DRAFT

Ben Clark Training Center School of Public Safety Project
Initial Study and Mitigated Negative Declaration

Prepared for:

Riverside Community College District
3801 Market Street
Riverside, California 92501
Contact: Bart Doering, Facilities Development Director

Prepared by:

DUDEK
27372 Calle Arroyo
San Juan Capistrano, California 92675
Contact: Rachel Struglia, PhD, AICP, Project Manager

JUNE 2021

Printed on 30% post-consumer recycled material.

Table of Contents

APPENDICES

FIGURES

TABLES

INTENTIONALLY LEFT BLANK

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
AFB	Air Force Base
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
BCTC	Ben Clark Training Center
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CAP	Climate Action Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CH_4	methane
CHRIS	California Historical Resources Information System
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of Riverside
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
dB	decibel
dBA	A-weighted decibel
District	Riverside Community College District
DPM	diesel particulate matter
EIC	Eastern information Center
EIR	Environmental Impact Report
EOP	Emergency Operation Plan
EPA	U.S. Environmental Protection Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gas
GWP	global warming potential
HVAC	heating, ventilation, and air conditioning
I	Interstate
IS	Initial Study
JPA	Joint Powers Authority
L_{dn}	day–night average noise level
L_{eq}	equivalent noise level
LOS	level of service
LST	localized significance threshold
MM	Mitigation Measure

Acronym/Abbreviation	Definition
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MT	metric ton
MVC	Moreno Valley College
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO_2	nitrogen dioxide
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OPR	California Governor's Office of Planning and Research
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
PPV	peak particle velocity
PRC	California Public Resources Code
project	School of Public Safety
RCNM	Roadway Construction Noise Model
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SHPO	State Historic Preservation Office
SLF	Sacred Lands File
SOx	sulfur oxides
ST	short term
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminant
VMT	vehicle miles traveled
VOC	volatile organic compound
WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments

1 Introduction

1.1 Project Overview

The Riverside Community College District (District) is proposing construction of a classroom and administration building and a law enforcement and emergency management response educational facility for the School of Public Safety (project). The project would be located at the Ben Clark Training Center (BCTC) and would provide two buildings for the School of Public Safety, an instructional department within the District's Moreno Valley College (MVC). The project would be built in two phases as funding becomes available. Phase I would be constructed within the short-term (0–1 year after project approval) and would involve construction of the classroom and administration building. Phase II would be constructed in the long-term (1–5 years after project approval) and would involve construction of the law enforcement and emergency management response educational facility.

1.2 California Environmental Quality Act Compliance

The District is the lead California Environmental Quality Act (CEQA) agency responsible for review and approval of the proposed project. Based on the findings of the Initial Study (IS), the City has made the determination that a Mitigated Negative Declaration (MND) is the appropriate environmental document to be prepared in compliance with CEQA (California Public Resources Code, Section 21000 et seq.). As stated in CEQA Section 21064, an MND may be prepared for a project subject to CEQA when an IS has identified no potentially significant effects on the environment.

This Draft IS/MND has been prepared by the District as lead agency and is in conformance with Section 15070(a) of the CEQA Guidelines (14 CCR 15000 et seq.). The purpose of this MND and the IS Checklist is to determine any potentially significant impacts associated with the proposed project and to incorporate mitigation measures into project design, as necessary, to reduce or eliminate the significant or potentially significant effects of the project.

1.3 Public Review Process

In accordance with CEQA, a good-faith effort has been made during preparation of this IS/MND to contact affected agencies, organizations, and persons who may have an interest in this project.

In reviewing the IS/MND, affected public agencies and the interested public should focus on the sufficiency of the document in identifying and analyzing the project's possible impacts on the environment. A copy of the Draft IS/MND and related documents are available for review at the District (see address below) between 8:00 a.m. and 5:00 p.m., Monday through Friday.

Riverside Community College District
3801 Market Street
Riverside, California 92501

The document is also available on the District's website at www.rccd.edu.

Comments on the Draft IS/MND may be made in writing before the end of the public review period. A 30-day review and comment period from June 15, 2021, to July 14, 2021, has been established in accordance with Section 15072(a) of the CEQA Guidelines. Following the close of the public comment period, the District will consider this Draft IS/MND and comments thereto in determining whether to approve the proposed project.

Written comments on the Draft IS/MND should be sent to the following address by 5:00 p.m., July 14, 2021.

Riverside Community College District
3801 Market Street
Riverside, California 92501
Contact: Bart Doering, Facilities Development Director
Telephone: 951.222.8962
Email: Bart.Doering@rccd.edu

2 Project Description

2.1 Project Location

The project site is located within the western Riverside County sub-region of Southern California. The project site is within a relatively developed area of Riverside County and is located within the northern portion of the BCTC at 16791 Davis Avenue, located south of 11th Street, between Davis Avenue and Bundy Avenue (Figure 1, Project Location). The project site is located on one parcel that encompasses the entire BCTC (Assessor's Parcel Number [APN] 294110005).

The BCTC is located southeast of the City of Riverside, west of the City of Moreno Valley and March Air Reserve Base, and northwest of the City of Perris. The BCTC also sits south and southeast of Orangecrest and Woodcrest, heavily developed residential communities, as well as north of the community known as Mead Valley. Regional access to the project site is provided via Interstate (I) 215, located approximately 1.6 miles east of the project site.

Within the BCTC, the project site is accessible via Bundy Avenue and 11th Street.

2.2 Environmental Setting

Background

The BCTC is one of the largest public safety training centers in Southern California. It encompasses approximately 375 acres of the former March Air Force Base (AFB). The March AFB was an active military installation almost continually from 1918 to 1996, when it was converted to the March Air Reserve Base and relocated east of I-215. In 1999, the federal government transferred the land that is now the BCTC to the County of Riverside (County) for the purposes of developing and operating a public safety training center. Since that time, the County has partnered with various public agencies to develop and use training and educational facilities at the BCTC in furtherance of that mission. These agencies include the Riverside County Sheriff's Department, California Department of Forestry and Fire Protection (CAL FIRE), Riverside County Fire Department, California Highway Patrol, Riverside County Probation Department, and the District (MVC 2021).

The District has long partnered with the County of Riverside and local and state-wide public safety agencies to provide public safety education training. As early as the 1950s, the District partnered with the Riverside County Sheriff's Department to provide law enforcement training at the District's Riverside City College campus. Over the decades, the District's partnerships and programs expanded to include training for fire, medical, and other public safety services. In 1996, the District moved the majority of its public safety training and education operations to the BCTC, and in 2006, all programs were realigned from Riverside City College to MVC under the MVC's School of Public Safety (MVC 2021).

The MVC School of Public Safety operates as an instructional department of MVC and continues to provide educational and training opportunities for students and current professionals interested in pursuing and advancing careers in law enforcement, fire, homeland security, and emergency medical services. MVC operates more than 35,000 square feet of instructional and administrative space within a combination of permanent and modular

classrooms and offices at the BCTC. The District leases the land for these facilities from the County of Riverside, which owns the entirety of the BCTC (MVC 2021).

Project Site and Surrounding Land Uses

Per the County of Riverside General Plan, the entire BCTC, inclusive of the project site, is located within the Community Development Foundation component of the County and is located within the boundaries of the March Area Plan area (County of Riverside 2015a). The March Area Plan is subject to the land use designations found in the March Joint Powers Authority (JPA)[1] General Plan, which designates the entire BCTC as Public Facility (PF) (Figure 2, General Plan Land Use Designation) (MJPA 1998). Additionally, the County's online mapping tool classifies the BCTC as being located within the March Area Zoning District and designates the BCTC with a zoning classification of Rural Residential (R-R) (Figure 3, Existing Zoning) (County of Riverside 2021). Refer to Section 3.11, Land Use and Planning, for further details on land use compatibility.

Bordering the BCTC, land is designated as Specific Plan (SP) for planned industrial uses to the north and east, and Cemetery (CM) to the southeast (MJPA 1998). The land directly south and southwest of the BCTC, located opposite Barton Street and Nandina Avenue, is not located within the jurisdiction of the March JPA. The County designates this land as part of the Rural Community Foundation (RCF) (County of Riverside 2015a) and zones the land as the Mead Valley District to the south and Woodcrest District to the southwest (County of Riverside 2021).

Existing Operations and Site Condition

The approximately 10-acre project site is located within the northwestern portion of the BCTC where the majority of existing training and instructional activities occur. The project site currently contains modular classroom buildings, a dirt athletic track, a gravel parking lot, and vacant land.

The project site is bounded by 11th Street to the north, Bundy Avenue to the east, a gravel parking lot to the west, and CAL FIRE Drill Grounds to the south. Portable and permanent classrooms, dormitories, and parking areas are located east of the project site beyond Bundy Avenue.

2.3 Project Characteristics

Proposed Project

The project would involve the demolition or relocation of existing modular classrooms on-site and the development and operation of two educational buildings that would provide approximately 54,135 square feet of educational and administrative spaces for the MVC School of Public Safety. The project would be built in two phases as funding becomes available. Phase I of the project would be constructed in the western portion of the project site and would involve the construction of an approximately 14,135-square-foot one-story classroom and administration building (Figure 4a, Site Plan – Phase I). Phase II of the project would be constructed on the eastern portion of the project site and involves construction of an approximately 40,000-gross-square-foot two-story law enforcement and emergency management response educational facility (Figure 4b, Site Plan – Phase II).

[1] The March JPA is a joint powers authority consisting of the Cities of Perris, Moreno Valley, and Riverside, and the County of Riverside. The County of Riverside transferred local land use authority to the March Air Reserve Base and successor lands to the March JPA in 1997.

Phase I would be constructed within the short-term (0 to 1 year after project approval) and Phase II would be constructed in the long-term (1 to 5 years after project approval). While this Draft IS/MND evaluates both phases as part of the project, detailed information for Phase II may not yet be fully available and/or subject to change.

The proposed project is the first project in a series of training and instructional projects that are planned for the BCTC. However, any projects beyond the proposed project remain at the conceptual level. It is anticipated that these projects would be identified in a future facilities master plan for the BCTC, which the District anticipates would be drafted in partnership with the County of Riverside and other public agencies that use the BCTC. Currently, no funding sources have yet been identified for this effort, so it is unknown when these planning initiatives would commence. Any future development projects beyond the scope of the proposed project would be subject to additional CEQA review.

Site Access, Circulation, and Parking

Site access would be provided via three proposed driveways along 11th Street. Two of the proposed driveways would lead to passenger vehicle parking lots located on the eastern and western corner of the of the project site. The third proposed driveway would lead to a loading area behind the building proposed for Phase I. Phase I would include 84 parking spots (inclusive of five parking spaces meeting the requirements of the Americans with Disabilities Act) located at the western corner of the project site. Phase II would include 125 parking spots located at the eastern corner of the project site.

Frontage Improvements

The project would include improvements to the frontages of the project site, including a new concrete walkway to provide pedestrian access from 11th Street to the proposed project. A variety of trees, shrubs, and vegetated groundcovers would be planted within landscape planters.

Stormwater and Other Utility Improvements

Since the project site is located within the BCTC and is surrounded by existing classroom buildings and dormitories, the site is served by existing domestic water, sanitary sewer, stormwater, electrical and natural gas utilities. The project would connect to these utilities from their current locations within the project vicinity.

Phase I of the project would also feature a stormwater detention basin to capture and attenuate stormwater flows. This basin would be designed to capture and retain flows from design flows consistent with the Riverside County Flood Control and Water Conservation Hydrology Manual prior to routing flows into the public storm drain system. The drainage system for Phase II of the project has not yet been designed but would comply with all applicable regulations pertaining to stormwater management.

Solar panels would be installed on the rooftop of the classroom building and in the parking lot. The rooftop array is expected to yield 50 kilowatts (kW) of power and the carport would yield 60 kW of power. An 80 kW per hour battery energy storage system would be located adjacent to the classroom building's east side (RCCD 2020). The timing of the solar panel installation is currently unknown. Therefore, for the purposes of this analysis, the beneficial impacts of installing solar panels (i.e., off-setting greenhouse gas emissions and energy usage) is not accounted for.

2.4 Project Construction and Phasing

The project would be built in two phases as funding becomes available. Phase I would be constructed within the short-term (0 to 1 year after project approval) and phase II would be constructed in the long-term (1 to 5 years after project approval). Construction of the project would include minor demolition of the existing sidewalk and landscaping, removal or relocation of existing portable classrooms to the east, site preparation, grading, underground utility construction (trenching), building construction, and architectural coating. For the purposes of this analysis, it is assumed that construction of Phase I of the project would commence in September 2021[2] and would last approximately 10 months. Phase II of the project was assumed to commence in August 2022 and would last about 14 months. All construction areas and staging areas would be fenced off and isolated from the remaining BCTC site. Construction phasing details are provided in Section 3.3, Air Quality.

Site preparation would involve the removal of existing concrete and landscaping located on the site. Additional site clearing and rough grading would occur during the site preparation phase. After grading, there would be trenching of soil for the placement of underground utilities. Building construction would involve the construction of the proposed buildings in Phase I and Phase II and associated exterior hardscape features (i.e., sidewalks, access ramps, stairways). The paving phase would involve paving walkways and hardscape around the building. The architectural coating phase would involve the application of interior and exterior paints and coatings. Additional information about construction phasing is provided in Section 3.3, Air Quality.

2.5 Project Approvals

The actions and/or approvals that the District needs to consider for the project include, but are not limited to, the following: This list is preliminary, and may not be comprehensive:

- Adoption of the Initial Study/Mitigated Negative Declaration (IS/MND)
- Division of State Architect approval of the site plan

Subsequent non-discretionary approvals (which would require separate processing through the District) would include, but may not be limited to a demolition permit, grading permit, building permits, and occupancy permits.

[2] Construction start dates may start later than what is assumed in this analysis. However, in an effort to capture a wort-case scenario for air quality emissions, an "earliest reasonable construction start date" is assumed. Assuming the earliest start date for construction represents the worst-case scenario for air quality and greenhouse gas emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

3 Initial Study Checklist

1. **Project title:**

   Ben Clark Training Center School of Public Safety Project

2. **Lead agency name and address:**

   Riverside Community College District
   3801 Market Street
   Riverside, California 92501

3. **Contact person and phone number:**

   Bart Doering
   Facilities Development Director
   951.222.8962

4. **Project location:**

   The project site is located within the northern portion of the BCTC at 16791 Davis Avenue, located south of 11th Street, between Davis Avenue and Bundy Avenue (Figure 1, Project Location). The project site is located on one parcel that encompasses the entire BCTC (APN 294110005). Regional access to the project site is provided via I-215, located approximately 1.6 miles east from the project site.

5. **Project sponsor's name and address:**

   Riverside Community College District
   3801 Market Street
   Riverside, California 92501

6. **General plan designation:**

   Public Facility (PF)

7. **Zoning:**

   Zoning District: March Area Zoning District
   Zoning Classification: Rural Residential (R-R)

8. **Description of project:**

   The project would develop an approximately 10-acre (gross) site within the northern portion of the BCTC. Phase I of the project would involve the construction of an approximately 14,135-square-foot one-story classroom and administration building (building A) (Figure 4a, Site Plan – Phase I). Phase II of the project involves construction of an approximately 40,000-gross-square-foot two-story law enforcement and emergency management response educational facility (building B) (Figure 4b, Site Plan – Phase II).

   Refer to Section 2, Project Description, for a detailed description of the project and associated improvements.

9. Surrounding land uses and setting:

The approximately 10-acre project site is located within the northwestern portion of the BCTC where the majority of existing training and instructional activities occur. The project site currently contains modular classroom buildings, a dirt athletic track, a gravel parking lot, and vacant land.

The project site is bounded by 11th Street to the north, Bundy Avenue to the east, a gravel parking lot to the west, and CAL FIRE Drill Grounds to the south. Portable and permanent classrooms, dormitories, and parking areas are located east of the project site beyond Bundy Avenue.

10. Other public agencies whose approval is required:

Division of State Architect approval of the site plan.

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.?

Yes. Refer to Section 3.18, Tribal Cultural Resources, for further discussion about the tribal cultural resource and the tribal consultation process.

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 and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

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

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

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

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

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

HUSSAIN AGHA
HUSSAIN AGAH

June 14, 2021

Signature — Hussain Agah, Associate Vice Chancellor, Facilities Planning — Date

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a. Earlier Analysis Used. Identify and state where they are available for review.
   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a. The significance criteria or threshold, if any, used to evaluate each question; and
   b. The mitigation measure identified, if any, to reduce the impact to less than significance

3.1 Aesthetics

	Potentially Significant Impact	Less Than Significant Impact 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 day or nighttime views in the area?	☐	☐	☒	☐

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

Less-than-Significant Impact. According the March JPA General Plan (MJPA 1998), the March JPA planning area contains scenic areas from the architectural value of the homes within the former residential community known as Green Acres (east of I-215) to the scenic vistas of the open space hillside areas west of I-215. Additionally, the March JPA General Plan designates Van Buren Boulevard as a scenic roadway. Van Buren Boulevard is located approximately 0.5 miles north of the project site. However, the project site is located within the BCTC and is surrounded by other BCTC facilities. Several of the buildings immediately surrounding the project site are three stories tall. The Phase I building would be two stories and the Phase II building would be one story; thus, the proposed buildings would be consistent with building heights in the surrounding area. Given the project's height, the inclusion of the project within the existing viewshed would be consistent with views currently found throughout the project area. Moreover, due to the existing development between the project site and surrounding scenic areas and vistas, the project would not have a substantial adverse effect on a scenic vista. Therefore, impacts associated with scenic vistas would be less than significant.

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

No Impact. As stated in Section 3.1(a), the only scenic roadway in the vicinity of the project site is Van Buren Boulevard, located approximately 0.5 miles north of the site. There are no designated state scenic highways

near the project site (Caltrans 2021). The closest designated state scenic highway is a portion of the I-10 Freeway, running 9 miles from the Calimesa area to the San Bernardino City Limit, which is approximately 15 miles to the northeast at its closest point. Existing development is located in between the project site and both Van Buren Boulevard and the scenic portion of I-10, precluding the availability these views of or across the project site. As such, the project would have no impact on state scenic highways or local scenic corridors.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less-than-Significant Impact. Figure 5, Exterior Rendering Phase I, shows the proposed design and height of the proposed education building for Phase I. The solar panels would be placed on top of this building and would not be visible. While the exact design and elevations are not available for the Phase II building, they would be similar to the Phase I Building. These buildings would be situated within the BCTC, which is an active public safety training facility and contains other two- and three-story buildings of similar design and height. The parking lot array would be placed in the parking lot to the west of the classroom building and would be a carport style structure. Given the consistency of the project with surrounding development, the project would not substantially degrade the existing visual character or change the quality of public views of the site and its surroundings. Thus, the project would have a less-than-significant impact to the existing visual character and quality of public views.

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

Less-than-Significant Impact. Construction activities would be conducted Monday through Friday from 7:00 a.m. to 6:00 p.m. and Saturday from 8:00 a.m. to 5:00 p.m. Although nighttime lighting would not generally be needed for construction activities, lighting may be needed during winter months when the hours of daylight are shorter than in other seasons of the year. When in use, nighttime lighting for construction would be focused on construction areas and would not spill over into other areas of the BCTC or other surrounding areas. In addition, construction lighting would be shielded and directed downward and would be of the minimum required intensity to provide for safe construction activity. Therefore, lighting necessary to conduct construction activities is not anticipated to result in substantial lighting that could affect nighttime views in the area. Impacts would be less than significant.

With regard to project operation, similar to existing buildings within the BCTC, the proposed project buildings would include interior lighting for illumination of classrooms, offices, meeting rooms, restrooms, and other areas and exterior lighting for safety and security purposes as well as outdoor lighting for security purposes. Exterior lighting would be typical of other lighting found throughout the BCTC. In conformance with Section 8.80.050 of the County of Riverside Municipal Code, all outdoor lighting would be directed downward, adequately shielded, and contained on the project site (County of Riverside 2020). Thus, lighting and glare impacts resulting from the project would be less than significant.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact 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 Department 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?	☐	☐	☐	☒

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

No Impact. Based on farmland maps prepared by the California Department of Conservation, the project site is not located in an area designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The majority of the project site is designated as Other Land (CDOC 2021a). Other Land is characterized as land that is not included in any other mapping category. Additionally, a small portion of the project site located along the northern boundary is designated as Urban and Built-Up Land (CDOC 2021a).

Urban and Built-Up land is characterized as land occupied by structures with a building density of at least 1 unit to 1.5 acres. Therefore, no impact associated with conversion of important farmland would occur.

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

No Impact. The project site is not located within an area that is zoned or designated for agricultural use or under a Williamson Act Contract (County of Riverside 2020). The March JPA General Plan designates the entire BCTC, inclusive of the project site, as Public Facility (PF) (MJPA 1998). Therefore, no impact would occur.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The project site is not zoned as forestland, timberland, or timberland zoned Timberland Production; nor does the site support these uses. The March JPA General Plan designates the entire BCTC, inclusive of the project site, as Public Facility (PF) (MJPA 1998). Therefore, no impact would occur.

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

No Impact. The project site is located within the BCTC, which is an active public safety training facility. The project site is not located on or adjacent to forestland. As such, the project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact would occur.

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

No Impact. As discussed previously in Section 3.2(a–d), the project is located within the BCTC, which is an active public safety training facility. The project site is not located on or adjacent to any parcels identified as important farmland or forestland. In addition, the proposed project would not involve changes to the existing environment that would result in the indirect conversion of important farmland or forestland located away from the project site. Therefore, no impact associated with the conversion of farmland or forestland would occur.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐

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

Less-than-Significant Impact. The project site is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County, and is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD).

The SCAQMD administers the SCAB's Air Quality Management Plan (AQMP), which is a comprehensive document outlining an air pollution control program for attaining the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The most recently adopted AQMP for the SCAB is the 2016 AQMP (SCAQMD 2017).[3] The 2016 AQMP focuses on available, proven, and cost-effective alternatives to traditional air quality strategies while seeking to achieve multiple goals in partnership with other entities seeking to promote reductions in greenhouse gases (GHGs) and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017).

The purpose of a consistency finding with regard to the AQMP is to determine if a project is consistent with the assumptions and objectives of the 2016 AQMP, and if it would interfere with the region's ability to comply with federal and state air quality standards. The SCAQMD has established criteria for determining

[3] The SCAQMD has initiated the development of the 2022 AQMP to address the attainment of the 2015 8-hour ozone standard (70 parts per billion) for the SCAB and the Coachella Valley. Preliminary rule development for the 2022 AQMP is expected to begin in July 2021 including control measures developed through Residential and Commercial Buildings and Mobile Source Working Groups.

consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3 of the SCAQMD CEQA Air Quality Handbook. These criteria are as follows (SCAQMD 1993):

- **Consistency Criterion No. 1:** Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.
- **Consistency Criterion No. 2:** Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the first criterion, project-generated criteria air pollutant emissions have been estimated and analyzed for significance and are addressed under Section 3.3(b). Detailed results of this analysis are included in Appendix A, Air Quality and Greenhouse Gas Emissions CalEEMod Output Files. As presented in Section 3.3(b), the proposed project would not generate construction or operational criteria air pollutant emissions that exceed the SCAQMD's thresholds, and the project would therefore be consistent with Criterion No. 1.

