (vph) | 13 | 472 | 426 | 311 | 199 | 64 | 182 | 289 | 242 | 292 | 1281 | 14 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5077 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 3433 | 1863 | 1583 | 1770 | 5085 | 1583 | 1770 | 5077 | |
| 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) | 14 | 513 | 463 | 338 | 216 | 70 | 198 | 314 | 263 | 317 | 1392 | 15 |
| RTOR Reduction (vph) | 0 | 0 | 84 | 0 | 0 | 35 | 0 | 0 | 41 | 0 | 1 | 0 |
| Lane Group Flow (vph) | 14 | 513 | 379 | 338 | 216 | 35 | 198 | 314 | 222 | 317 | 1406 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | pm+ov | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | 7 | 3 | 8 | 1 | 7 | 4 | |
| Permitted Phases | | | 2 | | | 6 | | | 8 | | | |
| Actuated Green, G (s) | 0.6 | 12.3 | 25.4 | 12.3 | 24.0 | 40.0 | 13.1 | 21.7 | 34.0 | 16.0 | 24.6 | |
| Effective Green, g (s) | 0.6 | 12.3 | 25.4 | 12.3 | 24.0 | 40.0 | 13.1 | 21.7 | 34.0 | 16.0 | 24.6 | |
| Actuated g/C Ratio | 0.01 | 0.15 | 0.31 | 0.15 | 0.30 | 0.50 | 0.16 | 0.27 | 0.42 | 0.20 | 0.30 | |
| Clearance Time (s) | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 13 | 538 | 497 | 522 | 553 | 783 | 286 | 1365 | 666 | 350 | 1545 | |
| v/s Ratio Prot | 0.01 | c0.14 | 0.12 | c0.10 | 0.12 | 0.01 | 0.11 | 0.06 | 0.05 | c0.18 | c0.28 | |
| v/s Ratio Perm | | | 0.12 | | | 0.01 | | | 0.09 | | | |
| v/c Ratio | 1.08 | 0.95 | 0.76 | 0.65 | 0.39 | 0.04 | 0.69 | 0.23 | 0.33 | 0.91 | 0.91 | |
| Uniform Delay, d1 | 40.1 | 34.0 | 25.0 | 32.2 | 22.6 | 10.5 | 31.9 | 23.0 | 15.8 | 31.7 | 27.0 | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 276.9 | 27.4 | 6.8 | 2.8 | 0.5 | 0.0 | 7.1 | 0.1 | 0.3 | 25.8 | 8.2 | |
| Delay (s) | 317.0 | 61.3 | 31.8 | 35.0 | 23.0 | 10.6 | 39.0 | 23.1 | 16.1 | 57.5 | 35.2 | |
| Level of Service | F | E | C | C | C | B | D | C | B | E | D | |
| Approach Delay (s) | | 51.2 | | | 28.1 | | | 24.8 | | | 39.3 | |
| Approach LOS | | D | | | C | | | C | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 37.7 | HCM 2000 Level of Service | D |
| HCM 2000 Volume to Capacity ratio | 0.89 | | |
| Actuated Cycle Length (s) | 80.8 | Sum of lost time (s) | 18.5 |
| Intersection Capacity Utilization | 72.5% | 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) | 44 | 271 | 262 | 15 | 656 | 55 | 213 | 85 | 13 | 31 | 79 | 106 |
| Future Volume (vph) | 44 | 271 | 262 | 15 | 656 | 55 | 213 | 85 | 13 | 31 | 79 | 106 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | 5.5 | 4.0 | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.99 | | 1.00 | 0.98 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3498 | | 3433 | 1826 | | | 1837 | 1583 |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.99 | 1.00 |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3498 | | 3433 | 1826 | | | 1837 | 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) | 48 | 295 | 285 | 16 | 713 | 60 | 232 | 92 | 14 | 34 | 86 | 115 |
| RTOR Reduction (vph) | 0 | 0 | 87 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 80 |
| Lane Group Flow (vph) | 48 | 295 | 198 | 16 | 769 | 0 | 232 | 102 | 0 | 0 | 120 | 35 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | 8 | 1 | 6 | | 8 | 8 | | 7 | 7 | 5 |
| Permitted Phases | | | 2 | | | | | | | | | 7 |
| Actuated Green, G (s) | 9.0 | 59.4 | 83.3 | 3.1 | 53.5 | | 23.9 | 23.9 | | | 13.1 | 22.1 |
| Effective Green, g (s) | 9.0 | 59.4 | 83.3 | 3.1 | 53.5 | | 23.9 | 23.9 | | | 13.1 | 22.1 |
| Actuated g/C Ratio | 0.08 | 0.49 | 0.69 | 0.03 | 0.45 | | 0.20 | 0.20 | | | 0.11 | 0.18 |
| Clearance Time (s) | 4.0 | 5.5 | 5.5 | 4.0 | 5.5 | | 5.5 | 5.5 | | | 5.5 | 4.0 |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 132 | 1751 | 1098 | 45 | 1559 | | 683 | 363 | | | 200 | 291 |
| v/s Ratio Prot | c0.03 | 0.08 | 0.04 | 0.01 | c0.22 | | c0.07 | 0.06 | | | c0.07 | 0.01 |
| v/s Ratio Perm | | | 0.09 | | | | | | | | | 0.01 |
| v/c Ratio | 0.36 | 0.17 | 0.18 | 0.36 | 0.49 | | 0.34 | 0.28 | | | 0.60 | 0.12 |
| Uniform Delay, d1 | 52.8 | 16.7 | 6.4 | 57.5 | 23.6 | | 41.3 | 40.8 | | | 51.0 | 40.8 |
| Progression Factor | 1.16 | 0.86 | 0.56 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.7 | 0.2 | 0.4 | 4.8 | 1.1 | | 1.3 | 1.9 | | | 4.8 | 0.2 |
| Delay (s) | 63.0 | 14.5 | 4.0 | 62.2 | 24.7 | | 42.6 | 42.7 | | | 55.7 | 41.0 |
| Level of Service | E | B | A | E | C | | D | D | | | E | D |
| Approach Delay (s) | | 13.4 | | | 25.5 | | | 42.6 | | | 48.5 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 27.3 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.46 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 20.5 |
| Intersection Capacity Utilization | 51.0% | 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) | 29 | 678 | 392 | 193 | 419 | 128 | 317 | 274 | 131 | 409 | 1049 | 18 |
| Future Volume (vph) | 29 | 678 | 392 | 193 | 419 | 128 | 317 | 274 | 131 | 409 | 1049 | 18 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | |
| Frt | 1.00 | 1.00 | 0.85 | 1.00 | 0.96 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | |
| Flt Protected | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3415 | | 3433 | 3539 | 1583 | 3433 | 5072 | |
| Flt Permitted | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3539 | 1583 | 1770 | 3415 | | 3433 | 3539 | 1583 | 3433 | 5072 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 29 | 678 | 392 | 193 | 419 | 128 | 317 | 274 | 131 | 409 | 1049 | 18 |
| RTOR Reduction (vph) | 0 | 0 | 71 | 0 | 23 | 0 | 0 | 0 | 102 | 0 | 2 | 0 |
| Lane Group Flow (vph) | 29 | 678 | 321 | 193 | 524 | 0 | 317 | 274 | 29 | 409 | 1065 | 0 |
| Turn Type | Prot | NA | pm+ov | Prot | NA | | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 5 | 2 | 3 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | | | | | | 8 | | | |
| Actuated Green, G (s) | 3.5 | 37.0 | 50.2 | 15.4 | 48.9 | | 13.2 | 24.9 | 24.9 | 17.2 | 27.9 | |
| Effective Green, g (s) | 3.5 | 37.0 | 50.2 | 15.4 | 48.9 | | 13.2 | 24.9 | 24.9 | 17.2 | 27.9 | |
| Actuated g/C Ratio | 0.03 | 0.33 | 0.44 | 0.14 | 0.43 | | 0.12 | 0.22 | 0.22 | 0.15 | 0.25 | |
| Clearance Time (s) | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | |
| Vehicle Extension (s) | 1.4 | 2.0 | 1.4 | 1.4 | 2.0 | | 1.4 | 2.0 | 2.0 | 1.4 | 2.0 | |
| Lane Grp Cap (vph) | 54 | 1153 | 700 | 240 | 1471 | | 399 | 776 | 347 | 520 | 1246 | |
| v/s Ratio Prot | 0.02 | c0.19 | 0.05 | c0.11 | 0.15 | | 0.09 | 0.08 | | c0.12 | c0.21 | |
| v/s Ratio Perm | | | 0.15 | | | | | | 0.02 | | | |
| v/c Ratio | 0.54 | 0.59 | 0.46 | 0.80 | 0.36 | | 0.79 | 0.35 | 0.08 | 0.79 | 0.86 | |
| Uniform Delay, d1 | 54.2 | 31.9 | 22.1 | 47.6 | 21.7 | | 48.8 | 37.5 | 35.2 | 46.4 | 40.9 | |
| 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 | 5.1 | 2.2 | 0.2 | 16.6 | 0.1 | | 9.8 | 0.1 | 0.0 | 7.1 | 5.7 | |
| Delay (s) | 59.3 | 34.1 | 22.3 | 64.2 | 21.8 | | 58.6 | 37.6 | 35.3 | 53.5 | 46.6 | |
| Level of Service | E | C | C | E | C | | E | D | D | D | D | |
| Approach Delay (s) | | 30.6 | | | 32.8 | | | 46.4 | | | 48.5 | |
| Approach LOS | | C | | | C | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 40.4 | HCM 2000 Level of Service | D |
| HCM 2000 Volume to Capacity ratio | 0.75 | | |
| Actuated Cycle Length (s) | 113.5 | Sum of lost time (s) | 20.0 |
| Intersection Capacity Utilization | 75.8% | ICU Level of Service | D |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

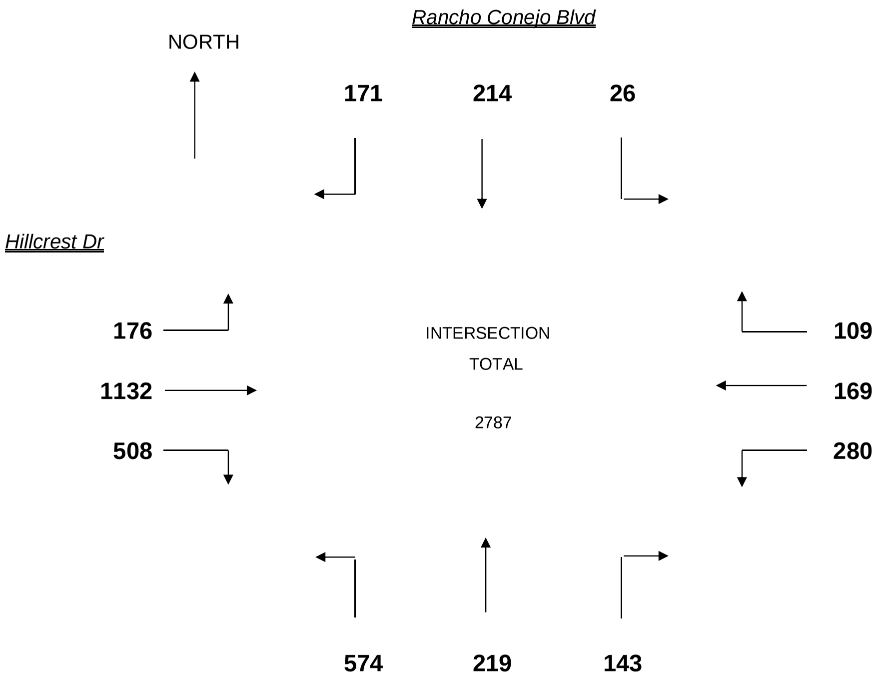
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 176 | 477 | 48 | 18 | 839 | 100 | 32 | 11 | 10 | 109 | 5 | 147 |
| Future Volume (vph) | 176 | 477 | 48 | 18 | 839 | 100 | 32 | 11 | 10 | 109 | 5 | 147 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Lane Util. Factor | 0.97 | 0.91 | | 1.00 | 0.91 | | 1.00 | 1.00 | | | 1.00 | 0.88 |
| Frt | 1.00 | 0.99 | | 1.00 | 0.98 | | 1.00 | 0.93 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | | 0.95 | 1.00 |
| Satd. Flow (prot) | 3433 | 5016 | | 1770 | 5004 | | 1770 | 1729 | | | 1777 | 2787 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.51 | 1.00 | | | 0.72 | 1.00 |
| Satd. Flow (perm) | 3433 | 5016 | | 1770 | 5004 | | 952 | 1729 | | | 1337 | 2787 |
| 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) | 191 | 518 | 52 | 20 | 912 | 109 | 35 | 12 | 11 | 118 | 5 | 160 |
| RTOR Reduction (vph) | 0 | 5 | 0 | 0 | 8 | 0 | 0 | 10 | 0 | 0 | 0 | 125 |
| Lane Group Flow (vph) | 191 | 565 | 0 | 20 | 1013 | 0 | 35 | 13 | 0 | 0 | 123 | 35 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | pm+ov |
| Protected Phases | 5 | 2 | | 1 | 6 | | | 8 | | | 4 | 5 |
| Permitted Phases | | | | | | | 8 | | | 4 | | 4 |
| Actuated Green, G (s) | 11.0 | 88.1 | | 3.0 | 81.1 | | 14.9 | 14.9 | | | 15.4 | 26.4 |
| Effective Green, g (s) | 11.0 | 88.1 | | 3.0 | 81.1 | | 14.9 | 14.9 | | | 15.4 | 26.4 |
| Actuated g/C Ratio | 0.09 | 0.73 | | 0.02 | 0.68 | | 0.12 | 0.12 | | | 0.13 | 0.22 |
| Clearance Time (s) | 4.5 | 5.5 | | 4.0 | 4.0 | | 4.5 | 4.5 | | | 4.0 | 4.5 |
| Vehicle Extension (s) | 2.0 | 3.0 | | 2.0 | 3.0 | | 2.0 | 2.0 | | | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 314 | 3682 | | 44 | 3381 | | 118 | 214 | | | 171 | 613 |
| v/s Ratio Prot | c0.06 | 0.11 | | 0.01 | c0.20 | | | 0.01 | | | | 0.01 |
| v/s Ratio Perm | | | | | | | 0.04 | | | | c0.09 | 0.01 |
| v/c Ratio | 0.61 | 0.15 | | 0.45 | 0.30 | | 0.30 | 0.06 | | | 0.72 | 0.06 |
| Uniform Delay, d1 | 52.4 | 4.8 | | 57.7 | 7.9 | | 47.8 | 46.4 | | | 50.2 | 37.0 |
| Progression Factor | 1.00 | 1.00 | | 1.03 | 0.62 | | 1.00 | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 2.3 | 0.1 | | 2.5 | 0.2 | | 0.5 | 0.0 | | | 11.4 | 0.0 |
| Delay (s) | 54.7 | 4.9 | | 61.9 | 5.1 | | 48.3 | 46.4 | | | 61.6 | 37.0 |
| Level of Service | D | A | | E | A | | D | D | | | E | D |
| Approach Delay (s) | | 17.4 | | | 6.2 | | | 47.6 | | | 47.7 | |
| Approach LOS | | B | | | A | | | D | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 16.8 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.40 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 14.0 |
| Intersection Capacity Utilization | 47.7% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

## APPENDIX B: Study Intersection LOS Analysis – ICU Output Sheets

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Rancho Conejo Blvd** |
| **LOCATION:** | **Rancho Conejo Blvd at Hillcrest Dr** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Existing (2020)** | **FILE:** | **ShapellTIA_ICU_EX.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |

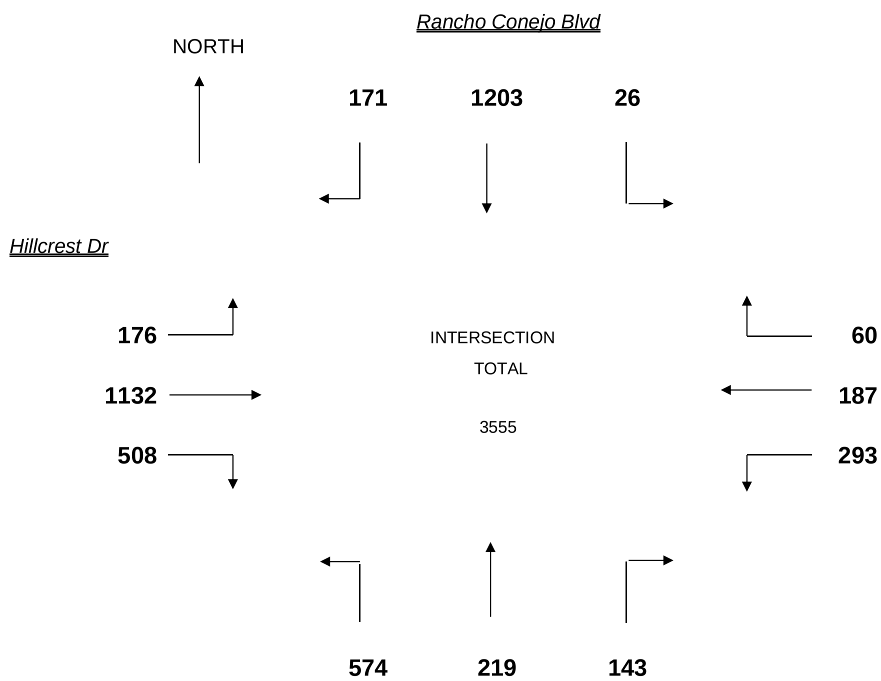



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 283 | 0.18 | N | |
| *THRU* | 3 | 4800 | 1260 | 0.26 | | 0.26 |
| *RIGHT* | 1 | 1600 | 115 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 51 | 0.03 | N | |
| *THRU* | 3 | 4800 | 214 | 0.05 | | 0.03 |
| *RIGHT* | 0 | 0 | 10 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 20 | 0.01 | N | |
| *THRU* | 2 | 3200 | 169 | 0.05 | | 0.05 |
| *RIGHT* | 1 | 1600 | 107 | 0 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 280 | 0.09 | N | |
| *THRU* | 1 | 1600 | 169 | 0.11 | | 0.09 |
| *RIGHT* | 1 | 1600 | 109 | 0.04 | | |

***TOTAL ICU*** 0.43

***LEVEL OF SERVICE*** A

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Rancho Conejo Blvd** |
| **LOCATION:** | **Rancho Conejo Blvd at Hillcrest Dr** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Existing (2020)** | **FILE:** | **ShapellTIA_ICU_EX.xls** |
| **PEAK HOUR:** | **PM Peak Hour** | **COMMENTS:** | |

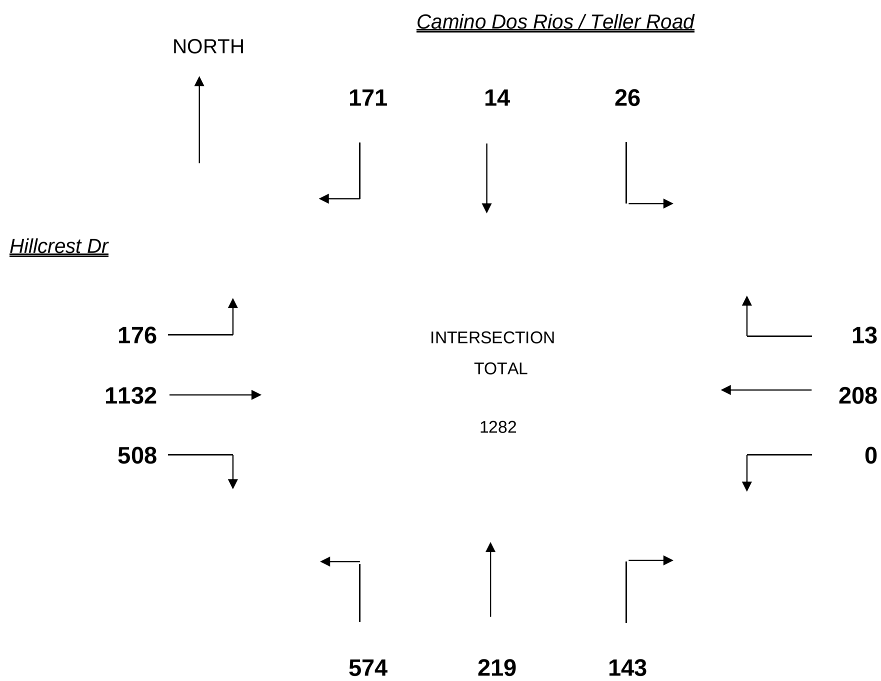



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 171 | 0.11 | N | |
| *THRU* | 3 | 4800 | 271 | 0.06 | | **0.11** |
| *RIGHT* | 1 | 1600 | 228 | 0.05 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 274 | 0.17 | N | |
| *THRU* | 3 | 4800 | 1203 | 0.25 | | **0.25** |
| *RIGHT* | 0 | 0 | 13 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 12 | 0.01 | N | |
| *THRU* | 2 | 3200 | 443 | 0.14 | | **0.14** |
| *RIGHT* | 1 | 1600 | 400 | 0.14 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 293 | 0.09 | N | |
| *THRU* | 1 | 1600 | 187 | 0.12 | | **0.09** |
| *RIGHT* | 1 | 1600 | 60 | 0 | | |

***TOTAL ICU*** 0.59

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Camino Dos Rios / Teller Road** |
| **LOCATION:** | **Camino Dos Rios at Teller Road** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Existing (2020)** | **FILE:** | **ShapellTIA_ICU_EX.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |




| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 68 | 0.02 | Y | 0.02 |
| *THRU* | 1 | 1600 | 15 | 0.01 | | |
| *RIGHT* | 0 | 0 | 4 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 7 | 0 | Y | **0.01** |
| *THRU* | 1 | 1600 | 14 | 0.01 | | |
| *RIGHT* | 1 | 1600 | 8 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 17 | 0.01 | N | |
| *THRU* | 2 | 3200 | 798 | 0.25 | | **0.25** |
| *RIGHT* | 1 | 1600 | 130 | 0.06 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 0 | 0.00 | N | |
| *THRU* | 2 | 3200 | 208 | 0.07 | | **0.00** |
| *RIGHT* | 0 | 0 | 13 | 0 | | |

***TOTAL ICU*** **0.28**

***LEVEL OF SERVICE*** **A**

**DATE:** 4 2020

**LOCATION:** Camino Dos Rios at Teller Road

**SCENARIO:** Existing (2020)

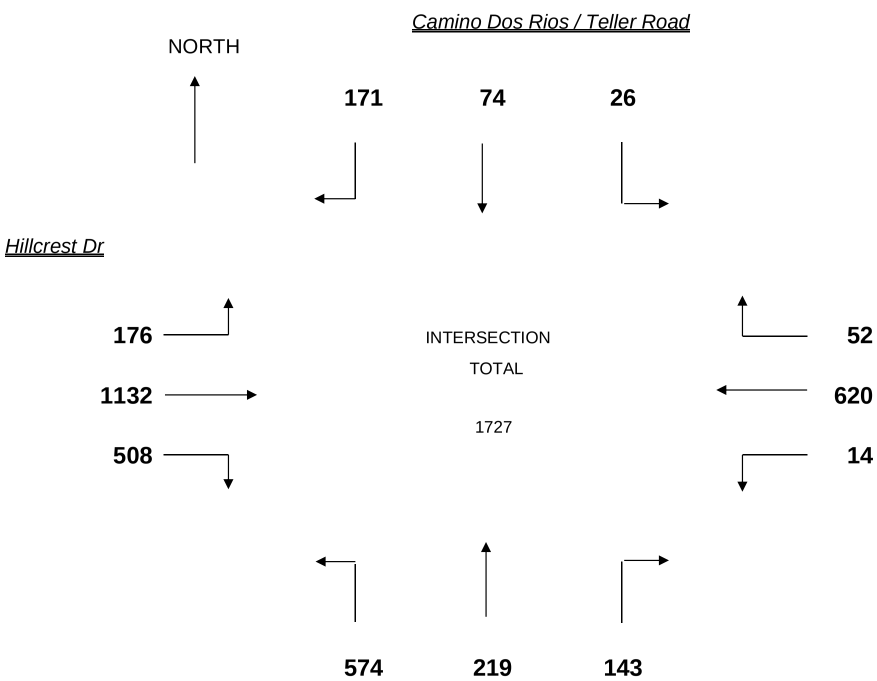
**PEAK HOUR:** PM Peak Hour

**N - S:** Camino Dos Rios / Teller Road

**E - W:** Hillcrest Dr

**FILE:** ShapellTIA_ICU_EX.xls

**COMMENTS:**

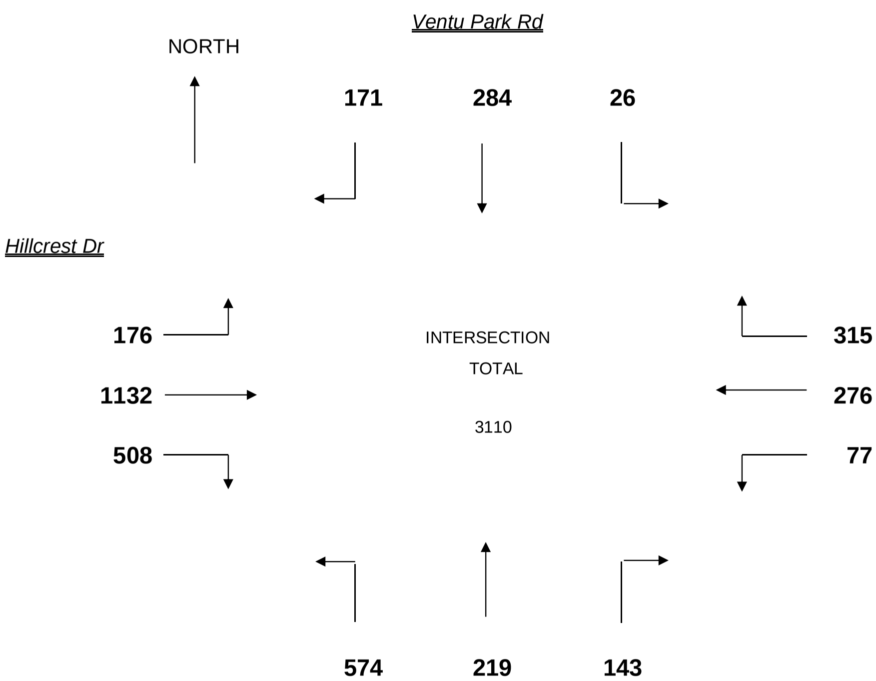



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 201 | 0.06 | Y | 0.06 |
| *THRU* | 1 | 1600 | 80 | 0.06 | | |
| *RIGHT* | 0 | 0 | 12 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 29 | 0 | Y | **0.06** |
| *THRU* | 1 | 1600 | 74 | 0.06 | | |
| *RIGHT* | 1 | 1600 | 100 | 0.04 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 42 | 0.03 | N | |
| *THRU* | 2 | 3200 | 256 | 0.08 | | **0.03** |
| *RIGHT* | 1 | 1600 | 247 | 0.09 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 14 | 0.01 | N | |
| *THRU* | 2 | 3200 | 620 | 0.21 | | **0.21** |
| *RIGHT* | 0 | 0 | 52 | 0 | | |