The second criterion regarding the potential of the proposed project to exceed the assumptions in the AQMP or increments based on the year of project buildout and phase is primarily assessed by determining consistency between the proposed project's land use designations and its potential to generate population growth. In general, projects are considered consistent with, and not in conflict with or obstructing implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (SCAQMD 1993). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, and employment by industry) developed by the Southern California Association of Governments (SCAG) for its 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2016). SCAQMD uses this document, which is based on general plans for cities and counties in the SCAB, to develop the AQMP emissions inventory (SCAQMD 2017).[4] The SCAG RTP/SCS and associated Regional Growth Forecast are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans.

The proposed project site is designated as Public Facilities (PF) in the County General Plan (County of Riverside 2015a) and is located within the March Area Zoning District (County of Riverside 2021). The project would be consistent with the existing zoning of the project site. As such, since the proposed project is not anticipated to result in residential population growth or generate an increase in employment that would conflict with existing employment-population projections, it would not conflict with or exceed the assumptions in the 2016 AQMP. Accordingly, the proposed project is consistent with the SCAG RTP/SCS forecasts used in the SCAQMD AQMP development.

[4] Information necessary to produce the emissions inventory for the South Coast Air Basin (SCAB) is obtained from the South Coast Air Quality Management District (SCAQMD) and other governmental agencies, including the California Air Resources Board (CARB), California Department of Transportation, and Southern California Association of Governments (SCAG). Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into its Travel Demand Model for estimating/projecting vehicle miles traveled and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy are integrated in the 2016 Air Quality Management Plan (SCAQMD 2017).

In summary, based on the considerations presented for the two criteria, impacts relating to the proposed project's potential to conflict with or obstruct implementation of the applicable AQMP would be less than significant.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less-than-Significant Impact. Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used to determine whether a project's individual emissions would have a cumulatively considerable contribution to air quality. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003a).

A quantitative analysis was conducted to determine whether the proposed project might result in emissions of criteria air pollutants that may cause exceedances of the NAAQS or CAAQS, or cumulatively contribute to existing nonattainment of ambient air quality standards. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide, particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}; course particulate matter), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$; fine particulate matter), and lead. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O_3, as well as CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$.

Regarding NAAQS and CAAQS attainment status,[5] the SCAB is designated as a nonattainment area for federal and state O_3 and $PM_{2.5}$ standards (CARB 2019; EPA 2020). The SCAB is also designated as a nonattainment area for state PM_{10} standards; however, it is designated as an attainment area for federal PM_{10} standards. The SCAB is designated as an attainment area for federal and state CO and NO_2 standards, as well as for state sulfur dioxide standards. Although the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard.[6]

The proposed project would result in emissions of criteria air pollutants for which the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (EPA) have adopted ambient air quality standards (i.e., the NAAQS and CAAQS). Projects that emit these pollutants have the potential to cause, or contribute to, violations of these standards. The SCAQMD CEQA Air Quality Significance Thresholds, as revised in April 2019, set forth quantitative emission significance thresholds for criteria air pollutants, which, if exceeded, would indicate the potential for a project to contribute to violations of the NAAQS or CAAQS. Table 3.3-1 lists the revised SCAQMD Air Quality Significance Thresholds (SCAQMD 2019).

---

5 An area is designated as in attainment when it is in compliance with the National Ambient Air Quality Standards and/or the California Ambient Air Quality Standards. These standards for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare are set by the U.S. Environmental Protection Agency and CARB, respectively. Attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards.

6 Re-designation of the lead NAAQS designation to attainment for the Los Angeles County portion of the SCAB is expected based on current monitoring data. The phase-out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

Table 3.3-1. South Coast Air Quality Management District Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	*Construction (in pounds/day)*	*Operation (in pounds/day)*
VOC	75	55
NO_x	100	55
CO	550	550
SO_x	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55
Lead[a]	3	3
Toxic Air Contaminants and Odor Thresholds		
Toxic air contaminants[b]	Maximum incremental cancer risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic and Acute Hazard index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	

Source: SCAQMD 2019.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); $PM_{2.5}$ = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District;
[a] The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the proposed project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
[b] Toxic air contaminants include carcinogens and noncarcinogens.

The project would result in a cumulatively considerable net increase for O_3, which is a nonattainment pollutant, if the proposed project's construction or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 3.3-1. These emission-based thresholds for O_3 precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly, and the effects of an individual project's emissions of O_3 precursors (i.e., VOCs and NO_x) on O_3 levels in ambient air cannot be determined through air quality models or other quantitative methods.

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions from construction and operation of the project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with construction and operational activities from a variety of land use projects, including colleges. The following discussion quantitatively evaluates project-generated construction and operational emissions and impacts that would result from implementation of the proposed project.

Construction Emissions

Construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (e.g., off-road construction equipment, soil disturbance, and VOC off-gassing from architectural coatings and asphalt pavement application) and off-site sources (e.g., vendor trucks, haul trucks, and worker vehicle trips). Specifically, entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. Internal combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$. Application of architectural coatings, such as exterior paint and other finishes, and application of asphalt pavement would

also produce VOC emissions. Construction emissions can vary substantially from day to day depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions.

For purposes of estimating proposed project emissions, and based on information provided by the District, it is assumed that construction of Phase I of the project would commence in September 2021[7] and would last approximately 10 months. Phase II of the project was assumed to commence in August 2022 and would last about 14 months. Detailed construction equipment modeling assumptions are provided in Appendix A. For Phase I, construction specifics are available and were included in the modeling assumptions. However, for Phase II, due to the future nature of the development, construction specifics are not available at this time, and the majority of the assumptions are based on CalEEMod default values. The analysis contained herein is based on the following schedule assumptions (duration of phases is approximate).

Phase I construction phases include the following:

Site Preparation / Grading:

- Demolition: 11 days.
- Site Preparation: 3 days.
- Grading / Over-excavation: 10 days.

Structure:

- Building Construction: 106 days.
- Architectural Coating - Plaster Exterior: 15 days.

Site Improvements

- Building Construction: 62 days.
- Paving - Asphalt Paving / Cure: 7 days.
- Architectural Coating - Striping: 3 days.

Interior

- Building Construction: 140 days:
- Architectural Coating - Paint - Primer / First Coat: 5 days.
- Architectural Coating - Final Paint: 5 days.

Phase II construction phases include the following:

- Demolition: 20 days.
- Site Preparation: 5 days.
- Grading: 8 days.

[7] The analysis assumes a construction start date of September 2021 which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

- Building Construction: 230 days.
- Paving: 18 days.
- Architectural coating: 18 days.

General construction equipment modeling assumptions for Phase I and Phase II of the project are provided in Table 3.3-2. Default values for equipment mix, horsepower, and load factor provided in CalEEMod were used for all construction equipment. For the analysis, it was generally assumed that heavy-duty construction equipment would be operating at the site five days per week, up to a maximum of 8 hours per day. Detailed construction equipment modeling assumptions are provided in Appendix A.

Table 3.3-2. Construction Workers, Vendor Trips, and Equipment Use per Day

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
Phase I						
Site Preparation / Grading						
Demolition	16	0	24	Concrete/Industrial Saws	1	8
				Excavators	3	8
				Rubber Tired Dozers	2	8
Site Preparation	18	0	0	Rubber Tired Dozers	3	8
				Tractors/Loaders/Backhoes	4	8
Grading / Over Excavation	16	0	276	Excavators	1	8
				Graders	1	8
				Rubber Tired Dozers	1	8
				Tractors/Loaders/Backhoes	3	8
Structure						
Building Construction	44	18	0	Cranes	1	7
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	7
				Welders	1	8
Plaster Exterior	10	0	0	Air Compressors	1	6
Site Improvement						
Building Construction	44	18	0	Cranes	1	7
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	7
				Welders	1	8

Table 3.3-2. Construction Workers, Vendor Trips, and Equipment Use per Day

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
Asphalt Paving / Cure	20	2	0	Cement and Mortar Mixers	2	6
				Pavers	1	8
				Paving Equipment	2	6
				Rollers	2	6
				Tractors/Loaders/Backhoes	1	8
Striping	10	2	0	Air Compressors	1	6
Interior						
Building Construction	44	18	0	Cranes	1	7
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	7
				Welders	1	8
Paint – Primer / 1st Coat	10	0	0	Air Compressors	1	6
Final Paint	10	2	0	Air Compressors	1	6
Phase II						
Demolition	16	0	62	Concrete/Industrial Saws	1	8
				Excavators	3	8
				Rubber Tired Dozers	2	8
Site Preparation	18	0	0	Rubber Tired Dozers	3	8
				Tractors/Loaders/Backhoes	4	8
Grading	16	0	276	Excavators	1	8
				Graders	1	8
				Rubber Tired Dozers	1	8
				Tractors/Loaders/Backhoes	3	8
Building Construction	54	22	0	Cranes	1	7
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	7
				Welders	1	8
Paving	20	0	0	Cement and Mortar Mixers	2	6
				Pavers	1	8
				Paving Equipment	2	6
				Rollers	2	6
				Tractors/Loaders/Backhoes	1	8
Architectural Coating	12	2	0	Air compressors	1	6

See Appendix A for additional details.

Emissions generated during construction (and operation) of the project are subject to the rules and regulations of the SCAQMD. Rule 403 (Fugitive Dust)[8] requires the implementation of measures to control the emission of visible fugitive/nuisance dust, such as wetting soils that would be disturbed. It was assumed that the active sites would be watered at least two times daily, resulting in an approximately 55% reduction of fugitive dust (CalEEMod default value), to represent compliance with SCAQMD standard dust control measures in Rule 403. The application of architectural coatings, such as exterior/interior paint and other finishes, and the application of asphalt pavement would also produce VOC emissions; however, the contractor is required to procure architectural coatings that comply with the requirements of SCAQMD's Rule 1113 (Architectural Coatings).[9]

Table 3.3-3 shows the estimated maximum daily construction emissions associated with the construction of Phase I and Phase II of the proposed project.

Table 3.3-3. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year[b]	VOCs	NO_x	CO	SO_x	PM_{10}[a]	$PM_{2.5}$[a]
	Pounds per Day					
Phase I						
2021	3.97	40.55	22.19	0.06	10.38	6.40
2022	33.27	44.16	49.16	0.09	3.56	2.37
Phase II						
2022	3.25	33.13	21.23	0.04	9.94	6.01
2023	22.16	15.95	18.24	0.04	1.45	0.86
Maximum	**33.27**	**40.55**	**22.19**	**0.09**	**10.38**	**6.40**
SCAQMD threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD 2019.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); $PM_{2.5}$ = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District.
See Appendix A for detailed results.

[a] These estimates reflect control of fugitive dust (watering three times daily) required by SCAQMD Rule 403.

[b] Phase I construction would cease on approximately July 5, 2022, while Phase II construction would commence on approximately August 8, 2022. Therefore, no construction overlap would occur between phases.

As shown in Table 3.3-3, Phase I and Phase II of the proposed project's maximum daily construction emissions would not exceed the SCAQMD thresholds for any criteria air pollutant.

[8] SCAQMD Rule 403 requires implementation of various best available fugitive dust control measures for different sources for all construction activity sources within its jurisdictional boundaries. Dust control measures include, but are not limited to, maintaining stability of soil through pre-watering of site prior to clearing, grubbing, cut and fill, and earth-moving activities; stabilizing soil during and immediately after clearing, grubbing, cut and fill, and other earth-moving activities; stabilizing backfill during handling and at completion of activity; and pre-watering material prior to truck loading and ensuring that freeboard exceeds 6 inches. While SCAQMD Rule 403 requires fugitive dust control beyond watering control measures, compliance with Rule 403 is represented in CalEEMod by assuming twice daily watering of active sites (55% reduction in PM_{10} and $PM_{2.5}$ [CAPCOA 2017]).

[9] SCAQMD Rule 1113, Architectural Coatings, requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Operational Emissions

Operation of the proposed project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from area sources, energy sources, and mobile sources, which are discussed below. The project buildout year assuming operation of Phase I and Phase II was assumed to be 2024.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2017). Consumer product VOC emissions estimated in CalEEMod are based on the floor area of non-residential buildings and on the default factor of pounds of VOC per building square foot per day. The CalEEMod default values for consumer products were assumed.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers using during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings, and SCAQMD's Rule 1113 (Architectural Coatings) governs the VOC content for interior and exterior coatings. CalEEMod default values were assumed, including the surface area to be painted, the VOC content of architectural coatings, and the reapplication rate of 10% of area per year.

Landscape maintenance includes fuel combustion emissions from equipment such as lawnmowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use are estimated based on CalEEMod default values.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, since criteria pollutant emissions occur at the power plant, which is typically off-site.

CalEEMod default values for energy consumption for the land use was applied for the project analysis. The energy use from non-residential land uses calculated in CalEEMod are based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end-use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the heating, ventilation, and air conditioning (HVAC) system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. The current version of CalEEMod assumes compliance with the 2016 Title 24 Building Energy Efficiency Standards (CAPCOA 2017); however, the project would be required to comply with the 2019 Title 24 Standards. Per the California Energy Commission Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, the first-year savings for newly constructed non-residential buildings are 197 gigawatt-hours of electricity, 76.6 megawatts of demand, and 0.27 million therms of gas, representing reductions from the 2016 Title 24 standard of 10.7%, 9%, and 1%, respectively (CEC 2018a). To take into account energy reductions associated with compliance with 2019 Title 24, the CalEEMod Title 24 electricity and natural gas values were reduced by 10.7% and 1%, respectively, for the project buildings.

Mobile Sources

Operation of the project would generate criteria air pollutant emissions from mobile sources (vehicular traffic) as a result of staff, students, and employee trips to and from the project. The maximum weekday trip rates were taken from Section 3.17, Transportation, and were assumed to be 1,096 one-way trips per day. The maximum weekday trip rate was then scaled down according to the CalEEMod default ratio for the land use to estimate updated weekend trip rates. CalEEMod was used to estimate emissions from proposed vehicular sources (refer to Appendix A). CalEEMod default data, including trip characteristics, emissions factors, and trip distances, were conservatively used for the model inputs. Emission factors representing the vehicle mix and emissions for 2024 were used to estimate emissions associated with vehicular sources.

Table 3.3-4 represents the maximum daily emissions associated with the first year that both phases of the project would be operational (2024). The values shown are the maximum summer and winter daily emissions results from CalEEMod. Complete details of the emissions calculations are provided in Appendix A.

Table 3.3-4. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions (Phase I and Phase II)

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Area	2.25	0.00	0.04	0.00	0.00	0.00
Energy	0.02	0.20	0.17	0.00	0.02	0.02
Mobile	1.58	7.14	20.09	0.08	7.10	1.94
Total	**3.85**	**7.34**	**20.30**	**0.08**	**7.12**	**1.96**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); $PM_{2.5}$ = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District.
See Appendix A for complete results.
Operational year 2024 was assumed. The values shown are the maximum summer or winter daily emissions results from CalEEMod. The total values may not add up exactly due to rounding.

As shown in Table 3.3-4, maximum daily operational emissions of VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ generated by the proposed project would not exceed the SCAQMD's significance thresholds.

As previously discussed, the SCAB has been designated as a federal nonattainment area for O_3 and $PM_{2.5}$, and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. However, as indicated in Tables 3.3-3 and 3.3-4, project-generated construction and operational emissions would not exceed the SCAQMD emission-based significance thresholds for VOCs, NO_x, PM_{10}, or $PM_{2.5}$.

Cumulative localized impacts would potentially occur if a project were to occur concurrently with another off-site project. Schedules for potential future projects near the project area are currently unknown; therefore, potential impacts associated with two or more simultaneous projects would be considered speculative.[10] However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all sites in the SCAQMD.

Therefore, the proposed project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant during construction and operation.

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

Less-than-Significant Impact. The project would not expose sensitive receptors to substantial pollutant concentrations as evaluated below.

Sensitive Receptors

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include sites such as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The closest sensitive receptors to the project site are residences located approximately 510 feet to the southeast.

Localized Significance Thresholds

The SCAQMD recommends a localized significance threshold (LST) analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the project as a result of proposed project activities. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD 2008a). The project is located within Source-Receptor Area 23 (Metropolitan Riverside County). This analysis applies the SCAQMD LST values for a 1-acre site within Source-Receptor Area 23 with a receptor distance of 100 meters (330 feet). However, these are conservative estimates since the closest sensitive receptor is 510 feet away and the LSTs increase with distance and site size.

[10] The California Environmental Quality Act (CEQA) Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145).

Project construction activities would result in temporary sources of on-site criteria air pollutant emissions associated with off-road equipment exhaust and fugitive dust generation. According to the Final Localized Significance Threshold Methodology, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2008a). Trucks and worker trips associated with the proposed project are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways since emissions would be relatively brief in nature and would cease once the vehicles pass through the main streets. Therefore, off-site emissions from trucks and worker vehicle trips are not included in the LST analysis. The maximum daily on-site emissions generated construction of the proposed project in each construction year for Phase I and Phase II are presented in Table 3.3-5 and are compared to the SCAQMD localized significance criteria for Source-Receptor Area 23 to determine whether project-generated on-site emissions would result in potential LST impacts.

Table 3.3-5. Construction Localized Significance Thresholds Analysis

Year	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day (On Site)[a]			
Phase I				
2021	40.50	21.65	10.18	6.35
2022	43.12	45.84	2.13	1.98
Phase II				
2022	33.09	20.70	9.75	5.95
2023	15.62	16.69	0.71	0.66
Maximum	*43.12*	*45.84*	*10.18*	*6.35*
SCAQMD LST Criteria	212	1,746	30	8
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: SCAQMD 2008a

Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); $PM_{2.5}$ = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Appendix A for detailed results.

[a] Localized significance thresholds are shown for a 1-acre disturbed area corresponding to a distance to a sensitive receptor of 100 meters in Source-Receptor Area 23 (Metropolitan Riverside County).

As shown in Table 3.3-5, proposed construction activities would not generate emissions in excess of site-specific LSTs; therefore, localized impacts of the proposed project would be less than significant.

CO Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed "CO hotspots." The transport of CO is extremely limited, as it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections operating at an unacceptable level of service (LOS) (LOS E or worse is unacceptable). Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection

that would potentially subject sensitive receptors to CO hotspots. As provided in Section 3.17, Transportation, the proposed project would not cause the LOS to operate at an unacceptable level.

In addition, at the time that the SCAQMD Handbook (1993) was published, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS as a result of the steady decline in CO concentrations in the SCAB due to turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. The SCAQMD conducted CO modeling for the 2003 AQMP[11] (SCAQMD 2003b) for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. The 2003 AQMP also projected 8-hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From years 2002 through 2005, the maximum 8-hour CO concentration was 3.8 ppm at the Sunset Boulevard and Highland Avenue intersection in 2002; the maximum 8-hour CO concentration was 3.4 ppm at the Wilshire Boulevard and Veteran Avenue in 2002.

Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least over 100,000 vehicles per day. Because the project is not anticipated to increase daily traffic volumes at any study intersection to more than 100,000 vehicles per day, a CO hotspot is not anticipated to occur.

Based on these considerations, the proposed project would not generate traffic that would contribute to potential adverse traffic impacts that may result in the formation of CO hotspots. This conclusion is supported by the analysis in Section 3.17, which demonstrates that traffic impacts would be less than significant. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Based on these considerations, the proposed project would result in a less-than-significant impact to air quality with regard to potential CO hotspots.

Toxic Air Contaminants

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. As discussed under the LST analysis, the closest sensitive receptor land uses are residences located approximately 510 feet to the southeast of the project site.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. “Incremental cancer risk” is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. The SCAQMD recommends a Hazard Index of 1 or more for acute

[11] SCAQMD’s CO hotspot modeling guidance has not changed since 2003.

(short-term) and chronic (long-term) non-carcinogenic effects. TACs that would potentially be emitted during construction activities associated with the proposed project would be diesel particulate matter.

The greatest potential for TAC emissions during construction would be diesel particulate matter (DPM) emissions from heavy equipment operations and heavy-duty trucks during construction of the project and the associated potential health impacts to sensitive receptors. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts; however, no short-term, acute relative exposure level has been established for DPM. Total project construction would last approximately 24 months, after which project-related TAC emissions would cease. According to the Office of Environmental Health Hazard Assessment, health risk assessments (which determine the exposure of sensitive receptors to toxic emissions) should be based on a 30-year exposure period for the maximally exposed individual receptor; however, such assessments should also be limited to the period/duration of activities associated with the project. A 24-month construction schedule represents a short duration of exposure (7% of a 30-year exposure period), while cancer and chronic risk from DPM are typically associated with long-term exposure. Thus, the project would not result in a long-term source of TAC emissions.

Exhaust PM_{10} is typically used as a surrogate for DPM, and as shown in Tables 3.3-3 and 3.3-5, which present total PM_{10} from fugitive dust and exhaust, project-generated construction PM_{10} emissions are anticipated to be minimal. In addition, sensitive receptors are located over 510 feet from the active project construction areas, which would reduce exposure to TACs as TAC emission dispersion increases with distance. Furthermore, the project would not require the extensive operation of heavy-duty diesel construction equipment, which is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce DPM emissions and would not involve extensive use of diesel trucks, which are also subject to a CARB Airborne Toxics Control Measure. Due to this relatively short period of exposure and minimal DPM emissions on site, TACs generated during construction would not be expected to result in concentrations causing significant health risks.

No residual TAC emissions and corresponding cancer health risk are anticipated after construction, and no long-term sources of TAC emissions are anticipated during operation of the project. CARB has published the Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2005), which identifies certain types of facilities or sources that may emit substantial quantities of TACs and therefore could conflict with sensitive land uses, such as “schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities.” The Air Quality and Land Use Handbook is a guide for siting of new sensitive land uses, and CARB recommends that sensitive receptors not be located downwind or in proximity to such sources to avoid potential health hazards. Of note, the project is not considered an air quality sensitive receptor. The enumerated facilities or sources include the following: high-traffic freeways and roads, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and large gas dispensing facilities. The project would not include any of the above-listed land uses associated with generation of TAC emissions. For the reasons previously described, the project would not result in substantial TAC exposure to sensitive receptors in the vicinity of the proposed project, and impacts would be less than significant.

Health Effects of Criteria Air Pollutants

Construction and operation of the proposed project would generate criteria air pollutant emissions; however, the project would not exceed the SCAQMD mass-emission thresholds.

The SCAB is designated as nonattainment for O_3 for the NAAQS and CAAQS. Thus, existing O_3 levels in the SCAB are at unhealthy levels during certain periods. Health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2021). The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCAB due to O_3 precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O_3 NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O_3 precursors is speculative. Because the proposed project would not involve activities that would result in O_3 precursor emissions (i.e., VOCs or NO_x) that would exceed the SCAQMD thresholds, as shown in Tables 3.3-3 through 3.3-5, the proposed project is not anticipated to substantially contribute to regional O_3 concentrations and its associated health impacts during construction or operation.

In addition to O_3, NO_x emissions contribute to potential exceedances of the NAAQS and CAAQS for NO_2. Health effects associated with NO_x include lung irritation and enhanced allergic responses (CARB 2021). As shown in Tables 3.3-3 through 3.3-5, proposed project construction and operations would not exceed the SCAQMD NO_x threshold, and existing ambient NO_2 concentrations would be below the NAAQS and CAAQS. Thus, the proposed project is not expected to result in exceedances of the NO_2 standards or contribute to associated health effects.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2021). CO hotspots were discussed previously as a less-than-significant impact. Thus, the proposed project's CO emissions would not contribute to the health effects associated with this pollutant.

The SCAB is designated as nonattainment for PM_{10} under the CAAQS and nonattainment for $PM_{2.5}$ under the NAAQS and CAAQS. Health effects associated with PM_{10} include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2021). As with O_3 and NO_x, and as shown in Tables 3.3-3 through 3.3-5, the proposed project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SCAQMD's thresholds. Accordingly, the proposed project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause an increase in related regional health effects for this pollutant.

In summary, the proposed project would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health effects associated with those pollutants. Therefore, impacts would be less than significant.

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

Less-than-Significant Impact. The evaluation of other emissions is focused on the potential for the project to generate odors. The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The project entails operation of an educational training center, which is not a land use that is associated with the creation of unwanted odors. Therefore, project operations would result in an odor impact that is less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐

Environmental Setting

This analysis of the project's potential impacts on biological resources is based on a biological reconnaissance conducted by a Dudek biologist on December 15, 2020, and a reference population check and focused special-status plant survey conducted by a Dudek biologist on April 9, 2021.

The biological reconnaissance survey was conducted to assess and map the existing biological resources on the project site and a surrounding 100-foot buffer to account for all on-site and off-site resources (Appendix B). The reconnaissance included an assessment of the existing vegetation communities to support special-status species and other protected biological resources. Vegetation communities observed during the biological reconnaissance include non-native grassland, disturbed habitat, and existing development. The land immediately surrounding the project site includes non-native grassland and buildings associated with the training facility. Undeveloped land occurs further to the south and west, with two distribution centers located directly north, and residential development is located farther to the east of the project site. Plant species observed during the reconnaissance survey include shortpod mustard (*Hirschfeldia incana*), prickly Russian thistle (*Salsola tragus*), stinknet (*Oncosiphon piluliferum),* coyote brush *(Baccharis pilularis)*, mulefat (*Baccharis salicifolia*), red brome (*Bromus rubens*), and wild oat (*Avena fatua*).

The focused special-status plant survey was conducted to determine presence/absence of smooth tarplant (*Centromadia pungens* ssp*. laevis*) within the project site and a surrounding 50-foot buffer. Prior to conducting the focused special-status plant survey, a reference population check was conducted near Lake Elsinore, in Riverside County, to confirm the species was identifiable and in bloom. Smooth tarplant was observed and was identified in bloom; thereby affirming that the focused special-status survey was conducted during peak phenology and that the species would be identifiable if present. The focused special-status plant survey was conducted in conformance with the CNPS Botanical Survey Guidelines (CNPS 2001); Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018); and the U.S. Fish and Wildlife Service's General Rare Plant Survey Guidelines (Cypher 2002). All plant species encountered during the field survey were identified to subspecies or variety, if applicable, to determine sensitivity status. Plant species observed during the focused special-status plant survey included shortpod mustard, prickly Russian thistle, stinknet, red brome, wild oat, redstem stork's bill (*Erodium cicutarium*), telegraphweed (*Heterotheca grandiflora*). dove weed (*Croton setiger*), mouse barley (*Hordeum murinum*), common Mediterranean grass (*Schismus barbatus*), needle goldfields (*Lasthenia gracilis*), Maltese star-thistle (*Centaurea melitensis*), chaparral gilia (*Gilia angelensis*), Palmer's goldenbush (*Ericameria palmeri*), common sandaster (*Corethrogyne filaginifolia*), whitemargin sandmat (*Euphorbia albomarginata*), bluedicks (*Dichelostemma capitatum*), common fiddleneck (*Amsinckia intermedia*), spiny sowthistle (*Sonchus asper* ssp. *asper*), Parish's milkvetch (*Astragalus douglasii* var. *douglasii*), old-man-in-the-

Spring (*Senecio vulgaris*), asthmaweed (*Erigeron bonariensis*), musky stork's bill (*Erodium moschatum*), and desertbroom (*Baccharis sarothroides*).

Dudek also conducted a literature review to identify the location of documented sensitive vegetation communities, special-status plants, and special-status wildlife within the vicinity of the project site. The literature review included a query of biological resource databases, including the California Department of Fish and Wildlife's California Natural Diversity Database (CDFW 2021), the California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2021), and U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) (USFWS 2021). The California Natural Diversity Database and California Native Plant Society queries included the nine U.S. Geological Survey quads surrounding the project site. The queries found a total of 63 special-status wildlife species and 52 special-status plant species as having occurred in the queried geographic area. Dudek analyzed the potential for the 63 special-status wildlife species and 52 special-status plant species to occur on the project site (see impact analysis below).

The project is also located within the plan area of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) (County of Riverside 2003). The MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan, pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan under the Natural Communities Conservation Planning Act of 1991. The MSHCP focuses on the conservation of plant and wildlife species and their associated habitats in western Riverside County. Consistency with the biological goals and provisions of the MSHCP would be evaluated herein.

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

Less-than-Significant Impact with Mitigation Incorporated. Multiple special-status plant and wildlife species were identified by the literature review query with a potential to occur on the project site. Appendix B list the special-status plant and wildlife species that have been evaluated for their potential to occur within the project site based on species documentation and habitat suitability. No native habitats or undisturbed vegetation was observed on the project site that would be considered high quality to support any special-status species; however, there is a moderate potential for some special-status species to occur.

Special Status Plants

The project site provides low-quality habitat for one special-status plant species: smooth tarplant. The site has the potential to support special-status plant species that are able to persist in non-native grassland and disturbed habitat. From the review of biological resource databases with information on habitat and species documentation around the project site, Dudek determined smooth tarplant, a California Rare Plant Rank (CRPR) 1B.1 plant species, had a moderate potential to occur within the non-native grassland habitat on the project site and within similar suitable habitat within 3 miles from the project site. Therefore, a focused special-status plant survey was conducted on April 9, 2021, to determine presence/absence of smooth tarplant. Appendix B includes further information on the species evaluated with a potential to occur. Paniculate tarplant (*Deinandra paniculata*) also was determined to have a moderate potential to occur on the project site, however, this species is listed as a CRPR 4.2 species that is considered stable in California and therefore is not considered a special-status species requiring further protection or mitigation. No other special-status plant species were determined to have a moderate or high potential to occur, and no special-status plants were observed on site during the April 2021 focused special-status plant survey. Therefore,

the project would not result in direct or indirect impacts to special-status plant species. As such, impacts to special-status plant species would be less than significant.

Special Status Wildlife

The project site contains low quality non-native grassland habitat, with disturbed and developed land that lacks native habitat to support most special-status wildlife species. However, based on the review of biological resource databases and biological resources determined to occur on the project site, Dudek biologists determined the project site has the potential to support four special-status wildlife species that are capable of persisting in low-quality habitat.

The project site provides suitable habitat for avian species including burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris actia),* and loggerhead shrike *(Lanius ludovicianus*), and mammal species such as San Diego black-tailed jackrabbit (*Lepus californicus bennettii).* Appendix B includes further information on the potential for these species to persist within the project site. The loss of suitable habitat for these species is not considered significant due to the limited impact of the project on upland mustards vegetation that consists of non-native grasses and ruderal (weedy) forbs (0.37 acres) and the availability of non-native grassland in the direct vicinity. The remaining available habitat ensures that species will likely continue to persist in the area and loss of suitable habitat is less than significant. However, if these species are determined to actively nest on the project site prior to the start of construction, significant impacts may occur through direct take of individuals, removal of active nests, or removal of occupied habitat. Therefore, to reduce potential project-related impacts to less than significant, **MM-BIO-1** and **MM-BIO-2** would be implemented to reduce potential impacts to California horned lark, loggerhead shrike, and San Diego black-tailed jackrabbit through pre-construction surveys, establishing buffers, and monitoring/relocation if needed. Due to additional protection afforded to the burrowing owl by the MSHCP, additional mitigation would be required through implementation of **MM-BIO-3** to reduce potential impacts to this species and comply with the MSHCP that includes focused surveys and avoidance or passive relocation if owls are found. Project implementation of these mitigation measures would reduce potential impacts to these special-status wildlife species to a less than significant level with mitigation incorporated.

Additionally, the project site provides suitable nesting habitat for a number of ground and shrub-nesting common and migratory bird species protected under the Migratory Bird Treaty Act and California Fish and Game Code Section 3500. The project would avoid potential impacts to protected bird species and their nests through avoidance of the general bird nesting season of February through August. However, if project activities commence during the avian nesting season, potential direct and indirect impacts to nesting birds may occur during initial vegetation clearing. Therefore, the measures included in **MM-BIO-2** would also reduce potential impacts to nesting birds to a less than significant level with mitigation incorporated.

MM-BIO-1 **Special-Status Wildlife**. Within 3 days prior to the start of ground disturbing and vegetation trimming/removal activities a pre-construction clearance survey shall be conducted by a knowledgeable biologist to determine the presence/absence of any special-status wildlife species such as San Diego black-tailed jackrabbit. The survey will focus on walking pedestrian transects through suitable habitat for this species. If any individuals or dens are found during the survey, a buffer will be established around the known location. Occupied dens would also require an onsite biological monitor to limit impacts to this species, and if individuals need to be moved out of harm's

way during construction activities, a biologist holding a Scientific Collecting Permit will relocate individual San Diego black-tailed jack rabbits to areas outside of the project impact area.

MM-BIO-2 **Nesting birds**. Ground-disturbing and vegetation trimming/removal activities shall be conducted outside of the breeding season to the extent feasible (i.e., February 1 through August 31). If the breeding season cannot be avoided, a pre-construction nesting bird survey shall be conducted prior to ground disturbing and vegetation trimming/removal activities. All suitable nesting habitat shall be thoroughly surveyed by a qualified biologist for the presence of nesting birds within 72 hours prior to commencement of the proposed project activities. If an active nest is detected within the study area, the project manager would be notified and an appropriate avoidance buffer would be maintained around the nest, as determined by a qualified biologist. The nest would be flagged and avoided until the nesting birds have fledged and the nest is vacant (as determined by the qualified biologist). As a general guidance during the breeding season, no work should occur within 300 feet from known protected passerine nests, and 500 feet from known raptor and special-status species nests, or as determined by a qualified biologist.

MM-BIO-3 **Burrowing owl**. The project site falls within a Multiple Species Habitat Conservation Plan Burrowing Owl Survey Area. Based on observations conducted during the biological reconnaissance survey, there is suitable habitat to support this species and therefore, focused surveys are required to determine if any burrowing owls are present prior to project construction. The focused surveys would be conducted according to the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (County of Riverside 2006). The focused surveys are to be conducted in two parts. Part A focuses on surveying for suitable burrows and owl signs (whitewash, feathers, track marks, pellets, prey remains), while Part B focuses on the presence/absence of burrowing owls. To survey for burrows and signs, the property should be walked in transects by a qualified biologist(s), keeping a distance of no more than 30 meters apart or at a distance such that surveyors have 100% visibility. Suitable burrows, owl signs, and owls, should be marked with GPS coordinates and mapped. If suitable burrows are found, then Part B of the focused surveys must be conducted.

For Part B, four additional surveys should be conducted focusing on surveying for burrowing owls. The first may be conducted concurrent with the Part A survey. Due to the diurnal nature of burrowing owls (Coulombe 1971), these four focused surveys must be conducted one hour prior to sunrise until two hours after or two hours prior to sunset until one hour after. First, surveyors must search for owls by scanning the area where mapped suitable habitat and signs of owls have been determined with the use of binoculars/spotting scopes. Then surveyors should walk transects surveying for owl signs and owls. If any signs or owls are observed, they should be marked with a GPS and mapped. The focused surveys must be conducted during the breeding season (March 1 through August 31) to accurately assess habitat use. In addition, weather conditions must consist of temperatures of 90ºF or below, wind speeds less than 20 miles per hour, no rain, and no heavy fog.

Regardless of presence/absence results, a 30-day pre-construction survey shall be conducted prior to the start of vegetation clearing activities for each phase of the project. Therefore, additional pre-construction surveys would be required if there is a delay in construction activities between Phase 1 and Phase 2.

If burrowing owls are found on the project site either during the focused surveys or pre-construction survey, additional avoidance measures would be required such as establishing a buffer around the active burrow and avoiding project activities within the buffer. If the project cannot be avoided consultation with the County of Riverside Environmental Programs Division would be required to determine if exclusion and passive relocation outside of the breeding season is a viable option to reduce impacts to a less than significant level.

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

No Impact. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies, known to provide habitat for sensitive animal or plant species, or known to be important wildlife corridors. Riparian habitats are those occurring along the banks of rivers and streams. The proposed project would primarily occur within upland non-native grassland and disturbed habitat with surrounding development. There are no drainages or waterways that could support riparian habitat on site. Additionally, no sensitive natural communities recorded in the vicinity of the project site were observed during the biological reconnaissance. Therefore, project activities would have no impact to riparian habitat or other sensitive natural communities, and no mitigation is required.

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

No Impact. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. The project site lacks potentially regulated waters or wetlands due to the lack of drainages, depressional areas, or hydrophytic vegetation. Additionally, no blue-line streams are mapped on the topographic map for the area. The entire site occurs in an upland area with non-native vegetation. Therefore, there would be no impact to protected waters or wetlands from project activities, and no mitigation is required.

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

No Impact. Wildlife movement corridors, also referred to as dispersal corridors or landscape linkages, are generally defined as linear features along which animals can travel from one habitat or resource area to another. The project site does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of supporting the movement of wildlife, particularly corridors that facilitate the movement of species between larger stands of native habitat. Additionally, the project site lacks stream habitat for resident or migratory fish species. The project site may provide stop over opportunities for migratory birds; however, the site is subject to regular disturbance and less disturbed areas with undeveloped land occur in offsite areas in the vicinity of the site. Project activities would therefore have no impact on the movement of resident or migratory fish or wildlife species and no mitigation is required.

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

No Impact. The project site is located within the County of Riverside. The Riverside General Plan policies OS 9.3 and OS 9.4 protect native trees, natural vegetation, stands of established trees, oak trees and other features for ecosystem, aesthetic, and water conservation purposes within the County. The project would not remove or effect any trees located on or adjacent to the project site. The project would comply with local policies and ordinances protecting biological resources. Therefore, project activities would have no impact related to conflicts with local policies or ordinances protecting biological resources.

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

Less-than-Significant Impact with Mitigation Incorporated. As previously mentioned, the proposed project is located in the MSHCP area. Specifically, the project site is mapped within the Gavilan Area Plan but is not located within any Criteria Cells or Cell Groups. The MSHCP was adopted in 2003 and focuses on the conservation of plant and wildlife species and their associated habitats in western Riverside County. Section 6 of the MSCHP outlines requirements to analyze potential impacts from the project on the following biological resources: riparian/ riverine and vernal pool areas, narrow endemic plant species, burrowing owl, and urban/wildlands interfaces.

Section 6.1.2 requires all project sites to be assessed for the presence of riparian/ riverine and vernal pool resources. The assessment must include mapping of riparian/ riverine and vernal pool resources. The assessment may be completed as part of the CEQA review process as outlined in Article V of the State CEQA Guidelines. If the mapping identifies suitable habitat for species listed in Section 6.1.2 of the MSHCP within the project area then focused surveys for those species are required to be conducted and avoidance measures shall be implemented. The project site occurs within an entirely upland area with no natural drainages or waterways, or any riparian habitat as identified by the MSHCP. Therefore, no impacts would occur and no mitigation measures (habitat mapping) are required in order to comply with Section 6.1.2 of the MSHCP.

Section 6.1.3 requires site-specific focused surveys to be conducted in areas identified by the MSHCP to potentially provide habitat for Narrow Endemic Plant Species. The project site is not within the identified Narrow Endemic Plant Species area and no suitable habitat for any Narrow Endemic Plants occurs on the project site, thus no mitigation pertaining to this section is required.

Section 6.1.4 provides guidelines pertaining to urban/wildlands interface for land development projects in proximity to the identified MSHCP Conservation Area. The section includes guidelines for drainage, toxins, lighting, noise, invasive species, barriers, and grading/ land development. The project site is not located in close proximity to the identified MSHCP Conservation Area, thus no mitigation pertaining to urban/ wildlands interface is required.

Section 6.3.2 outlines additional surveys that may be needed to achieve coverage for certain species. The project site is not mapped as a Critical Area in the MSHCP, but it is mapped within the MSHCP survey area for burrowing owl. Therefore, as required by the MSHCP, focused burrowing owl surveys conducted according to the MSHCP survey guidelines are required prior to the start of ground disturbing activities. Pre-construction clearance surveys would also be required to be conducted within 30 days prior to the start of

both Phase 1 and Phase 2 of the project. Project implementation of MM-BIO-4 would reduce potential impacts to burrowing owl to a less than significant level.

No additional plant and amphibian surveys are required to comply with the MSHCP. No other approved local, regional, or state Habitat Conservation Plans or Natural Community Conservation Plans exist or are planned in the project vicinity. The project would therefore have a less than significant impact mitigation incorporated.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐

Dudek conducted a Phase 1 cultural resources investigation in support of the IS/MND for the project. The cultural resources investigation included a cultural resources site records and literature search at the Eastern information Center (EIC; Appendix C), located on the campus of University of California, Riverside, and an intensive surface survey covering the approximately 10-acre (gross) project site, specifically within APN 294-110-005, to document existing conditions and in order to assess impacts of the project on cultural resources. In addition to the California Historical Resources Information System (CHRIS) records search at the EIC, the Phase 1 cultural resources investigation included a review of the California Native American Heritage Commission's (NAHC) Sacred Lands File (SLF) and background research.

Environmental Setting

The topography in the project site is relatively flat, at an elevation of 1,700 feet. According to United States Department of Agriculture, there are six soil types found in the Project Area: The six soil types represent two main soil types: Fallbrook and Monserate. The six varieties include Fallbrook sandy loam (5–8 % slopes), Fallbrook fine sandy loam (2–8% slopes), Fallbrook sandy loam (8–15 % slopes), Monserate sandy loam (0–5 % slopes), Monserate sandy loam (8- 15 % slopes), and Monserate sandy loam shallow (5–15 % slopes). Fallbrook series soils generally occur at elevations ranging from 300 to 2,000 above mean sea level in areas of with 200–280 frost-free days (USDA 2021). The Project site has been subject to a long history of government use, as will be outlined below. The majority of this area is occupied, or has been occupied in the past, by buildings, roads, facilitates, or other supporting infrastructure. Where undeveloped, evidence of mechanical earth-moving activities is visually apparent throughout much of the Project site. This is consistent with the intended training purposes of the BCTC area.

Under existing conditions, the project site, is largely disturbed, vacant land that primarily serves as parking for the BCTC. However, the eastern portion of the project site contains portable classroom buildings that would be removed as part of the project. The project site is bounded by 11th Street to the north, Bundy Avenue to the east, vacant land used for parking to the west, and the CAL FIRE Drill Grounds to the south. Located on the opposite side of 11th Street are portable classrooms and located on the opposite side of Bundy Avenue are dormitories, parking areas, and a classroom building. The areas bordering the project site are located within the BCTC.

Prehistoric Context

The BCTC project site is located in an area that was historically occupied by several groups of Native Americans. Traditional cultural territory is unable to be determined exclusively for any one tribe. The majority of documentation assign this area to be within the Cahuilla traditional territories, although Luiseño, Serrano, and Gabrieleño also claim traditional associations with this area. The Cahuilla occupied a roughly 2,400- square-mile territory that covered a wide ecological range extending from the San Jacinto Mountains to the desert to the Salton Sea and was divided into geographical areas claimed by corporate groups called a Sib, composed of several lineages and villages (Bean 1972; Bean and Shipek 1978). The territory was in a strategic location that provided access to resources through trade, as it was bisected by the major trade route, the Coco-Maricopa Trail. In addition, the territory was located at the periphery of two other routes, the Santa Fe Trail (which connected what is now the city of Needles to Cajon Pass) and the Yuman Trail which crossed the Borrego Desert, beginning in the city of Yuma and ending in San Diego (Bean 1972; Bean and Smith 1978). The Cahuilla, although separated from neighboring tribes by geographical features, still interacted with groups such as the Serrano, with whom the Cahuilla shared a similar ecological base, subsistence system, social and political structure, and belief system. They also regularly interacted with the Gabrielino, a group essential in the diffusion of ideas and natural resources from the coast to inland (Bean 1972). The Cahuilla are linguistically and culturally related to the Gabrielino, Cupeño, and Luiseño, and represent the descendants of local Late Prehistoric populations.

The tribes of the region were organized into patrilineal clans or bands centered on a chief, composed of 25–30 people (Kroeber 1925), each of which had their own territorial land or range where food and other resources were collected at different locations throughout the year (Sparkman 1908). The title of chief was heritable along family lines. Inter-band conflict was most common over trespassing. Sparkman observed that “when questioned as to when or how the land was divided and sub-divided, the Indians say they cannot tell, that their fathers told them that it had always been thus” (1908). Place names were assigned to each territory, often reflecting common animals, plants, physical landmarks, or cosmological elements that were understood as being related to that location. Marriages were generally arranged by parents or guardians. Free and widowed women had the option to choose their partner. Polygamy occurred though was not common, often with a single man marrying a number of sisters and wives. Shamanism was a major component in tribal life. The physical body and its components was thought to be related to the power of an individual, and wastes such as fluids, hair, and nails were discarded with intent. Hair, once cut, was often carefully collected and buried to avoid being affected negatively or controlled by someone who wishes them harm. Some locations and natural resources were of cultural significance. Springs and other water-related features were thought to be related with spirits. These resources, often a component of origin stories, had power that came with a variety of risks and properties to those who became affected. Puberty ceremonies for both boys and girls were complex and rigorous. Mourning ceremonies were similar throughout the region, generally involving cut of the hair, burning of the deceased’s clothes a year after death, and redistribution of personal items to individuals outside of the immediate tribal group (Sparkman 1908; Kroeber 1925).