***TOTAL ICU*** **0.36**

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Ventu Park Rd** |
| **LOCATION:** | **Ventu Park Rd at Hillcrest Dr** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Existing (2020)** | **FILE:** | **ShapellTIA_ICU_EX.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |

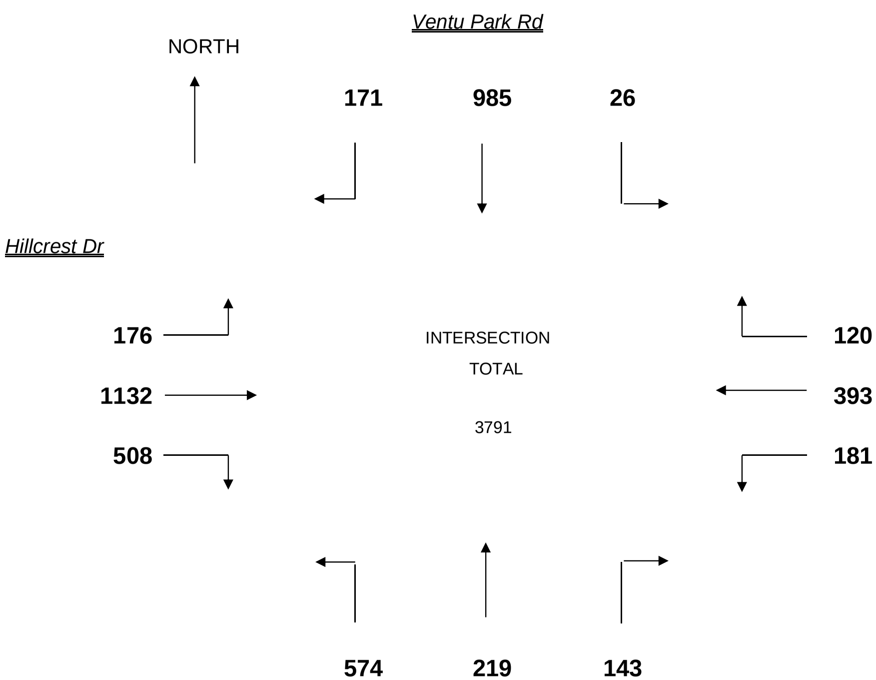



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 233 | 0.07 | N | |
| *THRU* | 2 | 3200 | 941 | 0.29 | | **0.29** |
| *RIGHT* | 1 | 1600 | 82 | 0.00 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 169 | 0.05 | N | |
| *THRU* | 2 | 3200 | 284 | 0.09 | | **0.05** |
| *RIGHT* | 1 | 1600 | 21 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 55 | 0.03 | N | |
| *THRU* | 2 | 3200 | 358 | 0.11 | | **0.03** |
| *RIGHT* | 1 | 1600 | 299 | 0.11 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 77 | 0.05 | N | |
| *THRU* | 2 | 3200 | 276 | 0.18 | | **0.18** |
| *RIGHT* | 0 | 0 | 315 | 0 | | |

***TOTAL ICU*** 0.55

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Ventu Park Rd** |
| **LOCATION:** | **Ventu Park Rd at Hillcrest Dr** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Existing (2020)** | **FILE:** | **ShapellTIA_ICU_EX.xls** |
| **PEAK HOUR:** | **PM Peak Hour** | **COMMENTS:** | |

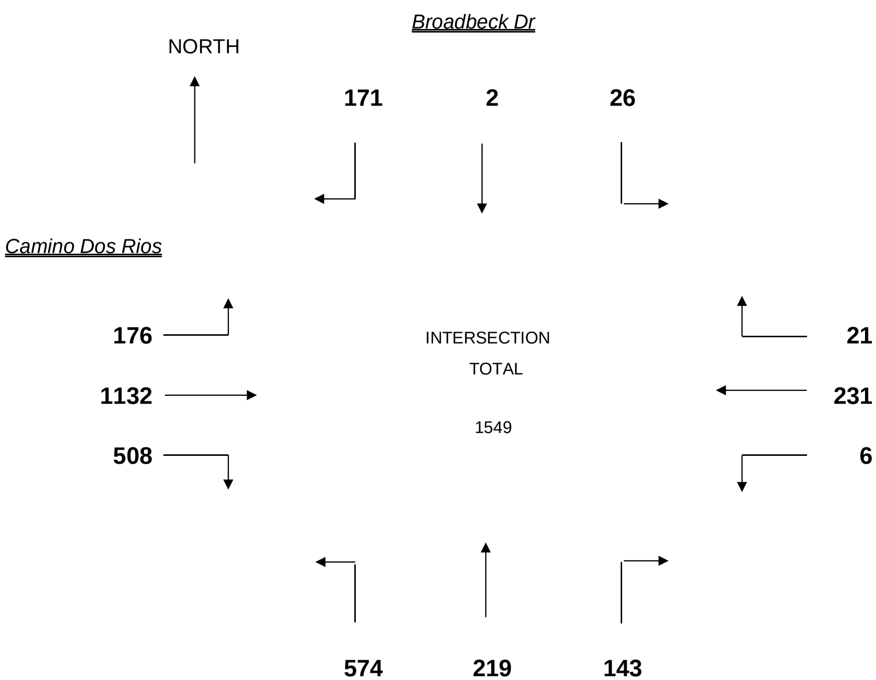



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 299 | 0.09 | N | |
| *THRU* | 2 | 3200 | 257 | 0.08 | | 0.09 |
| *RIGHT* | 1 | 1600 | 123 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 384 | 0.12 | N | |
| *THRU* | 2 | 3200 | 985 | 0.31 | | 0.31 |
| *RIGHT* | 1 | 1600 | 16 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 27 | 0.02 | N | |
| *THRU* | 2 | 3200 | 637 | 0.20 | | 0.20 |
| *RIGHT* | 1 | 1600 | 369 | 0.14 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 181 | 0.11 | N | |
| *THRU* | 2 | 3200 | 393 | 0.16 | | 0.11 |
| *RIGHT* | 0 | 0 | 120 | 0 | | |

***TOTAL ICU*** 0.71

***LEVEL OF SERVICE*** **C**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Broadbeck Dr** |
| **LOCATION:** | **Broadbeck Dr at Camino Dos Rios** | **E - W:** | **Camino Dos Rios** |
| **SCENARIO:** | **Existing (2020)** | **FILE:** | **ShapellTIA_ICU_EX.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |

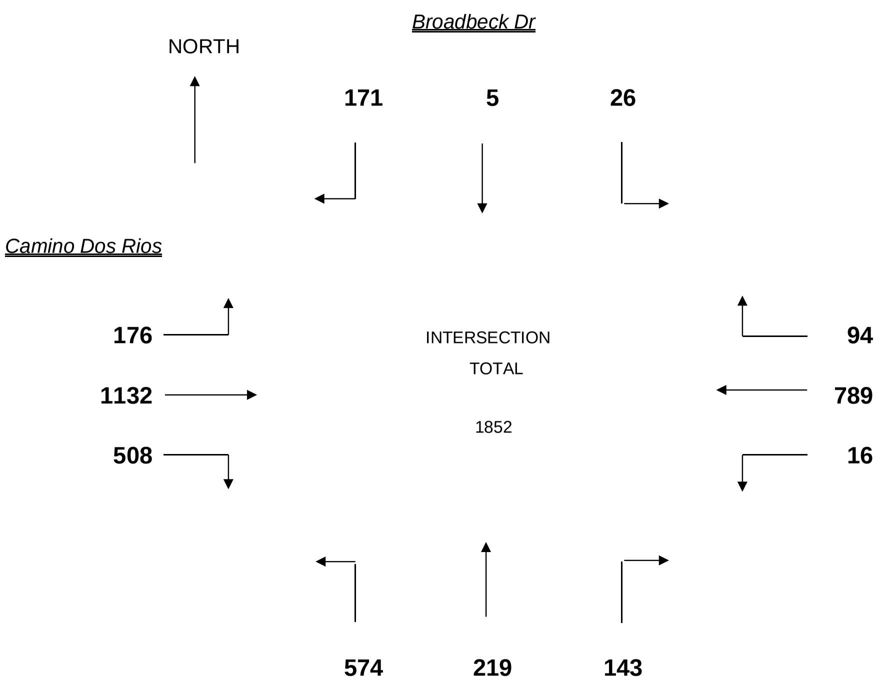



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 24 | 0 | N | |
| *THRU* | 1 | 1600 | 3 | 0.02 | | 0 |
| *RIGHT* | 0 | 0 | 9 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 66 | 0 | N | |
| *THRU* | 1 | 1600 | 2 | 0.04 | | 0.04 |
| *RIGHT* | 2 | 3200 | 49 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 89 | 0.03 | N | |
| *THRU* | 3 | 4800 | 1024 | 0.22 | | 0.22 |
| *RIGHT* | 0 | 0 | 25 | 0 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 6 | 0.00 | N | |
| *THRU* | 3 | 4800 | 231 | 0.05 | | 0.00 |
| *RIGHT* | 0 | 0 | 21 | 0 | | |

***TOTAL ICU*** 0.26

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Broadbeck Dr** |
| **LOCATION:** | **Broadbeck Dr at Camino Dos Rios** | **E - W:** | **Camino Dos Rios** |
| **SCENARIO:** | **Existing (2020)** | **FILE:** | **ShapellTIA_ICU_EX.xls** |
| **PEAK HOUR:** | **PM Peak Hour** | **COMMENTS:** | |




| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 30 | 0 | N | |
| *THRU* | 1 | 1600 | 10 | 0.03 | | **0** |
| *RIGHT* | 0 | 0 | 9 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 102 | 0 | N | |
| *THRU* | 1 | 1600 | 5 | 0.07 | | **0.07** |
| *RIGHT* | 2 | 3200 | 138 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 166 | 0.05 | N | |
| *THRU* | 3 | 4800 | 448 | 0.10 | | **0.05** |
| *RIGHT* | 0 | 0 | 45 | 0 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 16 | 0.01 | N | |
| *THRU* | 3 | 4800 | 789 | 0.18 | | **0.18** |
| *RIGHT* | 0 | 0 | 94 | 0 | | |

***TOTAL ICU*** **0.30**

***LEVEL OF SERVICE*** **A**

**DATE:** 4 2020

**LOCATION:** Rancho Conejo Blvd at Hillcrest Dr

**SCENARIO:** Existing (2020) Plus Project

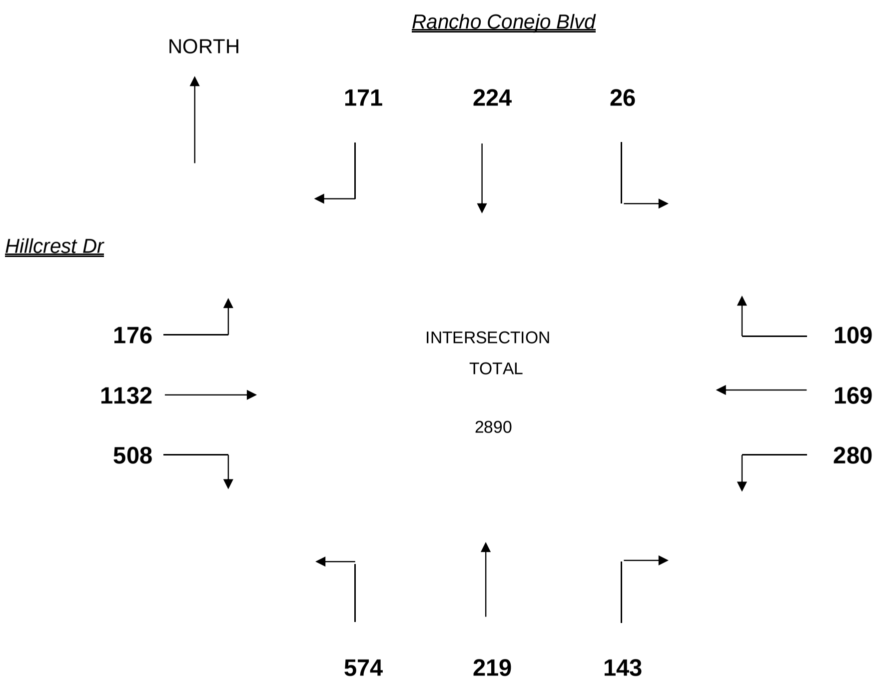
**PEAK HOUR:** AM Peak Hour

**N - S:** Rancho Conejo Blvd

**E - W:** Hillcrest Dr

**FILE:** ShapellTIA_ICU_EXPP.xls

**COMMENTS:**

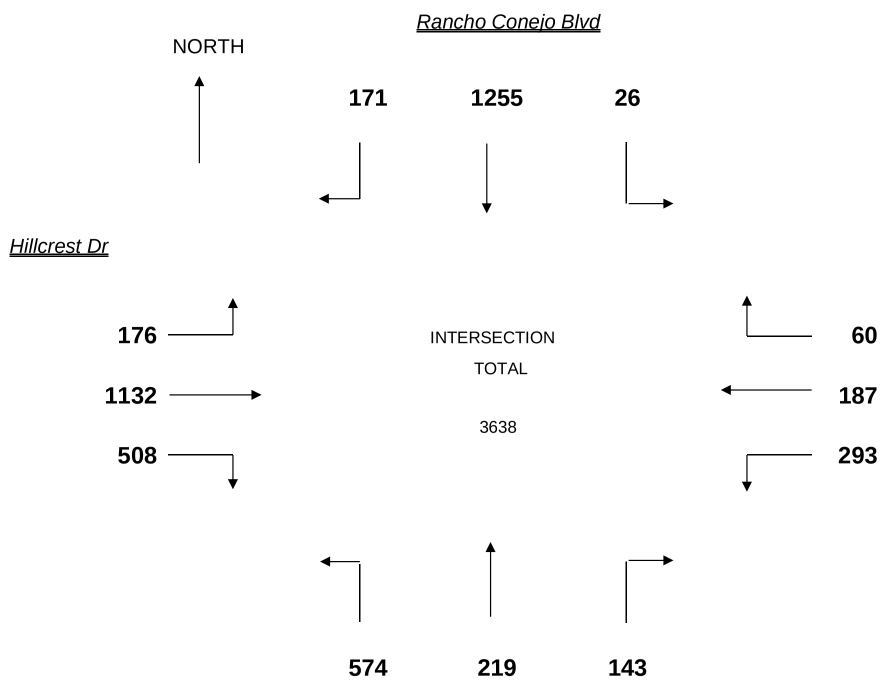



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 307 | 0.19 | N | |
| *THRU* | 3 | 4800 | 1325 | 0.28 | | 0.28 |
| *RIGHT* | 1 | 1600 | 115 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 51 | 0.03 | N | |
| *THRU* | 3 | 4800 | 224 | 0.05 | | 0.03 |
| *RIGHT* | 0 | 0 | 10 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 20 | 0.01 | N | |
| *THRU* | 2 | 3200 | 169 | 0.05 | | 0.05 |
| *RIGHT* | 1 | 1600 | 111 | 0 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 280 | 0.09 | N | |
| *THRU* | 1 | 1600 | 169 | 0.11 | | 0.09 |
| *RIGHT* | 1 | 1600 | 109 | 0.04 | | |

***TOTAL ICU*** 0.45

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Rancho Conejo Blvd** |
| **LOCATION:** | **Rancho Conejo Blvd at Hillcrest Dr** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Existing (2020) Plus Project** | **FILE:** | **ShapellTIA_ICU_EXPP.xls** |
| **PEAK HOUR:** | **PM Peak Hour** | **COMMENTS:** | |

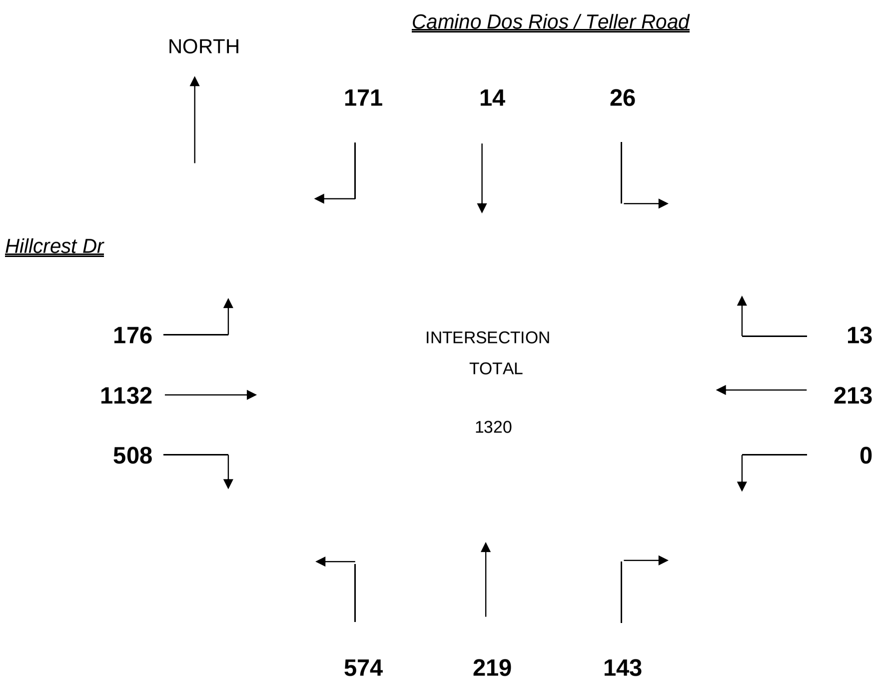



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 174 | 0.11 | N | |
| *THRU* | 3 | 4800 | 279 | 0.06 | | 0.11 |
| *RIGHT* | 1 | 1600 | 228 | 0.05 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 274 | 0.17 | N | |
| *THRU* | 3 | 4800 | 1255 | 0.26 | | 0.26 |
| *RIGHT* | 0 | 0 | 13 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 12 | 0.01 | N | |
| *THRU* | 2 | 3200 | 443 | 0.14 | | 0.15 |
| *RIGHT* | 1 | 1600 | 420 | 0.15 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 293 | 0.09 | N | |
| *THRU* | 1 | 1600 | 187 | 0.12 | | 0.09 |
| *RIGHT* | 1 | 1600 | 60 | 0 | | |

***TOTAL ICU*** 0.61

***LEVEL OF SERVICE*** **B**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Camino Dos Rios / Teller Road** |
| **LOCATION:** | **Camino Dos Rios at Teller Road** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Existing (2020) Plus Project** | **FILE:** | **ShapellTIA_ICU_EXPP.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |

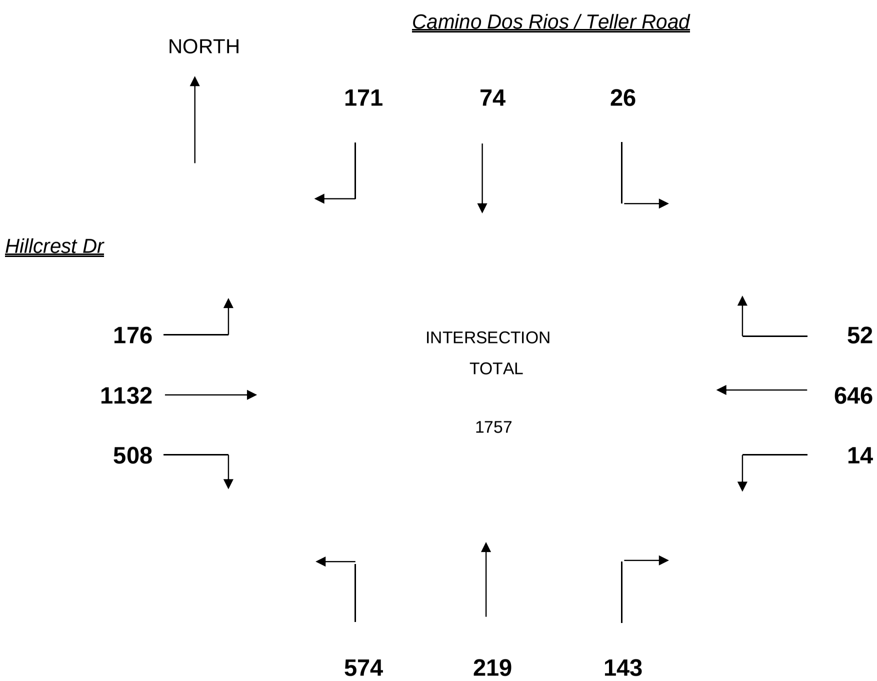



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 68 | 0.02 | Y | 0.02 |
| *THRU* | 1 | 1600 | 15 | 0.01 | | |
| *RIGHT* | 0 | 0 | 4 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 7 | 0 | Y | **0.01** |
| *THRU* | 1 | 1600 | 14 | 0.01 | | |
| *RIGHT* | 1 | 1600 | 8 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 17 | 0.01 | N | |
| *THRU* | 2 | 3200 | 831 | 0.26 | | **0.26** |
| *RIGHT* | 1 | 1600 | 130 | 0.06 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 0 | 0.00 | N | |
| *THRU* | 2 | 3200 | 213 | 0.07 | | **0.00** |
| *RIGHT* | 0 | 0 | 13 | 0 | | |

***TOTAL ICU*** **0.29**

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Camino Dos Rios / Teller Road** |
| **LOCATION:** | **Camino Dos Rios at Teller Road** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Existing (2020) Plus Project** | **FILE:** | **ShapellTIA_ICU_EXPP.xls** |
| **PEAK HOUR:** | **PM Peak Hour** | **COMMENTS:** | |




| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 201 | 0.06 | Y | 0.06 |
| *THRU* | 1 | 1600 | 80 | 0.06 | | |
| *RIGHT* | 0 | 0 | 12 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 29 | 0 | Y | **0.06** |
| *THRU* | 1 | 1600 | 74 | 0.06 | | |
| *RIGHT* | 1 | 1600 | 100 | 0.04 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 42 | 0.03 | N | |
| *THRU* | 2 | 3200 | 260 | 0.08 | | **0.03** |
| *RIGHT* | 1 | 1600 | 247 | 0.09 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 14 | 0.01 | N | |
| *THRU* | 2 | 3200 | 646 | 0.22 | | **0.22** |
| *RIGHT* | 0 | 0 | 52 | 0 | | |