The staple food of the inhabitants of the region during the etnohistoric period was acorns (Sparkman 1908). Of the at least six oak species within this tribal groups traditional territory, the most desirable of these was the black oak (*Quercus kelloggii*) due to its ease of processing, protein content, and digestibility. Acorns were stored in granaries

to be removed and used as needed. The acorns were generally processed into flour using a mortar and pestle. The meal was most commonly leached with hot water and the use of a rush basket, however, there are also accounts of placing meal into excavated sand and gravel pits to allow the water to drain naturally. The acorn was then prepared in a variety of ways, though often with the use of an earthen vessel (Sparkman 1908). Other edible and medicinal plants of common use included wild plums, choke cherries, Christmas berry, gooseberry, elderberry, willow, Juncus, buckwheat, lemonade berry, sugar bush, sage scrub, currents, wild grapes, prickly pear, watercress, wild oats and other plants. More arid plants such as Yucca, Agave, mesquite, chia, bird-claw fern, Datura, yerba santa, Ephedra, and cholla were also of common use by some Luiseño populations. A number of mammals were commonly eaten. Game animals included back-tailed deer, antelope, rabbits, hares, birds, ground squirrels, woodrats, bears, mountain lions, bobcats, coyotes, and others. In lesser numbers, reptiles and amphibians may have been consumed. Fish and marine resources provided some portion of many tribal communities, though most notably those nearest the coast. Shellfish would have been procured and transported inland from three primary environments, including the sandy open coast, bay and lagoon, and rocky open coast. The availability of these marine resources changed with the rising sea levels, siltation of lagoon and bay environments, changing climatic conditions, and intensity of use by humans and animals.

The first extensive contact with Europeans occurred when the Juan Bautista de Anza expedition passed through the area, setting up a trade route to provide resources to the missions by land. While the first contact was hostile, later interaction included baptisms (at the surrounding missions) and, eventually, the adoption by the Cahuilla of Euro-American cattle and agricultural practices. The Cahuilla managed to maintain their political and economic autonomy through the Spanish period, Mexican period, and into the American pioneer period. A smallpox epidemic in 1863 decimated a large part of the population and weakened their sovereignty. The Cahuilla remained (for the most part) on their own lands until 1877 when reservations were established (Bean and Smith 1978).

Historic Period (Post 1542)

Historic Period Overview

European activity in the region began as early as AD 1542, when Juan Rodríguez Cabrillo landed in San Diego Bay. Sebastián Vizcaíno returned in 1602, and it is possible that there were subsequent contacts that went unrecorded. These brief encounters made the local native people aware of the existence of other cultures that were technologically more complex than their own. Epidemic diseases may also have been introduced into the region at an early date, either by direct contacts with the infrequent European visitors or through waves of diffusion emanating from native peoples farther to the east or south. Father Juan Crespí, a member of the 1769 Spanish Portolá expedition, authored the first written account of interaction between Europeans and the indigenous population in the region that makes up Orange County today. It is possible, but as yet unproven, that the precipitous demographic decline of native peoples had already begun prior to the arrival of Gaspar de Portolá and Junípero Serra in 1769.

Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to native populations. Some former mission neophytes were absorbed into the work forces on the ranchos, while others drifted toward the urban centers at San Diego and Los Angeles or moved to the eastern portions of the county where they were able to join still largely autonomous native communities. United States conquest and annexation, marked by the Mexican-American war and California Sur's ceding to the United States in 1851, together with the gold rush in Northern California, brought many additional outsiders into the region. Development during the following decades was fitful, undergoing cycles of boom and bust. With rising populations in the nineteenth century throughout the Southern California region, there were increased demands for important commodities such as salt.

Camp Haan

The following section has been synthesized from Historic American Building Survey documentation for Camp Haan, completed by Dudek (Dotter 2017). In the early 1940s military use expanded to the west from March Field, across the Atchison, Topeka & Santa Fe Railroad, to include Camp Haan. Camp Haan served as an anti-aircraft artillery training center, military discipline barracks, and prisoner-of-war camp during World War II, and is considered significant by local residents for its association with events that made a significant contribution to the broad patterns of Riverside County history. Camp Haan was built in several stages between November 1940 and October 1942. Camp Haan reached its maximum size of 85,000 troops during World War II, and would have covered 8,058 acres that have been subsequently developed as a portion of Riverside National Cemetery, General Old Golf Course, Air Force Village West Retirement Community and Arnold Heights residential community (MJPA 2010). Summary of records at the March JPA Museum provide the following information relating to Camp Haan.

Originally a tent camp, wooden barracks and other buildings were quickly added. By October of 1941, the Camp had 353 buildings, 2,459 floor tents, 6 exchanges, 5 chapels, a hospital, 18 miles of sewers, and 28 miles of streets. By November 1941, most of the men who trained at Camp Haan had been assigned to coastal defenses in the Los Angeles and San Francisco Bay area.

In March 1942 Camp Haan was reorganized as an Army Service Depot and in late 1942 a prisoner of war camp was built for 1,200 Italian prisoners of war. The prisoners of war worked at Camp Haan and in the surrounding citrus orchards. In April 1945, German prisoners of war arrived at Haan to replace the Italians. Later in the war, Camp Haan had an 800-bed debarkation hospital which received wounded coming in from the Pacific theater of operation. After the war the camp became a separation center and on August 31, 1946, it was closed. Many of the wooden buildings were sold and moved to other locations and the land was divided (MJPA 2010).

The first stage was the largest, including barracks and service facilities for two antiaircraft artillery brigades comprised of five battalions, as well as a camp hospital and a warehouse and services area. By February 1941, there were 159 wooden buildings for use as mess halls, warehouses, offices, dispensaries, chapels, theaters, recreation centers, and base exchanges; 1,251 hutments that housed five to six personnel each, with wood floors and framing covered with canvas, wired for electricity and with gas service for heating; in addition to constructing water and sewer systems, electric power stations, graded and paved roads, and spur lines to the camp's warehouse loading docks from the nearby main railroad track. In anticipation of the camp growing, a large cold food storage unit was installed as well, with room to store enough cold food to feed 16,500 personnel for three days (Anthony 1988). At later dates, the original barracks and services were expanded to house more units: the Camp Hospital was more than doubled in size, as was the warehouse and services area; a Magazine Area was constructed in the northwest section, safely separated from the rest of camp; a Prisoner of War camp was added; and a large Military Disciplinary Barracks area was built southwest of the main training camp buildings. When the camp was completed in October 1942, the cost had escalated from an estimated $2.2 million to $6.5 million. By that time, there were 382 wooden buildings, 2500 hutments, 28 miles of roads, 18 miles of gas mains, 18 miles of sewer lines, and 15 miles of water lines for the approximately 7,500 service men living and training at the camp (Dotter 2017).

The majority of buildings were wood-frame construction, with a few permanent buildings being constructed using bricks. Foundations were either concrete slabs or poured-in-place concrete posts, both with embedded ferrous connectors to attach wood framing. The slab foundations were used for the mess halls, administration buildings, storage buildings, motor vehicle-related buildings, and latrines. The concrete post foundations correspond to barracks locations (U.S. Engineer Office 1946; U.S. Air Force 1951). Walls were wood-framed with horizontal wood plank siding. The hutments had canvas tents forming the upper half of the walls and the roof, whereas the other

buildings had wood-framed roofs covered in composition roofing material. Doors were typically wood with half-lites, and windows were wood-framed, multiple-lite double-hung or casement windows.

Background Research

CHRIS Records Search

Previous Cultural Resource Studies

EIC records indicate that 24 cultural resource studies have been completed within 0.5 miles of the project site between 1978 and 2018. Of the 24 previous studies, seven intersected at least a portion of the project site. The remaining 17 of these previously conducted studies were conducted outside the project site in all cardinal directions, but within the 0.5-mile radius. Table 3.5-1 summarizes all 24 reports identified followed by a brief summary of the seven reports overlapping the project site.

Table 3.5-1. Previous Technical Studies within 0.5 Miles of Project Site

EIC Report Number (RI-)	Authors	Date	Title	Proximity to Project Site
00422	Richard Lando	1978	Environmental Impact Evaluation: Archaeological Survey of Six Road Right-of-ways, Mead Valley, Riverside County, California	Outside
01144	D.M Van Horn	1980	Archaeological Survey Report: The 1500 Acre Woodcrest Agricultural Preserve Located Adjacent to March AFB, Riverside County, California	Outside
02042	McCarthy, Daniel F.	1986	An Archaeological Assessment of the West March Housing Development, March Air Force Base, Riverside County, California	Overlaps
02125	Swope, Karen K.	1987	An Archaeological Assessment of 970+ Acres of Land Located on March Air Force Base, Riverside County, California	Overlaps
02159	Drover, C.E.	1987	An Archaeological Assessment of the Air Force Village West, Riverside County, California	Outside
02293	Drover, C.E.	1988	An Archaeological Assessment of the Proposed Barton Street Pipeline and Access Road Near Glen Valley, California	Outside
02653	De Munck, Victor C.	1989	A Cultural Resource Assessment of 375 Acres of Land Located in the Indio Area of Riverside, California.	Outside
03465	Drover, Christopher	1992	A Cultural Resources Assessment of the 800-Acre Alta Cresta Ranch Specific Plan, Riverside East - Steele Peak USGS Quads, Woodcrest CA	Outside
03510	McDonald, Meg and Barb Giacomini	1996	An Intensive Survey of Approximately 2,500 Acres of March Air Force Base, Riverside County, California	Adjacent
04996	McKenna et al.	2001	Cultural Resources Review of Previous Studies at the Ben Clark Public Safety Training Center at March Air Force Base, Riverside County, California.	Overlaps
05179	LSA Associates, Inc.	2003	Cultural Resource Assessment, Beazer Homes Tract 30756, Riverside County, California	Outside

Table 3.5-1. Previous Technical Studies within 0.5 Miles of Project Site

EIC Report Number (RI-)	Authors	Date	Title	Proximity to Project Site
05458	Mason, Roger D.	2005	Phase I Archaeological Survey Report for the Sawada Parcel (APN 266-160-006), Riverside County, CA	Outside
05994	Dahdul, Mariam, Daniel Ballester, and Josh Smallwood	2003	Archaeological Testing at Sites CA-RIV-4736/H. Alta Cresta Specific Plan, Tentative Tract Map NO.S 31237, 31238, 31360 TO 31362, Near the City of Riverside, Riverside County	Outside
06276	Mason, Rodger, D.	2005	Phase I Archaeological Survey Report for the Geiser Parcel (APN 266-160-008) Riverside County, California	Outside
06718	Jordan, Stacey C.	2007	Archaeological Survey Report for Southern California Edison Company: March JPA Village West Projects, March Air Force Base, Riverside County, California (WO #6477-2000, AI #P2206; WO #6077-7947, AI #K7992)	Outside
07068	Stacey C. Jordan, Ph.D., RPA	2007	Archaeological Survey Report for Southern California Edison Company New Underground System Project on March Air Force Base Riverside County, California	Outside
07332	Bonner, Wayne H. and Marnie Aislin-Kay	2006	Report Letter: Cultural Resource Records Search and Site Visit Results for T-Mobile Telecommunications Facility Candidate IE04728A (MBM Farm), 20197 Nandina Avenue, Perris, Riverside County, California.	Outside
08272	William Manely Consulting and Earth Tech	1995	Historic Building Inventory and Evaluation, March Air Force Base, Riverside County, California	Overlaps
09362	Michael Hogan	2015	Archaeological Monitoring Program March Joint Powers Authority Project Near March Air Reserve Base, Riverside County, California CRM TECH Contract No. 2833	Outside
09971	Adella B. Schroth	1998	Review of Traditional Cultural Properties and Ethnography of the March Joint Powers Authority Planning Area	Overlaps
10093	Urban Future, Inc.	1996	Environmental Impact Report for the March Air Force Base Redevelopment Project	Overlaps
10144	Robert D Niehaus Inc	1988	Photographic Record of the Remains of Camp Haan on the Western Portion of March Air Force Base, Riverside, California	Overlaps
01036	Christopher E. Drover	1980	Environmental Impact Evaluation: Archaeological Assessment of Proposed Rock Quarrying Area of Pacific Industrial Properties Near Home Gardens, California	Outside
10307	Bai "Tom" Tang	2018	Historical/ Archaeological Resources Survey Addition to South Campus (Balance of Lot 41), Meridian Business Park Near the City of Riverside,	Outside

Table 3.5-1. Previous Technical Studies within 0.5 Miles of Project Site

EIC Report Number (RI-)	Authors	Date	Title	Proximity to Project Site
			Riverside County, California CRM TECH Contract 3349	
--	*Dotter, Kara	2017	Historic American Building Survey Written Documentation for Camp Haan, Riverside County, California, Ben Clark Training Center. Prepared for County of Riverside Economic Development Agency.	Overlaps
--	*Giacinto, Adam, Ross Owen, Jessica Colston, Ted Roberts, and Micah Hale	2020	Cultural Resources Inventory Report for the BCTC Hazardous Fuel Reduction Project, Riverside County, California. Prepared for, and on file with, Riverside County Fire and CAL FIRE.	Overlaps

* **Note:** Report No. pending EIC integration into CHRIS database.

Report No. RI-2042

An Archaeological Assessment of the West March Housing Development, March Airforce Base, Riverside County, California (McCarthy 1986), documents the results of an archaeological resource study consisting of pedestrian survey and archival record search. The study area overlaps approximately 80% of the eastern half portion of the project site. Six previously unrecorded prehistoric archaeological resources were identified during the course of this study; none of which intersect the current project site. The report includes the National Register of Historic Places (NRHP) Determination of Eligibility form, prepared by Daniel F. McCarthy, Archaeological Research Unit of the University of California, Riverside, stating that the 1986 study area, which includes a portion of the current project site, was determined to be ineligible for NRHP listing and no further studies were recommended.

Report No. RI-2125

An Archaeological Assessment of 970+/- Acres of Land Located on March Air Force Base, Riverside County, California (Swope 1987), documents the results of an archaeological investigation conducted on behalf of the United States Air Force to determine effects on cultural resources in a proposed area of housing development. The study consists of a pedestrian survey. The survey area overlaps the entirety of the current project site. Swope identified 19 archaeological sites within the area of study, only one of which intersects the current project site [P-33-003285/CA-RIV-3285H]. The site is described as various foundations and tent platform remnants of Camp Haan. Swope explains it is unlikely the current remnants of the site can provide significant archaeological or architectural information; however, Swope states that the information associated with Camp Haan provides important information into the World War II period. Swope recommended that a formal historic document search of all available records be conducted before any additional demolition or removal of Camp Haan structures as a means to reveal any information associated with prisoner of war activities in the United States and further inform on the history of the World War II period. It is noted that P-33-003285/CA-RIV-3285H may be eligible for the NRHP, although no further documentation or nomination forms are included. No new archaeological resources were identified during the course of this study. A portion of the historic-period Camp Haan, P-33-003285/CA-RIV-3285H, was identified within the current project site.

Report No. RI-4996

Cultural Resources Review of Previous Studies at the Ben Clark Public Safety Training Center at March Air Force Base, Riverside County, California (McKenna 2001), documents the review and analysis of previously conducted cultural studies. The study area overlaps the entirety of the current project site. McKenna cites a 1987 study conducted by Swope and Neiditch, claiming P-33-003285/CA-RIV-3285H (Camp Haan) was deemed not eligible for the NRHP according to State Historic Preservation Office (SHPO). McKenna concludes, with SHPO concurrence on September 19, 1988, that there are no significant or eligible cultural resources for NRHP listing within the study location, and therefore within the current project site. Moreover, the report recommended that the study area not be classified as a traditional cultural property. The report states given the cultural sensitivity surrounding the BCTC, there is a potential to encounter buried resources and therefore, recommended construction monitoring for initial ground disturbing activities. No new archaeological resources were identified during the course of this study.

Report No. RI-8272

Historic Building Inventory and Evaluation, March Air Force Base, Riverside County, California (Wessel 1995), documents the results of archival research, pedestrian survey, and evaluation of historic buildings on behalf of US Department of the Air Force. The study area overlaps the entirety of the current project site and focuses on the built environment. No cultural resources were identified within the current project site during the course of this study.

Report No. RI-9971

Review of Traditional Cultural Properties and Ethnography of the March Joint Powers Authority Planning Area (Schroth 1998), documents the results of a literature review conducted to determine if cultural resources would be impacted if various cities within Riverside were to be re-zoned. The study area encompasses the entirety of the current project site. Various bedrock milling sites are identified throughout the subject study area, none of which are considered culturally significant and do not intersect the current project site. The report recommended that the prehistoric resources identified within the study area as not significant and ineligible for NRHP listing and that the study area not be identified as a traditional cultural property. Included within this report is a letter from the SHPO dated May 24, 1999, concurring with the report's findings. No new archaeological resources were identified during the course of this study within the current project site.

Report No. RI-10093

Environmental Impact Report for the March Air Force Base Development Project (Urban Futures Inc. 1996), documents the results prepared on behalf of March Joint Powers Redevelopment Agency to determine environmental impacts on a proposed multifaceted development plan. The study area encompasses the entirety of the current project site. It is concluded that due to current level of development in the area, potential impact to archaeological resources are anticipated to be less than significant. No new archaeological resources were identified during the course of this study.

Report No. RI-10144

Photographic Record of the Remains of Camp Haan on the Western Portion of March Air Force Base Riverside, California (Robert D. Niehaus Inc. 1988), documents the condition of Camp Haan (P-33-003285/CA-RIV-3285H) through a series of photographs. The study location overlaps approximately 20% of the western half portion of the current project site. Niehaus depicts Camp Haan as consisting of concrete foundations, pipes, conduit segments, concrete pilings serving as previous tent supports, and various electrical accessories. Structural remnants

associated with the historic-period Camp Haan, P-33-003285/CA-RIV-3285H, was identified through EIC records as occurring within the current project site, which is further discussed in the following section for previously recorded cultural resources. No new archaeological resources were identified during the course of this report.

Reports Pending EIC ID

Dudek prepared a Historic American Building Survey documentation for Camp Haan in 2017 (Dotter 2017). This study included a detailed historic context, copies of original photographs, maps, and plans, and other descriptive information. Dudek additionally supported archaeological efforts for fuel reduction projects within the Camp Haan area, as documented by Cultural Resources Inventory Report for the BCTC Hazardous Fuel Reduction Project, Riverside County, California (Giacinto et al. 2020). This study, focusing on the area west of the footprint historically occupied by the Camp Hann buildings, confirmed that the majority of prehistoric bedrock milling sites had been substantially disturbed or destroyed since previous recordation. This study additionally supplemented records of P-33-003285/CA-RIV-3285H, recording a previously undocumented refuse scatter with potential WW II-era cultural material. No resources documented as part of these studies would be affected by the present project.

Previously Recorded Cultural Resources

EIC records indicate that 49 previously recorded cultural resources are located within 0.5 miles of the proposed Project site. Forty-two resources are prehistoric archaeological resources, five are historic-era archaeological resources, one is a prehistoric isolate, and one is a multicomponent site consisting of both prehistoric and historic-period resources. Only one historic-period archaeological resource (P-33-003285/CA-RIV-3285H) overlaps the current project site. No prehistoric resources have been identified within the current project site based on records held at the EIC. Table 3.5-2 summarizes all 49 identified resources followed by a brief summary of the resource (P-33-003285/CA-RIV-3285H) that overlaps the current project site.

Table 3.5-2. Previously Recorded Cultural Resources within 0.5 Miles of Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Project Site
003096	CA-RIV-003096	Multicomponent	Prehistoric bedrock milling feature and a historic can scatter	1986 (Daniel F. McCarthy); 2007 (Koji Tsunoda, Jones & Stokes)	Unknown	Outside
003097	CA-RIV-003097	Prehistoric	Two bedrock milling features	1986 (Daniel F. McCarthy)	Unknown	Outside
003098	CA-RIV-003098	Prehistoric	Two bedrock milling features	1986 (Daniel F. McCarthy)	Unknown	Outside
003099	CA-RIV-003099	Prehistoric	Bedrock milling feature	1986 (Daniel F. McCarthy)	Unknown	Outside
003100	CA-RIV-003100	Prehistoric	Three bedrock milling features	1986 (Daniel F. McCarthy); 2014 (Daniel Ballester)	Unknown	Outside

Table 3.5-2. Previously Recorded Cultural Resources within 0.5 Miles of Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Project Site
003105	CA-RIV-003105	Prehistoric	Two milling features	1986 (Daniel F. McCarthy); 2014 (Daniel Ballester)	Unknown	Outside
*003285	CA-RIV-003285/H	Historic	Previous Location of Camp Haan a WWII-Era Military Base: Majority of buildings have been demolished, current site consists of concrete foundations, paved roads, portions of barrack structures, structural rock alignments, and various trash pits; updated in February 18, 2020 to include historic period refuse scatter	1987 (K. Swope and B. Neiditch); 1990 (Fred Budinger Jr.); 2007 (Adrian Sanchez Moreno)	Not Eligible (According to SHPO, see RI-4996)	Overlaps
003286	CA-RIV-003286	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003287	CA-RIV-003287	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003288	CA-RIV-003288	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003289	CA-RIV-003289	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch.)	Not Eligible (According to SHPO, see RI-4996)	Outside

Table 3.5-2. Previously Recorded Cultural Resources within 0.5 Miles of Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Project Site
003290	CA-RIV-003290	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003291	CA-RIV-003291	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003292	CA-RIV-003292	Prehistoric	Two boulders with series of milling features	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003293	CA-RIV-003293	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditc)	Not Eligible (According to SHPO, see RI-4996)	Outside
003294	CA-RIV-003294	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003295	CA-RIV-003295	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003296	CA-RIV-003296	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003297	CA-RIV-003297	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside

Table 3.5-2. Previously Recorded Cultural Resources within 0.5 Miles of Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Project Site
003298	CA-RIV-003298	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003299	CA-RIV-003299	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003300	CA-RIV-003300	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003301	CA-RIV-003301	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003302	CA-RIV-003302	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003303	CA-RIV-003303	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Not Eligible (According to SHPO, see RI-4996)	Outside
003325	CA-RIV-003325	Prehistoric	Bedrock milling feature	1987 (C.E. Drover)	Unknown	Outside
003326	CA-RIV-003326	Prehistoric	Bedrock milling feature	1987 (C.E. Drover)	Unknown	Outside
003327	CA-RIV-003327	Prehistoric	Bedrock milling feature	1987 (C.E. Drover)	Unknown	Outside
003328	CA-RIV-003328	Prehistoric	Milling feature	1987 (C.E. Drover)	Unknown	Outside
003329	CA-RIV-003329	Prehistoric	Bedrock milling feature	1987 (C.E. Drover)	Unknown	Outside

Table 3.5-2. Previously Recorded Cultural Resources within 0.5 Miles of Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Project Site
003380	CA-RIV-003380	Prehistoric	Bedrock milling feature	1987 (L. Gorenflo)	Not Eligible (According to SHPO, see RI-4996)	Outside
003381	CA-RIV-003381	Prehistoric	Bedrock milling feature	1988 (L. Gorenflo)	Not Eligible (According to SHPO, see RI-4996)	Outside
003382	CA-RIV-003382	Prehistoric	Milling feature	1989 (L. Gorenflo)	Unknown	Outside
003383	CA-RIV-003383	Prehistoric	Bedrock milling feature	1990 (L. Gorenflo); 2014 (D. Ballester)	Unknown	Outside
005414	CA-RIV-005414	Prehistoric	Bedrock milling feature	1994 (B. Giacomini)	Unknown	Outside
005415	CA-RIV-005415	Prehistoric	Bedrock milling feature	1995 (B. Giacomini)	Unknown	Outside
005447	CA-RIV-005447	Prehistoric	Milling feature	1996 (B. Giacomini)	Unknown	Outside
005453	CA-RIV-005453	Historic	Trash scatter consisting of purple glass fragments.	1997 (B. Giacomini)	Unknown	Outside
007782	CA-RIV-005823	Prehistoric	Bedrock milling feature	1996 (C. Schultze)	Unknown	Outside
014873	CA-RIV-007928	Prehistoric	Bedrock milling feature	2005 (Cotterman, Cary D.)	Unknown	Outside
015935		Historic	Trash dump with modern debris	2007 (Tsunoda, Koji)	Unknown	Outside
024849	CA-RIV-012318	Prehistoric	Bedrock milling feature	2016 (Nina Gallardo and Sal Boites)	Unknown	Outside
024859	CA-RIV-012321	Historic	Trash scatter consisting of metal objects, glass and ceramic fragments; there is evidence of the glass being melted.	2016 (Daniel Ballester, John Goodman, and Cynthia Morales)	Unknown	Outside

Table 3.5-2. Previously Recorded Cultural Resources within 0.5 Miles of Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Project Site
024860	CA-RIV-012322	Historic	Concrete foundations from since removed antenna towers, most likely associated with March Airforce Base.	2016 (Daniel Ballester and Ben Kerridge)	Unknown	Outside
026411	CA-RIV-012424	Prehistoric	Bedrock milling feature	2016 (Daniel Ballester and Todd Perry)	Does not appear eligible; no official code given	Outside
026626		Prehistoric	Isolated chert flake	2016 (Daniel Ballester)	Unknown	Outside
026627	CA-RIV-012532	Prehistoric	Low density lithic scatter	2016 (Todd Perry and Michael Hogan)	Does not appear eligible; no official code given	Outside
026664	CA-RIV-012563	Prehistoric	Bedrock milling feature	2017 (Nina Gallardo)	Does not appear eligible; no official code given	Outside
028029	CA-RIV-012652	Prehistoric	Bedrock milling feature	2017 (Ben Kerridge); 2017 (Sal Z. Boites)	Does not appear eligible; no official code given	Outside

* **Note:** Updated site record not yet integrated into CHRIS database.