***TOTAL ICU*** **0.37**

***LEVEL OF SERVICE*** **A**

**DATE:** 4 2020

**LOCATION:** Ventu Park Rd at Hillcrest Dr

**SCENARIO:** Existing (2020) Plus Project

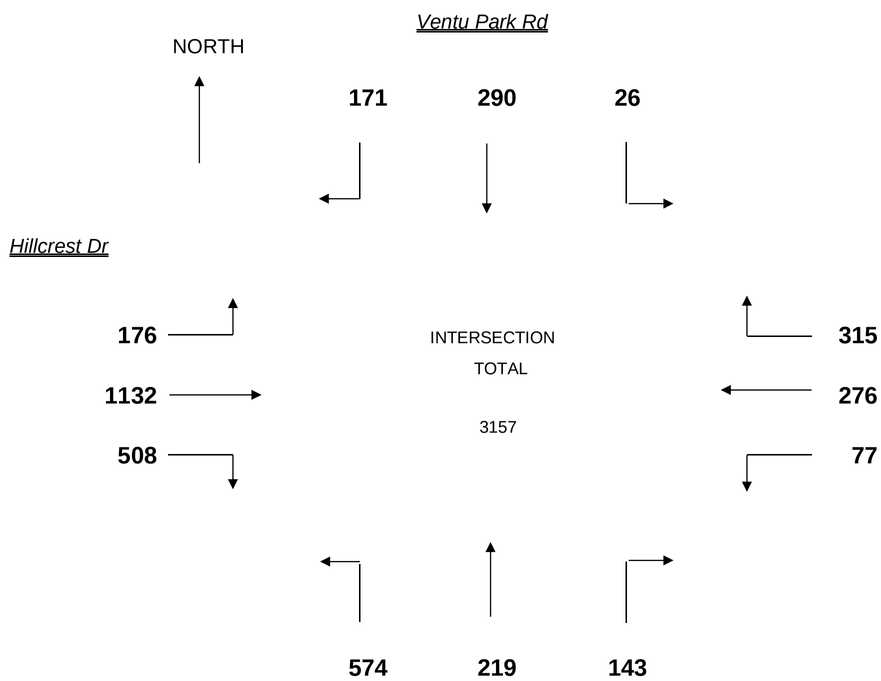
**PEAK HOUR:** AM Peak Hour

**N - S:** Ventu Park Rd

**E - W:** Hillcrest Dr

**FILE:** ShapellTIA_ICU_EXPP.xls

**COMMENTS:**




| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 233 | 0.07 | N | |
| *THRU* | 2 | 3200 | 982 | 0.31 | | **0.31** |
| *RIGHT* | 1 | 1600 | 82 | 0.00 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 169 | 0.05 | N | |
| *THRU* | 2 | 3200 | 290 | 0.09 | | **0.05** |
| *RIGHT* | 1 | 1600 | 21 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 55 | 0.03 | N | |
| *THRU* | 2 | 3200 | 358 | 0.11 | | **0.03** |
| *RIGHT* | 1 | 1600 | 299 | 0.11 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 77 | 0.05 | N | |
| *THRU* | 2 | 3200 | 276 | 0.18 | | **0.18** |
| *RIGHT* | 0 | 0 | 315 | 0 | | |

***TOTAL ICU*** 0.57

***LEVEL OF SERVICE*** **A**

**DATE:** 4 2020

**LOCATION:** Ventu Park Rd at Hillcrest Dr

**SCENARIO:** Existing (2020) Plus Project

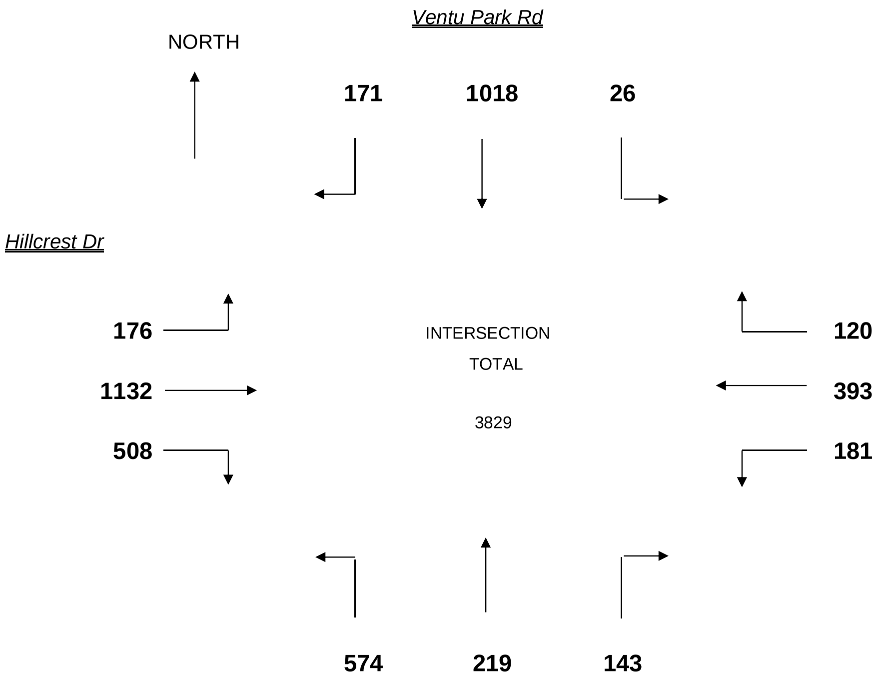
**PEAK HOUR:** PM Peak Hour

**N - S:** Ventu Park Rd

**E - W:** Hillcrest Dr

**FILE:** ShapellTIA_ICU_EXPP.xls

**COMMENTS:**

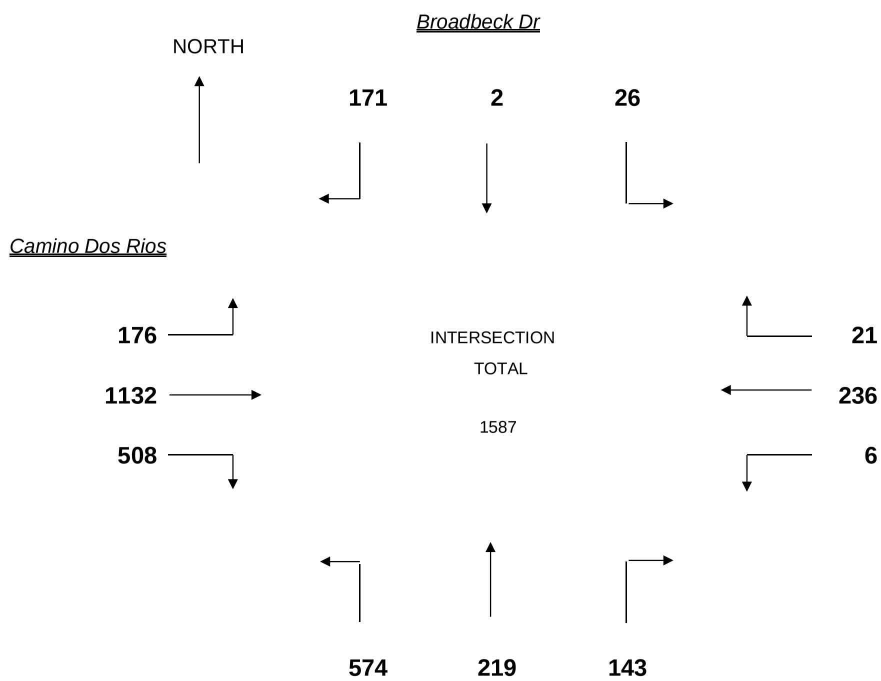



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 299 | 0.09 | N | |
| *THRU* | 2 | 3200 | 262 | 0.08 | | 0.09 |
| *RIGHT* | 1 | 1600 | 123 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 384 | 0.12 | N | |
| *THRU* | 2 | 3200 | 1018 | 0.32 | | 0.32 |
| *RIGHT* | 1 | 1600 | 16 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 27 | 0.02 | N | |
| *THRU* | 2 | 3200 | 637 | 0.20 | | 0.20 |
| *RIGHT* | 1 | 1600 | 369 | 0.14 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 181 | 0.11 | N | |
| *THRU* | 2 | 3200 | 393 | 0.16 | | 0.11 |
| *RIGHT* | 0 | 0 | 120 | 0 | | |

***TOTAL ICU*** 0.72

***LEVEL OF SERVICE*** C

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Broadbeck Dr** |
| **LOCATION:** | **Broadbeck Dr at Camino Dos Rios** | **E - W:** | **Camino Dos Rios** |
| **SCENARIO:** | **Existing (2020) Plus Project** | **FILE:** | **ShapellTIA_ICU_EXPP.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |

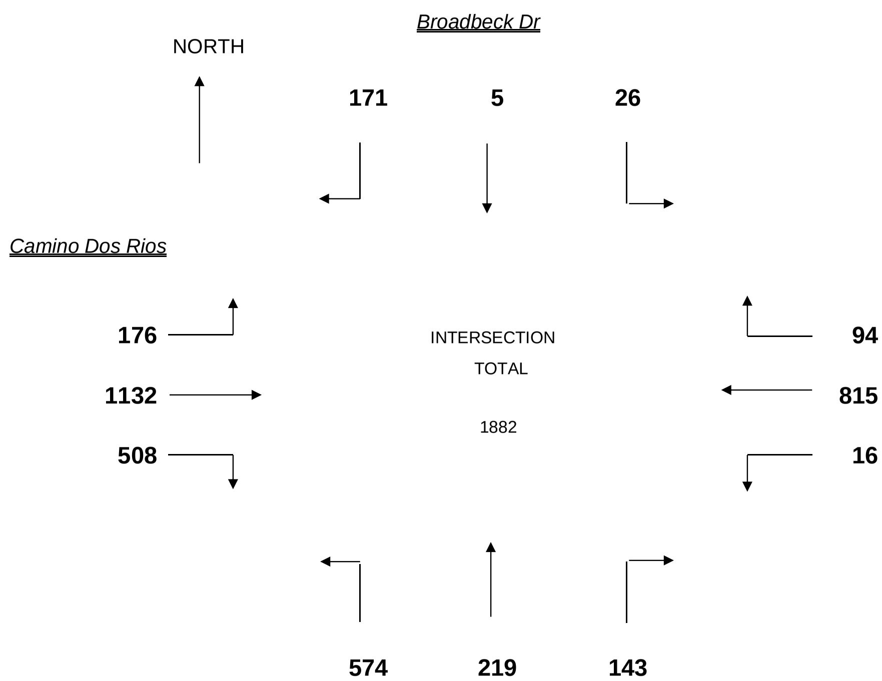



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 24 | 0 | N | |
| *THRU* | 1 | 1600 | 3 | 0.02 | | 0 |
| *RIGHT* | 0 | 0 | 9 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 66 | 0 | N | |
| *THRU* | 1 | 1600 | 2 | 0.04 | | 0.04 |
| *RIGHT* | 2 | 3200 | 49 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 89 | 0.03 | N | |
| *THRU* | 3 | 4800 | 1057 | 0.23 | | 0.23 |
| *RIGHT* | 0 | 0 | 25 | 0 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 6 | 0.00 | N | |
| *THRU* | 3 | 4800 | 236 | 0.05 | | 0.00 |
| *RIGHT* | 0 | 0 | 21 | 0 | | |

***TOTAL ICU*** 0.27

***LEVEL OF SERVICE*** A

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Broadbeck Dr** |
| **LOCATION:** | **Broadbeck Dr at Camino Dos Rios** | **E - W:** | **Camino Dos Rios** |
| **SCENARIO:** | **Existing (2020) Plus Project** | **FILE:** | **ShapellTIA_ICU_EXPP.xls** |
| **PEAK HOUR:** | **PM Peak Hour** | **COMMENTS:** | |

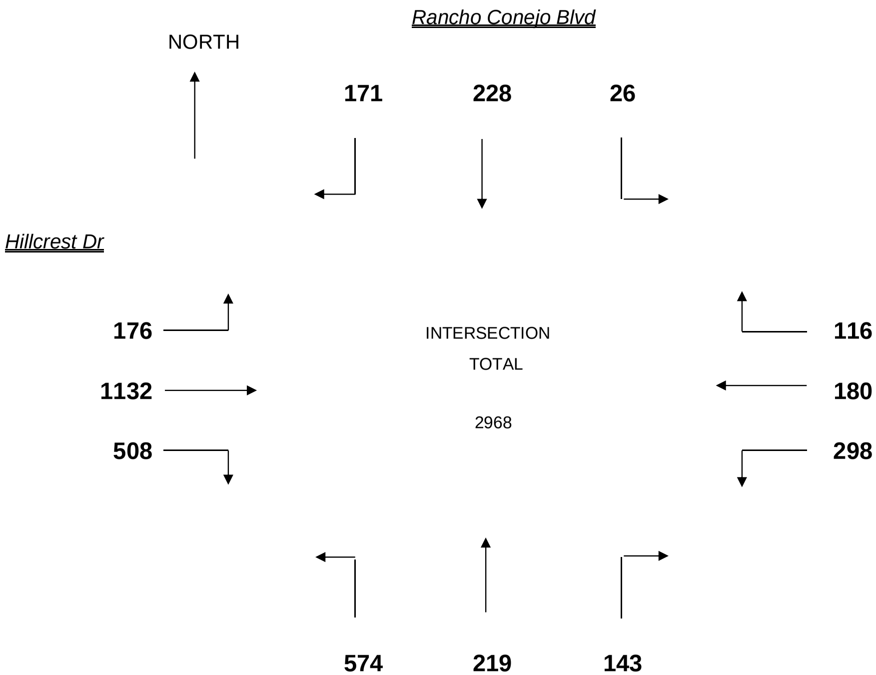



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 30 | 0 | N | |
| *THRU* | 1 | 1600 | 10 | 0.03 | | **0** |
| *RIGHT* | 0 | 0 | 9 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 102 | 0 | N | |
| *THRU* | 1 | 1600 | 5 | 0.07 | | **0.07** |
| *RIGHT* | 2 | 3200 | 138 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 166 | 0.05 | N | |
| *THRU* | 3 | 4800 | 452 | 0.10 | | **0.05** |
| *RIGHT* | 0 | 0 | 45 | 0 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 16 | 0.01 | N | |
| *THRU* | 3 | 4800 | 815 | 0.19 | | **0.19** |
| *RIGHT* | 0 | 0 | 94 | 0 | | |

***TOTAL ICU*** **0.31**

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Rancho Conejo Blvd** |
| **LOCATION:** | **Rancho Conejo Blvd at Hillcrest Dr** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Build Out (2040)** | **FILE:** | **ShapellTIA_ICU_BO.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |

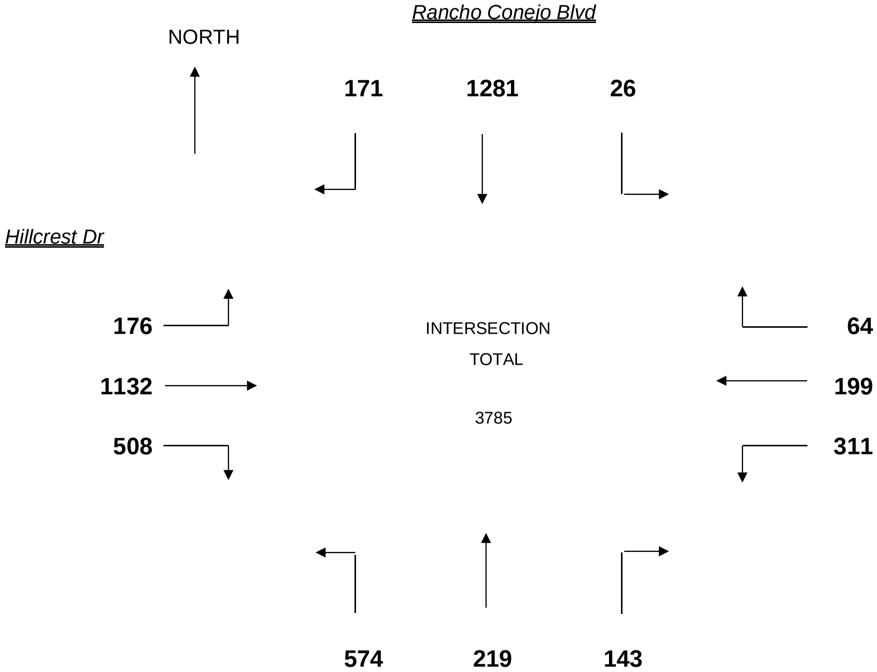



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 301 | 0.19 | N | |
| *THRU* | 3 | 4800 | 1341 | 0.28 | | **0.28** |
| *RIGHT* | 1 | 1600 | 123 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 54 | 0.03 | N | |
| *THRU* | 3 | 4800 | 228 | 0.05 | | **0.03** |
| *RIGHT* | 0 | 0 | 11 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 22 | 0.01 | N | |
| *THRU* | 2 | 3200 | 180 | 0.06 | | **0.06** |
| *RIGHT* | 1 | 1600 | 114 | 0 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 298 | 0.09 | N | |
| *THRU* | 1 | 1600 | 180 | 0.11 | | **0.09** |
| *RIGHT* | 1 | 1600 | 116 | 0.04 | | |

***TOTAL ICU*** **0.46**

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Rancho Conejo Blvd** |
| **LOCATION:** | **Rancho Conejo Blvd at Hillcrest Dr** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Build Out (2040)** | **FILE:** | **ShapellTIA_ICU_BO.xls** |
| **PEAK HOUR:** | **PM Peak Hour** | **COMMENTS:** | |

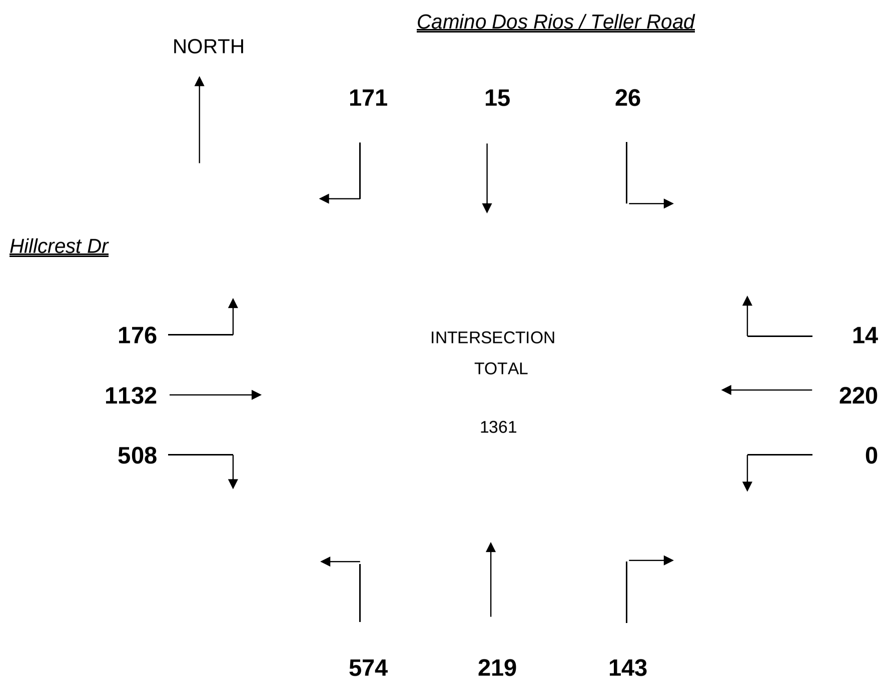



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 182 | 0.11 | N | |
| *THRU* | 3 | 4800 | 289 | 0.06 | | **0.11** |
| *RIGHT* | 1 | 1600 | 242 | 0.05 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 292 | 0.18 | N | |
| *THRU* | 3 | 4800 | 1281 | 0.27 | | **0.27** |
| *RIGHT* | 0 | 0 | 14 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 13 | 0.01 | N | |
| *THRU* | 2 | 3200 | 472 | 0.15 | | **0.15** |
| *RIGHT* | 1 | 1600 | 426 | 0.15 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 311 | 0.10 | N | |
| *THRU* | 1 | 1600 | 199 | 0.12 | | **0.10** |
| *RIGHT* | 1 | 1600 | 64 | 0 | | |

***TOTAL ICU*** **0.63**

***LEVEL OF SERVICE*** **B**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Camino Dos Rios / Teller Road** |
| **LOCATION:** | **Camino Dos Rios at Teller Road** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Build Out (2040)** | **FILE:** | **ShapellTIA_ICU_BO.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |

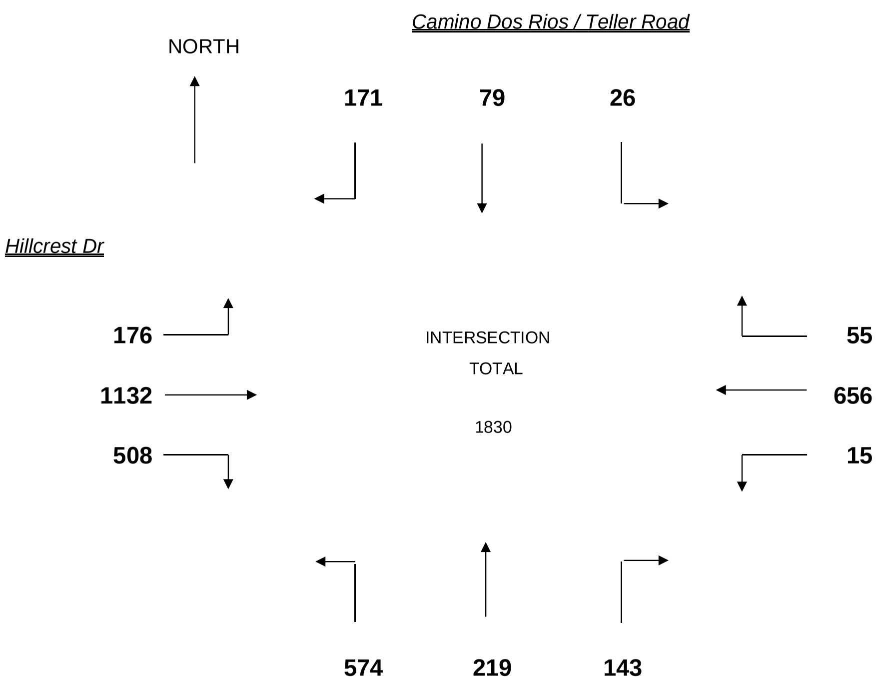



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 72 | 0.02 | Y | 0.02 |
| *THRU* | 1 | 1600 | 16 | 0.01 | | |
| *RIGHT* | 0 | 0 | 4 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 8 | 0 | Y | **0.01** |
| *THRU* | 1 | 1600 | 15 | 0.01 | | |
| *RIGHT* | 1 | 1600 | 9 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 19 | 0.01 | N | |
| *THRU* | 2 | 3200 | 846 | 0.26 | | **0.26** |
| *RIGHT* | 1 | 1600 | 138 | 0.06 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 0 | 0.00 | N | |
| *THRU* | 2 | 3200 | 220 | 0.07 | | **0.00** |
| *RIGHT* | 0 | 0 | 14 | 0 | | |

***TOTAL ICU*** **0.29**

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Camino Dos Rios / Teller Road** |
| **LOCATION:** | **Camino Dos Rios at Teller Road** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Build Out (2040)** | **FILE:** | **ShapellTIA_ICU_BO.xls** |
| **PEAK HOUR:** | **PM Peak Hour** | **COMMENTS:** | |

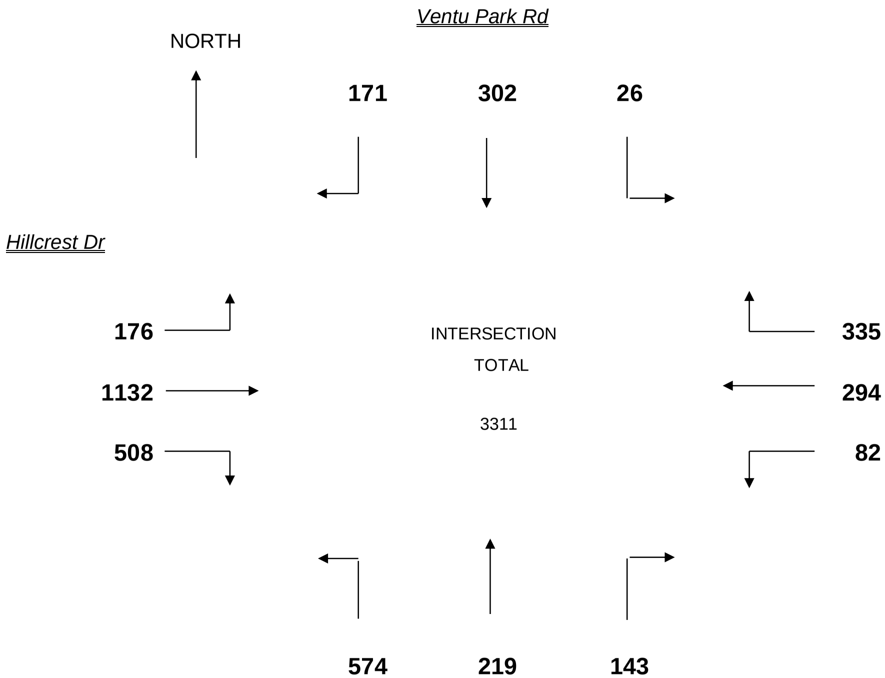



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 213 | 0.07 | Y | 0.07 |
| *THRU* | 1 | 1600 | 85 | 0.06 | | |
| *RIGHT* | 0 | 0 | 13 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 31 | 0 | Y | **0.07** |
| *THRU* | 1 | 1600 | 79 | 0.07 | | |
| *RIGHT* | 1 | 1600 | 106 | 0.04 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 44 | 0.03 | N | |
| *THRU* | 2 | 3200 | 271 | 0.08 | | **0.03** |
| *RIGHT* | 1 | 1600 | 262 | 0.10 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 15 | 0.01 | N | |
| *THRU* | 2 | 3200 | 656 | 0.22 | | **0.22** |
| *RIGHT* | 0 | 0 | 55 | 0 | | |