P-33-003285/CA-RIV-3285H

P-33-003285/CA-RIV-3285H is a historic-era site, measuring approximately 1,000 meters north to south by 1,000 meters east to west (3,280 by 3,280 feet) at an elevation of 1,700 feet above mean sea level, overlaps a portion of the western half portion of the current project site. P-33-003285/CA-RIV-3285H is documented as the previous location of Camp Haan; a World War II-era military camp consisting of Anti-aircraft Replacement Training Center, Base Prisoner of War Camp, Army Service Forces Depot, and US Disciplinary Barracks. The site was originally formally recorded in 1987 by Swope and Neiditch, who describe the site as mostly demolished with a few remaining features. Features include structural remains of the original barracks, holding cells, concrete foundations, tent platforms, rectangular structural rock formations, paved roads, subsurface cisterns, and a trash dump consisting of solder-top cans, glass, and ceramics. It is interpreted to have been operational during the early to mid-1940s. P-33-003285/CA-RIV-3285H was again formally recorded in 1990 by Budinger, who notes that the area has been bulldozed leaving "only foundations and associated cement pads and piers." An update was provided by Moreno in

2007, who explains that during a survey conducted that same year, only foundational remains were present in the southern portion of the site and the site has been highly disturbed due to bulldozing efforts. An update to the site was prepared by Dudek (Giacinto et al. 2020) to include a historic-period refuse scatter comprised of metal cans and glass jars, identified near the former prisoner/security facilities of Camp Haan; however, this resource was identified outside the current project site boundaries. While the SHPO prepared a letter dated September 6, 1991, indicating that they concurred with the finding that the American Red Cross Building and associated garage are NRHP eligible under criteria A and C, these buildings are not present within the current project site, nor would they be otherwise affected. Features associated with destroyed buildings and facilities, such as roads, concrete pads, and other remnants, were determined by the lead agency with SHPO concurrence to be ineligible for NRHP listing. Outside of the present investigation, the most recent documentation of Camp Haan included Historic American Building Survey in 2017 documentation (Dotter 2017) and a fuel management project in 2019 (Giacinto et al. 2020).

Review of Historical Maps and Aerial Photographs

Dudek consulted historical maps and aerial photographs to understand development of the project site and surrounding properties. Topographic maps are available for the years 1902, 1905, 1911, 1927, 1939, 1942, 1955, 1960, 1962, 1969, 1974, 1980, 1984, 2012, 2015, and 2018 (NETR 2021a). Historic aerials are available for the years 1948, 1966, 1967, 1978, 1994, 2002, 2005, 2009, 2010, 2012, 2014, and 2016 (NETR 2021b).

The first U.S. Geological Survey topographic map showing the project site dates to 1901 and shows the project site as undeveloped. The following topographic maps, 1905, 1911, 1927, 1939, and 1942 show no significant change to the project site. The topographic map from 1955 depicts the project site as the Ben Clark Public Safety Training Center on March Air Force Base, with 11th Street intersecting west to east and Dalla Avenue intersecting north to south. The 1960 topographic map no longer shows any of the BCTC, instead showing the project site as undeveloped. However, the following topographic map from 1962 is consistent with the 1955 map, showing the project site as the BCTC. The remainder of the topographic maps show no significant changes to the project site.

The first aerial photograph showing the project site dates to 1948 and shows the project site developed with a series of structures throughout and 11th Street intersecting east to west and Dalla Avenue intersecting north to south. The 1966 aerial no longer shows any structures, instead the project site is shown void of structures and cleared of vegetation. The following aerial photographs, 1967 and 1978, show no significant change within the project site. The aerial from 1994 no longer shows the southern half of Dalla Avenue, instead there is a cleared path parallel and just to the south of 11th Street. The following aerial photographs, in 2002 and 2005, show no significant change to the project site until 2009. The 2009 historic aerial photograph depicts a series of structures in the northern half of the project site, and four structures and a parking lot in the southwestern quadrant of the project site. The aerial from 2010 no longer shows the four structures in the southwestern quadrant. The 2012 aerial photograph shows a series of structures in the southeastern section of the project site, just south of 11th Street. The aerial from 2014 shows the dirt lot just south of 11th Street, between the previous location of the four structures and the series of structures to the east, being used as a parking lot. The remaining aerial photograph shows no significant change to the project site or surrounding areas.

The project site has been subjected to considerable ground disturbance from at least the 1940s up to the 2010s.

Geotechnical Report Review

Dudek reviewed a geotechnical report for the project to better understand the geomorphology of the project site. The geotechnical report, Geotechnical Investigation, Geologic Hazards Evaluation, and Infiltration Testing RCCD Ben Clark Training Center Phase I: Education Center, 16791 Davis Avenue, Riverside, California (Appendix D), was prepared for the Riverside Community College District in March 2020. The report documents the results of subsurface testing, laboratory testing, and data analysis. Subsurface testing consisted of six machine-augered borings drilled to a depth of 40 feet and located within the southwestern portion of the current project site. One boring encountered 2 feet of fill soils; this boring was located just south of 11th Street in the central portion of the project site (see B-2). The boring parallel with B-2 to the west, encountered a thin layer of gravel on the surface (see B-4). The report concludes that the area of study contains as much as 3.5 feet of disturbed soils consisting of native soils and artificial fill (intermixed); however, the only documented artificial fill was encountered at a maximum depth of 2 feet. The report does not provide further details regarding artificial fill or native soils. The results of these borings are documented in Table 3.5-3.

Table 3.5-3. Inland Foundation Engineering Boring Log Summary

Boring Number	0–10 feet		10–20 feet	20–30 feet	30–40 feet
B-1	0–2 feet: olive brown silty clayey sand; medium dense (artificial fill)		2–15.5 feet: olive highly to moderately weathered granite; very dense	Boring terminated at 15.5 feet	
B-2	0–2 feet: olive brown silty sand (artificial fill)	2–3.5 feet: olive brown silty clayey sand; medium dense	3.5–23 feet: olive moderately to slightly weathered granite; very dense	Boring terminated at 23 feet	
B-3	0–3 feet: olive brown silty sand; loose to medium dense (artificial fill)		3–21 feet: olive moderately to slightly weathered granite; very dense	Boring terminated at 21 feet	
B-4	2 inches of artificial gravel fill on surface 0–3.5 feet: olive brown silty clayey sand; medium dense (artificial fill)		3.5–40.5 feet: olive to light grey highly to slightly weathered granite; very dense		
B-5	0–1 foot: olive brown silty clayey sand, loose (artificial fill)	1–2.5 feet: red brown clayey sand; loose	2.5–15 feet: olive highly to moderately weathered; very dense	Boring terminated at 15 feet	
B-6	0–1 foot: olive brown silty clayey sand, loose (artificial fill)	1–3 feet: dark brown clayey sand; loose	3–15 feet: olive highly to moderately weathered granite; very dense	Boring terminated at 15 feet	

Source: Appendix D

NAHC SLF Results

Dudek contacted the NAHC on December 2, 2020, to request a review of the SLF. The NAHC replied via email on December 9, 2020, stating that the SLF search was completed with negative results.

Survey

An intensive pedestrian cultural survey of the project site was conducted on January 8, 2021. Survey observations indicate that the entirety of the project site has been disturbed by grading activities. No evidence of the historic period Camp Haan, P-33-003285/CA-RIV-3285H, was encountered and no unknown historic period or prehistoric cultural resources were observed as a result of the survey.

Regulatory Framework

Work for the project was conducted in compliance with CEQA. The regulatory framework as it pertains to cultural resources under CEQA is detailed below.

Under the provisions of CEQA, including the CEQA Statutes (PRC Sections 21083.2 and 21084.1), the CEQA Guidelines (14 CCR 15064.5), and California Public Resources Code (PRC) Section 5024.1 (14 CCR 4850 et seq.), properties expected to be directly or indirectly affected by a proposed project must be evaluated for California Register of Historical Resources (CRHR) eligibility (PRC Section 5024.1).

The purpose of the CRHR is to maintain listings of the state's historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change. The term *historical resources* includes a resource listed in or determined to be eligible for listing in the CRHR; a resource included in a local register of historical resources; and any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR 15064.5[a]). The criteria for listing properties in the CRHR were developed in accordance with previously established criteria developed for listing in the National Register of Historic Places. The California Office of Historic Preservation regards "any physical evidence of human activities over 45 years old" as meriting recordation and evaluation (OHP 1995:2).

California Register of Historic Resources

A cultural resource is considered "historically significant" under CEQA if the resource meets one or more of the criteria for listing on the CRHR. The CRHR was designed to be used by state and local agencies, private groups, and citizens to identify existing cultural resources within the state and to indicate which of those resources should be protected, to the extent prudent and feasible, from substantial adverse change. The following criteria have been established for the CRHR. A resource is considered significant if it:

1. is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. is associated with the lives of persons important in our past;
3. embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, historical resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be able to convey the reasons for their significance. Such

integrity is evaluated in regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Under CEQA, if an archeological site is not a historical resource but meets the definition of a "unique archeological resource" as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section. A *unique archaeological resource* is defined as follows:

- An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
  - Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
  - Has a special and particular quality, such as being the oldest of its type or the best available example of its type
  - Is directly associated with a scientifically recognized important prehistoric or historic event or person

Resources that neither meet any of these criteria for listing in the CRHR nor qualify as a "unique archaeological resource" under CEQA (PRC Section 21083.2) are viewed as not significant. Under CEQA, "A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects" (PRC Section 21083.2[h]).

Impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. Impacts to historical resources from a proposed project are thus considered significant if the project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource, which contributes to its significance; or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource

California Environmental Quality Act

As described further, the following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b)–(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5[b]). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1[q]), it is an "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; 14 CCR 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; 14 CCR 15064.5[a]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following (14 CCR 15064.5[b][2]):

(1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

(2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a]–[c]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2[g]).

Impacts on nonunique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2[a]; 14 CCR 15064.5[c][4]). However, if a nonunique archaeological resource qualifies as a tribal cultural resource (PRC Sections 21074[c] and 21083.2[h]), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the county coroner has examined the remains (Section 7050.5[b]). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Section 7050.5[c]). The NAHC will notify the "most likely descendant," and with the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the most likely descendant by NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

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

Less-than-Significant Impact with Mitigation Incorporated. As described in Section 3.5.1, Existing Conditions, EIC records indicate that 49 previously recorded cultural resources are located within 0.5 miles of the project site. Only one historic-period archaeological resource (P-33-003285/CA-RIV-3285H) overlaps the current project site. The historical resource P-33-003285/CA-RIV-3285H is documented as the previous location of Camp Haan; a World War II-era military camp consisting of Anti-aircraft Replacement Training Center, Base Prisoner of War Camp, Army Service Forces Depot, and US Disciplinary Barracks dating from 1941–1946 or 1947. The intensive-level pedestrian survey did not identify any evidence or contributing components of P-33-003285/CA-RIV-3285H within the project site. While extant buildings associated with Camp Haan, if present, would be potentially eligible for NRHP/CRHR listing, remnant foundations or other features have been determined within concurrence by SHPO as not NRHP/CRHR eligible. However, there is always a possibility that intact subsurface historic-period archaeological deposits or features associated with Camp Haan operations that were not previously identified could be encountered during construction activities and impacts to these resources would be potentially significant. Therefore, **MM-CUL-1** and **MM-CUL-2** would be implemented to reduce potential impacts to unanticipated historic-period archaeological resources. Implementation of **MM-CUL-1** and **MM-CUL-2** would reduce potential impacts pertaining to the inadvertent discovery of archaeological resources to a less than significant level. Therefore, impacts associated with historical resources would be less than significant.

MM-CUL-1 All construction personnel and monitors who are not trained archaeologists shall be briefed regarding inadvertent discoveries prior to the start of construction activities. A basic presentation and handout or pamphlet shall be prepared in order to ensure proper identification and treatment of inadvertent discoveries. The purpose of the Workers Environmental Awareness Program (WEAP)

training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

MM-CUL-2 A qualified archaeologist shall be retained and on-call to conduct spot monitoring and respond to and address any inadvertent discoveries identified during ground disturbing activities whether within disturbed, imported or native soils. A qualified archaeologist shall be retained to monitor all initial ground disturbance once such activities have reached 1 foot above native soils. Initial ground disturbance is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to archaeological monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current project-related construction. A qualified archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs for those days monitoring occurs.

In the event that potential prehistoric or historic-era archaeological resources (sites, features, or artifacts) are exposed during construction activities for the project, all construction work occurring within 100 feet of the find shall immediately stop and a qualified archaeologist must be notified immediately to assess the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work (e.g., preparation of an archaeological treatment plan, testing, or data recovery) may be warranted. If Native American resources are discovered or are suspected, each of the consulting tribes for the Project will be notified and as dictated by California Health and Safety Code Section 7050.5, PRC Section 5097.98, and the California Code of Regulations (CCR) Section 15064.5(e).

If monitoring is conducted, an archaeological monitoring report shall be prepared within 60 days following completion of ground disturbance and submitted to the Riverside Community College District for review. This report shall document compliance with approved mitigation, document the monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the Eastern information Center and interested consulting tribes.

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

Less-than-Significant Impact with Mitigation Incorporated. No archaeological resources were identified within the project site as a result of the NAHC SLF search; however, the CHRIS records search identified one historic-period resource overlapping the current project site. Resource P-33-003285/CA-RIV-3285H is associated with the former Camp Haan, a World War II-era military camp consisting of Anti-aircraft Replacement Training Center, Base Prisoner of War Camp, Army Service Forces Depot, and US Disciplinary Barracks dating from 1941-1946 or 1947. However, the intensive-level pedestrian survey did not identify

any evidence of P-33-003285/CA-RIV-3285H nor any unknown historic-period or prehistoric cultural resources. A review of historical maps and aerial images indicates that the project site has been subjected to considerable ground disturbance from at least the 1940s up to the 2010s. A review of a geotechnical report prepared for the project site determined that artificial fill intermixed with native soils (disturbed soils) were identified up to 3.5 feet below the existing ground surface as a result of the six subsurface exploratory boring investigations, resulting in less than reliable survey findings. In consideration of all these factors, and given the cultural sensitivity in the vicinity of the project site, the potential to encounter unknown intact subsurface archaeological deposits and/or features is considered low, but possible during ground disturbing activities within native soil, between 3.5 to 5 feet below the existing ground surface, considering the lack of opportunity to observe native soils during the pedestrian survey. In the event that unanticipated archaeological resources are encountered during project implementation, impacts to these resources would be potentially significant. Therefore, **MM-CUL-1** and **MM-CUL-2** would be implemented to reduce potential impacts to unanticipated archaeological resources. Implementation of **MM-CUL-1** and **MM-CUL-2** would reduce potential impacts pertaining to the inadvertent discovery of archaeological resources to a less than significant level.

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

Less-than-Significant Impact. No prehistoric or historic-era burials were identified within the proposed project site as a result of the CHRIS records search, NAHC SLF search, or pedestrian survey. However, bordering the BCTC, land is designated as Cemetery (CM) to the southeast (MJPA 1998). In the event that human remains are inadvertently encountered during construction activities, such resources would be treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, PRC Section 5097.98, and the California Code of Regulations (CCR) Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. No further excavation or disturbance of the project site or any nearby area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined, within two working days of notification of the discovery, if the remains are potentially human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to notify the NAHC within 24 hours. The NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant must then complete their inspection within 48 hours of being granted access to the site. The most likely descendant would then determine, in consultation with the property owner, the disposition of the human remains. Compliance with these regulations would ensure that impacts to human remains resulting from the proposed project would be less than significant.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐

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

Less-than-Significant Impact. The electricity and natural gas used for construction of the proposed project would be temporary, would be substantially less than that required for project operation, and would have a negligible contribution to the project's overall energy consumption. Additionally, although natural gas and electricity usage would increase due to the implementation of the project, the project's energy efficiency would meet the current Building Energy Efficiency Standards (Title 24). Although the project would see an increase in petroleum use during construction and operation, vehicles would use less petroleum due to advances in fuel economy and potential reduction in vehicle miles traveled (VMT) over time.

Construction

Electricity

Temporary electric power for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers would be provided by Southern California Edison. The electricity used for such activities would be temporary, would be substantially less than that required for project operation, and would have a negligible contribution to the project's overall energy consumption.

Natural Gas

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the Petroleum subsection. Any minor amounts of natural gas that may be consumed as a result of project construction would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption.

Petroleum

Heavy-duty construction equipment associated with demolition and construction activities for construction would rely on diesel fuel, as would vendor trucks involved in delivery of materials to the project site. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel to and from the site in gasoline-powered light-duty vehicles.

Heavy-duty construction equipment of various types would be used during each phase of project construction. Appendix A lists the assumed equipment usage for each phase of construction. The project's construction equipment is estimated to operate for a total of 25,960 hours.

Fuel consumption from construction equipment was estimated by converting the total carbon dioxide (CO_2) emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Construction is estimated to occur in 2021 and 2022 for Phase I and 2022 and 2023 for Phase II of the project based on the construction phasing schedule. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2020). The estimated diesel fuel usage from construction equipment for Phase I and Phase II of the project are shown in Table 3.6-1.

Table 3.6-1. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)	kg/CO_2/Gallon	Gallons
Phase I				
Site Preparation / Grading				
Demolition	6	18.70	10.21	1,831.58
Site Preparation	7	5.02	10.21	491.22
Grading / Over Excavation	6	13.03	10.21	1,275.90
Structure				
Building Construction	9	122.79	10.21	12,026.02
Plaster Exterior	1	1.91	10.21	187.55
Site Improvement				
Building Construction	9	71.83	10.21	7,035.73
Asphalt Paving / Cure	8	5.73	10.21	561.37
Striping	1	0.38	10.21	37.51
Interior				
Building Construction	9	162.21	10.21	15,887.14
Paint – Primer 1st Coat	1	0.64	10.21	62.52
Final Paint	1	0.64	10.21	62.52
			Phase I Total	**39,459.06**
Phase II				
Demolition	6	33.99	10.21	3,329.11
Site Preparation	7	8.36	10.21	818.79
Grading	6	10.42	10.21	1,020.75
Building Construction	9	266.55	10.21	26,106.42

Table 3.6-1. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)	kg/CO_2/Gallon	Gallons
Paving	8	14.74	10.21	1,443.75
Architectural Coating	1	2.30	10.21	225.06
			Phase II Total	**32,943.88**
			Project Total (Phase I and Phase II)	**72,402.94**

Sources: Pieces of equipment and equipment CO_2 (Appendix A); kg/CO_2/Gallon (The Climate Registry 2020).
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Fuel consumption from worker-, vendor-, and haul-truck trips are estimated by converting the total CO_2 emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline, and vendor/hauling vehicles are assumed to be diesel. Calculations for total worker-, vendor-, and haul-truck fuel consumption for Phase I and Phase II are provided in Tables 3.6-2 through 3.6-4.

Table 3.6-2. Construction Worker Gasoline Demand

Phase	Trips	Vehicle MT CO_2	kg/CO_2/ Gallon	Gallons
Phase I				
Site Preparation / Grading				
Demolition	176.00	0.78	8.78	88.84
Site Preparation	54.00	0.24	8.78	27.33
Grading / Over Excavation	160.00	0.71	8.78	80.87
Structure				
Building Construction	4,664.00	20.42	8.78	2,325.74
Plaster Exterior	150.00	0.64	8.78	72.89
Site Improvement				
Building Construction	2,728.00	11.68	8.78	1,330.30
Asphalt Paving / Cure	140.00	0.60	8.78	68.34
Striping	30.00	0.13	8.78	14.81
Interior				
Building Construction	6,160.00	26.38	8.78	3,004.27
Paint – Primer 1st Coat	50.00	0.21	8.78	23.92
Final Paint	50.00	0.21	8.78	23.92
			Phase I Total	**7,061.22**
Phase II				
Demolition	320.00	1.37	8.78	156.04
Site Preparation	90.00	0.39	8.78	44.42
Grading	128.00	0.55	8.78	62.64
Building Construction	12,420.00	51.80	8.78	5,899.77
Paving	360.00	1.48	8.78	168.56
Architectural Coating	216.00	0.89	8.78	101.37

Table 3.6-2. Construction Worker Gasoline Demand

Phase	Trips	Vehicle MT CO_2	kg/CO_2/ Gallon	Gallons
			Phase II Total	6,432.80
			Project Total (Phase I and Phase II)	13,494.02

Sources: Trips and vehicle CO_2 (Appendix A); kg/CO_2/Gallon (The Climate Registry 2020).
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram.