***TOTAL ICU*** **0.39**

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Ventu Park Rd** |
| **LOCATION:** | **Ventu Park Rd at Hillcrest Dr** | **E - W:** | **Hillcrest Dr** |
| **SCENARIO:** | **Build Out (2040)** | **FILE:** | **ShapellTIA_ICU_BO.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |




| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 248 | 0.08 | N | |
| *THRU* | 2 | 3200 | 1002 | 0.31 | | **0.31** |
| *RIGHT* | 1 | 1600 | 88 | 0.00 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 180 | 0.06 | N | |
| *THRU* | 3 | 4800 | 302 | 0.07 | | **0.06** |
| *RIGHT* | | 0 | 23 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 58 | 0.04 | N | |
| *THRU* | 2 | 3200 | 381 | 0.12 | | **0.04** |
| *RIGHT* | 1 | 1600 | 318 | 0.12 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 82 | 0.05 | N | |
| *THRU* | 2 | 3200 | 294 | 0.20 | | **0.20** |
| *RIGHT* | 0 | 0 | 335 | 0 | | |

***TOTAL ICU*** **0.61**

***LEVEL OF SERVICE*** **B**

**DATE:** 4 2020

**LOCATION:** Ventu Park Rd at Hillcrest Dr

**SCENARIO:** Build Out (2040)

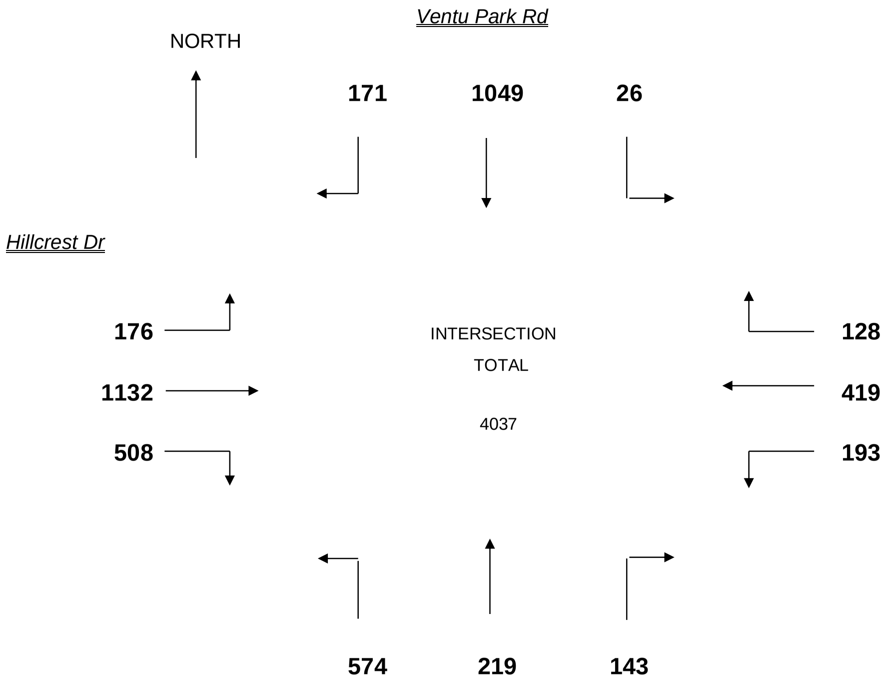
**PEAK HOUR:** PM Peak Hour

**N - S:** Ventu Park Rd

**E - W:** Hillcrest Dr

**FILE:** ShapellTIA_ICU_BO.xls

**COMMENTS:**

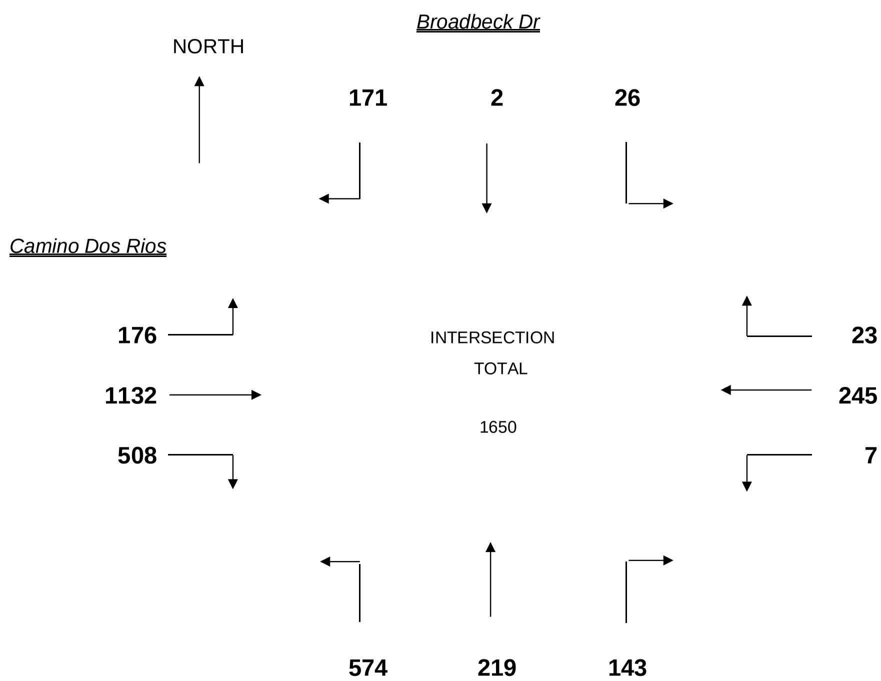



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 317 | 0.10 | N | |
| *THRU* | 2 | 3200 | 274 | 0.09 | | 0.10 |
| *RIGHT* | 1 | 1600 | 131 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 409 | 0.13 | N | |
| *THRU* | 3 | 4800 | 1049 | 0.22 | | 0.22 |
| *RIGHT* | | 0 | 18 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 29 | 0.02 | N | |
| *THRU* | 2 | 3200 | 678 | 0.21 | | 0.21 |
| *RIGHT* | 1 | 1600 | 392 | 0.15 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 193 | 0.12 | N | |
| *THRU* | 2 | 3200 | 419 | 0.17 | | 0.12 |
| *RIGHT* | 0 | 0 | 128 | 0 | | |

***TOTAL ICU*** 0.65

***LEVEL OF SERVICE*** B

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Broadbeck Dr** |
| **LOCATION:** | **Broadbeck Dr at Camino Dos Rios** | **E - W:** | **Camino Dos Rios** |
| **SCENARIO:** | **Build Out (2040)** | **FILE:** | **ShapellTIA_ICU_BO.xls** |
| **PEAK HOUR:** | **AM Peak Hour** | **COMMENTS:** | |

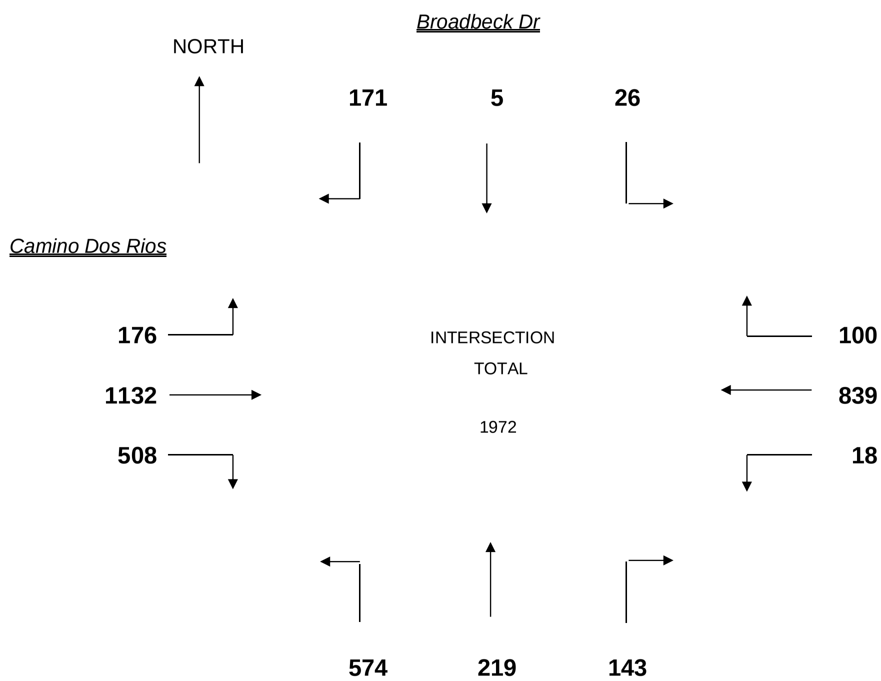



| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 26 | 0 | N | |
| *THRU* | 1 | 1600 | 3 | 0.02 | | **0** |
| *RIGHT* | 0 | 0 | 10 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 70 | 0 | N | |
| *THRU* | 1 | 1600 | 2 | 0.05 | | **0.05** |
| *RIGHT* | 2 | 3200 | 52 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 95 | 0.03 | N | |
| *THRU* | 3 | 4800 | 1090 | 0.23 | | **0.23** |
| *RIGHT* | 0 | 0 | 27 | 0 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 7 | 0.00 | N | |
| *THRU* | 3 | 4800 | 245 | 0.06 | | **0.00** |
| *RIGHT* | 0 | 0 | 23 | 0 | | |

***TOTAL ICU*** **0.28**

***LEVEL OF SERVICE*** **A**

| | | | |
|---|---|---|---|
| **DATE:** | **4 2020** | **N - S:** | **Broadbeck Dr** |
| **LOCATION:** | **Broadbeck Dr at Camino Dos Rios** | **E - W:** | **Camino Dos Rios** |
| **SCENARIO:** | **Build Out (2040)** | **FILE:** | **ShapellTIA_ICU_BO.xls** |
| **PEAK HOUR:** | **PM Peak Hour** | **COMMENTS:** | |




| | # OF LANES | CAPACITY | VOLUME | V/C | SPLIT PHASED | CRITICAL V/C |
|---|---|---|---|---|---|---|
| **NORTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 32 | 0 | N | |
| *THRU* | 1 | 1600 | 11 | 0.03 | | **0** |
| *RIGHT* | 0 | 0 | 10 | 0 | | |
| **SOUTHBOUND** | | | | | | |
| *LEFT* | 0 | 0 | 109 | 0 | N | |
| *THRU* | 1 | 1600 | 5 | 0.07 | | **0.07** |
| *RIGHT* | 2 | 3200 | 147 | 0 | | |
| **EASTBOUND** | | | | | | |
| *LEFT* | 2 | 3200 | 176 | 0.06 | N | |
| *THRU* | 3 | 4800 | 477 | 0.11 | | **0.06** |
| *RIGHT* | 0 | 0 | 48 | 0 | | |
| **WESTBOUND** | | | | | | |
| *LEFT* | 1 | 1600 | 18 | 0.01 | N | |
| *THRU* | 3 | 4800 | 839 | 0.20 | | **0.20** |
| *RIGHT* | 0 | 0 | 100 | 0 | | |

***TOTAL ICU*** **0.33**

***LEVEL OF SERVICE*** **A**

# Appendix I

## Water Supply Assessment

CALIFORNIA AMERICAN WATER

February 18, 2021

Re: Conejo Summit Water Supply Assessment

Conejo Summit,

The attached Water Supply Assessment (WSA) was prepared on behalf of California-American Water (CAW) to satisfy the requirements of California Water Code Section 10910 (Senate Bill 610) for the Conejo Summit Development (Project).

As required by Senate Bill 610, this WSA assessed whether the total projected water supplies available during average, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand for the Project, in addition to CAW's existing and planned future uses. The water demands of the proposed Project were accounted for in CAW's *2015 Urban Water Management Plan for the Southern Division - Ventura County District*. This WSA concludes that CAW's total projected water supplies are sufficient to meet the projected water demand for the Project.

This WSA is approved by California American Water on February 18, 2021 and is being provided to the City of Thousand Oaks as the Lead Agency for the Project to support your determination of whether water supplies will be sufficient to satisfy the demands of the project in addition to planned and future uses.

Should you have any concerns or require additional information regarding this WSA please contact me.

Sincerely,

Mark Reifer

Mark Reifer
Engineering Manager – Project Delivery

# *Water Supply Assessment*

# Proposed Conejo Summit Project

**Prepared by:**


**LOS ANGELES**
706 S. Hill Street, 11th Floor
Los Angeles, CA 90014

Meridian Consultants

**WESTLAKE VILLAGE**
920 Hampshire Road, Suite A5
Westlake Village, CA 91361


**December 2020**

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## List of Tables



## List of Figures

## LIST OF ACRONYMS

| | |
|---|---|
| ac | acre |
| af | acre-feet, equal to approximately 325,851 gallons |
| afy | acre-feet per year |
| BMP | Best Management Practice, one of the water conservation methods |
| BO | Biological Opinion |
| BOR | Bureau of Reclamation |
| Cal-Am | California American Water Company |
| CALFED | CALFED Bay-Delta Program |
| CCDP | Conejo Creek Diversion Project |
| CEQA | California Environmental Quality Act |
| City | Unless otherwise specified means the City |
| CII | Commercial, Industrial, and Institutional land uses |
| cfs | Cubic feet per second |
| Calleguas | Calleguas Municipal Water District |
| CRA | Colorado River Aqueduct |
| CUWCC | California Urban Water Conservation Council |
| du/ac | dwelling units per acre |
| DWR | California Department of Water Resources |
| ESA | Endangered Species Act |
| gpd | gallons per day |
| gal/ac | gallons per acre |
| gal/du | gallons per dwelling unit |
| gal/du/day | gallons per dwelling unit per day |
| gal/ksf | gallons per thousand square feet |
| gpm | gallons per minute |
| hcf | hundred cubic feet, equal to 748 gallons |
| HECW | high efficiency clothes washer |
| HCTP | Hill Canyon Wastewater Treatment Plant |

| | |
|---|---|
| IRP | Integrated Resources Program |
| ksf | thousand square feet |
| MWELO | Model Water Efficient Landscape Ordinance |
| mg/L | milligrams per liter |
| mgd | million gallons per day |
| MWD | Metropolitan Water District of Southern California |
| psi | pounds per square inch |
| PWS | Public Water System |
| QSA | Quantification Settlement Agreement |
| RPA | Reasonable and Prudent Alternative |
| SB | Senate Bill |
| SCAG | Southern California Association of Governments |
| SWP | State Water Project |
| TDS | total dissolved solids |
| ULFT | ultra low flow toilets |
| UWMP | Urban Water Management Plan |
| WSA | Water Supply Assessment |
| WSAP | Water Supply Allocation Plan |
| WSMD | Water Surplus and Drought Management |

# 1.0 INTRODUCTION

## 1.1 Purpose and Acknowledgement

This Water Supply Assessment (WSA) was prepared on behalf of Thousand Oaks Master, LLC (Applicant) for the proposed Conejo Summit Project (proposed Project) for California-American Water (Cal-Am) to satisfy the requirements of California Water Code (CWC) Section 10910 (Senate Bill 610) for this proposed Project. The proposed Project lies within the city limits of the City of Thousand Oaks (City). The proposed Project lies within Cal-Am's Ventura County District water service area.

The City is the Lead Agency for the Project's environmental review which is required by the California Environmental Quality Act (CEQA). As required by Senate Bill 610 (SB 610), Cal-Am is responsible for assessing whether the total projected water supplies available during average, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand for the proposed Project, in addition to Cal-Am's existing and planned future uses. A water supplier's Urban Water Management Plan (UMWP) serves as a foundational document for a WSA. As explained in Section **7.1** of this WSA, the water demands of the proposed Project were not accounted for in Cal-Am's 2015 UWMP for the Southern Division - Ventura County District (2015 UWMP), as submitted to the California Department of Water Resources (DWR) in June 2016.[1]

This WSA includes the following:

- Description of the Project and proposed water demand;
- Overview of Cal-Am's water system;
- Information on Cal-Am's current and projected water demands in the Ventura County District water service area;
- Information on Cal-Am's current and projected water supplies;
- Discussion of water supply reliability;
- Comparison of water supplies and water demands for average, single dry, and multiple dry years; and
- Determination of water supply sufficiency and a description of the facilities necessary to provide additional water supplies to serve the demands of the proposed Project.

This WSA is based on information provided in the water supply and demand data from the Cal-Am Ventura County District 2015 UWMP[2] for their Ventura County District. Content from the 2015 UWMP has been

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1 California American Water Company, *2015 Urban Water Management Plan,* June 2016.p. 2-3.
2 California American Water Company, *2015 Urban Water Management Plan,* June 2016.

updated and incorporated into this document and reflects the supply and demand information that will be presented in the 2015 UWMP. Additional information from other sources is also incorporated into this WSA to document supplies from all sources, including purchased water. Documentation includes identifying and quantifying water rights, contracts, and/or entitlements to the supply. Cal-Am must provide the results of the assessment to the City, as the Lead Agency, for inclusion in the CEQA document for the project. Further, as Cal-Am is a retail water purveyor and receives water from the Calleguas Municipal Water District (Calleguas), information from the Calleguas' 2015 UWMP[3] has been included as appropriate.

It is noted that this WSA addresses the overall water supply available to meet the demands of Cal-Am's existing customers, development of the proposed Project, and other future demands within the Cal-Am Ventura County District service water service area. The WSA does not address the physical infrastructure of the water delivery system within the service area since the focus is on the overall water supply.

## 1.2 Legislation

### *1.2.1 Urban Water Management Act*

The California Urban Water Management Planning Act (UWMP Act),[4] requires all urban water suppliers with more than 3,000 connections or distributing more than 3,000 acre feet per year (afy) to complete an UWMP every five years ending in '5' and '0'. The Ventura County District does not release information on total connections; per the 2015 Cal-Am Ventura County District UWMP[5] covers the Ventura County District and the two service areas it contains: Thousand Oaks and Las Posas; combined the two service areas exceed 3,000 customers and deliver 3,000 AFY or more; the 2020 UWMP for the Ventura District will include the El Rio system for a total of three service areas. The UWMP Act is administered by DWR, who is responsible for compiling data for Statewide and regional analysis, and publishing the accepted documents online for public access.

The UWMP is a valuable planning document used for multiple purposes:

- Serves as valuable resource to the community and other interested parties regarding water supply and demand, conservation and other water related information;
- Meets a statutory requirement of the California Water Code;

3 Calleguas Municipal Water District, *2015 Urban Water Management Plan*, June 2016.
4 California Water Code, Division 6 Part 2.6, §§10610 - 10656), Urban Water Management Planning Act.
5 California American Water Company, *2015 Urban Water Management Plan,* June 2016, p. 3-1

- Provides a key source of information for city and county General Plans. WSAs, and Written Verifications of Water Supply;
- Supports regional long-range planning documents including City and County General Plans;
- Provides a standardized methodology for water utilities to assess their water resource needs and availability;
- Serves as a critical component of developing Integrated Regional Water Management Plans (IRWMPs); and
- Provides a resource for regional involvement in the California Water Plan.

### *1.2.2 SB 610*

Senate Bill (SB) 610[6] amended the Public Resources Code to incorporate CWC requirements for certain types of development projects to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 seeks to promote more collaborative planning between local water suppliers, cities, and counties by requiring detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large development projects.

Under SB 610, water suppliers must prepare WSAs for projects meeting certain project size criteria and deliver them to local governments for inclusion in any environmental documentation. The criteria that trigger preparation of a WSA are shown below with this Project's applicable criteria marked with an "x."

- A proposed residential development of more than 500 dwelling units.
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- A proposed hotel or motel, or both, having more than 500 rooms.
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- A mixed-use project that includes one or more of the projects specified in this subdivision.

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6 SB 610, Costa. California Water Code, Division 6, Conservation, Development and utilization of State Water Resources, Part 2.10, Sections 10910 – 10915.Water Supply Planning to Support Existing and Planned Future Uses. effective January 1, 2002.

- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

The proposed Project is a commercial and industrial development, as described in more detail in the Project Description section. The proposed Project includes future development of approximately 353,401 square feet of office and industrial space and exceeds the mixed-use project threshold of 250,000 square feet of commercial floor space.

The City has determined that the Project is subject to review under CEQA[7] and the State CEQA Guidelines[8] The City has determined that the Project is a "project" as defined in California Water Code Section 10912[9] and has determined that a CEQA review is required for the proposed Project. The Project requires a WSA because it proposes construction of uses that exceed the thresholds of a development that would demand an amount of water equivalent to, or greater than, the amount of water required by a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.

The WSA reviews and makes a finding of reasonable sufficiency of water supplies that either are available or will be available to the City to meet future demands for the period from year 2023 to year 2043.

### *1.2.3 Other Legislation*

In November 2009, the California legislature passed the comprehensive 2009 Delta/Water Legislation.[10] The package consists of five bills, whose content reflects the inextricable linkages between the health of the California Delta and California's Statewide water supply management practices and policies. The bills descend directly from those goals set out in the blue-ribbon Delta Vision Strategic Plan, a December 2008 document with findings and recommendations for managing the Delta as a crucial component of California's water supply system.

The 2009 Delta/Water Legislation—in codifying policies such as a 20 percent per capita urban use reduction target, mandatory monitoring of groundwater levels, new measuring requirements for agriculture, enhanced penalties for improper diversion, alongside establishing a new governance structure for the Delta—directly implements some of the Delta Vision Strategic Plan's most important recommendations.

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7 California Environmental Quality Act (CEQA), Public Resources Code, Section 21000 et seq.

8 CEQA Guidelines, California Code of Regulations, Section 15000 et. seq.

9 California Water Code, Division 6, Conservation, Development and utilization of State Water Resources, Part 2.10, Sections 10912.

10 2009 Comprehensive Water Legislation Package consists of four bills adopted on November 4, 2009 - SBX7-1 (Simitian) Delta Governance • SBX7-6 (Steinberg) Groundwater Monitoring • SBX7-7 (Steinberg) Water Conservation • SBX7-8 (Steinberg) Water Diversions.

Of the five bills identified in the 2009 Delta/Water Legislation package, the Urban and Agricultural Water Conservation bill ("SBX7 7")[11] would have the greatest influence on the City, Calleguas, and MWD. This bill establishes a Statewide urban water conservation target of 10 percent by 2015 and 20 percent by 2020. This target is consistent with the Governor's February 2008 proposal and is part of the legislation recommended by the Delta Vision Strategic Plan.[12] "SBX7 7" also provides options for how water agencies can achieve higher levels of water conservation but requires those options to meet a per capita reduction in water use.

## 1.3 California American Water Company

### *1.3.1 Cal-Am System Description*

Cal-Am is a privately owned public utility providing water services to over 630,000 people in 50 communities throughout California that is regulated by the California Public Utility Commission (CPUC), CPUC Utility #U210W. Therefore, its facilities, operations, and financial structure (including customer rates) are subject to extensive regulation by the CPUC, as well as environmental, health, safety and water quality regulations by federal, State, and local governments. The CPUC sets rules and regulates public utility companies in California. The intent of the regulations set by the CPUC is to ensure provision of high-quality water service at a fair price. All increases in service rates are directly related to the cost of providing quality service and are subjected to a public review process and approval by the CPUC.

Cal-Am is operated by three Division Offices: Northern Division; Central Division; and Southern Division. The Northern Division includes the Sacramento County and Larkfield Districts, the Central Division includes the Monterey County District, and the Southern Division includes the Ventura County, Los Angeles County and San Diego County Districts.

The Cal-Am Ventura County District contains three Public Water Systems (PWSs) – Thousand Oaks, Los Posas Valley and El Rio; PWSs are the systems that provide drinking water for human consumption. These systems are regulated by the State Water Resources Control Board (Board), Division of Drinking Water with separate operating permits with the State Water Resources Control Board Division of Drinking Water (DDW).

The Cal-Am Ventura County District service area covers approximately 26.6 square miles and is located within southern Ventura County along highway 101, northwest of Los Angeles. The service areas consist of: 1) approximately one half of the City of Thousand Oaks (25 square miles) and 2) portions of unincorporated Ventura County identified as Las Posas Valley (1.6 square miles). Since the 2015 Cal-Am Ventura County District UWMP was completed, the Cal-Am Ventura County District acquired the El Rio water system.

11 California Department of Water Resources, Water Conservation Act of 2009 (Senate Bill X7-7), November 2009.
12 California Resources Agency, *Delta Vision Strategic Plan,* October 2008.

Combined the three service areas exceed 3,000 customers and deliver 3,000 AFY or more and will be included as part of the Ventura County District's 2020 UWMP.

**Figure 1: Cal-Am Service Area** shows the Cal-Am Ventura County District service area.

### *1.3.2 Cal-Am Ventura County District 2015 Urban Water Management Plan*

The Cal-Am Ventura County District 2015 UWMP for Cal-Am's Southern Division Ventura County District,[13] is the current applicable document for use in planning future water demand and supplies. Currently, Cal-Am is in the process of preparing the 2020 UWMP; 2020 UWMPs are due to DWR by July 1, 2021.[14]

Cal-Am's 2015 UWMP was prepared based on guidance from the DWR 2015 Urban Water Management Plans Guidebook for Urban Water Suppliers (UWMP Guidebook).[15] The Final 2015 Southern Division Ventura County District UWMP was formally adopted by California American Water on June 30, 2016. The implementation of this plan shall be carried out as described unless significant changes occur between the adoption of this plan and the 2020 plan.

Cal-Am is a member of the California Urban Water Conservation Council (CUWCC) and is a signatory to the CUWCC Memorandum of Understanding (CUWCC MOU).[16] The CUWCC MOU outlines Best Management Practices (BMPs) that correspond with the Demand Management Measures (DMM) outlined in the UWMP Act. The UWMP Act allows CUWCC members to submit their CUWCC BMP reports in lieu of completing a DMM section if the member is in full compliance with the BMPs.

## 1.4 Calleguas Municipal Water District

### *1.4.1 Overview and Description*

Calleguas is an independent special district that was formed by the voters of southern Ventura County in 1953 for the purpose of providing a safe, reliable water supply. Named for the watershed in which it is located, Calleguas is a public agency established under the Municipal Water District Act of 1911.[17] It is

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13 California American Water, *2015 Urban Water Management Plan for the Southern Division - Ventura County District*, adopted June 30, 2016.

14 California Department of Water Resources, *Urban Water Management Plan*s, https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans, accessed October 7, 2020.

15 California Department of Water Resources*, 2015 Urban Water Management Plans Guidebook.*

16 California Urban Water Conservation Council (CUWCC), *Memorandum of Understanding Regarding Urban Water Conservation in California (MOU)*, adopted September 1991, amended January 2016.

17 Municipal Water Act of 1911, California Water Code Section 71000.

governed by a five-member board of directors elected by voters to represent each of the five geographic divisions within the Calleguas service area.

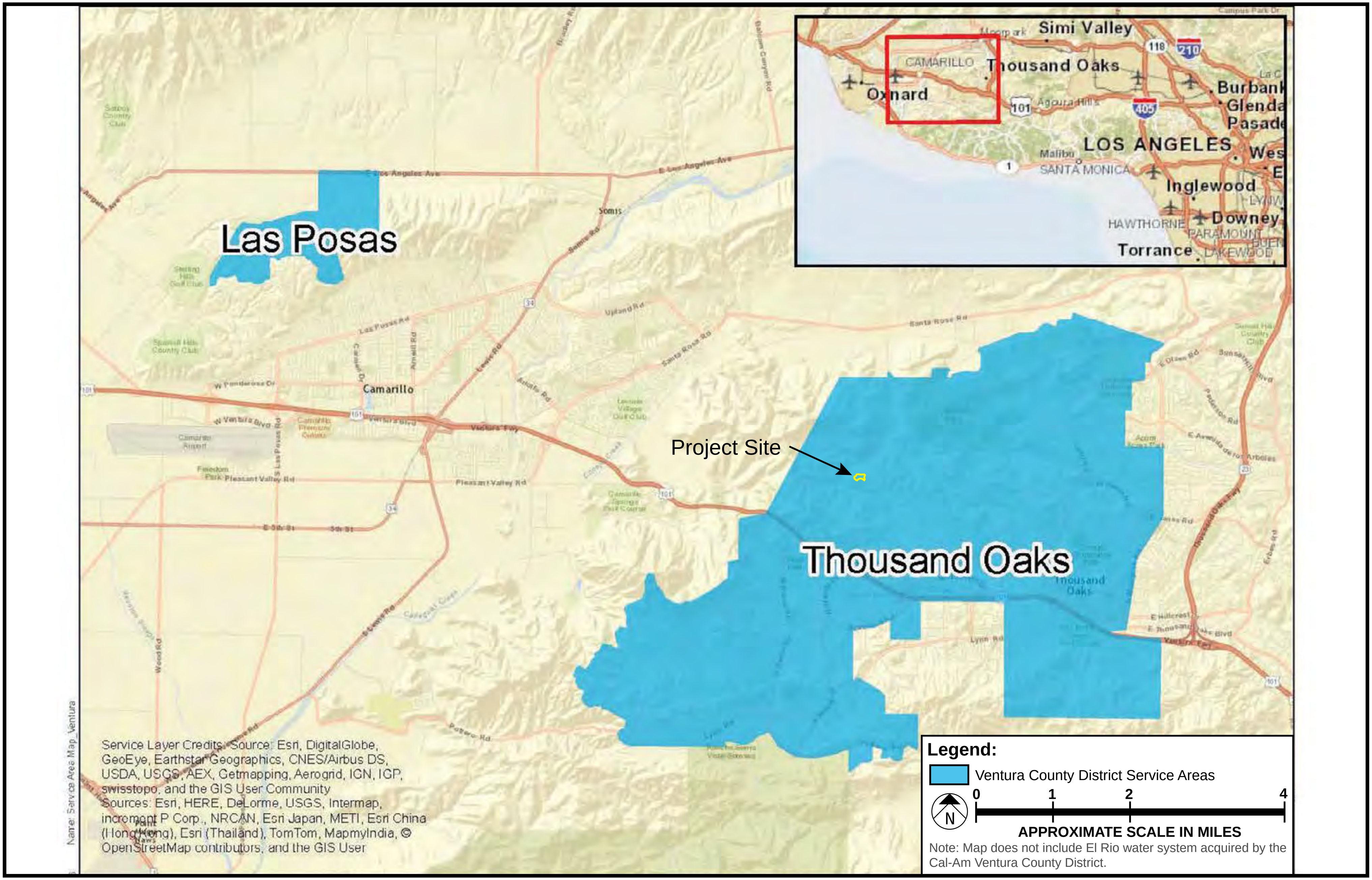
In 1960, Calleguas became a member agency of the Metropolitan Water District of Southern California (MWD), which provides wholesale water from the Colorado River via the Colorado Aqueduct and from northern California via the State Water Project (SWP). Metropolitan is comprised of 26 member agencies, and Calleguas is the fifth largest member agency in terms of average annual water deliveries.

Approximately three-quarters of Ventura County residents rely on Calleguas for all or part of their water. Calleguas distributes high quality drinking water on a wholesale basis to 19 cities, local water agencies, and investor-owned and mutual water companies throughout southeast Ventura County. These retail purveyors receive water through 140 miles of large-diameter pipeline operated and maintained by Calleguas. In turn, these purveyors (listed below) deliver water to area residents, businesses, and agricultural customers. Only a small portion of the water delivered by Calleguas (approximately 5 percent) is used for agricultural purposes. Agricultural demands are generally met by other agencies or private entities using untreated surface water, recycled wastewater, and groundwater from various basins underlying the area.

Calleguas' mission is to provide its service area with a reliable supplemental supply of regional and locally developed water in an environmentally and economically responsible manner. Calleguas distributes high quality drinking water on a wholesale basis to 19 retail water purveyors, who in turn deliver water to area residents, businesses, and agricultural customers. All but one of the major cities in Ventura County rely upon Calleguas to provide a reliable imported water source to meet municipal and industrial water demands.

Calleguas' primary job is importing and distributing water from MWD; water that arrives via the State Water Project (SWP) from northern California. To increase reliability, Calleguas can also pump water from its Las Posas Aquifer Storage and Recovery Project (Las Posas ASR Project) well field.

**Figure 2: Calleguas Service Area** shows Calleguas' service area and purveyor boundaries. Calleguas' service area encompasses approximately 366 square miles. Land use in the area is primarily residential, commercial, industrial, and agricultural. Although a large portion of the water use in Ventura County is for agricultural purposes, these demands are generally served by other agencies or private entities using untreated surface water, recycled wastewater, and groundwater from various basins underlying the area.



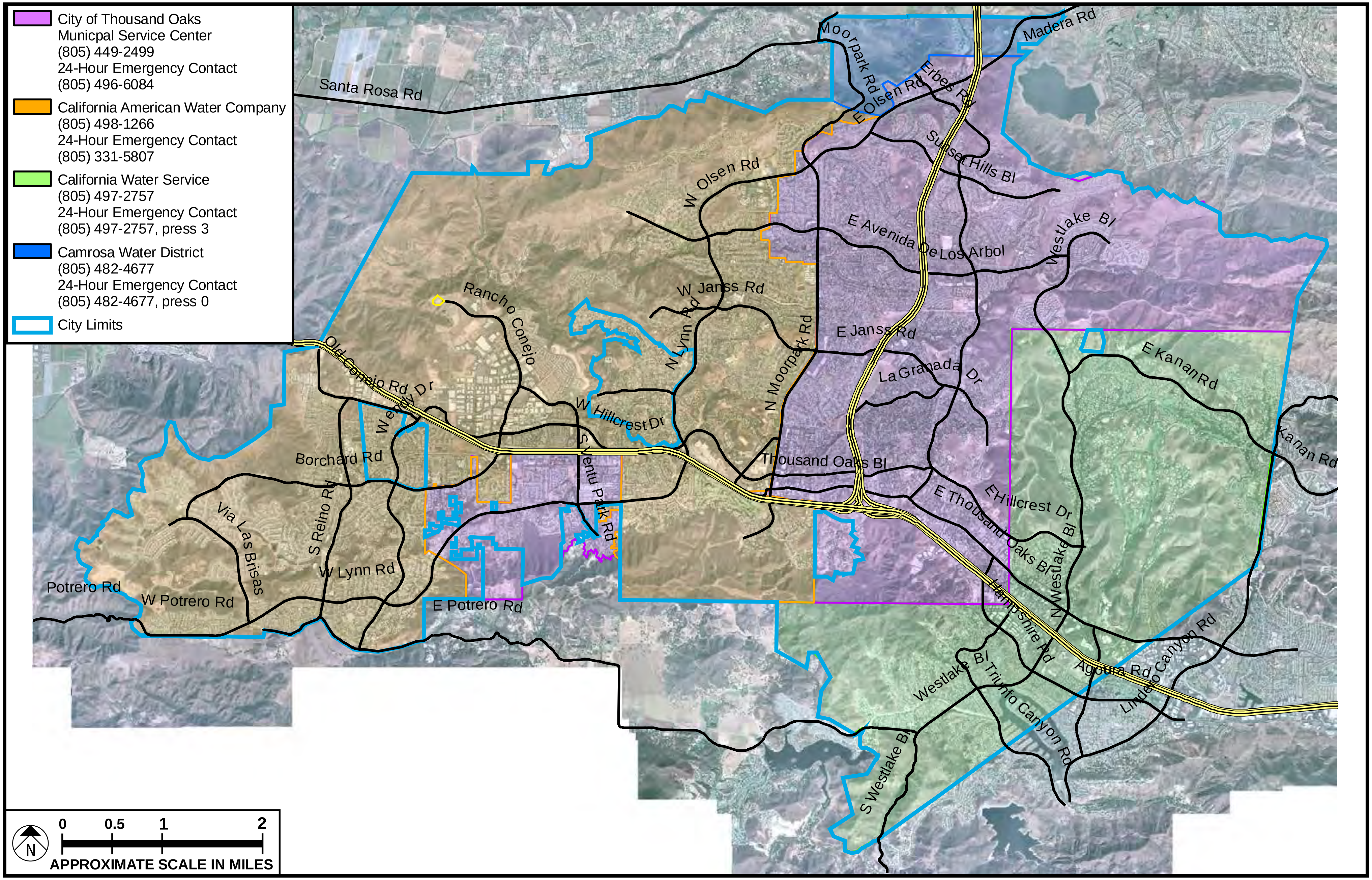

**SOURCE:** California American Water, 2015 Urban Water Management Plan

FIGURE 1

Meridian Consultants

Cal-Am Service Area

301-001-20




**SOURCE:** California American Water, 2015 Urban Water Management Plan

FIGURE 2

Meridian Consultants

Calleguas Service Area

301-001-20

### *1.4.2 Calleguas 2015 UWMP*

Water planning is an essential function of water suppliers but becomes critical as California grapples with ongoing drought and expected long-term climate changes. Prior to the adoption of the UWMP Act,[18] there were no specific requirements that water agencies conduct long-term resource planning.

Plan components that are required to be addressed and evaluated include:

- Water deliveries and uses
- Water supply sources
- Efficient water uses
- Demand management measures
- Water shortage contingency planning

The Final 2015 Calleguas UWMP was formally adopted by the Calleguas Board of Directors on June 14, 2016.[19] Currently, Calleguas is in the process of preparing the 2020 UWMP.

## 1.5 Climate

Thousand Oaks has a Mediterranean climate as evidenced by warm dry summers followed by moist, cool winters. Maximum summer temperatures can exceed 100 degrees Fahrenheit, and winter temperatures occasionally drop below 32 degrees Fahrenheit. Average rainfall ranges from 12 to 14 inches. The majority of this rainfall occurs during the winter months.

**Table 1: Precipitation and Evapotranspiration in the Ventura County Area – 2019/2020** presents monthly climate data in more detail.

18 California Water Code, Division 6 Part 2.6, Section10610 - 10656),Urban Water Management Planning Act.

19 Calleguas Municipal Water District, *2015 Urban Water Management Plan,* June 2016.

**Table 1**
**Precipitation and Evapotranspiration in the Ventura County Area - 2019/2020**

| Criteria | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total ETO (inches) | 2.78 | 3.78 | 3.32 | 3.59 | 4.46 | 6.77 | 6.37 | 6.59 | 3.54 | 3.33 | 3.00 | 2.12 |
| Total Rainfall (inches) | 1.07 | 0.87 | 3.59 | 1.92 | 1.74 | 2.55 | 1.11 | 0.00 | 0.18 | 0.06 | 3.16 | 4.35 |
| Degrees Fahrenheit | 56.2 | 57.2 | 54.3 | 60.3 | 63.8 | 65.9 | 67.7 | 71.2 | 69.5 | 66.2 | 59.8 | 54.8 |

*Source: Data from California Irrigation Management Information System (CIMIS), Central Coast Valley Station - Station 217in Moorpark (period of record is from September 2019 to August 2020) https://cimis.water.ca.gov/UserControls/Reports/MonthlyReportViewer.aspx.*

## 1.6 Service Area Population

In the greater Southern California region, the population growth rate from 2015 to 2020 is an extension of the slow growth pattern observed during the 2000-2010 period. According to estimates by the California Department of Finance, California's population grew by 7.3% (or 2.7 million) from 2010 to the end of 2019.[20] Ventura County, California's estimated population is 851,297 with a growth rate of 0.02% in the past year according to the most recent United States census data.[21]

The historical, current and projected populations for Cal-Am’s Ventura County District water service area within the City of Thousand Oaks and adjacent unincorporated area of Ventura County are shown in **Table 2, Historic, Current and Projected Cal-Am’s Ventura County District Service Area Population – 2015 to 2035**. It is not anticipated that the commercial and industrial use on the proposed Project will result in significant number of new permanent residents within the Ventura County water service area in excess of these projections.

20 California Department of Finance, “Demographics,” http://www.dof.ca.gov/forecasting/demographics/Estimates/.

21 World Population Review, https://worldpopulationreview.com/us-counties/ca/ventura-county-population.

**Table 2**
**Historic, Current and Projected Cal-Am Ventura County District Service Area Population**

| | 2015 | 2020 | 2025 | 2030 | 2035 |
|---|---|---|---|---|---|
| Population | 63,423 | 64,700 | 65,438 | 66,178 | 66,926 |

*Source: Cal-Am Ventura County District 2015 UWMP, Table 3-4.*
*The population projections for California American Water's service areas are based on 2010 census data, DWR's Population Tool, and growth rates from SCAG's Draft 2016 Growth Forecast adjusted for the District's service area.*

## 1.7 Definitions

For the purposes of this WSA, the following defined terms are used:

- Purchased Water: The amount of water purchased from Cal-Am's wholesale supply sources and put into the distribution system based on metered flows at each supply connection.
- Groundwater production: The amount of water produced from Cal-Am groundwater supply sources and put into the distribution system based on metered flows at each well.
- Consumption: The amount of billed metered water consumed by customers.
- Demand: The amount of water distributed through the entire water system, which is the sum of groundwater production and purchased water. Demand includes non-revenue water, which is equal to the difference between water put into the distribution system and consumption.
- Unit Factor: The calculated amount of water demand per unit (e.g., acre, square feet: sq. ft or SF, dwelling unit, etc.) of a specific type of use (e.g., land use, development type, business type, etc.).

## 2.0 PROPOSED PROJECT

The proposed Rancho Conejo Summit Project (proposed Project) would provide for the development of a commercial and industrial center in the Rancho Conejo Specific Plan area of the City. **Figure 3: Project Location**, shows the location of the Rancho Conejo Summit Project within the City. The site is bound by Rancho Conejo Boulevard, Corporate Center Drive and Conejo Spectrum Street. Currently there is no address for the Project site; however, it includes the following assessor parcels: Parcel 1 - 667-0-340-045, 055, 065, 075, 085, 095, 105, 125, 135, 145,155, 185; 195 and Parcel 2 – 667-0-340-030.

The proposed Project will consist of 15 buildings totaling approximately 754,222 square feet of office and manufacturing areas. In addition, 391,831 square feet of landscaping will be provided. The details of the proposed Project are shown in **Table 3: Rancho Conejo Summit Project Details**. Initial construction for the proposed Project is anticipated to be completed by 2023 and initial operations to commence by that date. The proposed site plan is shown in **Figure 4: Rancho Conejo Summit Site Plan**.

Because the proposed Project will exceed the requirements SB 610 and consists of a commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space, it is subject to the requirement of SB 610 and this water supply assessment has been prepared.

Water demands were estimated for the proposed Project’s water use factors obtained from other water supply and other WSAs with comparable uses including the Los Angeles Department of Water and Power and the Cal-Am Southern Division – Los Angeles County District. Water use for the proposed Project was calculated for the uses identified.

As shown in **Table 4: Proposed Project Water Demand**, the total estimated water demand for the proposed Project for each component is shown. Based on anticipated operations of the proposed Project the following annual water demand:

- Office and Manufacturing: 5.5 days per week (5-day work week plus 0.5 day of weekend time) for 52 weeks for a total of 343.9 acre-feet per year (afy); and

- Landscaping: up to 3 days of exterior water use per week for 52 weeks for a total of 49.1 afy.[22]

Based on the estimated annual water demand for the prosed Project is 393.0 afy.

**Table 3**
**Conejo Summit Project Details**

| | Office | | | | |
|---|---|---|---|---|---|
| **Use** | **Ground Floor (SF)** | **Mezzanine (SF)** | **Manufacturing (SF)** | **Total (SF)** | **Landscaping (SF)** |
| Building 1A | 2,500 | 2,500 | 28,552 | 33,552 | 26,537 |
| Building 1B | 4,000 | 2,500 | 33,396 | 39,896 | 10,553 |
| Building 1C | 5,000 | 2,500 | 32,400 | 39,900 | 9,684 |
| Building 1D | 2,000 | 2,500 | 58,068 | 62,568 | 33,838 |
| Building 1E | 2,500 | 2,500 | 69,101 | 74,101 | 16,900 |
| Building 1F | 2,500 | 2,500 | 47,924 | 52,924 | 12,200 |
| Building 1G | 2,500 | 2,500 | 45,460 | 50,460 | 22,170 |
| Building 2 | 2,500 | 2,500 | 33,748 | 38,748 | 26,749 |
| Building 3 | 14,000 | 0 | 35,368 | 49,368 | 76,916 |
| Building 4A | 1,000 | 800 | 40,167 | 41,967 | 14,245 |
| Building 4B | 1,000 | 800 | 30,770 | 32,570 | 26,906 |
| Building 5A | 1,000 | 2,500 | 86,580 | 90,080 | 31,745 |
| Building 5B | 1,000 | 2,500 | 19,265 | 22,765 | 9,566 |
| Building 6A | 4,000 | 6,000 | 25,515 | 35,515 | 16,933 |
| Building 6B | 2,500 | 2,500 | 84,808 | 89.808 | 56,889 |
| **Totals** | **48,000** | **35,100** | **671,122** | **754,222** | **391,831** |

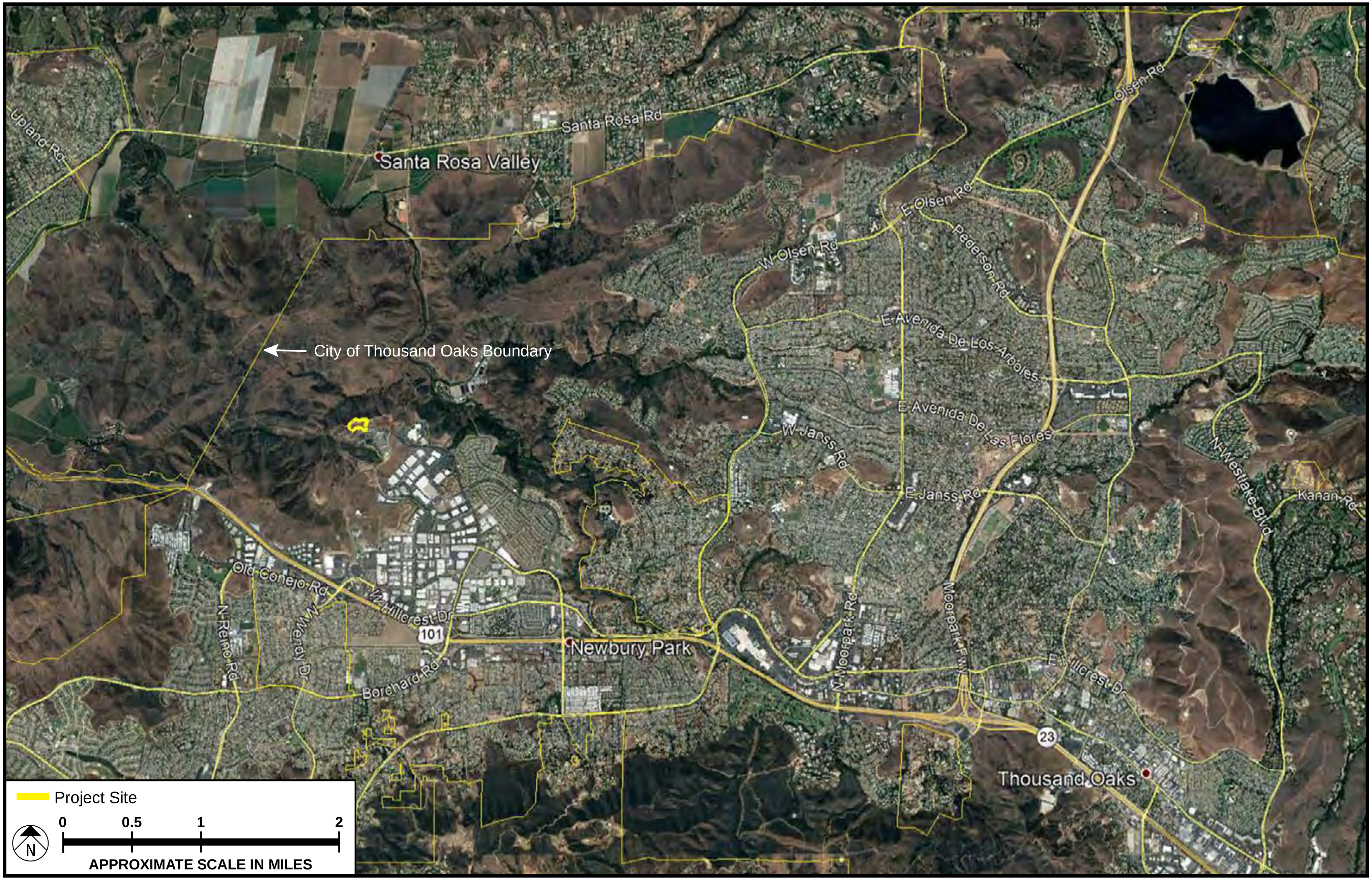
22 The exterior/landscape water demands are consistent with the landscape water efficiency standards are governed by the Model Water Efficient Landscape Ordinance (MWELO) enacted in 2015 via Executive Order B-29-15 (EO) that tasked the Department of Water Resources (DWR) with revising the 2010 updated MWELO to increase water efficiency standards for new and retrofitted landscapes through encouraging the use of more efficient irrigation systems, graywater usage, and onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf. The EO also required that agencies report on their implementation and enforcement of local ordinances by December 31, 2015. The law directs Land Use Authorities (cities and counties) to ensure MWELO compliance on development projects with landscaped areas of 500 square feet or more. This applies to residential, commercial, industrial and institutional projects that require a permit, plan check, or design review. Land Use Authorities are responsible for enforcing the ordinance. The City of Thousand Oaks has incorporated its requirements into the Municipal Code, Title 10, Utilities, Chapter 2, Water, Article 11, Water Conservation.