Table 3.6-3. Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle MT CO_2	kg/CO_2/Gallon	Gallons
Phase I				
Site Preparation / Grading				
Demolition	0.00	0.00	10.21	0.00
Site Preparation	0.00	0.00	10.21	0.00
Grading / Over Excavation	0.00	0.00	10.21	0.00
Structure				
Building Construction	1,908.00	23.19	10.21	2,271.68
Plaster Exterior	0.00	0.00	10.21	0.00
Site Improvement				
Building Construction	1,116.00	13.50	10.21	1,321.90
Asphalt Paving / Cure	14.00	0.17	10.21	16.58
Striping	6.00	0.07	10.21	7.11
Interior				
Building Construction	2,520.00	30.48	10.21	2,984.94
Paint – Primer 1st Coat	0.00	0.00	10.21	0.00
Final Paint	0.00	0.00	10.21	0.00
			Phase I Total	6,602.21
Phase II				
Demolition	0.00	0.00	10.21	0.00
Site Preparation	0.00	0.00	10.21	0.00
Grading	0.00	0.00	10.21	0.00
Building Construction	5,060.00	60.09	10.21	5,885.41
Paving	0.00	0.00	10.21	0.00
Architectural Coating	0.00	0.00	10.21	0.00
			Phase II Total	5,885.41
			Project Total (Phase I and Phase II)	12,487.62

Sources: Trips and vehicle CO_2 (Appendix A); kg/CO_2/Gallon (The Climate Registry 2020).
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram.

Table 3.6-4. Construction Haul Truck Diesel Demand

Phase	Trips	Vehicle MT CO_2	kg/CO_2/Gallon	Gallons
Phase I				
Site Preparation / Grading				
Demolition	24.00	0.86	10.21	84.33
Site Preparation	0.00	0.00	10.21	0.00
Grading / Over Excavation	276.00	9.90	10.21	969.77
Structure				
Building Construction	0.00	0.00	10.21	0.00
Plaster Exterior	0.00	0.00	10.21	0.00
Site Improvement				
Building Construction	0.00	0.00	10.21	0.00
Asphalt Paving / Cure	0.00	0.00	10.21	0.00
Striping	0.00	0.00	10.21	0.00
Interior				
Building Construction	0.00	0.00	10.21	0.00
Paint – Primer 1st Coat	0.00	0.00	10.21	0.00
Final Paint	0.00	0.00	10.21	0.00
			Phase I Total	**1,054.10**
Phase II				
Demolition	62.00	2.20	10.21	215.48
Site Preparation	0.00	0.00	10.21	0.00
Grading	0.00	0.00	10.21	0.00
Building Construction	0.00	0.00	10.21	0.00
Paving	0.00	0.00	10.21	0.00
Architectural Coating	0.00	0.00	10.21	0.00
			Phase II Total	**215.48**
			Project Total (Phase I and Phase II)	**1,269.58**

Sources: Trips and vehicle CO2 (Appendix A); kg/CO2/Gallon (The Climate Registry 2020).
Notes: MT = metric ton; CO2 = carbon dioxide; kg = kilogram.

In summary, construction of the project is anticipated to consume 13,494 gallons of gasoline and 86,160 gallons of diesel over the course of approximately 24 months.[12] The proposed project would be required to comply with the CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. Furthermore, the proposed project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that requires the vehicle fleet to reduce emissions by retiring, replacing, repowering older engines, or installing Verified Diesel Emissions Control Strategies. Therefore, impacts associated with construction would be less than significant.

[12] For context, in 2018, California consumed about 681 million barrels of oil, which equates to approximately 78.36 million gallons of petroleum a day. Based on these assumptions, about 58.77 billion gallons of petroleum would be consumed in California throughout the project construction period (EIA 2021a). Locally, approximately 1.87 billion gallons of petroleum would be consumed in Riverside County throughout the project construction period (CARB 2017a).

Operation

Electricity

The project would require electricity for multiple purposes at buildout, including cooling, lighting, appliances, various equipment within the training center, and lighting for the associated parking lot. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. Electricity consumption associated with project operation is based on the CalEEMod outputs presented in Appendix A.

CalEEMod default values for energy consumption for the college and associated parking lot were applied for the project analysis. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end-use categories subject to Title 24 requirements (end-uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Title 24 of the California Code of Regulations serves to enhance and regulate California building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. According to these estimations, the proposed project would consume approximately 588,285 kilowatt-hours per year during operation.[13]

Rooftop and parking lot solar panel arrays would be installed on site which would yield up to 110 kW of power which is expected to have a carbon offset of 126 metric tons per year (RCCD 2020).Because the timing of when this would occur is not yet known, as a conservative measure, the beneficial impacts of installing solar panels (i.e., off-setting greenhouse gas emissions and energy usage) is not accounted for within this analysis.

Natural Gas

The operation would require natural gas for various purposes, including water heating and natural gas appliances. Natural gas consumption associated with operation is based on the CalEEMod outputs presented in Appendix A.

CalEEMod default values for energy consumption for the college were applied for the project analysis. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end-use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

[13] For context, in 2019, California used approximately 250 billion kilowatt-hours of electricity (EIA 2021b). Locally, in 2019, non-residential electricity demand in Riverside County was approximately 8 billion kilowatt-hours (CEC 2021a).

Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. According to these estimations, the proposed project would consume approximately 741,040 kilo-British Thermal Units (kBtu) per year.[14]

Petroleum

During operations, the majority of fuel consumption resulting from the project would involve the use of motor vehicles traveling to and from the project site by students and employees.

Petroleum fuel consumption associated with motor vehicles traveling to and from the project site is a function of the VMT as a result of project operation. As shown in Appendix A and as discussed in Section 3.3, Air Quality, and Section 3.8, Greenhouse Gas Emissions, the annual VMT attributable to the proposed project is expected to be approximately 2,578,736 VMT. Similar to the construction worker and vendor trips, fuel consumption from students and facility is estimated by converting the total CO_2 emissions from operation of the project to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Based on the annual fleet mix provided in CalEEMod, 69.64% of the fleet range from light-duty to medium-duty vehicles and motorcycles, which are assumed to run on gasoline. The remaining 30.36% of vehicles represent medium-heavy duty to heavy-duty vehicles and buses and are assumed to run on diesel.

Calculations for annual mobile source fuel consumption are provided in Table 3.6-5 (gasoline) and Table 3.6-6 (diesel).

Table 3.6-5. Annual Mobile Source Gasoline Demand

	Vehicle MT CO_2	kg/CO_2/Gallon	Gallons
Operation	715.39	8.78	81,840

Sources: Trips and vehicle CO_2 (Appendix A); kg/CO_2/Gallon (The Climate Registry 2020).
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram

Table 3.6-6. Annual Mobile Source Diesel Demand

	Vehicle MT CO_2	kg/CO_2/Gallon	Gallons
Operation	311.85	10.21	30,544

Sources: Trips and vehicle CO_2 (Appendix A; kg/CO_2/Gallon (The Climate Registry 2020).
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram

Summary

Over the lifetime of the project, the fuel efficiency of the vehicles being used by the visitors, students, and employees of the project is expected to increase. As such, the amount of gasoline consumed as a result of vehicular trips to and from the project site during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted a new approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to

[14] For context, in 2018, California consumed approximately 1,574.4 billion kBtu of natural gas (EIA 2021c). Locally, in 2018, non-residential uses in Riverside County consumed about 14.8 billion kBtu of natural gas (CEC 2021b).

support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California (CARB 2017b). Additionally, in response to Senate Bill (SB) 375, CARB has adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by the year 2020 and 13% by the year 2035 for light-duty passenger vehicles in the SCAG planning area. This reduction would occur by reducing VMT through the integration of land use planning and transportation (SCAG 2012). As such, operation of the project is expected to use decreasing amounts of petroleum over time, due to advances in fuel economy.

The proposed project would create additional electricity and natural gas demand by adding educational facilities. New facilities associated with the proposed project would be subject to the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of non-residential buildings and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting.

In summary, implementation of the project would increase the demand for electricity and natural gas at the project site and petroleum consumption in the region during construction and operation. However, as the project would be consistent with current regulations and policies, the project would not be wasteful, inefficient, and would not result in unnecessary energy resource consumption. The project's energy consumption demands during construction and operation would conform to the State's Title 24 standards such that the project would not be expected to wastefully use gas and electricity. Since the proposed project would comply with Title 24 conservation standards, the proposed project would not directly require the construction of new energy generation or supply facilities or result in wasteful, inefficient, or unnecessary consumption of energy. Moreover, vehicle usage associated with the project would use less petroleum due to advances in fuel economy and potential reduction in VMT over time. Therefore, impacts would be less than significant.

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

Less-than-Significant Impact. The proposed project would be subject to and would comply with, at a minimum, the 2019 California Building Code Title 24 (24 CCR, Part 6). The project would also comply with the County's CAP, which was updated in November 2019 to reduce regional energy use and thereby reduce the County's contribution to global climate change (County of Riverside 2019). In addition, this project is identified as a location for solar panel arrays in the RCCD 2020 Districtwide Solar Planning Initiative.

The proposed project would not conflict with existing energy standards and regulations; therefore, impacts during construction and operation of the proposed project would be less than significant.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☒	☐	☐

a) Would the project 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.

No Impact. The Alquist-Priolo Zones Special Studies Act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years. As shown in Figure S-2, in the Safety Chapter of the County's General Plan, the project site would not be located within an Alquist-Priolo Zone or a County designated fault hazard zone. The nearest Alquist-Priolo Zone is located approximately 10.3 miles northeast of the project site and the nearest County fault hazard zone is located approximately 10.5 miles northeast of the project site (County of Riverside 2015b). Additionally, there are no active faults in the March JPA planning area, including the project site; the Casa Loma Fault, located approximately 11 miles to the east, is the closest segment of the San Jacinto Fault zone to the project site (MJPA 1998). Furthermore, based on a review of the California Department of Conservation regulatory maps (CDOC 2021b), the project site is not located in a designated earthquake fault zone. Therefore, no impact associated with fault rupture would occur

ii) Strong seismic ground shaking?

Less-than-Significant Impact. Similar to other areas located in the seismically active Southern California region, the County is susceptible to strong ground shaking during an earthquake. However, as previously addressed in Section 3.7(a)(i), the project site is not located within an active fault zone, and the site would not be affected by ground shaking more than any other area in this seismic region. Additionally, as discussed in the Geotechnical Report prepared for the project, all structures would be designed in accordance with the 2019 California Building Code, which sets forth specific engineering requirements (CBC 2019). Further, the project would incorporate grading, foundation design and lateral resistance recommendations provided within the Geotechnical Report. Refer to Appendix D for further detail. Incorporation of these recommendations would reduce the potential risk to both people and structures with respect to strong seismic ground shaking. Therefore, impacts associated with strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less-than-Significant Impact. Liquefaction occurs when partially saturated soil loses its effective stress and enters a liquid state, which can result in the soil's inability to support structures above. Liquefaction can be induced by ground-shaking events and is dependent on soil saturation conditions. According the March JPA General Plan, the potential for liquefaction and seismically induced dynamic settlements of soils is low within the entire March JPA planning area, including the project site. The relatively dense and cohesive nature of the underlying alluvium and the presence of a shallow (less than 50 feet below ground surface) regional water table results in a low susceptibility of seismically induced hazards (MJPA 1998). Additionally, based on a review of the California Department of Conservation regulatory maps (CDOC 2021b), the project site is not located in a liquefaction zone. Therefore, impacts associated with liquefaction would be less than significant.

iv) Landslides?

No Impact. The project site consists of flat parcel and is not located adjacent to any potentially unstable topographical feature such as a hillside or riverbank. As shown in Figure S-4 in the Safety Chapter of the County's General Plan, the project site would not be located in an area susceptible to landslides (County of Riverside 2015b). Additionally, based on a review of the California Department of Conservation regulatory maps (CDOC 2021b), the project site is not located in a landslide zone. Therefore, no impact associated with landslides would occur.

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

Short-Term Construction Impacts

Less-than-Significant Impact. The project would involve earthwork and other construction activities that would disturb surface soils and temporarily leave exposed soil on the ground's surface. Common causes of soil erosion from construction sites include stormwater, wind, and soil being tracked off site by vehicles. To help curb erosion, project construction activities must comply with all applicable federal, state, and local regulations for erosion control. The project would be required to comply with standard regulations, including South Coast Air Quality Management District Rules 402 and 403, which would reduce construction erosion impacts. Rule 402 requires that dust suppression techniques be implemented to prevent dust and soil erosion from creating a nuisance off site (SCAQMD 1976). Rule 403 requires that fugitive dust be controlled with best available control measures so that it does not remain visible in the atmosphere beyond the property line of the emissions source (SCAQMD 2005).

Since project construction activities would disturb 1 or more acres, the project must adhere to the provisions of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. Construction activities subject to this permit include clearing, grading, and ground disturbances such as stockpiling and excavating. The NPDES Construction General Permit requires implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would include construction features for the project (i.e., best management practices [BMPs]) designed to prevent erosion and protect the quality of stormwater runoff. Sediment-control BMPs may include stabilized construction entrances, straw wattles on earthen embankments, sediment filters on existing inlets, or the equivalent. Therefore, construction impacts associated with soil erosion would be less than significant.

Long-Term Operational Impacts

Less-than-Significant Impact. Once developed, the project site would include the proposed buildings, paved parking areas, and associated improvements that would stabilize and help retain on-site soils. The remaining portions of the project site containing pervious surfaces would primarily consist of landscape areas. These landscape areas would include a mix of trees, shrubs, plants, and groundcover that would help retain on-site soils while preventing wind and water erosion from occurring. Therefore, operational impacts related to soil erosion would be less than significant.

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

Less-than-Significant Impact. As discussed in Section 3.7(a) (iii) and (iv), the project site would be located in an area associated with very low liquefaction susceptibility (MJPA 1998) and would not be located in a landslide zone (County of Riverside 2015b). The project site is flat and is not located adjacent to any potentially unstable topographical feature, such as a hillside or riverbank. Additionally, the project site is mapped as Monserate sandy loam (87.9%) and Fallbrook fine sandy loam (12.1%) (USDA 2021), which is not made up of clay materials typically associated with expansive soils. Therefore, impacts associated with unstable and expansive soils would be less than significant.

d) Would the project 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?

Less-than-Significant Impact. As discussed in Section 3.7(c), the project site is mapped as Monserate sandy loam (87.9%) and Fallbrook fine sandy loam (12.1%) (USDA 2021), which is not made up of clay materials typically associated with expansive soils. Therefore, impacts associated with unstable and expansive soils would be less than significant.

e) Would the project 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?

No Impact. The project would connect directly to the public sewer system and would not require septic tanks or any other alternative wastewater disposal system. Therefore, no impacts associated with the adequacy of soils and septic systems would occur.

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

Less-than-Significant Impact with Mitigation Incorporated. The project site's paleontological sensitivity was previously assessed in 2001 in the Ben Clark Training Center Environmental Impact Report (EIR), which covered the entirety of the project site (RCSD 2002). According to the Ben Clark Training Center EIR the project site is considered to have a low potential for containing paleontological resources. The project site primarily consists of recent alluvial sediments, which do not often reveal paleontological sites and resources because they are generally too young to contain fossils (Appendix D). No paleontological resources have been previously identified on the project site during pervious ground disturbing activities, particularly during grading activities that occurred directly on the entirety of the project site as part of the development of the former March AFB. However, the possibility of a paleontological discovery cannot be discounted. Accordingly, destruction of paleontological resources or unique geologic features during site-disturbing activities associated with construction of the proposed project is considered a potential significant impact. Therefore, **MM-GEO-1** is provided and would be implemented to ensure potential impacts during construction activities to paleontological resources or unique geologic features are reduced to a less-than-significant level.

MM-GEO-1 In the event that paleontological resources (fossil remains) are exposed during construction activities for the proposed project, all construction work occurring within 50 feet of the find shall

immediately stop until a qualified paleontologist, as defined by the Society of Vertebrate Paleontology's 2010 guidelines, can assess the nature and importance of the find. Depending on the significance of the find, the paleontologist may record the find and allow work to continue or recommend salvage and recovery of the resource. All recommendations will be made in accordance with the Society of Vertebrate Paleontology's 2010 guidelines and shall be subject to review and approval by the Riverside Community College District. Work in the area of the find may only resume upon approval of a qualified paleontologist

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐

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

Less-than-Significant Impact. Climate change refers to any significant change in measures of climate (e.g., temperature, precipitation, or wind patterns) lasting for an extended period of time (i.e., decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and buildup of heat in the atmosphere near the Earth's surface (the troposphere). The greenhouse effect is a natural process that contributes to regulating the Earth's temperature, and it creates a livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen

trifluoride (see also CEQA Guidelines Section 15364.5).[15] The three GHGs evaluated herein are CO_2, CH_4, and N_2O because these gases would be emitted during proposed project maintenance.

The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare each GHG's ability to trap heat in the atmosphere relative to another gas. The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e). Consistent with CalEEMod Version 2016.3.2, this GHG emissions analysis assumed the GWP for CH_4 is 25 (i.e., emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

As discussed in Section 3.3, Air Quality, the proposed project is located within the jurisdictional boundaries of the SCAQMD. In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document—Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008a). This document, which builds on the California Air Pollution Control Officers Association's previous guidance, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO_2e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (SCAQMD 2008b). The 10,000 MT CO_2e per-year threshold, which was derived from GHG reduction targets established in Executive Order S-3-05, was based on the conclusion that the threshold was consistent with achieving an emissions capture rate of 90% of all new or modified stationary source projects.

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land-use development projects. The most recent proposal issued by SCAQMD, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1. Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2. Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3. Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO_2e per-year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical

[15] Climate-forcing substances include greenhouse gases (GHGs) and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in the California Health and Safety Code Section 38505; impacts associated with other climate-forcing substances are not evaluated herein.

screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4. Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of Assembly Bill (AB) 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per-service population for project-level analyses and 6.6 MT CO_2e per-service population for plan-level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5. Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, establish specific thresholds of significance, or mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance that are consistent with the manner in which other impact areas are handled in CEQA (California Natural Resources Agency 2009).

To determine the proposed project's potential to generate GHG emissions that would have a significant impact on the environment, its GHG emissions were compared to the SCAQMD recommended commercial project quantitative threshold of 1,400 MT CO_2e per year.

Construction Greenhouse Gas Emissions

Construction of the project would result in GHG emissions, which are primarily associated with off-road construction equipment, on-road haul and vendor trucks, and worker vehicles. The SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2009) recommends that "construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies." Thus, the total construction GHG emissions were calculated, amortized over 30 years, and added to the total operational emissions for comparison with the GHG significance threshold of 1,400 MT CO_2e per year. Therefore, the determination of significance is addressed in the operational emissions discussion following the estimated construction emissions.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 3.3. Construction of Phase I of the project is anticipated to commence in September 2021, lasting approximately 10 months. Phase II of the project is expected to begin in August 2022 and last about 14 months. On-site sources of GHG emissions include off-road equipment, and off-site sources include haul trucks, vendor trucks, and worker vehicles. Table 3.8-1 presents construction GHG emissions for Phase I and Phase II of the project from on-site and off-site emission sources.

Table 3.8-1. Estimated Annual Construction GHG Emissions

Year[a]	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Phase I				
2021	150.44	0.03	0.00	151.22
2022	394.46	0.08	0.00	396.34
			Phase I Total	**547.56**
Phase II				
2022	176.50	0.04	0.00	177.44
2023	278.62	0.05	0.00	279.90
			Phase II Total	**457.34**
Total Project (Phase I and Phase II)				
			Phase I and Phase II Total	**1,004.90**
			Amortized Emissions (over 30 years)	**33.50**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for complete results.

[a] Phase I construction would cease on approximately July 5, 2022, while Phase II construction would commence on approximately August 8, 2022. Therefore, no construction overlap would occur between phases.

As shown in Table 3.8-1, the estimated total GHG emissions during construction would be approximately 1,005 MT CO_2e. Estimated project-generated construction emissions amortized over 30 years would be approximately 34 MT CO_2e per year. As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Because there is no separate GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis in the following text.

Operational Emissions

CalEEMod Version 2016.3.2 was used to estimate potential project-generated operational GHG emissions from vehicular sources, area sources (natural gas combustion and landscape maintenance), electrical generation (including electrical generation associated with water supply and wastewater treatment), and solid waste. Emissions from each category—area sources, energy sources, mobile sources, solid waste, and water supply and wastewater treatment—are discussed in the following text with respect to the project. For additional details, see Section 3.3 for a discussion of operational emission calculation methodology and assumptions, specifically for area, energy (natural gas), and mobile sources. The operational year of 2024 was assumed to be buildout of the project.

Area Sources

CalEEMod was used to estimate GHG emissions from the project's area sources, including gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions. It was assumed that 100% of the landscaping equipment would be gasoline-powered. Consumer product use and architectural coatings result in VOC emissions, which are analyzed in air quality analysis only, and low-to-no GHG emissions.

Energy Sources

The estimation of operational energy emissions was based on CalEEMod land use defaults and square footage of the project's land uses. For non-residential buildings, CalEEMod energy intensity value (electricity or natural gas usage per square foot per year) assumptions were based on the California Commercial End-Use Survey database. Emissions are calculated by multiplying the energy use by the utility carbon intensity (pounds of GHGs per kilowatt-hour for electricity or 1,000 British thermal units for natural gas) for CO_2 and other GHGs.

The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. The current version of CalEEMod assumes compliance with the 2016 Title 24 Building Energy Efficiency Standards (CAPCOA 2017); however, the project would be required to comply with the 2019 Title 24 Standards. Per the California Energy Commission Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, the first-year savings for newly constructed non-residential buildings are 197 gigawatt hours of electricity, 76.6 megawatts of demand, and 0.27 million therms of gas, representing reductions from the 2016 Title 24 standard of 10.7%, 9%, and 1%, respectively (CEC 2018b). To take into account energy reductions associated with compliance with 2019 Title 24, the CalEEMod Title 24 electricity and natural gas values were reduced by 10.7% and 1%, respectively, for the project buildings.