**Table 4**
**Proposed Project Water Demand**

| Use | Office Ground Floor | Office Mezz. | Demand Factor | Subtotal Office Demand | Manufact. | Demand Factor | Subtotal Manufact. Demand | Landscaping | Demand Factor | Subtotal Landscape Demand | Total Water Demand | Acre-feet |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SF | SF | g/d/SF | gpd | SF | g/d/SF | gpd | SF | g/d/SF | gpd | gpd | |
| Building 1A | 2,500 | 2,500 | 0.15 | 750 | 28,552 | 0.08 | 2,284.20 | 26,537 | 0.093 | 2,467.90 | 5,502.10 | 0.02 |
| Building 1B | 4,000 | 2,500 | 0.15 | 975 | 33,396 | 0.08 | 2,671.70 | 10,553 | 0.093 | 981.4 | 4,628.10 | 0.01 |
| Building 1C | 5,000 | 2,500 | 0.15 | 1,125 | 32,400 | 0.08 | 2,592.00 | 9,684 | 0.093 | 900.6 | 4,617.60 | 0.01 |
| Building 1D | 2,000 | 2,500 | 0.15 | 675 | 58,068 | 0.08 | 4,645.40 | 33,838 | 0.093 | 3,146.90 | 8,467.40 | 0.03 |
| Building 1E | 2,500 | 2,500 | 0.15 | 750 | 69,101 | 0.08 | 5,528.10 | 16,900 | 0.093 | 1,571.70 | 7,849.80 | 0.02 |
| Building 1F | 2,500 | 2,500 | 0.15 | 750 | 47,924 | 0.08 | 3,833.90 | 12,200 | 0.093 | 1,134.60 | 5,718.50 | 0.02 |
| Building 1G | 2,500 | 2,500 | 0.15 | 750 | 45,460 | 0.08 | 3,636.80 | 22,170 | 0.093 | 2,061.80 | 6,448.60 | 0.02 |
| Building 2 | 2,500 | 2,500 | 0.15 | 750 | 33,748 | 0.08 | 2,699.84 | 26,749 | 0.093 | 2,487.657 | 5,937.50 | 0.02 |
| Building 3 | 14,000 | | 0.15 | 2,100 | 35,368 | 0.08 | 2,829.44 | 76,916 | 0.093 | 7,153.188 | 12,082.63 | 0.04 |
| Building 4A | 1,000 | 800 | 0.15 | 270 | 40,167 | 0.08 | 3,213.36 | 14,245 | 0.093 | 1,324.785 | 4,808.15 | 0.01 |
| Building 4B | 1,000 | 800 | 0.15 | 270 | 30,770 | 0.08 | 2,461.6 | 26,906 | 0.093 | 2,502.258 | 5,233.86 | 0.02 |
| Building 5A | 1,000 | 2,500 | 0.15 | 525 | 86,580 | 0.08 | 6,926.4 | 31,745 | 0.093 | 2,952.285 | 10,403.69 | 0.03 |
| Building 5B | 1,000 | 2,500 | 0.15 | 525 | 19,265 | 0.08 | 1,541.2 | 9,566 | 0.093 | 889.638 | 2,955.84 | 0.01 |
| Building 6A | 4,000 | 6,000 | 0.15 | 1,500 | 25,515 | 0.08 | 2,041.2 | 16,933 | 0.093 | 1,574.769 | 5,115.97 | 0.02 |
| Building 6B | 2,500 | 2,500 | 0.15 | 750 | 84,808 | 0.08 | 6,784.64 | 56,889 | 0.093 | 5,290.677 | 12,825.32 | 0.04 |
| **Totals** | 48,000 | 35,100 | | 12,465 | 671,122 | | 53,690 | 391,831 | | 36,440 | 102,595 | 0.31 |

*Notes:*

*SF – square foot, g/d/SF – gallons per day per square foot, gpd – gallons per day*



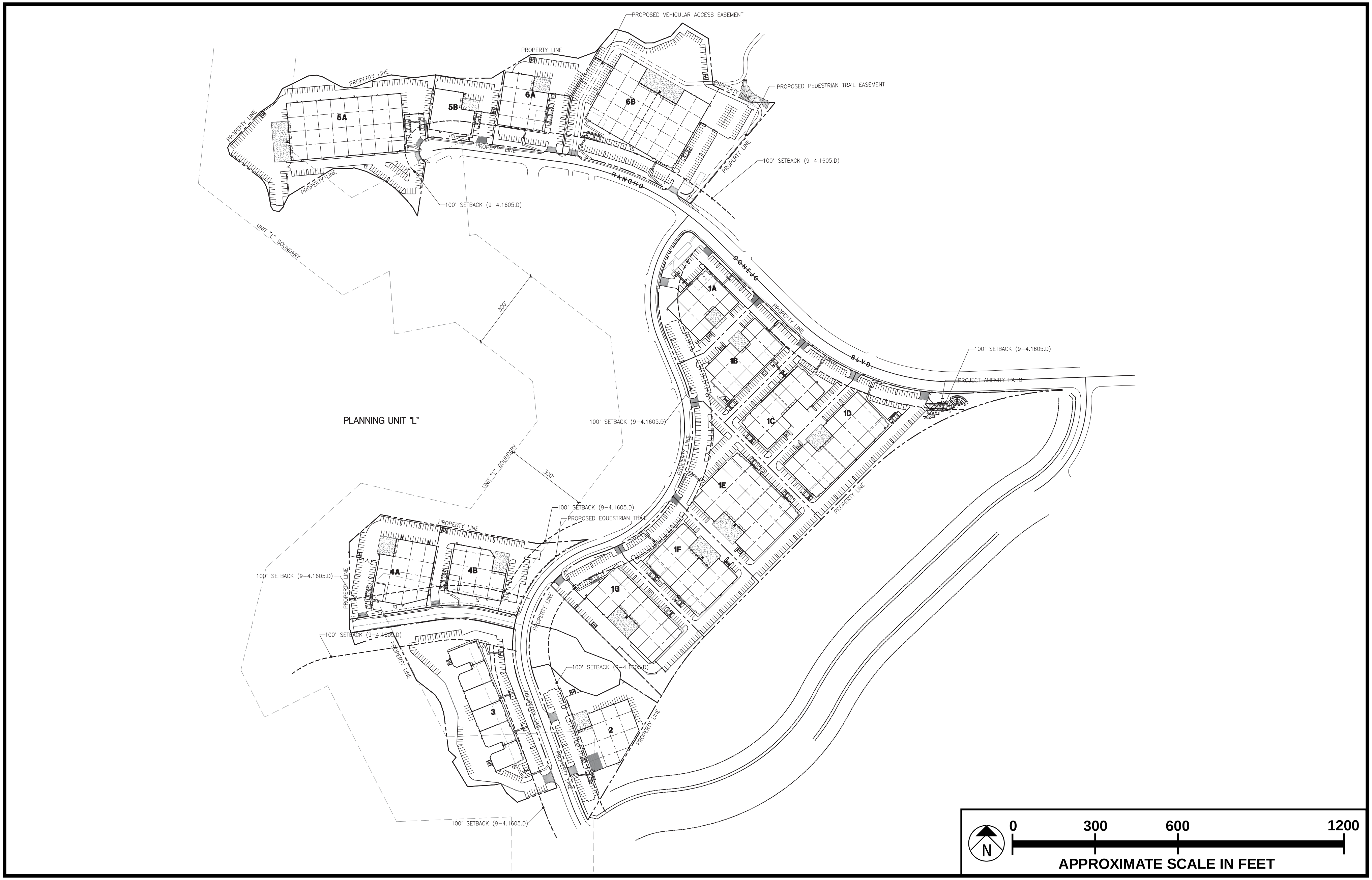

**SOURCE:** Google Earth - 2020

FIGURE **3**

Meridian Consultants

Project Location

301-001-20




**SOURCE:** HPA Architects - February 2020

FIGURE 4

Meridian Consultants

Conejo Summit Site Plan

301-001-20

# 3.0 WATER SUPPLY SOURCES

## 3.1 Overview

This report addresses the requirements of Section 10910 of the California Water Code (Senate Bills 610 [SB 610] for the proposed Project in the City and with Cal-Am's service area. The Code requires a WSA be prepared for any "project" that would consist of one or more of the following:

- A proposed residential development of more than 500 dwelling units.
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- A proposed hotel or motel, or both, having more than 500 rooms.
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- A mixed-use project that includes one or more of the projects specified in this subdivision.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

As previously noted, the proposed Project is a commercial and industrial development, as described in more detail in the Project Description section. The proposed Project includes future development of approximately 353,401 square feet of office and industrial space and exceeds the mixed-use project threshold of 250,000 square feet of commercial floor space. The City has determined that the Project is subject to review under CEQA[23] and the State CEQA Guidelines[24]

As the proposed Project would be constructed by, and start operation in, 2023, the WSA reviews and makes a finding of meet future demands for the period 2023 to 2043.

23 California Environmental Quality Act (CEQA), Public Resources Code, Section 21000 et seq.
24 CEQA Guidelines, California Code of Regulations, Section 15000 et. seq.

## 3.2 Calleguas Municipal Water District

### *3.2.1 Water Supply and Demand*

In 1960, Calleguas became a member agency of the MWD, which provides wholesale water from the Colorado River via the Colorado Aqueduct and from northern California via the State Water Project (SWP). MWD is comprised of 26 member agencies, and Calleguas is the fifth largest member agency in terms of average annual water deliveries. Nearly all of the potable water delivered by Calleguas to its member purveyors is purchased from MWD.

MWD's overall supply and demand projections for their member agencies and service area, including Calleguas, are for 2020 to 2040 shown in **Table 5: Average Year MWD Supply, Demand and Deliveries – 2020 to 2040**.

**Table 5**
**Average Year MWD Supply, Demand and Deliveries – 2020 to 2040**

| | 2020 | 2026 | 2030 | 2035 | 2040 |
|---|---|---|---|---|---|
| ***Supplies*** | | | | | |
| In Region Supplies and Programs | 693,000 | 774,000 | 852,000 | 956,000 | 992,000 |
| California Aqueduct[a] | 1,760,000 | 1,781,000 | 1,873,000 | 1,899,000 | 1,899,000 |
| Colorado River Aqueduct[b] | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 |
| **Total** | **3,653,000** | **3,755,000** | **3,925,000** | **4,055,000** | **4,091,000** |
| ***Demands*** | | | | | |
| Total Demands on MWD | 1,586,000 | 1,636,000 | 1,677,000 | 1,726,000 | 1,765,000 |
| IID-SDCWA Transfers and Canal Linings | 274,000 | 282,000 | 282,000 | 282,000 | 282,000 |
| **Total MWD Deliveries[c]** | **1,860,000** | **1,918,000** | **1,959,000** | **2,008,000** | **2,047,000** |

*Source: Calleguas 2015 UWMP, Appendix F, Table 2-6.*
*Notes:*
*a - California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.*
*b - Maximum CRA deliveries limited to 1.20 MAF including IID-SDCWA transfer and exchange and canal linings.*
*c - Total demands are adjusted to include IID-SDCWA transfer and exchange and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.*

### *3.2.2 Imported Water*

In 1953, faced with recurring droughts, an expanding population and economy that would soon exhaust local drinking water supplies, voters in southern Ventura County united to form Calleguas for the purpose of providing the region with a reliable supply of high quality supplemental water. Finding a dependable water source for a semiarid region such as Ventura County was no simple feat: adequate rainfall is unreliable, rivers are seasonal, and groundwater often brackish and unsuitable for both urban and agricultural uses. Due to the geographic location of its service area, Calleguas receives exclusively SWP water under normal operating conditions. The SWP is a 700-mile network of reservoirs, aqueducts, and pumping facilities that convey water from the northern Sierra Nevada Mountain Range to Northern California, the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California.

Following a thorough evaluation of potential water sources, MWD turned to the planned SWP's system of canals, reservoirs and pumping plants to be built to convey water captured from the snow covered peaks of the Sierras to many regions throughout the State. To secure water from the State system, voters approved another ballot measure in 1960 so that Calleguas could join MWD, a State water contractor.

Water delivered to Calleguas is treated by MWD at the Joseph Jensen Filtration Plant in Granada Hills and is typically delivered to Calleguas through MWD’s West Valley Feeder No. 2 Pipeline. The West Valley Feeder No. 2 Pipeline is capable of delivering up to 300 cubic feet per second (cfs) of water to the East Portal of Calleguas’ eight- foot-diameter Perliter Tunnel. The East Portal is located in the City of Chatsworth and is Calleguas’ sole connection to MWD.

From this point, water is conveyed through the Perliter Tunnel into Simi Valley, where it is distributed through Calleguas’ transmission system, stored in Lake Bard, or injected into the Fox Canyon aquifer. During planned and emergency shutdowns of imported supply, Lake Bard and the Las Posas Aquifer Storage and Recovery Project (Las Posas ASR Project) provide reliable water supplies to Calleguas’ customers.

Lake Bard is located in the center of the Calleguas service area and can store approximately 10,500 AF of water, of which 7,500 AF is readily available with existing facilities. Water stored in Lake Bard is treated at the Lake Bard Water Filtration Plant (LBWFP), which has a treatment capacity of 65 million gallons per day (mgd). Water from the LBWFP can be delivered anywhere in Calleguas’ service area.

The Las Posas ASR Project is located west of Moorpark and can store an estimated 50,000 AF of water in the Fox Canyon aquifer of the East Las Posas Basin through injection into 18 dual-purpose injection and extraction wells. Water stored in the aquifer is pumped out through the same eighteen wells, disinfected, and delivered into Calleguas’ transmission system. Currently, water from the Las Posas ASR Project can be delivered to Camarillo, Moorpark, Somis, Oxnard, Port Hueneme, and nearby unincorporated areas. A pump station is fully operational as of 2019[25] that enables the Las Posas ASR Project water to be delivered to Calleguas’ entire service area.

Per the 2015 UWMP for the Ventura County District, Cal-Am provides domestic water to western Thousand Oaks, Newbury Park, and an unincorporated area north of Camarillo; the entire supply is potable water from

25 Calleguas Municipal Water District, Board of Director Meeting, Meeting Minutes, August 2019.

Calleguas' imported supply.[26] Except for the newly acquired El Rio system which is supplied by local groundwater and not by Calleguas imported water.

### *3.2.3 Groundwater Basin Description/Supply*

Groundwater has been used in Ventura County since the late 19th century, primarily for irrigation, but also for municipal and industrial water supply. With the passage of California's Sustainable Groundwater Management Act (SGMA) in 2014, prudent management of the State's critical groundwater basins is now a primary water resource concern and mandated by State law. SGMA requires adoption of groundwater water sustainability plans by January 31, 2020 for all basins defined by the State as either a high or medium priority and subject to critical overdraft, and by January 31, 2022 for all other high or medium priority basins.

Historically, the aquifer system in southern Ventura County has been in a state of overdraft, which has led to seawater intrusion. The non-consumptive portion of imported water utilized by the majority of Calleguas purveyor customers is treated at local wastewater treatment facilities and discharged to the Calleguas Creek watershed. This water ultimately percolates into the aquifers, serving as an important source of recharge. Unfortunately, over the past several decades, wastewater discharges, urban and agricultural runoff, applied irrigation, and native marine sediments have caused the aquifers to become increasingly saline. Increasing chloride concentrations have rendered many wells unsuitable for potable or irrigation purposes.

Calleguas has incorporated groundwater storage strategies and transfer agreements into its water resources portfolio; all groundwater is stored in the East Los Posas Basin.[27] In addition to the Las Posas Aquifer Storage project (ASR) Project, Calleguas has periodically stored water through in lieu means since the early 1990s. Under this storage method, Calleguas has supplied imported water to well operators who, in turn, reduce groundwater pumping. The reduction in pumping results in the creation of storage credits. Such storage credits are then transferred to Calleguas. In this way, groundwater can be stored and subsequently pumped during periods when imported supplies are curtailed.

Calleguas also accumulated additional groundwater storage credits through the Conejo Creek Diversion Project (CCDP).[28] The CCDP consists of a diversion structure and pipelines that were jointly constructed by Calleguas and the Camrosa Water District (Camrosa). Recycled wastewater from the City of Thousand is diverted from Conejo Creek and used for agricultural and landscape irrigation within Camrosa Water District's service area. Water that is not used within the Camrosa Water District is provided to the Pleasant Valley County Water District for agricultural irrigation in lieu of groundwater pumping. In return, Calleguas received

26 Calleguas Municipal Water District, 2015 UWMP, p.3-2.
27 Calleguas Municipal Water District, 2015 UWMP, pp. 6-4 and 6-5.
28 Calleguas Municipal Water District, 2015 UWMP, pp. 6-4 and 6-5.

groundwater storage credits from Fox Canyon Groundwater Management Agency (FCGMA) equal to the amount of water delivered. By agreement, historically some of these credits were pumped from wells operated by the United Water Conservation District (UWCD) to meet demands in the Cities of Oxnard and Port Hueneme. In 2014, Calleguas turned over all of its project facilities and obligations to Camrosa but retained the groundwater storage credits that it had accrued as a project participant up to that time.

As a result of drought conditions, Calleguas extracted stored water to help meet regional water demands from 2008 through 2011.[29] Calleguas is actively working with other groundwater pumpers in the Las Posas basins to develop a sustainable groundwater management plan consistent with SGMA that mitigates impacts on adjacent groundwater pumpers due to future operation of the Las Posas ASR Project.

As noted, all of the groundwater deliveries are provided on the Oxnard Plain, and not to the Cal-Am service area in the City of Thousand Oaks and Newbury Park.

### *3.2.4 Recycled Water and Desalinated Water*

#### Recycled Water

Calleguas has actively supported the development and use of recycled wastewater within its service area. In the 1990s, Calleguas built recycled water delivery systems within the Conejo and Simi Valleys and continues to own, operate, and maintain those facilities.

In the 2000s, Calleguas built recycled water facilities as a participant in the CCDP, as previously noted. The CCDP consists of a diversion structure and pipelines that were jointly constructed by Calleguas and Camrosa. Recycled wastewater from the City is diverted from Conejo Creek and used for agricultural and landscape irrigation within Camrosa Water District's service area. Water that is not used within the Camrosa Water District is provided to the Pleasant Valley County Water District for agricultural irrigation in-lieu of groundwater pumping. As previously noted, Calleguas turned over ownership, operation, and maintenance of those facilities to Camrosa Water District in 2014.

In 2016, Calleguas began conveying treated wastewater from the City of Oxnard AWPF to agricultural customers for irrigation in-lieu of groundwater pumping. The AWPF water is transported through the SMP, which is currently operating at very low capacity as a brine discharge facility. Because the AWPF water is extremely low in salinity, even when blended with the brine discharge in the SMP, it provides water of a

29 Calleguas Municipal Water District, 2015 UWMP, p. 6-6.

quality suitable for agricultural irrigation. This activity is expected to continue until Oxnard builds a permanent pipeline to convey the water to these agricultural customers.

Although Calleguas does not operate any wastewater treatment facilities, it does own and operate a limited number of recycled water pipelines and pumping facilities. Calleguas has historically purchased recycled water from Triunfo Sanitation District and VCWWD No. 8 (City of Simi Valley) and delivered the water to customers for irrigation and landfill activities. Calleguas also conveys recycled water from the City of Oxnard AWPF to agricultural customers in an unincorporated area east of Oxnard. Calleguas does not provide any supplemental treatment to the recycled water it distributes.

#### Seawater Desalination

In 2000, the MWD created the Seawater Desalination Program (SDP) and solicited projects from its member agencies. Calleguas does not currently utilize desalinated water and has no plans to pursue such at this time.

### *3.2.5 Written Contracts or Other Proof of Entitlement*

As a member agency of Metropolitan, Calleguas benefits from transfer agreements made through Metropolitan. To date, Calleguas has not pursued independent transfer agreements.

### *3.3.6 Water Sources*

The Cal-Am Ventura County District purchases its entire supply of water from Calleguas for the service area in the western portion of the City of Thousand Oaks and the adjacent unincorporated area.

#### Calleguas Municipal Water District

Calleguas is a wholesale water agency that delivers water to Cal-Am's Ventura County District. Calleguas' service area is shown in Figure 5-3. Calleguas' primary source of water is SWP water purchased from MWD. Typically, Calleguas delivers water from MWD directly to its retail customers. However, Calleguas has the ability to store excess water from MWD and local supplies in Lake Bard or at its Las Posas Aquifer Storage and Recovery well field for future delivery. The Calleguas is working with other local agencies to increase the utilization efficiency of its local water supplies and is participating in numerous groundwater and desalination projects to reduce its reliance upon imported water.

**Table 6: Calleguas Planned Sources of Supply (2010-2043)** shows the planned sources of supply for Calleguas. For the year included the 20 year forecast in this WSA for the proposed Project (2043), the amount shown has been extrapolated for comparison purposes only. The extrapolation for future water

supplies or years 2040 and 2043, where applicable, did not assumed any increase in supply beyond the projection of either Cal-Am in the 2015 UWMP or Calleguas in their 2015 UWMP. Further, the future demands and deliveries for 2040 and 2043 assumed that Cal-Am would achieve the same demand requirements as for 2035 via ongoing conservation measures as required under current legislation and thru future improvements.

**Table 6**
**Calleguas Planned Sources of Supply (2010-2043)**

| Source | 2020 | 2035 | 2030 | 2035 | 2040 | 2043[a] |
|---|---|---|---|---|---|---|
| | | | Afy | | | |
| Imported MWD Water | 121,925 | 125,169 | 124,974 | 124,183 | 124,824 | 124,824 |
| Recycled Wastewater | 1,770 | 1,790 | 1,790 | 1,790 | 1,790 | 1,790 |
| **Totals** | **123,695** | **126,959** | **126,764** | **125,973** | **126,614** | **126,614** |

*Source: Calleguas Municipal Water District, 2015 Urban Water Management Plan, June Table 6-9.*
*a -Date for 2040 and 2043 extrapolated.*
*afy – acre feet per year*

## 3.3 Cal-Am Ventura County Water District

Cal-Am's Ventura County District purchases all of its water from Calleguas as shown in **Table 7: Cal-Am Ventura County District Demand Projections Provided to Wholesale Suppliers (2020-2043)**. For the years included in the 20 year forecast in this WSA for the proposed Project (2023, 2040 and 2043); the amounts shown have been extrapolated for comparison purposes only. The amounts for 2023 were extrapolated based on a straight line project from year 2020 to year 2025, while out year extrapolations (years 2040 and 2043) were done on a straight line basis using the year 2035 amounts.

Cal-Am's Ventura County District purchases all of the potable water required to meet the service area demands from Calleguas. There is no maximum or minimum water purchase amount with Calleguas. However, Cal-Am does not maintain a purchased order or agreement with Calleguas noting that Calleguas does not have this concept of agreement/purchase orders for water delivery.[30]

30 Email correspondence with Mr. Jacob Quick, P.E., Senior Project Engineer, California American Water Company, October 7, 2020.

**Table 7**
**Cal-Am Ventura County District Demand Projections Provided to Wholesale Suppliers (2020-2043)**

| Wholesaler | 2020 | 2023[a] | 2025 | 2030 | 2035 | 2040[a] | 2043[a] |
|---|---|---|---|---|---|---|---|
| Calleguas | 16,946 | 17,060 | 17,137 | 17,331 | 17,527 | 17,527 | 17,527 |

*Source: California American Water, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, June 2016. Table 4-11.*
*a – amounts extrapolated for 2023, 2040 and 2043.*

### *3.3.1 Surface Water*

The Cal-Am Ventura County District does not have its own surface water supply. Sources of supply for the wholesale water agencies that supply Cal-Am's Ventura County District are discussed in **Section 2.2**. Currently, the water is delivered through eleven turnouts. Ten of the turnouts distribute water into the Thousand Oaks service area where the proposed Project is located and one turnout feeds the Las Posas service area; the El Rio system has two groundwater wells that service customers.

### *3.3.2 Groundwater*

Cal-Am does not extract groundwater due to the poor quality of the groundwater within the Thousand Oaks and Los Posas service areas. Contaminant plumes from local industries have required the Cal-Am to import all of its potable water supplies to those service areas. In El Rio, Cal-Am extracts groundwater through two wells to provide service to its customers; Cal-Am did not service El Rio in 2015.

### *3.3.4 Recycled Water Opportunities*

Cal-Am does not own or operate wastewater collection or treatment facilities or recycled water distribution facilities. However, the wastewater collection and treatment agencies for Cal-Am Ventura County District's service areas (Thousand Oaks, Los Posas Valley and El Rio) are currently recycling the wastewater or will be considering recycled water in the near future. Cal-Am is continually looking for opportunities and working with its regional partners to increase the use of recycled water within the service area.

**Wastewater System Description**

Wastewater produced within Cal-Am's Ventura County District's service area is treated by two separate agencies. The City treats the wastewater produced from the Thousand Oaks service area at the Hill Canyon Treatment Plant, and the City of Oxnard treats wastewater from users within Cal-Am's Las Posas and El Rio service areas at the Oxnard Wastewater Treatment Plant. The Hill Canyon Treatment Plant treats approximately 98 percent of the Cal-Am's wastewater; however, this water is not available to the City of Thousand Oaks or Newbury Park portions of the Cal-Am service area.

***Recycled Water Use Optimization***

The largest potential use for recycled water within Cal-Am's Ventura County District is for landscape irrigation at public parks, golf courses, government offices, schools, and commercial and industrial complexes. Cal-Am does not project any recycled water will be used within the Thousand Oaks portion of the Ventura County District service areas in the next 20 years.

### *3.3.5 Future Water Projects*

Cal-Am develops capital improvement projects as a part of the Comprehensive Planning Studies (CPSs) which are periodically prepared for each service area. CPSs are typically prepared on a five to eight-year cycle with interim updates prepared as conditions change or the need arises. Each service area is evaluated for specific needs from which a prioritized list of projects is developed. Projects are generally classified into one of several categories as follows: Source of Supply, Storage, Conjunctive Use, and Water Quality / Water Efficiency. Some projects meet multiple planning goals across two or more of the listed categories. A storage project, for example, not only provides increased system reliability but also assists in meeting peak hour demands often delaying the need for additional source of supply.

### *3.3.6 Written Contracts or Other Proof of Entitlement*

The Cal-Am Ventura County District purchases imported water from Calleguas which in turn has transfer agreements with MWD. However, Cal-Am does not maintain a purchased order or agreement with Calleguas noting that Calleguas does not have this concept of agreement/purchase orders for water delivery.[31]

# 4.0 WATER SUPPLY RELIABILITY AND SHORTAGE CONTINEGNCY PALNIG

## 4.1 Water Reliability

Calleguas has committed to provide water to meet 100 percent of the Cal-Am Ventura County District's demand, even in the event of an extreme water shortage. With the exception of one emergency connection in the Los Posas Valley, and for the two groundwater wells in El Rio the Ventura County District receives all of its water from the Calleguas and thus has the same supply reliability as its wholesaler.

31 Email correspondence with Mr. Jacob Quick, P.E., Senior Project Engineer, California American Water Company, October 7, 2020.

Calleguas utilizes imported and local water supplies. Imported water from Calleguas, which is purchased from MWD, is affected by multiple factors. MWD's supply is imported from the Colorado River and Bay- Delta through the Colorado River Aqueduct (CRA) and the SWP, respectively. The local and imported supplies are affected by legal, environmental, water quality and climatic factors.

- **Legal:** Supply allocations from the CRA are dictated through legal agreements and, in some cases, court settlements. Supply from the SWP is affected by legal factors, including the Bay-Delta Accord, which changed operating criteria of the SWP and can significantly reduce supply to MWD in dry years. Several of the groundwater basins within the Calleguas service area are regulated to ensure that the groundwater resources are utilized in the best interest of the public and for the common benefit of the all the water users.
- **Environmental:** Several species of fish located in the Bay-Delta have been listed as endangered, which has led to decreased pumping by the SWP and environmental litigation. Numerous environmental regulations limit the discharge of brine waste from desalination facilities. These regulations may impact Calleguas and its retail water providers by limiting utilization of local brackish groundwater resources.
- **Water Quality:** Disinfection byproducts pose water quality issues for the SWP. Disinfection byproducts form when organic carbon and bromide in the source water react with disinfectants at the water treatment plant. Groundwater inflows into the SWP also pose arsenic concerns. Total dissolved solids (TDS) levels in the Ventura County groundwater are increasing due to discharges from local wastewater treatment facilities. Increased groundwater treatment may be required to utilize local groundwater supplies.
- **Climatic:** Variable hydrology in the basins that feed the Sacramento-San Joaquin Delta affects SWP supply.

The supply reliability for the Cal-Am's Ventura County District is wholly dependent upon the supply reliability of its wholesale agency - Calleguas. The Ventura County District's arrangement with Calleguas provides 100 percent reliability of supply and thus, the Ventura County District's supply reliability is set at 100 percent for all scenarios.

According to its 2015 UWMP, Calleguas has sufficient surplus to meet future demands under average year conditions. According to its 2015 UWMP, Calleguas has sufficient surplus to meet future demands under average year conditions. Calleguas' average year condition supply projections are shown in **Table 8: Calleguas Supply Reliability Projections-Average Year Conditions**.

Under single dry year conditions, Calleguas projects to maintain a supply surplus through 2035. **Table 9: Calleguas Supply Reliability Projections-Single Dry Year** shows the supply projections for Calleguas under single dry year conditions.

Under multiple dry year conditions, Calleguas projects to maintain a supply surplus through 2035. **Table 10: Calleguas Supply Reliability Projections-Multiple Dry Year Conditions** shows the supply projections for Calleguas under multiple dry year conditions.

**Table 8**
**Calleguas Supply Reliability Projections-Average Year Conditions**

| | 2020 | 2025 | 2030 | 2035 | 2040 | 2043[a] |
|---|---|---|---|---|---|---|
| | Volume (afy) | | | | | |
| Supply Totals | 123,695 | 126,959 | 126,764 | 125,973 | 126,614 | 126,614 |
| Demand Totals | 99,744 | 97,634 | 100,247 | 102,746 | 102,746 | 102,746 |
| Difference | 23,951 | 29,325 | 26,517 | 23,227 | 23,868 | 23,868 |
| Total demand if planned local projects are developed | 115,729 | 120,119 | 122,932 | 125,631 | 125,631 | 125,631 |
| Difference if planned local projects are not developed | 7,996 | 6,840 | 3,832 | 342 | 983 | 983 |

*Source: Calleguas, 2016 UWMP, Table 6-9 and*
*Cal-Am, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, June 2016. Table 6-3.*
*a -Date for 2043 extrapolated.*

**Table 9**
**Calleguas Supply Reliability Projections-Single Dry Year**

| | 2020 | 2025 | 2030 | 2035 | 2040[a] | 2043[a] |
|---|---|---|---|---|---|---|
| | Volume (afy) | | | | | |
| Supply Totals | 124,525 | 127,864 | 127,675 | 126,887 | 126,887 | 126,887 |
| Demand Totals | 111,228 | 108,347 | 110,724 | 113,642 | 113,642 | 113,642 |
| **Difference** | **13,347** | **19,517** | **16,951** | **13,245** | **13,245** | **13,245** |

*Source: California American Water, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, June 2016. Table 6-4.*
*a -Date for 2040 and 2043 extrapolated.*
*afy – acre feet per year*

**Table 10**
**Calleguas Supply Reliability Projections-Multiple Dry Year Conditions**

| | | 2020 | 2025 | 2030 | 2035 | 2040 [a] | 2043 [a] |
|---|---|---|---|---|---|---|---|
| | | Volume (afy) | | | | | |
| First Year | Supply | 123,004 | 130,040 | 130,609 | 129,933 | 129,933 | 129,933 |
| | Demand | 105,006 | 101,439 | 103,744 | 106,518 | 106,518 | 106,518 |
| | Difference | 17,998 | 28,601 | 26,865 | 23,415 | 23,415 | 23,415 |
| Second Year | Supply | 123,004 | 130,040 | 130,744 | 129,933 | 129,933 | 129,933 |
| | Demand | 105,006 | 101,439 | 103,744 | 106,518 | 106,518 | 106,518 |
| | Difference | 17,998 | 28,601 | 26,865 | 23,415 | 23,415 | 23,415 |
| Third Year | Supply | 123,004 | 130,040 | 130,609 | 129,933 | 129,933 | 129,933 |
| | Demand | 105,006 | 101,439 | 103,744 | 106,518 | 106,518 | 106,518 |
| | Difference | 17,998 | 28,601 | 26,865 | 23,415 | 23,415 | 23,415 |

*Source: California American Water, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, June 2016. Table 6-5.*
*a -Date for 2040 and 2043 extrapolated*
*afy – acre feet per year*

## 4.2 Water Shortage Contingency Planning

### *4.2.1 Water Supply Shortage Stages and Conditions*

Cal-Am is regulated by the California Public Utilities Commission (CPUC); accordingly, California American Water must obtain CPUC approval for any water conservation programs, including voluntary and/or mandatory measures. Cal-Am has Rule 14.1 on file with CPUC to obtain CPUC approval for a staged water conservation plan for the Ventura County District, which complies with UWMP Act requirements for a Water Shortage Contingency Plan. Conditions that require stages of action are defined in Section B of Rule 14.1. In the event of a 50 percent reduction in supply, Cal-Am would implement the mandatory conservation measures described within Section H to achieve a 50 percent reduction in demand.

### *4.2.2 Catastrophic Supply Interruption Plan*

In the event of a sudden and catastrophic loss of water supply, the Cal-Am Ventura County District has written an Emergency Response Plan (ERP), which is used to guide Cal-Am's employees. The ERP contains detailed action items to the following list of events that might result in a drastic loss in supply.

In the event of a power outage, Cal-Am's Ventura County District 's first response task is to activate/check the status of emergency power supply. Cal-Am will assign a monitor to oversee the status of the emergency supply during the incident and report any problems to the Incident Commander. Once the power has been restored, all affected equipment will be reset and restarted. The overall strategy is to determine if the reason for the outage is local to the plant or regional and the estimated time to return power. This will provide the Ventura County District with the degree of significance of the situation, which will help assess the need to secure additional diesel fuel for generators. The treatment process would also be operated to minimize the effects of the power loss.

The first response in the event of an earthquake is to perform a system audit to determine the extent of damage to utilities, piping, and processes. This audit will allow the Ventura County District to concentrate staff and resources on issues that need to be addressed immediately. Additional staff will be required for sampling, analysis, equipment repair, manual equipment and process operation, and communication. A report of the damage will be issued to the Incident Commander followed by a list of supplies that are necessary for repairs.

### *4.2.3 Three-year Minimum Water Supply*

The minimum supply for the Cal-Am Ventura County District is equal to the driest three-year historic sequence in the history of the Ventura County District's supply. Through its agreement with Calleguas, the Cal-Am Ventura County District purchases 100 percent of its potable water demand for the Thousand Oaks service area. Thus, there has never been a time when demand could not be fully met with purchased water from Calleguas. Thus, it is assumed that the supply from Calleguas meets 100 percent of Cal-Am's Ventura County District's Thousand Oaks service area demand. **Table 11: Cal-Am Ventura County District Three-year Minimum Water Supplies** shows the three-year minimum water supplies in acre feet per year for the Ventura County District.

**Table 11**
**Cal-Am Ventura County District's Three-year Minimum Water Supplies**

| Supply Source | 2016 | 2017 | 2018 |
|---|---|---|---|
| | | acre-feet | |
| Calleguas[a] | 13,573 | 14,155 | 14,741 |

*Source: California American Water, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, June 2016. Table 6-6.*

*Notes:*

*a - Calleguas supply is assumed to be 100% of the Ventura County District's demand. Calleguas is required to meet 100% of the Cal-Am Ventura County District's potable water demand.*

*Water amount measured in acre feet per year (afy).*

## 4.3 Drought Planning

Calleguas, MWD and DWR are implementing several water supply strategies to ensure that sufficient supply is available in drought conditions. These strategies include investments in conservation; water recycling; transfer agreements; storage; and supply. Based on these investments Calleguas , MWD, and DWR, anticipate that there will be sufficient supply available to meet forecasted purveyor demands.

### *DWR Strategies*

**Bay-Delta Conservation Plan** – The primary objective of the Bay-Delta Conservation Plan is to restore the Bay-Delta in such a way that results in a more resilient ecosystem and more reliable supplies. Several alternatives for achieving the plan’s objectives have been proposed and have been evaluated by DWR as part of an Environmental Impact Report/Environmental Impact Statement.

### *MWD Strategies*

**Transfer & Storage** – The MWD is implementing transfer agreements and storage strategies to increase the reliability of the SWP and Colorado River supplies.

**Transfer Opportunities** – The MWD has developed water transfer agreements between agriculture and municipal water users to improve supply reliability.

### *Calleguas Strategies*

**Las Posas Aquifer Storage and Recovery** - The Calleguas and MWD have banked water within the Las Posas groundwater basin. This water can be pumped to maintain deliveries during times when surface water supplies are limited.

**Lake Bard** – Lake Bard provides the Calleguas with a local source of supply. The lake can store approximately 8,000 acre-feet of water and the treatment plant has a capacity of 100 cubic feet per second (cfs). These supplies can be utilized when imported supplies are curtailed.

**Salinity Management Project** – The salinity management project treats local groundwater that is too saline for potable use. This enables the Calleguas to increase groundwater supplies and improve regional supply reliability.

# 5.0 WATER CONSERVATION MEASURES

## 5.1 City Water Conservation Ordinance

The City of Thousand Oak's City Council eliminated the Level One water restrictions on May 30, 2017, by adopting the Water Conservation Ordinance;[32] as such, the City is currently under the permanent water conservation requirements. Details on each conservation level are below.

Although the drought has been declared over, preparations for the next water shortage are underway and many changes in how California manages its' water are expected. By January 2021, each water agency will be given a draft water budget based on the population served and the irrigated landscape areas within their boundaries. In the future it will be the responsibility of the water agency to meet these budgets, and fines from the state for noncompliance are possible. Also, the agencies are required to develop water shortage contingency plans for six different conservation levels:

- 10 percent reduction
- 20 percent reduction
- 30 percent reduction
- 40 percent reduction
- 50 percent reduction
- More than a 50 percent reduction in water usage.

These following water conservation measures are taken from the permanent water conservation measures, which were adopted by an ordinance in 2009. Also, there is no watering during or 48 hours after any rain (State law).

- Watering is prohibited between the hours of 9:00 a.m. and 5:00 p.m.
- No excessive water flow or runoff is permitted
- No washing down hard or paved surfaces
- Re-circulating water is required for decorative water fountains and features
- Washing vehicles, other than at commercial car wash facilities, must be done with a self-closing shut off nozzle on the hose
- Drinking water in food establishments will be served only upon request
- Lodging establishments must provide guests options to decline daily linen services

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32 City of Thousand Oaks, Municipal Code, Title 10, Utilities, Chapter 2, Water, Article 11, Water Conservation., June 2009.

- Single-pass cooling systems may not be installed
- Non-recirculating commercial car wash and laundry systems are prohibited in new systems
- Restaurants are required to use water conserving dish wash spray valves

### *Level One City Water Conservation Measures*

- Outdoor watering restricted to 3 days a week (April to October) and two days a week (November to March), for no more than 15 minutes per station.
- Leaks, breaks or malfunctions must be fixed within 72 hours.
- The City requests that pools or spas be emptied and re-filled for routine maintenance during a drought declaration.

### *Level Two City Water Conservation Measures*

- Outdoor watering restricted to 2 days a week (April to October) and 1 day a week (November to March), for no more than 15 minutes per station.
- Leaks, breaks or malfunctions must be fixed within 48 hours.
- Filling or re-filling ornamental lakes or ponds with potable water is prohibited except to the extent needed to sustain aquatic life provided that such animals are of significant value and have been actively managed within the water feature before a declaration of a supply shortage level.
- Refilling of more than one foot or initial filling of residential swimming pools or outdoor spas with potable water is prohibited (This was waived during the most recent drought).

### *Level Three City Water Conservation Measures*

- No outside irrigation with potable water, except for the following:
  - Maintenance of trees and shrubs by hand-watering
  - Maintenance of existing landscaping necessary for fire protection, erosion control or stormwater protection
  - Maintenance of plant materials identified to be rare or essential to the well-being of the protected species.
  - Maintenance of landscaping within active public parks and playing fields, day care centers, golf course greens and school grounds, provided that it does not exceed two days a week.
- Leaks, breaks or malfunctions must be fixed within 24 hours.
- Limits on new potable water service (see the ordinance for details).

## 5.2 Cal-Am Water Conservation Measures

Call-Am has implemented the following schedule for water as a conservation measure;[33] using the watering schedule below, customers may run their irrigation systems three days per week:

- Odd-numbered addresses
  - Monday, Thursday, and Saturday
- Even-numbered addresses
  - Tuesday, Friday, and Sunday
- No watering on Wednesday

Other conservation considerations include:

- To avoid evaporation, please water outdoors before 9:00 AM or after 5:00 PM
- Watering is limited to a total of 15 minutes per station per allowed day
- Low-flow irrigation systems (Including drip irrigation and micro spray) that emits less than two gallons per hour are exempt from day of week and time limitations.

33 Cal-Am, *Ventura Conservation*. https://www.amwater.com/caaw/Conservation/District-Resources/Ventura/.

## 6.0 WATER DEMANDS

The methodology for developing demand projections incorporates ongoing and future water conservation efforts to reflect a reduced per capita usage as required by SB7.

### 6.1 Baseline and Targets

The calculation of SB7 baseline and target per capita water use is shown in **Table 12: Baseline, Interim Target and Per Capita Water Use** for the baseline, compliance, interim target, and target daily per capita water use for the Ventura County District expressed in gallons per capita per day (gpcd). As shown, the 2020 per capita use target is 234 gpcd.

**Table 12**
**Baseline, Interim Target, and Target Per Capita Water Use**

| Parameter | Water Use (gpd) |
|---|---|
| Baseline Per Capita Water Use | 290 |
| 2015 Per Capita Use | 197 |
| 2015 Interim Water Use Target | 262 |
| 2020 Per Capita Use | 234 |

*Source: California American Water, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, June 2016. Table 4-1.*

Since 1996, the Cal-Am Ventura County District's per capita water use has varied. As shown in **Table 12**, the per capita water use in 2015 was well below the 2020 target. The declining trend in per capita water use from 2007 through 2015 is attributed to a combination of factors such as economic conditions, prolonged drought conditions, and State-mandated conservation regulations. It is assumed that these factors have resulted in subsequent physical (e.g., turf replacement, water fixture replacement, etc.) and behavioral changes (e.g., irrigating less or quicker showers due to various media conservation campaigns and materials) in customer demand patterns associated with effective conservation programs. While physical conservation related changes result in essentially permanent demand reductions, behavioral changes may not yield permanent demand reductions. State-mandated emergency water conservation regulations may have a short-term impact on demand reductions during drought conditions, but it is assumed that there will be a rebound to average demands due to customers' behavioral changes over the long-term. By nature, the State-mandated emergency regulations are temporary, but SB7 requirements are long-term. Therefore, for the purposes of projecting long-term Ventura County District-wide water use, the per capita water use between 2016 and 2020 is linearly interpolated to meet the 2020 target, which is similar to the 2011-2015 average gpcd.

## 6.2 Sales to Other Water Agencies

Although Calleguas has two emergency connections to the Crestview Mutual Water Company to deliver water in emergencies, Calleguas does not have any contracts to sell water to other agencies as a wholesaler. Additionally, Calleguas does not plan to sell water to other agencies in the future.

## 6.3 Additional Water Uses and Losses

**Table 13: Cal-Am Ventura County District Non-Revenue Water** shows the current and projected amount of non-revenue water (NRW) for the Ventura County District. NRW is defined as the water losses plus authorized unbilled (metered and unmetered) water consumption. In the Ventura County District, there are authorized unbilled accounts. Thus, NRW is the difference between the amount of water that Cal-Am purchases from the Calleguas and the amount of water Cal-Am delivers to its customers.

The Cal-Am Ventura County District operating reports are used to determine historical non=revenue water (NRW). NRW as a percentage of total production has varied significantly in the past five years from 3.1% in 2011 to 7.6% in 2015. NRW in 2015 was 1,020 AFY thus, for 2015 to 2035, the annual NRW is assumed to be constant at 1,020 AFY because the amount of water lost in the distributions system should not be impacted by changes in demand**.** Cal-Am's Ventura County District actual water use for the past 10 years (2010 to 2019) is shown in **Table 14: Cal-Am Ventura County District Water Actual Water Deliveries (2010 – 2019),**

**Table 13**
**Cal-Am Ventura County District Non-Revenue Water**

| Water Use | 2015 | 2020 | 2023[a] | 2025 | 2030 | 2035 | 2040[a] | 2043[a] |
|---|---|---|---|---|---|---|---|---|
| Non-revenue Water | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 |

*Source: California American Water, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, June 2016. Table 4-9.*
*a - Date for 2040 and 2043 extrapolated.*

**Table 14**
**Cal-Am Ventura County District Water Actual Water Deliveries (2010 – 2019)**

| Water Deliveries | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| | Afy | | | | | | | | | |
| Ventura County District | 14,252.8 | 14,956.0 | 16,872.4 | 17,655.0 | 17,095.1 | 14,031.0 | 13,377.2 | 14,587.5 | 14,858.6 | 13,667.7 |

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*Source: Email correspondence with Mr. Jacob Quick, P.E., Senior Project Engineer, California American Water Company, October 7, 2020.*
*afy – acre feet per year*

## 6.4 Total Water Use

**Table 15: Cal-Am Ventura County District Projected Water Use (2015-2043)** shows the current and projected total water use for Cal-Am's Ventura County District. Total water use includes water delivered to customers, water sold to other agencies, and non-revenue water. For the years included in the 20 year forecast in this WSA for the proposed Project (2023, to 2043); the amounts shown have been extrapolated for comparison purposes only.

**Table 15**
**Cal-Am Ventura County District Projected Water Use (2015-2043)**

| Water Use | 2015 | 2020 | 2023[a] | 2025 | 2030 | 2035 | 2040[a] | 2043[a] |
|---|---|---|---|---|---|---|---|---|
| Total Water Deliveries | 12,996 | 15,926 | 16,040 | 16,117 | 16,311 | 16,507 | 16,507 | 16,507 |
| Non-revenue water | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 |
| Totals | 14,016 | 16,946 | 17,060 | 17,137 | 17,331 | 17,527 | 17,527 | 17,527 |

*Source: California American Water, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, June 2016. Table 4-10.*
*a -Date for 2040 and 2043 extrapolated.*
*Water amount measured in AFY (acre-feet per year). The amounts for 2023 were extrapolated based on a straight line project from year 2020 to year 2025, while out year extrapolations (year 2043) were done on a straight line basis using the year 2040 amounts.*

## 6.5 Wholesale Water Demands

Cal-Am Ventura County District purchases all of its water from Calleguas. **Table 16: Cal-Am Ventura County District Normal Year Water Demand Projections from Calleguas** shows the amount of water projected to be purchased from Calleguas provided that the full supply from Calleguas is available per the requirements of the contract. For the out years that would include the 20 year forecast for the proposed Project (2023, to 2043); the amounts shown have been extrapolated for comparison purposes only. The projections shown in **Table 16** are slightly different than those in **Table 15** as a result of Cal-Am's projections factoring in future per capita growth projections for population increase;[34] Calleguas did not use that method in their future projections but rather estimated deliveries on percentage of overall increase in demands (which would include residential as well as non-residential demands).[35]

**Table 16**
**Cal-Am Ventura County District Normal Year Water Demand Projections from Calleguas**

| Water Use | 2015 | 2020 | 2023[a] | 2025 | 2030 | 2035 | 2040 | 2043[a] |
|---|---|---|---|---|---|---|---|---|
| Annual Cal-Am Normal Year Demand Projections | 14,031 | 16,938 | 17,035 | 17,130 | 17,324 | 17,520 | 17,718 | 17,718 |

*Source: Calleguas, 2015 Urban Water Management Plan. Appendix B*
*a -Date for 2043 extrapolated.*
*Water amount measured in AFY (acre-feet per year). The amounts for 2023 were extrapolated based on a straight line project from year 2020 to year 2025, while out year extrapolations (year 2043) were done on a straight line basis using the year 2040 amounts.*

## 6.6 Historic and Projected Water Use by Sector

**Table 17: Cal-Am Ventura County District Historic and Future Water Demand by Sector** show the past, current and projected demands. Use is identified into eight sectors as follows: Residential, Commercial, Industrial, Fire, OPA, Co Acct., Resale, and Miscellaneous. Residential encompasses both single- and multifamily residential water use. Fire includes both fire hydrants and fire services. OPA, which stands for “other public authority,” includes government accounts and schools. The “Other or Miscellaneous” sector primarily consists of construction meter usage and public and private fire service connections. No raw or recycled water is provided in the service are and so all numbers presented below are for potable water deliveries. Cal-Am is continually looking for opportunities and working with its regional partners to increase the use of recycled water within the service area.

34 See Cal-Am Ventura County District 2015 UWMP, Appendix F, Demand Project Methodology.

35 See Calleguas Municipal Water District, 2016 UWMP, Appendix F – Metropolitan’s Draft Overall Supply Capability Tables and Supply/Demand Projections for Calleguas’ Service Area.