The CalEEMod default energy intensity factor (CO_2, CH_4, and N_2O mass emissions per kilowatt-hour) for Southern California Edison is based on the value for Southern California Edison's energy mix in 2012. The Southern California Edison energy use intensity factor was adjusted consistent with their 2018 Power Content Label, which reported that 35% of the power mix was generated by eligible renewable sources (SCE 2020). SB X1 2 established a target of 33% from renewable energy sources for all electricity providers in California by December 31, 2020, and SB 100 calls for further development of renewable energy, with a target of 44% by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030. As such, GHG emissions associated with project electricity demand would continue to decrease over time.

Mobile Sources

All details for criteria air pollutants discussed in Section 3.3 are also applicable for the estimation of operational mobile source GHG emissions. Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the State. In addition, the National Highway Traffic Safety Administration and Environmental Protection Agency have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the project's motor vehicles. The effectiveness of fuel economy improvements was evaluated to the extent it was captured in the EMFAC2014 emission factors for motor vehicles in 2024.

Solid Waste

The project would generate solid waste, and therefore, result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the proposed project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using CalEEMod default values.

Estimated project-generated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, and water usage and wastewater generation for project buildout (2024) are shown in Table 3.8-2.

Table 3.8-2. Estimated Annual Operational GHG Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	0.00	0.00	0.00	0.01
Energy	169.86	0.00	0.00	179.90
Mobile	1,026.09	0.05	0.00	1,027.25
Solid waste	14.28	0.84	0.00	35.39
Water and wastewater	21.56	0.09	0.00	24.41
			Total	**1,266.96**
			Amortized 30-year Construction Emissions	*33.50*
			Project Operations + Amortized Construction Total	**1,300.46**
			SCAQMD Threshold	*1,400*
			Threshold Exceeded?	**No**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent; SCAQMD = South Coast Air Quality Management District; <0.01 = reported value less than 0.01.
See Appendix A for complete results.

As shown in Table 3.8-2, estimated annual project-generated GHG emissions would be approximately 1,267 MT CO_2e due to project operation only. Estimated annual project-generated operational GHG emissions in 2024 plus amortized construction emissions (approximately 34 MT CO_2e per year) would be approximately 1,300 MT CO_2e per year. Thus, the project would not exceed the SCAQMD threshold of 1,400 MT CO_2e per year. Therefore, the project's GHG contribution would not be cumulatively considerable and is less than significant.

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

Less-than-Significant Impact. The proposed project would result in less-than-significant impacts related to conflicts with GHG emission reduction plans, for the reasons described as follows.

Potential to Conflict with the County of Riverside Climate Action Plan

The County of Riverside Climate Action Plan (CAP) is not applicable to the project; however, a brief analysis of the project's potential to conflict with the County of Riverside CAP is provided for informational purposes.

The County of Riverside CAP, originally adopted in 2015 and updated in 2019, presents a comprehensive set of actions to reduce its internal and external GHG emissions to 15% below 2008 GHG emission levels by 2020, consistent with the AB 32 Scoping Plan. The County provided the CAP update in November 2019 and was adopted on December 17, 2019. The CAP update builds upon the information gathered by the GHG inventories and forecasts emissions for 2030 and 2050. The CAP update was designed under the premise that the County of Riverside, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County's jurisdiction and that Riverside County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner. The CAP update proposes new targets consistent with the state targets to meet the requirements of SB 32. The state recommends a 15% reduction below 2005–2008 baseline levels by 2020, a 49% reduction below 2008 levels by 2030, and an 80% reduction below 2008 levels by 2050. In order to meet these goals, the County plans to reduce community-wide emissions to 3,576,598 MT CO_2e per year by 2030 and 1,192,199 MT CO_2e per year by 2050 (County of Riverside 2019). Per the CAP, each new project within the County subject to CEQA would require to meet one of the following criteria:

- Projects below the screening threshold of 3,000 MT CO_2e per year for GHGs are determined to be less than significant, and no further GHG analysis would be required, or
- Projects that exceed the screening threshold are able to tier from the GHG analysis associated with the CAP by accumulating 100 points from the Screening Tables in Appendix F of the CAP.

As discussed under threshold 3.8(a), the project is estimated to generate approximately 1,300 MT CO_2e per year from operation and amortized construction; therefore, the project would not exceed the County of Riverside's CAP threshold of 3,000 MT CO_2e per year. As such, the project would not conflict with the County of Riverside's CAP.

Potential to Conflict with the CARB Scoping Plan

The Climate Change Scoping Plan, approved by CARB in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs (CARB 2014, 2017c). The Scoping Plan is not directly applicable to specific projects, and it is not intended to be used for project-level evaluations.[16]

[16] The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (California Natural Resources Agency 2009).

Under the Scoping Plan, however, several state regulatory measures aim to identify and reduce GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area-source emissions (e.g., energy usage and high-GWP GHGs in consumer products) and changes to the vehicle fleet (e.g., hybrid, electric, and more fuel-efficient vehicles) and associated fuels, among others. Nonetheless, the project would comply with various GHG emission reduction regulations to the extent they apply to the project's emissions sources.

Potential to Conflict with the Southern California Association of Governments 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

The SCAG 2020–2045 RTP/SCS is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the Southern California Region pursuant to SB 375. In addition to demonstrating the Region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2020–2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2020–2045 RTP/SCS would result in more complete communities with various transportation and housing choices while reducing automobile use.

The following strategies are intended to be supportive of implementing the 2020–2045 RTP/SCS and reducing GHGs: focus growth near destinations and mobility options; promote diverse housing choices; leverage technology innovations; support implementation of sustainability policies; and promote a green region (SCAG 2020). The strategies that pertain to residential development and SCAG's support of local jurisdiction sustainability efforts would not apply to the project. The project's potential to conflict with the remaining applicable strategies is presented below.

Focus Growth Near Destinations and Mobility Options. The project would not conflict with this strategy of the 2020–2045 RTP/SCS as it would be located within the existing BCTC, which currently provides educational and training programs.

Leverage Technology Innovations. One of the technology innovations identified in the 2020–2045 RTP/SCS that would apply to the project is the promotion and support of low emission technologies for transportation, such as alternative fueled vehicles to reduce per capita GHG emissions. The project would include electric charging vehicle stations and clean air parking stalls throughout the project site. The project would not conflict with SCAG's ability to implement this strategy.

Promote a Green Region. The third applicable strategy within the 2020–2045 RTP/SCS, for individual developments, such as the project, involves promoting a green region through efforts such as supporting local policies for renewable energy production and promoting more resource efficient development (e.g., reducing energy consumption) to reduce GHG emissions. Solar panels would be installed on the rooftop of the classroom building and in the parking lot. The rooftop array is expected to yield 50 kilowatts (kW) of power and the carport would yield 60 kW of power. An 80 kW per hour battery energy storage system would be located adjacent to the classroom building's east side (RCCD 2020). Therefore, the project would support this measure.

Based on the analysis above, the project would be consistent with the SCAG 2020–2045 RTP/SCS.

Potential to Conflict with Senate Bill 32 and Executive Order S-3-05

Regarding consistency with SB 32 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and Executive Order S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future-year analysis. However, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan: Building on the Framework that "California is on track to meet the near-term 2020 GHG emissions limit and is well-positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, CARB (2014) states the following:

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under Assembly Bill 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally-driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the State is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and Executive Order S-3-05. This is confirmed in the 2017 Climate Change Scoping Plan Update, which states (CARB 2017c):

> The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

The proposed project would not interfere with implementation of GHG reduction goals for 2030 or 2050 because it would not exceed the SCAQMD's recommended threshold of 1,400 MT CO_2e per year for commercial projects. Moreover, the proposed project would not exceed the County of Riverside CAP threshold of 3,000 MT CO_2e per year. While the project is not subject to the County of Riverside CAP requirements, compliance with goals set out in the document shows that the project emission rates align with regional and statewide goals. Because the project would not exceed these thresholds, this analysis provides support for the conclusion that the project would not impede the state's trajectory toward the previously described statewide GHG reduction goals for 2030 or 2050.

Summary

Based on the considerations previously outlined, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; therefore, the impact would be less than significant.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact 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 that 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?	☐	☐	☒	☐

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

Short-Term Construction Impacts

Less-than-Significant Impact. A variety of hazardous substances and wastes would be transported to, stored, used, and generated on the project site during construction of the project. These would include

fuels for machinery and vehicles, new and used motor oils, cleaning solvents, paints, and storage containers and applicators containing such materials. Accidental spills, leaks, fires, explosions, or pressure releases involving hazardous materials represent a potential threat to human health and the environment if not properly treated. However, these materials would be transported, used, and disposed of in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. For example, hazardous materials would not be disposed of or released onto the ground or into the underlying groundwater or any surface water during construction or operation of the project, and completely enclosed containment would be required for all refuse generated on the project site. Additionally, all construction waste, including trash, litter, garbage, solid waste, petroleum products, and any other potentially hazardous materials, would be removed to a waste facility permitted to treat, store, or dispose of such materials. Use of these materials during construction for their intended purpose would not pose a significant risk to the public or the environment.

The transport and use of hazardous materials would be required to comply with the guidelines set forth by each product's manufacturer, as well as with all applicable federal, state, and local regulations. The United States Department of Transportation, the California Department of Health Services, the California Department of Transportation, and the California Highway Patrol all have interrelated programs designed to prevent disasters during the transportation of hazardous materials. Additionally, the EPA and the Occupational Safety and Health Administration have interrelated programs designed to prevent the misuse of hazardous materials in the workplace. Therefore, with compliance with all applicable federal, state, and local regulations, construction of the project would have a less-than-significant impact with regard to hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Long-Term Operational Impacts

Less-than-Significant Impact. Potentially hazardous materials associated with project operations would include those materials used during typical cleaning and maintenance activities. Although these potential hazardous materials would vary, they would generally include household cleaning products, paints, fertilizers, and herbicides and pesticides. Many of these materials are considered household hazardous wastes, common wastes, and/or universal wastes by the EPA; the EPA considers these types of wastes to be common to businesses and households and to pose a lower risk to people and the environment than other hazardous wastes when properly handled, transported, used, and disposed of. Federal, state, and local regulations typically allow these types of wastes to be handled and disposed of with less stringent standards than other hazardous wastes, and many of these wastes do not have to be managed as hazardous waste.

Additionally, any potentially hazardous material handled on the project site would be limited in both quantity and concentrations, consistent with other similar uses at the BCTC, and any handling, transport, use, and disposal would comply with applicable federal, state, and local regulations. Additionally, as mandated by the Occupational Safety and Health Administration, all hazardous materials stored on the project site would be accompanied by a Material Safety Data Sheet, which would inform employees and first responders as to the necessary remediation procedures in the case of accidental release. Therefore, operational impacts associated with hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials would be less than significant.

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

Less-than-Significant Impact. Construction activities on the project site would involve the transport of gasoline and other materials to the site during construction. Relatively small amounts of commonly used hazardous substances, such as gasoline, diesel fuel, lubricating oil, grease, and solvents would be used on site for construction and maintenance. The materials alone and use of these materials for their intended purpose would not pose a significant risk to the public or environment; however, accidental spills of hazardous materials during construction could potentially result in soil contamination or water quality impacts. To minimize/eliminate fuel spillage, all construction vehicles would be adequately maintained and equipped. All equipment maintenance work, including refueling, would occur off site or within the designated construction staging area. All potentially hazardous construction waste, including trash, litter, garbage, other solid wastes, petroleum products, and other potentially hazardous materials, would be removed to a hazardous waste facility permitted to treat, store, or dispose of such materials. Additionally, any potentially hazardous material handled on the project site during operation of the project would be limited in both quantity and concentration, consistent with other similar uses at the BCTC, and any handling, transport, use, and disposal would comply with applicable federal, state, and local regulations. Therefore, with compliance with all applicable federal, state, and local regulations, the project would not 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, and impacts would be less than significant.

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

Less-than-Significant Impact. The project site would be located within the BCTC which is a regional training site that provides basic and advanced training to public safety personnel. The project proposes development of two buildings for the School of Public Safety at BCTC and would involve construction near existing BCTC buildings used for training purposes such as the CAL FIRE Training Center and EMS Academy building located approximately 50 feet east of the project site.

The nearest school to the project site is Tomas Rivera Elementary School, located approximately 0.8 miles north of the project site. As discussed in Section 3.9(a) and (b), limited amounts of hazardous materials could be used during construction and operation of the project, including the use of standard construction materials (e.g., lubricants, solvents, and paints), cleaning and other maintenance products (used in the maintenance of buildings, pumps, pipes, and equipment), diesel and other fuels (used in construction and maintenance equipment and vehicles), and the limited application of pesticides associated with landscaping. These materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. None of these activities would result in the routine transport of, emission, or disposal of hazardous materials, and no acutely hazardous materials would be used on site during construction or operation of the project. All construction activity would be performed in compliance with state and federal regulations, and compliance with these regulations would ensure that the general public would not be exposed to any unusual or excessive risks related to hazardous materials during construction on the project site. Additionally, all equipment maintenance work, including refueling, would occur off site or within the designated construction staging area. All potentially hazardous construction waste, including trash, litter,

garbage, other solid wastes, petroleum products, and other potentially hazardous materials, would be removed to a hazardous waste facility permitted to treat, store, or dispose of such materials. During operation of the project, any potentially hazardous material handled on the project site would be limited in both quantity and concentrations, consistent with other similar uses at the BCTC, and any handling, transport, use, and disposal would comply with applicable federal, state, and local regulations. Further, as mandated by the Occupational Safety and Health Administration, all hazardous materials stored on the project site would be accompanied by a Material Safety Data Sheet, which would inform employees and first responders as to the necessary remediation procedures in the case of accidental release. Therefore, impacts to schools would be less than significant.

d) Would the project be located on a site that 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?

Less-than-Significant Impact. The provisions in California Government Code Section 65962.5, is commonly referred to as the "Cortese List." The Cortese List, or a site's presence on the list, has bearing on the local permitting process as well as on compliance with CEQA. The California Department of Toxic Substances Control's EnviroStor and the State Water Resources Control Board's GeoTracker online databases are commonly searched to determine the presence or absence of hazardous materials sites included on the Cortese List.

A review of these regulatory databases showed that the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List) (DTSC 2021; SWRCB 2021). While no impacts are anticipated due to contaminated soils on the project site, if contaminated soils are found during the course of construction for the project, all standard hazardous remediation and removal procedures would be followed. As such, the project would not result in a significant hazard to the public or to the environment. Therefore, no impacts related to on-site hazardous materials would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The closest airport to the project site is March Air Reserve Base/Inland Port Airport, which is located approximately 2 miles east of the project site. According to the Vision 2030 March JPA General Plan (MJPA 2010), the project site is located outside of the March Air Reserve Base/Inland Port Airport's influence area boundary. No private airstrips are located within the broader vicinity of the March JPA (AirNav.com 2021). Thus, air traffic noise associated with the airport would not expose construction workers or District employees to excessive noise levels. Therefore, no impacts associated with public airport and air traffic noise would occur.

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

Less-than-Significant Impact. The project must comply with the County's Emergency Operation Plan (EOP) for both construction and operations of all phases. Construction activities that may temporarily restrict vehicular traffic during all phases would be required to implement adequate and appropriate measures to

facilitate the passage of persons and vehicles through and around any required road closures in accordance with the County's EOP. Operation of the project would not interfere with the County's EOP because the driveways off 11th Street would be made accessible for emergency vehicles. The project applicant would be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state, and federal requirements related to emergency access and evacuation plans. Adherence to these requirements would ensure that potential impacts related to this issue remain below a level of significance and that no mitigation would be required. Thus, impacts would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Less-than-Significant Impact. A review of CAL FIRE maps show that the project site is not located within a Very High Fire Hazard Severity Zone (FHSZ) (CAL FIRE 2021). However, Figure S-11 of the County General Plan, shows the project site is located within a high FHSZ (County of Riverside 2015b). As such, the project would be required to comply with regulations regarding wildfire hazards in the Riverside County Municipal Code. Projects which are located in high FHSZ areas as designated in the County General Plan shall require project features such as a buffer of fire retardant landscaping for appropriate distances from structures, water facility improvements, and roofs, eaves and siding constructed with Class B fire resistant roofing materials (County of Riverside 2020). Additionally, under existing conditions, the project site is largely disturbed, vacant land that is located entirely within the BCTC. Upon completion of construction, the project would introduce two new buildings, paved parking areas, and associated site improvements. In the event of a wildfire in the areas proximate to the project site, all occupants at the project site would evacuate the area, as directed by local fire officials. Therefore, impacts related to wildland fires would be less than significant.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact 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:				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 off site;	☐	☐	☒	☐
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?	☐	☐	☐	☒

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

Short-Term Construction Impacts

Less-than-Significant Impact. Construction of the project would include earthwork activities that could potentially result in erosion and sedimentation, which could subsequently degrade downstream receiving waters and violate water quality standards. Stormwater runoff during the construction phase may contain silt and debris, resulting in a short-term increase in the sediment load of the municipal storm drain system. Substances such as oils, fuels, paints, and solvents may be inadvertently spilled on the project site and subsequently conveyed via stormwater to nearby drainages, watersheds, and groundwater.

Because the project would result in more than 1 acre of ground disturbance, the project would be subject to the NPDES stormwater program, which includes obtaining coverage under the State Water Resources Control Board's Construction General Permit. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground such as stockpiling or excavation. The Construction General Permit requires development and implementation of a SWPPP. Among the required items that must be included within a SWPPP are project design features intended to protect against substantial soil erosion as a result of water and wind erosion, commonly known as BMPs. The implementation of a Construction General Permit, including preparation of a SWPPP and implementation of BMPs, would reduce stormwater runoff during project construction impacts to acceptable levels. It follows that because construction of the project would not violate any water quality standards or waste discharge requirements, the project would not otherwise substantially degrade surface or groundwater quality. Therefore, short-term construction impacts associated with water quality would be less than significant.

Long-Term Operational Impacts

Less-than-Significant Impact. The project would comply with sections of the County Municipal Code that set forth regulations to protect and enhance the quality of watercourses, water bodies, and wetlands within the County in a manner consistent with the federal Clean Water Act, the California Porter-Cologne Water Quality Control Act, and the municipal NPDES permit. Applicable sections of the Municipal Code include Chapter 13.12, which outlines the requirements of the County's Storm Water and Urban Runoff Management and Discharge Controls (County of Riverside 2020). The project would comply with these regulations by including low impact development best management practices to reduce runoff from impervious surfaces, including new development, through landscape design that promotes water retention, permeable surface design, natural drainage systems, and on-site retention. Compliance with these regulations and implementation of LID BMPs would address identified pollutants and hydrologic conditions of concern from development of the project. Therefore, long-term impacts associated with water quality, including surface water quality and groundwater quality, would be less than significant.

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

Less-than-Significant Impact. As discussed in the County General Plan, western Riverside County is sustained primarily by water imported from Northern California via the State Water Project and the allocations from the Colorado River. Local groundwater production provides a secondary water supply (County of Riverside 2015c). While the project site is largely vacant land, the site does not contain a groundwater recharge basin or other facilities that promote groundwater recharge. Thus, under the existing condition, the project site is not considered an important location for groundwater recharge.

During construction, the project would use only limited amounts of water resources for construction activities and landscaping activities. Although the project would add impervious surfaces to the project site, once operational, the project site would contain landscaped areas and other pervious surfaces that would allow for water to percolate into the subsurface soils. Minimal water use will be required for any of the proposed buildings which would be used for education and training purposes, and the County has adequate supply to currently meet water demands, as described in Section 3.19, Utilities and Service Systems. Additionally, the project would not involve permanent pumping of groundwater; therefore, the project would not substantially deplete groundwater supplies. Therefore, the project would not substantially interfere with groundwater recharge and impacts would be less than significant.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in substantial erosion or siltation on or off site;

Less-than-Significant Impact. Under the existing conditions, the project site is largely disturbed, vacant land with portable classrooms located in the eastern corner of the site. The project would result in the removal of the existing asphalt and portable classrooms on the project site and the construction of two new buildings, paved parking areas, and associated improvements. The project would also include a new engineered stormwater drainage system that would feature structural BMPs such as retention facilities to treat and manage storm water flows before conveying them into the County's public storm drain system.

While the project's future drainage conditions would be designed to mimic the existing on-site drainage conditions to the maximum extent practicable, demolition and construction activities would inevitably result in changes to the internal drainage patters of the site. However, the project's future storm drain system will be designed to conform with applicable federal, state, and local requirements related to drainage, hydrology, and water quality, thereby reducing the potential for the project to result in stormwater flows off-site that could result in erosion on or off site. Additionally, the project's structural BMPs would be designed such any potential sediments collected on-site are captured in retention facilities so that they would not be conveyed to downstream waters and result in siltation. As such, altering the on-site drainage pattern would be conducted in a manner consistent with all applicable standards related to the collection and treatment of stormwater, such that they would not result in substantial erosion or siltation on or off site. Therefore, impacts associated with altering the existing drainage pattern of the project site would be less than significant.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

Less-than-Significant Impact. Under the existing conditions, the project site is largely disturbed, vacant land with portable classrooms located in the eastern corner of the site. The project would result in the removal of the existing asphalt and portable classrooms on the project site and the construction of two new buildings, paved parking areas, and associated improvements. The project would include a new engineered stormwater drainage system that would feature structural BMPs such as retention facilities to treat and manage storm water flows before conveying them into the public storm drain system. While the project's future drainage conditions would be designed to mimic the existing on-site drainage conditions to the maximum extent practicable, demolition and construction activities would inevitably result in changes to the internal drainage patters of the site. However, the project's future storm drain system will be designed to conform with applicable federal, state, and local requirements related to drainage, hydrology, and water quality. As such, altering the on-site drainage pattern would be conducted in a manner consistent with all applicable standards related to the collection and treatment of stormwater. Therefore, impacts associated with altering the existing drainage pattern of the Project site would be less than significant.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less-than-Significant Impact. As discussed above, the project would inevitably alter the drainage patters of the project site; however, the project would include a new engineered stormwater drainage system that would be designed to conform with applicable federal, state, and local requirements related to drainage, hydrology, and water quality, such that the project's future stormwater system can adequately treat and manage stormwater flows such that they would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

As such, altering the on-site drainage pattern would be conducted in a manner consistent with all applicable standards related to the collection and treatment of stormwater. Therefore, impacts associated with altering the existing drainage pattern of the project site would be less than significant.

v) impede or redirect flood flows?

No Impact. According to the Federal Emergency Management Agency Flood Insurance Rate Map No. 06065C0745G (FEMA 2008), the project site is located outside of both a 1% Annual Chance Flood Hazard Zone (100-year floodplain) and 0.2% Annual Chance Flood Hazard Zone (500-year floodplain). In addition, per the County General Plan, Figure S-10 Dam Failure Inundation Zones, the project site is located outside of a dam inundation area (County of Riverside 2015b). Therefore, the project would have no effect on flood flows, and no impact would occur.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. Refer to Section 3.10©(iv). The project site is not located near a lake that could be vulnerable to a seiche during high winds. Additionally, the project site is located inland and is not within a coastal area or river delta that could be impacted by a tsunami. Therefore, no impacts resulting from a flood, tsunami, or seiche which could potentially risk release of pollutants due to project inundation are anticipated.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The project would comply with regional and local regulations requiring preparation of an SWPPP and would not obstruct existing water quality control plans or groundwater sustainable management plans. In addition, the project site is not considered a suitable area for groundwater recharge and would not introduce impervious areas over a significant groundwater recharge zone. Therefore, no impacts associated with conflict with a water quality control plan or sustainable groundwater management plan are anticipated.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒

a) Would the project physically divide an established community?