**Table 17**
**Cal-Am Ventura County District Historic and Future Water Demand by Sector**

| Water Use Sector | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040[a] | 2043[a] |
|---|---|---|---|---|---|---|---|---|
| Residential | 10,049 | 8,082 | 9,904 | 10,023 | 10,144 | 10,266 | 10,266 | 10,266 |
| Commercial | 1,176 | 2,815 | 3,086 | 3,086 | 3,160 | 3,198 | 3,198 | 3,198 |
| Industrial | 1,415 | 1,477 | 1,810 | 1,810 | 1,854 | 1,877 | 1,877 | 1,877 |
| Institutional/Government | 892 | - | - | - | - | - | - | - |
| Landscape | 1,320 | - | - | - | - | - | - | - |
| Fire | - | 18 | 22 | 22 | 22 | 22 | 22 | 22 |
| OPA | - | - | - | 1,113 | 1,127 | 1,140 | 1,140 | 1,140 |
| Misc. | - | - | 4 | 4 | 4 | 4 | 4 | 4 |
| **Total** | **14,852** | **12,996** | **15,926** | **16,117** | **16,311** | **16,507** | **16,507** | **16,507** |

*Source: California American Water, 2015 Urban Water Management Plan for the Cal-Am Southern Division - Ventura County District, June 2016. Tables 4-2 to 4-6.*

*a - Date for 2040 and 2043 extrapolated. The amounts for out year extrapolations (year 2-4- and 2043) were done on a straight line basis using the year 2035 amounts.*

*Water amount measured in AFY (acre-feet per year)*

# 7.0 WATER DEMAND ANALYSIS FOR PROPOSED PROJECT

## 7.1 Project Demand Analysis

Cal-Am's 2015 UWMP for the Ventura County District states that future water demand projections incorporate ongoing and future water conservation efforts to reflect a reduced per capita usage as required by SB7 and CWC Section 10910(c)(1).[36,37] As previously noted, the calculation of SB7 baseline and target per capita water use in the Cal-Am Ventura County District 2015 UWMP is shown in **Table 12** for the baseline, compliance, interim target, and target daily per capita water use for the Ventura County District.

Projections for commercial and industrial connections and future water demand in the Cal-Am Ventura County District 2015 UWMP were based on the assumption that these uses would grow at the same rate as population.[38] The basis of the population growth rate was the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In preparing the 2015 UWMP, for the Ventura County District, Cal-Am also solicited input from local land use planning agencies, including the City of Thousand Oaks for areas within the City limits and the County of Ventura for the unincorporated areas, from November 2013 through November 2014. As such, any future projects and development was included in the land use plans at that time; further, future development was accounted for in the SCAG growth projections provided in the 2016 RTP/SCS. Any future project that would result in changes to land use planning after the local agencies land use input process (after November 2014),[39] would not be accounted for in SCAG's 2016 RTP/SCS projections and not accounted for in the Ventura County District 2015 UWMP.

The Project site is located entirely within the City of Thousand Oaks. Currently, all 49.62 acres comprising the Project site is designated "Industrial" in the City of Thousand Oaks General Plan Land Use Map.[40] Prior to May 2015, the majority of the Project site, 39.73 acres, (those areas east and south of Conejo Center Drive [building sites 1A thru 1G, and 2] and north of Rancho Conejo Boulevard [building sites 5A, 5B, 6A and 6B] was designated in the General Plan for "Industrial Uses," the remainder of the Project site (9.9 acres) west of Conejo Center Drive [building sites 3, 4A and 4B] was designated as "High Density

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36 California American Water, *2015 Urban Water Management Plan for the Southern Division - Ventura County District,* Appendix A – Baseline Daily per Capita Use Memorandum, May 12, 2016.

37 State Water Resources Control Board, California Water Code, Section 10910 (c)(1), Stats. 1995, Ch. 881, Sec. 4.

38 Email correspondence with Mr. Jacob Quick, P.E., Senior Project Engineer, California American Water Company, October 7, 2020.

39 As of November 2014, the majority of the Project site, 39.73 acres, (those areas east and south of Conejo Center Drive [building sites 1A thru 1G, and 2] and north of Rancho Conejo Boulevard [building sites 5A, 5B, 6A and 6B] was designated in the General Plan for "Industrial Uses," the remainder of the Project site (9.9 acres) west of Conejo Center Drive [building sites 3, 4A and 4B] was designated as "High Density Residential."

40 City of Thousand Oaks, General Plan Land Use Map, adopted October 20, 2015.

Residential." The City amended the General Plan Land Use Map in May 2015 to change the land use designation to "Industrial," and the Rancho Conejo Specific Plan from "High Density Residential" to "Employment Park."[41] In addition this change, as portion of the Project site (Parcel 2; Building 5A) was changed from "Conejo Valley High School Site" to "Employment Park" per Amendment 15 to the Rancho Conejo Specific Plan (Specific Plan No.7) on January 13, 2015; this change did not have any effect on water demand estimates.

The land use designations at the time the Cal-Am completed their inventory planning data (November 2014) were used for the preparation of water demand projects in the 2015 UWMP for the Cal-Am Ventura County District were "Industrial Uses" for 39.73 and 9.9 acres "High Density Residential" for the Project site. Those uses were considered and are part of the future water demand projections in the Cal-Am Ventura County District 2015 UWMP.

The conversion of the land from residential use to industrial use as part of the 2015 General Plan amendment process would result in a corresponding change in the water demand estimates in the Cal-Am Ventura County District 2015 UWMP. As noted in the City's Negative Declaration, the approximate industrial building space for the parcels that had their land use designation change would be available for up to 150,935 sq. ft. of "Industrial" development.[42] As such, the Negative Declaration noted that future industrial development of the portion the Project site that was re-designated as part of the General Plan amendment would require 9,056 gpd or 7.94 afy.[43] However, there was no separate consideration estimated in the Negative Declaration for landscape irrigation. The water demands for the proposed project (see Table 4) are estimated to be 11, 144 gpd or 9.78 AFY with a landscape irrigation water demand is 5.26 afy; the total demand is 15.04 afy.

As the water demand projections in the Ventura County District 2015 UWMP considered this area to be residential use, and the water demand was estimated based on per capita basis based on population and density, resulting 234 gallons per capita per day (gpcd). According to the City's General Plan, "Residential High Density" can be developed at a density of 15 to 30 dwelling units per acre. For the 9.9 acres of the portion of the project re-designated, this would be from 148 to 297 units. The California Department of Finance (DOF) estimates the average persons per household to be 2.78 people[44] which would result in a

41 City of Thousand Oaks, Negative declaration 2915-70251, Land Use Amendment 2015-70251/Specific Plan Amendment SPA 2015-70138, May 27, 2015.

42 City of Thousand Oaks, Negative declaration 2915-70251, *Land Use Amendment 2015-70251/Specific Plan Amendment SPA 2015-70138*, May 27, 2015. p. 25.

43 Assumes same annual water uses days for the proposed Project of 5.5 days per week for 52 week or 286 days per year.

44 California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark*, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/, accessed October 9, 2020.

population of 408 to 825. This would result in a water demand of 86,472 gpd to 193,050 gpd (42.55 AFY to 85.39 AFY).[45]

As the water demand for "Industrial" use (15.04 afy) of the areas that was previously designated as "Residential High Density" (42.55 AFY to 85.16 AFY) is less than the amount that would have been included in the Cal-Am Ventura County District 2015 UWMP estimate, the future water demand for the Project was accounted for in the Cal-Am Ventura County District 2015 UWMP.

Therefore, the proposed Projects water entire demand can be considered to be included in the future water demand projections in the Cal-Am Ventura County District 2015 UWMP.

## 7.2 Average Water Year

**Table 18: Average Year Supply and Demand Assessment (2020-2043)**, compares average water year supply and demand in five-year intervals for Cal-Am's Ventura County District Service Area. The analysis considers the 20 year period required for WSAs to evaluate water supply. As such, with the Project's first year of operation is 2023, the 20 year period is from 2023 to 2043.

As previously noted, the extrapolation for future water supplies or years 2040 and 2043, where applicable, did not assumed any increase in supply beyond the projection of either Cal-Am in the Ventura County District 2015 UWMP or Calleguas in their 2015 UWMP. Further, the future demands and deliveries for 2040 and 2043 assumed that Cal-Am would achieve the same demand requirements as for 2035 via ongoing conservation measures as required under current legislation and thru future improvements.

As previously noted, Calleguas has agreed to supply any additional demand requirements that the Ventura County District may require. Further, as indicated in **Table 14**, over the past 5 years (2015 to 2019) the Ventura County District has averaged deliveries of 14,104.4 afy; this is less than the 2020 estimate of 15,926 afy. As such, the Ventura County District has achieved substantial conservation and reduced its overall deliveries than projected in the Cal-Am Ventura County District 2015 UWMP.

Therefore, because the proposed Project is included in the Average Demand estimates for the period from 2023 to 2043, it is expected that Cal-Am's Ventura County District's typical average year supply will be sufficient.

45 Assumes 365 days for domestic water use.

**Table 18**
**Average Year Supply and Demand Assessment (2020 to 2043)**

| | 2020 | 2023[a] | 2025 | 2030 | 2035 | 2040[a] | 2043[a] |
|---|---|---|---|---|---|---|---|
| | | | | Afy | | | |
| Average Demand[b] | 15,926 | 16,040 | 16,117 | 16,311 | 16,507 | 16,507 | 16,507 |
| Average Supply[c] | 16,938 | 17,053 | 17,130 | 17,324 | 17,520 | 17,718 | 17,825 |
| Non-Revenue Water (NRW) | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 |
| Supply (Deficit)[d] | (8) | (7) | (7) | (7) | (7) | 191 | 298 |
| Additional supply available from Calleguas | 8 | 7 | 7 | 7 | 7 | 0 | 0 |

*a - Date for 2023, 2040 and 2043 extrapolated. The amounts for 2023 were extrapolated based on a straight line project from year 2020 to year 2025, while out year extrapolations (year 2040 and 2043) were done on a straight line basis using the year 2035 amounts.*
*b – from Table 17.*
*c --- from Calleguas 2015 UWMP Appendix B - see Table XX*
*d – Surplus (Deficit) = Average Supply less Average Demand less NRW*

## 7.3 Dry Water Years

**Tables 19** through **22: Dry Water Years Supply and Demand Assessments**, provide a comparison of the water supply and demands for single dry and multiple dry water years for the 20 year period for the proposed Project's operational from 2023 to 2043. As the water demand for the proposed Project water is part of the future year projections in the Cal-Am Ventura County District 2015 UWMP, it is expected that Cal-Am's Ventura County District's single and multiple dry year supply will be sufficient for the 20 year period from 2023 to 2043.

Via Calleguas, the Cal-Am Ventura County District has access to additional water supplies via projects designed to drought-proof purveyors during dry years. A key element that would benefit the Thousand Oaks service area of the Ventura County District include the expansion of the Lake Bard Treatment Plant. It is expected that the Cal-Am, as a retail customer of Calleguas, would receive some additional supplies in a drought lasting up to three years to meet any foreseeable deficit. If extreme multiyear shortages occurred beyond what MWD and Calleguas could provide, Cal-Am would invoke various water conservation ordinances and activities, provided in the *Section 5.0* of this WSA. It is unlikely that minor deficits would force Cal-Am to implement any of the water shortage actions listed

**Table 19: Single and Multiple Dry Water Years Supply and Demand Assessments (2023 to 2027)** demonstrates that the Cal-Am Ventura County District's service area would be expected to utilize a portion of Calleguas reserves to ensure adequate supplies of imported water to meet the Ventura County District's demands during single dry and multiple dry year scenarios for the period 2023 to 2027.

**Table 20: Single and Multiple Dry Water Years Supply and Demand Assessments (2028 to 2032)** illustrates single and multiple dry year water supply and demand for the Cal-Am Ventura County District's service area for years 2028 through 2032 is expected that Cal-Am's Ventura County District's typical average year supply will be sufficient.

**Table 21: Single and Multiple Dry Water Years Supply and Demand Assessments (2033 to 2037)** illustrates single and multiple dry year water supply and demand for the Cal-Am Ventura County District's service area or years 2033 through 2037. As shown, it is expected that Cal-Am's Ventura County District's supply will be sufficient to meet demands during this period.

**Table 22: Single and Multiple Dry Water Years Supply and Demand Assessments (2038 to 2043)** illustrates single and multiple dry year water supply and demand for the Cal-Am Ventura County District's service area for years 2038 through 2043. As shown, it is expected that Cal-Am's Ventura County District's supply will be sufficient to meet demands during this period.

As noted above, **Tables 19** through **22** show that with the existing water system and the addition of facilities and programs there will be an adequate supply for single and multiple dry years for the projected 20-year operational period of the proposed Project period (2023 to 2043) required for this WSA.

**Table 19**
**Single and Multiple Dry Water Years Supply and Demand Assessments (2023 to 2027)**

| | Average Water Year | Single Dry Water Year | Multiple Dry Years | | |
|---|---|---|---|---|---|
| | 2023[c] | 2024[c] | 2024[c] | 2025 | 2026[c] |
| | Afy | | | | |
| Average Demand | 16,040 | 16,078 | 16,078 | 16,117[a] | 16,155 |
| Average Supply | 17,053 | 17,091 | 17,091 | 17,130[b] | 17,168 |
| Non-revenue Water (NWR) | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 |
| Surplus (Deficit)[d] | (7) | (7) | (7) | (7) | (7) |
| Additional supply available from Calleguas | 7 | 7 | 7 | 7 | 7 |

*Notes:*
*a - from Table 17.*
*b -from Calleguas 2015 UWMP Appendix B; extrapolated for out years - see Table 16*
*c -- Date for 2023, 2024 and 2026 extrapolated. The amounts were extrapolated based on a straight line project from year 2020 to year 2025.*
*d – Surplus (Deficit) = Average Supply less Average Demand less NRW*

**Table 20**
**Single and Multiple Dry Water Years Supply and Demand Assessments (2028 to 2032)**

| | Average Water Year | Single Dry Water Year | Multiple Dry Years | | |
|---|---|---|---|---|---|
| | 2028[c] | 2029[c] | 2029[c] | 2030 | 2031[c] |
| | | | Afy | | |
| Average Demand[a] | 16,233 | 16,272 | 16,272 | 16,311 | 16,349 |
| Average Supply[b] | 17,246 | 17,285 | 17,285 | 17,324 | 17,383 |
| Non-revenue Water (NWR) | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 |
| Surplus (Deficit)[d] | (7) | (7) | (7) | (7) | 14 |
| Additional supply available from Calleguas | 7 | 7 | 7 | 7 | 0 |

*Note*
*a - from Table 17.*
*b - from Calleguas 2015 UWMP Appendix B; extrapolated for odd years – see Table XX*
*c - -Date for 2028, 2029 and 2031 extrapolated. The amounts were extrapolated based on a straight line project from year 2025 to year 2030*
*d – Surplus (Deficit) = Average Supply less Average Demand less NRW*

**Table 21**
**Single and Multiple Dry Water Years Supply and Demand Assessments (2033 to 2037)**

| | Average Water Year | Single Dry Water Year | Multiple Dry Years | | |
|---|---|---|---|---|---|
| | 2033[c] | 2034[c] | 2034[c] | 2035 | 2036[c] |
| | | | Afy | | |
| Average Demand[a] | 16,428 | 16,467 | 16,467 | 16,507 | 16,507 |
| Average Supply[b] | 17,441 | 17,480 | 17,480 | 17,520 | 17,559 |
| Non-revenue Water | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 |
| Surplus (Deficit)[d] | (7) | (7) | (7) | (7) | 32 |
| Additional supply available from Calleguas | 7 | 7 | 7 | 7 | 0 |

*Note*
*a - from Table 17.*
*b - from Calleguas 2015 UWMP Appendix B; extrapolated for odd years] see Table XX*
*c -- Date for 2033, 2034 and 2036 extrapolated. The amounts were extrapolated based on a straight line project from year 2030 to year 2035*
*d – Surplus (Deficit) = Average Supply less Average Demand less NRW*

**Table 22**
**Single and Multiple Dry Water Years Supply and Demand Assessments (2038 to 2043)**

| | Average Water Year | Single Dry Water Year | Multiple Dry Years | | |
|---|---|---|---|---|---|
| | 2038[c] | 2039[c] | 2039[c] | 2040 | 2041[c] |
| | | | Afy | | |
| Average Demand[a] | 16,507 | 16,507 | 16,507 | 16,507 | 16,507 |
| Average Supply[b] | 17,538 | 17,678 | 17,678 | 17,718 | 17,757 |
| Non-revenue Water | 1,020 | 1,020 | 1,020 | 1,020 | 1,020 |
| Surplus (Deficit)[d] | 11 | 151 | 151 | 491 | 230 |
| Additional supply available from Calleguas | 0 | 0 | 0 | 0 | 0 |

_Note_

_a - from Table 17._

_b - from Calleguas 2015 UWMP Appendix B; extrapolated for odd years_

_c - Date for 2038, 2039 and 20241extrapolated. The amounts were extrapolated based on a straight line project from year 2035._

_d – Surplus (Deficit) = Average Supply less Average Demand less NRW_

# 8.0 REGULATORY MEASURES

Cal-Am's Ventura County District has adequate supplies for the 20-year period (2023 to 2043) to meet the proposed Project's demand. In addition, the proposed Project will be required to implement various water conservation measures in accordance with applicable regulatory measures identified in the 2019 California Green Building Standards Code.[46]

## 8.1 Outdoor Water Use (Landscaping) Conservation

### *8.1.1 Regulatory Requirements*

The proposed Project will be required to implement the mandatory nonresidential outdoor water efficiency and conservation measures of the 2019 California Green Standards Building Code.[47] These include:

**5.304.2 Outdoor water use in landscape areas equal to or greater than 500 square feet.** When water is used for outdoor irrigation for new construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review, one of the following shall apply:

1. A local water efficient landscape ordinance that is, based on evidence in the record, at least as effective in conserving water as the updated model ordinance adopted by DWR per Government Code Section 65595 (c).
2. The California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations.

**5.304,4 Outdoor water use in landscape areas of 2,500 square feet or less.** Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of MWELO or conform to the prescriptive compliance measures contained in MWELO's Appendix D**.**

**5.304.5 Graywater or rainwater use in landscape areas.** For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2,500 square feet of landscape and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to Appendix D Section (5).

The proposed Project will use 0.31 acre-feet per day or 49.1 AFY of water for irrigation.

46 California Code of Regulation, Title 24, Part 11, California Building Standards Commission. 2019 California Green Building Standards Code, Effective January 1, 2020. https://codes.iccsafe.org/content/CAGBSC2019/cover.

47 California Code of Regulation, Title 24, Part 11, California Building Standards Commission. 2019 California Green Building Standards Code, Effective January 1, 2020. https://codes.iccsafe.org/content/CAGBSC2019/cover.

## 8.2 Indoor Water Use Conservation

Three primary approaches to saving water indoors:

1. Hardware solutions, such as replacing a high-flow fixture with a water- efficient version;
2. Operational solutions, such as finding alternatives to using water for cleaning tasks, instituting a regular leak inspection and repair program, and optimizing the water efficiency of appliances; and
3. Personnel solutions, such as educating employees to conserve water and to report leaks.

The proposed project will be required to implement the mandatory nonresidential indoor water efficiency and conservation measures of the 2019 California Green Standards Building Code.[48] These include:

> **5.303.1 Meters.** Separate submeters or metering devices shall be installed for the uses described in Sections 5.303.1.1 and 5.303.1.2.
>
> **5.303.1.1 New buildings or additions in excess of 50,000 square feet.** Separate submeters shall be installed as follows:
>
> 1. For each individual leased, rented, or other tenant space within the building projected to consume more than 100 gal/day (380 L/day).
> 2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems shall have provisions to monitor water use for the following:
>    a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
>    b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
>    c. Steam and hot-water boilers with energy with energy input more than 500,000 Btu/h (147 kW).
>
> **5.303.1.2 Excess consumption.** A separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/day.

48 California Code of Regulation, Title 24, Part 11, California Building Standards Commission. 2019 California Green Building Standards Code, Effective January 1, 2020. https://codes.iccsafe.org/content/CAGBSC2019/cover.

## 9.0 SUMMARY

Sufficient water supplies exist to support the proposed Project based on the following facts:

- Cal-Am Ventura County District has been identified as the primary public water supplier for the proposed Project.
- The total estimated water demand for the proposed Project at buildout is 393 afy.
- The estimated water demand for the proposed Project was included in the Cal-Am Ventura County District 2015 UWMP. However, as a result of land use designation changes for portions of the Project Site that occurred after the adoption of the 2015 UWMP, the water demand for uses changed. The water demand projections in the Ventura County District 2015 UWMP considered a portion of the Project Site to be residential use ("Residential High Density"). That land use designation was changed in 2015 to "Industrial" use. Since the estimated water demand for industrial uses is less than the water demand for residential uses included in the Cal-Am Ventura County District 2015 UWMP estimate, the future water demand for the Project was accounted for in the Cal-Am Ventura County District 2015 UWMP.
- Cal-Am Ventura County District receives all of its water supplies as imported surface water from Calleguas Municipal Water District, which receives its water from the Metropolitan Water District of Southern California.
- Existing water supply sources are available to Calleguas Municipal Water District to meet Cal-Am Ventura County District's demands for imported surface water.
- Conclusions in the WSA are based on the Cal-Am Ventura County District 2015 UWMP and Calleguas Municipal Water District 2015 UWMP.
- Cal-Am Ventura County District has sufficient supplies in normal, single dry and multiple dry years to meet demands.
- Cal-Am Ventura County District has access to additional water supplies from Calleguas Municipal Water District should they be needed to meet additional demands.
- The proposed Project is required to install water conservation measures and to follow the conservation measures of the Cal-Am Ventura County District and the City of Thousand Oaks' landscape irrigation ordinance.

# 10.0 ORGANIZATIONS AND PERSONS CONSULTED

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Mark Reifer, P.E., Engineering Manager - Project Delivery

## City of Thousand Oaks, Community Development Department

Iain Holt, AICP, Senior Planner

## 11.0 REFERENCES


Cal-Am, Ventura County District Conservation. https://www.amwater.com/caaw/Conservation/District-Resources/Ventura/

California American Water Company, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, adopted June 30, 2016.

California American Water, 2015 Urban Water Management Plan for the Southern Division - Ventura County District, Appendix A – Baseline Daily per Capita Use Memorandum, May 12, 2016.

California Code of Regulation, Title 24, Part 11, California Building Standards Commission. 2019 California Green Building Standards Code, Effective January 1, 2020. https://codes.iccsafe.org/content/CAGBSC2019/cover

California Department of Finance, "Demographics," http://www.dof.ca.gov/forecasting/demographics/Estimates/https://worldpopulationreview.com/us-counties/ca/ventura-county-population

California Department of Finance, "Demographics," http://www.dof.ca.gov/forecasting/demographics/Estimates/

California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ accessed October 9, 2020.

California Department of Water Resources, 2015 Urban Water Management Plans Guidebook.

California Department of Water Resources, Urban Water Management Plans, https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans, accessed October 7, 2020.

California Department of Water Resources, Water Conservation Act of 2009 (Senate Bill X7-7), November 2009

California Environmental Quality Act (CEQA), Public Resources Code, Section 21000 et seq;

California Resources Agency, Delta Vision Strategic Plan, October 2008California Water Code, Division 6 Part 2.6, §§10610 - 10656), Urban Water Management Planning Act. Calleguas Municipal Water District, 2015 Urban Water Management Plan, June 2016.

California Resources Agency, Delta Vision Strategic Plan, October 2008

California Urban Water Conservation Council (CUWCC), Memorandum of Understanding Regarding Urban Water Conservation in California (MOU), adopted September 1991, amended January 2016.

California Water Code, Division 6 Part 2.6, §§10610 - 10656), Urban Water Management Planning Act.

California Water Code, Division 6, Conservation, Development and utilization of State Water Resources, Part 2.10, Sections 10912.

Calleguas Municipal Water District, 2015 Urban Water Management Plan, June 2016.

Calleguas Municipal Water District, Board of Director Meeting, Meeting Minutes, August 2019.

CEQA Guidelines, California Code of Regulations, Section 15000 et. seq.

City of Thousand Oaks, Article 11. Water Conservation, June 2009

City of Thousand Oaks, General Plan Land Use Map, adopted October 20, 2015.

City of Thousand Oaks, Negative Declaration 2915-70251, Land Use Amendment 2015-70251/Specific Plan Amendment SPA 2015-70138, May 27, 2015. p. 25.

Municipal Water Act of 1911, California Water Code Section 71000.

SB 610, Costa. California Water Code, Division 6, Conservation, Development and utilization of State Water Resources, Part 2.10, Sections 10910 – 10915.Water Supply Planning to Support Existing and Planned Future Uses. effective January 1, 2002.

State Water Resources Control Board, California Water Code, Section 10910 (c)(1), Stats. 1995, Ch. 881, Sec. 4.

USEPA, Wastewater Technology Fact Sheet. Package Treatment Plants. https://www3.epa.gov/npdes/pubs/package_plant.pdf

World Population Review , https://worldpopulationreview.com/us-counties/ca/ventura-county-population

2009 Comprehensive Water Legislation Package consists of four bills adopted on November 4, 2009 - SBX7-1 (Simitian) Delta Governance • SBX7-6 (Steinberg) Groundwater Monitoring • SBX7-7 (Steinberg) Water Conservation • SBX7-8 (Steinberg) Water Diversions.