No Impact. The physical division of an established community typically refers to the construction of a linear feature (e.g., a major highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community or between a community and outlying area.

Under existing conditions, the project site is mostly vacant, disturbed land that is used primarily for parking. Portable classrooms are located in the eastern corner of the site but would be removed as part of the project. The project site is located entirely within the BCTC which is a public safety training center. As such, the project site is not used as a connection between established communities. Instead connectivity within

the area surrounding the project site is connected via roadways. As such, the project would not impede movement within an established community, or from one established community to another. Therefore, no impact would occur.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less-than-Significant Impact. The County General Plan depicts five foundation components that are broad land use categories that depict the growth of development in a desirable future as envisioned in the County General Plan. However, Area Plans use a consistent set of land use designations that fall under the umbrella of these Foundation Components. As discussed in Section 2, Project Description, the project site is located within the Community Development Foundation component of the County and is located within the boundaries of the March Area Plan (County of Riverside 2015a). Land use designations for the March Area Plan are found in the March JPA General Plan, which designates the project site as Public Facility (PF) (see Figure 2) (MJPA 1998). Per the March JPA General Plan, the Public Facility (PF) land use designation allows for development and operation of community facilities, including fire stations, police stations, transportation/transit corridors or hubs, recreation centers, water tanks, public utilities, or other noncommercial, non-residential, or non-industrial purposes. Administrative offices associated with public facilities are also permitted. Within the March JPA planning area, public facilities include the BCTC facility and non-cantonment federal facilities such as the Commissary and U.S. Forest Service/CAL FIRE Operations facility (MJPA 1998). The project proposes the construction of a classroom and administration building and a law enforcement and emergency management response educational facility for the School of Public Safety at the BCTC. Thus, the project is consistent with the land use designation. Furthermore, the March JPA General Plan provides goals and policies within the Land Use Element to address the capitalization of the opportunities within the planning area, and the reuse and revitalization of existing facilities. Goals and policies that are applicable to the proposed project include the following:

Policy 5.3 Support the development of educational and specialized facilities that will train persons for new and improved employment opportunities.

Goal 11 Plan for the location of convenient and adequate public services to serve the existing and future development of March JPA Planning Area.

Policy 11.1 Preserve appropriate and adequate sites for public facilities.

As previously mentioned above, the project proposes construction of two buildings for the School of Public Safety at the BCTC. The School of Public Safety, also referred to as, the Public Safety Education and Training department, provides an educational pathway for sworn and correctional officers, and fire personnel, as well as students interested in pursuing careers in law, fire, homeland security and emergency medical services to complete an educational program, certificate or associate degree for career advancement in public safety education. Therefore, because the project would construct buildings for the School of Public Safety that would be used for educational and training purposes, the project would be consistent with Policy 5.3. As previously stated, the project site would be located within the BCTC and would be surrounded by existing BCTC facilities including dormitories, classroom buildings, and the CAL FIRE Drill Grounds. As such, the project would be consistent with existing uses within the BCTC and there would be no conflict with the existing land use designation of the site. Thus, the project would be consistent with Goal 11 and Policy 11.1.

Furthermore, per the County's online mapping tool, the project site is within the March Area Zoning District and has a zoning classification of R-R (see Figure 3) (County of Riverside 2021). The project does not propose a residential use, however, per Chapter 17.16 of the County Municipal Code, educational institution uses are permitted within the R-R zone provided approval of a plot plan (County of Riverside 2020). Therefore, there would be no impacts associated with the conflict of a land use plan, policy, or regulation.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☐	☒

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The State Mining and Reclamation Act of 1975 (California Public Resources Code Section 2710 et seq.) requires that the California State Geologist implement a mineral land classification system to identify and protect mineral resources of regional or statewide significance in areas where urban expansion or other irreversible land uses may occur, thereby potentially restricting or preventing future mineral extraction on such lands.

As mandated by the State Mining and Reclamation Act, aggregate mineral resources within the state are classified by the State Mining & Geology Board through application of the Mineral Resource Zone (MRZ) system. The MRZ system is used to map all mineral commodities within identified jurisdictional boundaries, with priority given to areas where future mineral resource extraction may be prevented or restricted by land use compatibility issues, or where mineral resources may be mined during the 50-year period following their classification. The MRZ system classifies lands that contain mineral deposits and identifies the presence or absence of substantial sand and gravel deposits and crushed rock source areas (i.e., commodities used as, or in the production of, construction materials). The State Geologist classifies MRZs within a region based on the following factors (CDOC 2000):

MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.

> **MRZ-2a:** Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present

MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.

MRZ-3: Areas containing mineral deposits for which the significance cannot be determined from available data.

MRZ-3a: Areas containing known mineral deposits that may qualify as a mineral resource

MRZ-3b: Areas containing inferred mineral deposits that may qualify as mineral resources.

MRZ-4: Areas where available information is inadequate for assignment of any other MRZ category.

According to maps prepared by the California Department of Conservation (CDOC 2008), the project site is located within a designated MRZ-3 area. This designation indicates that the State of California has determined this is an area where mineral deposits are likely; however, their significance has not been determined. Additionally, per the County General Plan, the project site is located within an MRZ-3 area (County of Riverside 2015c).

Furthermore, the County General Plan (County of Riverside 2015c) does not identify any mineral recovery sites within the project site. The project site is not currently being used for mineral resource extraction and is instead used as regional training site that provides basic and advanced training to public safety personnel. No mining operations would be impacted by this development and the site would likely never be used for any mining operations in the future. Given these factors, the project would not result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state, and there would be no impacts.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. Please refer to Section 3.12(a). The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Thus, no impact would occur.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

Noise is defined as unwanted sound. Sound may be described in terms of level or amplitude (measured in decibels [dB]), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel (dBA) scale performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear. Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise. These descriptors include the equivalent noise level over a given period (L_{eq}), the statistical sound level, the day–night average noise level (L_{dn}), and the community noise equivalent level (CNEL). Each of these descriptors uses units of dBA. Table 3.13-1 provides examples of A-weighted noise levels from common sounds. In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level.

Table 3.13-1. Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
—	110	Rock band
Jet flyover at 300 meters (1,000 feet)	100	—
Gas lawn mower at 1 meter (3 feet)	90	—
Diesel truck at 15 meters (50 feet), at 80 kilometers per hour (50 mph)	80	Food blender at 1 meter (3 feet) Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area Heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban daytime	50	Large business office Dishwasher, next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural night time	20	Bedroom at night, concert hall (background)
—	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013

L_{eq} is a sound energy level averaged over a specified period (typically no less than 15 minutes for environmental studies). L_{eq} is a single numerical value that represents the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} measurement would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors. L_{max} is the greatest sound level measured during a designated time interval or event.

Unlike the L_{eq} metrics, L_{dn} and CNEL metrics always represent 24-hour periods, usually on an annualized basis. L_{dn} and CNEL also differ from L_{eq} because they apply a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). "Time weighted" refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dB, while nighttime (10:00 p.m.–7:00 a.m.) noise is penalized by adding 10 dB. L_{dn} differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., thus eliminating the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 dB to 1 dB and, as such, are often treated as equivalent to one another.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities such as blasting, pile driving, and heavy earthmoving.

Several different methods are used to quantify vibration. Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square amplitude is most frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal. Decibel notation is commonly used to measure root mean square. The decibel notation acts to compress the range of numbers required to describe vibration.

High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some

passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise.

The nearest sensitive receptors to the project site are existing off-site residences located approximately 510 feet to the southeast. These receptors represent the nearest sensitive land uses with the potential to be impacted by construction and operation of the proposed project.

Due to use of the BCTC as an active training facility, the District and other public safety agencies that use the BCTC expect training activities to routinely result in elevated noise levels. As such, the District and other public safety agencies do not consider training classrooms and dormitories within the BCTC as sensitive receptors. As such, these uses are not treated as sensitive receptors for the purposes of this analysis. However, this analysis does capture the existing and projected noise environments at these locations for informational purposes only.

Existing Noise Conditions

Noise measurements were conducted near the project site on January 6, 2021, to characterize the existing noise levels (Figure 6, Noise Measurement Locations). Table 3.13-2 provides the location, date, and time the noise measurements were taken. The noise measurements were taken using a Soft dB Piccolo sound level meter equipped with a 0.5-inch, pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute standard for a Type 2 (General Use) sound level meter. The accuracy of the sound level meter was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Table 3.13-2. Measured Noise Levels

Measurement Location	Location	Date	Time	L_{eq} (dBA)	L_{max} (dBA)
ST1	At 16888 Bundy Avenue, in front of offices	01/06/21	10:34 a.m.–10:49 a.m.	62.6	82.8
ST2	At 16958 Bundy Avenue, in front of Sherriff Dormitory	01/06/21	11:03 a.m.–11:18 a.m.	54.4	78.5
ST3	At 21065 Foulois Avenue, SE corner of Foulois Avenue and Ryan Street	01/06/21	11:43 a.m.–11:58 a.m.	59.1	79.6
ST4	Along [1]1th Street, E of Dalla Avenue, S of Modular Restroom 15	01/06/21	12:17 p.m.–12:32 p.m.	63.4	81.1
ST5	At SW corner of 12th Street and Davis Avenue	01/06/21	12:39 p.m.–12:54 p.m.	51.9	66.2

L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; dBA = A-weighted decibels.

Five short-term noise measurements (ST1–ST5) were conducted on site and adjacent to nearby noise-sensitive land uses. The measured energy-averaged (L_{eq}) and maximum (L_{max}) noise levels are provided in Table 3.13-2. The field noise measurement data sheets are provided in Appendix E. The primary noise sources consisted of traffic on the local roadways ([1]1th Street, Bundy Avenue), distant construction, vehicle sirens, and airplane flyovers. As shown in Table 3.13-2, the measured sound levels ranged from approximately 52 to 63 dBA L_{eq}.

Estimated Vehicular Noise

The existing 24-hour, time-weighted (CNEL) traffic noise levels were modeled using the Federal Highway Administration (FHWA) Traffic Noise Model version 2.5 (FHWA 2004) and existing traffic volumes from the proposed project's traffic impact study (see Section 3.17). Traffic noise levels were modeled at representative on-site and off-site locations with the most potential to be impacted by project-related traffic noise. These locations are shown in Figure 6. As shown in Figure 6, site ST2 represents on-campus dormitories and site ST3 represents the off-site noise-sensitive residences to the southeast.

The results of the traffic modeling for the existing conditions are summarized in Table 3.13-3, Traffic Noise – Existing, and the traffic noise modeling data is shown in Appendix E. As shown in Table 3.13-3, the existing modeled traffic noise levels range from approximately 30 dBA CNEL at receiver ST3 to 52 dBA CNEL at receiver ST2.

Table 3.13-3. Traffic Noise – Existing

Modeled Receiver	Description	Existing (dBA CNEL)
S–2 - Dormitories	At 16958 Bundy Avenue, in front of Sherriff Dormitory	52
S–3 - Residences	At 21065 Foulois Avenue, SE corner of Foulois Avenue and Ryan Street	30

Source: Appendix E.

Note: dBA = A-weighted decibel; CNEL = community noise equivalent level.

Regulatory Setting

Federal

There are no federal noise regulations applicable to the project. However, various federal agencies have established rules and guidelines addressing noise and vibration. For example, in its Transit Noise and Vibration Impact Assessment guidance manual (FTA 2018), the Federal Transit Administration (FTA) offers guidance on the estimation of construction noise levels from a construction project site. It also provides suggested thresholds that include no more than 80 dBA L_{eq} (over an 8-hour period) as received at a residential land use. In the absence of such a quantified limit provided by the March JPA, this analysis adopts 80 dBA L_{eq8h} for quantitative construction noise impact assessment.

With respect to vibration, the same above-mentioned manual from the FTA provides guidance for the assessment of vibration impacts on people (i.e., potential annoyance), building damage risk, and disruption of vibration-sensitive processes. Vibration impact criteria suggested by the FTA vary both with the frequency of vibration event occurrence and the sensitivity of the building or process that may be exposed to groundborne vibration. By way of example, a modern commercial building constructed from reinforced concrete or steel would have a vibration impact threshold of 0.5 inches per second PPV, while a non-engineered timber or masonry structure more akin to a typical single-family or multifamily residence may have a more stringent 0.2 inches per second PPV vibration impact criteria against which project-attributed vibration due to construction could be assessed for the nearest such receptors in the surrounding community.

State

Government Code Section 65302(g)

California Government Code Section 65302(g) requires the preparation of a Noise Element in a general plan, which shall identify and appraise the noise problems in the community. The Noise Element shall recognize the guidelines adopted by the Office of Noise Control in the State Department of Health Services and shall quantify, to the extent practicable, current and projected noise levels for major noise sources such as highways and freeways, primary arterials and major local streets, rail lines, airports and industrial plants.

California General Plan Guidelines

The California General Plan Guidelines, published by the California Governor's Office of Planning and Research (OPR), provides guidance for the acceptability of specific land use types within areas of specific noise exposure. OPR guidelines are advisory in nature. Local jurisdictions, including the March JPA, have the responsibility to set specific noise standards based on local conditions.

Local

March Joint Powers Authority

The project site is located within the March JPA, as are the existing residences and other noise-sensitive land uses in the surrounding area. The noise criteria identified in the Draft Vision 2030 March JPA General Plan Update 2030 Noise/Air Quality Element (Figure III-1) are guidelines to evaluate the land use compatibility of transportation-related noise. The land use compatibility guidelines indicate that low-density and multi-family residential land uses are considered *normally acceptable* with noise levels below 60 and 65 dBA CNEL, respectively, and *conditionally acceptable* with noise levels below 70 dBA CNEL.

Furthermore, the March JPA Development Code, Chapter 9.10, Performance Standards, Section 9.10.130 identifies standards for mechanical and electrical equipment (e.g., HVAC) which indicate equipment shall be located and operated in a manner that does not disturb adjacent uses and activities.

The March JPA does not have its own Noise Ordinance. Rather, it applies the standards for noise regulation from the Riverside County Code; the adopted ordinance regulates construction noise impacts for all projects within one-quarter mile from an occupied residence(s) and sets forth land use compatibility relating to noise.

Riverside County Code

The Noise Ordinance included in Chapter 9.52, Noise Regulation of the Riverside County Code, provides land use compatibility guidelines which indicate that residential community development (i.e. low density [LDR], medium density [MDR], high density [HDR]) noise level standards are 55 dBA L_{eq} for daytime hours (7 a.m.–10 p.m.) and 45 dBA L_{eq} for nighttime hours (10 p.m.–7 a.m.).

Construction Noise Exemption

In Section 9.52.020, Exemptions of the Noise Ordinance, the County states that private construction projects located within one-quarter mile from an inhabited dwelling are exempt from the standards described above, provided that:

- Construction does not occur between the hours of six p.m. and six a.m. during the months of June through September, and
- Construction does not occur between the hours of six p.m. and seven a.m. during the months of October through May

a) Would the project result in 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?

Construction Activities

Less-than-Significant Impact. Construction noise and vibration levels are temporary phenomena that can vary from hour to hour and day to day, depending on the equipment in use, the operations being performed, and the distance between the source and receptor.

Equipment that would be in operation during proposed construction would include, in part, excavators, concrete saws, compressors, welders, and paving equipment. Table 3.13-4 presents typical maximum noise levels for various pieces of construction equipment at a distance of 50 feet (note that these are maximum noise levels). Typically, construction equipment operates in alternating cycles of full power and low power, producing average noise levels less than the maximum noise level presented in Table 3.13-4. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 3.13-4. Typical Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Air compressor	81
Backhoe	80
Compactor	82
Concrete mixer	85
Concrete pump	82
Concrete vibrator	76
Crane, mobile	83
Dozer	85
Generator	81
Grader	85
Impact wrench	85
Jackhammer	88
Loader	85
Paver	89
Pneumatic tool	85

Table 3.13-4. Typical Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Pump	76
Roller	74
Saw	76
Truck	88

Source: FTA 2018.
Note: dBA = A-weighted decibels.

For the equipment typically used to complete a development project such as the proposed project, the maximum noise levels at 50 feet would be approximately 89 dBA, although the hourly noise levels would vary. Construction noise in a well-defined area typically attenuates at approximately 6 dB per doubling of distance. During Phase 1 of the two-phase project construction, construction activity would take place within approximately 1,200 feet of the nearest noise-sensitive land uses (residences to the southeast) during demolition, site preparation, and grading work; additionally, during Phase 2, this receptor would be located approximately 510 feet or more away from construction activity.

The FHWA Roadway Construction Noise Model (RCNM) (FHWA 2008) was used to estimate construction noise levels. Although the model was funded and promulgated by the FHWA, the RCNM is often used for non-roadway projects because the same types of construction equipment used for roadway projects are often used for other types of construction. Input variables for the RCNM consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver. No topographical or structural shielding was assumed in the modeling. The RCNM has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis.

Construction scenario assumptions, including phasing and equipment mix, were based on information from the District and the CalEEMod default values developed for the air quality and GHG emissions impacts analysis. Table 3.13-5 summarizes the estimated construction noise, with separate calculations provided for the different types of construction activities that would occur for this project. The RCNM inputs and outputs are provided in Appendix E.

Table 3.13-5. Construction Noise Model Results Summary

Construction Phase	Construction Noise at Representative Receiver Distances (L_{eq} (dBA))*	
	On-Site Dormitories to the Southeast	*Off-Site Residences to the Southeast*
Demolition	58	65
Site Preparation	59	63
Grading	59	63
Building Construction	58	59
Paving	55	59
Architectural Coating	46	46

Table 3.13-5. Construction Noise Model Results Summary

Construction Phase	Construction Noise at Representative Receiver Distances (L_{eq} (dBA))*	
	On-Site Dormitories to the Southeast	*Off-Site Residences to the Southeast*
Summary of Noise Model Results		
Highest Construction Noise Levels	59	65
Lowest Construction Noise Levels	46	46
Ambient Noise Levels**	54	59

Source: Appendix E.
Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibel.
* - Construction noise levels are calculated based on the nearest distances between the sensitive receptor and the construction phase
** - Measured noise levels from Table 3.13-2

As shown in Table 3.13-5, construction noise levels at the nearest noise-sensitive land use (residences to the southeast) are estimated to range from approximately 46 dBA L_{eq} during the architectural coating phase to approximately 65 dBA L_{eq} during the demolition phase. At the dormitories to the southeast, construction noise levels would be similar, ranging from approximately 46 dBA L_{eq} to 59 dBA L_{eq}.

As discussed previously, Riverside County Code Section 9.52.020 does not permit construction noise that would create a noise disturbance between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May. The proposed project would conduct construction activities between the allowable hours and the estimated noise levels would be well below the FTA's advisory noise standard of 80 dBA $L_{eq\ 8\text{-}hr}$. Therefore, noise from project construction would be less than significant.

Operational Activities

Less-than-Significant Impact. Long-term (i.e., operational) noise associated with the proposed project would include traffic noise from additional vehicle trips, as well as noise from on-site mechanical equipment such as HVAC equipment. The proposed project would also include outdoor activities such as mock simulations with emergency vehicles.

Traffic Noise

The proposed project would generate additional traffic trips along several existing roads in the area including Bundy Avenue and [1]1th Street. Potential noise effects from vehicular traffic associated with a variety of project-related operational scenarios were assessed using FHWA Traffic Noise Model Version 2.5 (FHWA 2004). Data used to model noise from vehicular traffic was derived from the project-specific Traffic Impact Analysis report prepared by Dudek (Appendix F). Information used in the model consisted of project geometry, traffic volumes (aggregated turn movements), and speeds (posted speed limits) for the following scenarios:

- Existing AM Peak Hour
- Existing plus Project AM Peak Hour

Noise levels were modeled at the representative noise-sensitive receivers (ST3) and at the dormitories to the southeast. The receivers were modeled to be 5 feet above the local ground elevation. Traffic Noise Model input and output files are provided in Appendix E. Traffic noise impacts were calculated by comparing the various existing baseline modeled noise results with the existing plus project results. The results are presented in Table 3.13-6.

Table 3.13-6. Modeled Traffic Noise With and Without Project (CNEL dBA)

Modeled Receiver	Description	Existing	Existing with Project	Difference
ST2	At 16958 Bundy Avenue, in front of Sherriff Dormitory	52	52	0
ST3	At 21065 Foulois Avenue, SE corner of Foulois Avenue and Ryan Street	30	30.8	0.8

Source: Appendix E.
Note: CNEL = community noise equivalent level; dBA = A-weighted decibels.

As shown in Table 3.13-6, typical existing traffic noise levels would not increase as a result of the proposed project. At the nearby modeled receivers, project-related noise levels would increase by less than 1 dB. This is because additional project trips associated with the proposed project would be relatively few in number compared to existing traffic along Bundy Avenue and 11th Street. Changes in noise level of this order (less than 1 dB) would not be audible. Therefore, the traffic noise level increase associated with the project is considered less than significant.

On-Site Mechanical Equipment Noise

HVAC equipment would have the potential to create noise impacts. The specific details (location, size, manufacturer, and model) of the HVAC equipment have not yet been determined. However, based on examination of several major manufacturers' HVAC equipment specifications for representative models (details of which are provided in Appendix E), the dimensionless sound power levels[17] were found to range from approximately 68 dBA to 92 dBA.

The nearest existing off-site noise-sensitive use (i.e., residences to the east of the project site) would be approximately 620 feet to the southeast of the Phase II building. Conservatively assuming a sound power level of 92 dBA, the noise level at a distance of 200 feet would be approximately 49 dBA. The noise level would be approximately 39 dBA at the nearest residences, 620 feet away. At the dormitories to the southeast, the noise levels would be lower because of the additional distance. Furthermore, all HVAC or other mechanical equipment would be shielded from direct view by a rooftop parapet barrier, which would provide additional noise reduction. Therefore, noise from on-site mechanical equipment would comply with the March JPA Development Code (i.e., located and operated as to not disturb adjacent uses), as described

[17] Sound power or acoustic power is the rate at which sound energy is emitted, reflected, transmitted, or received, per unit time. It is calculated and expressed in watts and as sound power level (L_W) in decibels. It is the power of the sound force on a surface of the medium of propagation of the sound wave. For a sound source, unlike sound pressure (L_P), sound power is neither room-dependent nor distance-dependent. Sound pressure is a measurement at a point in space near the source, whereas the sound power of a source is the total power emitted by that source in all directions. The relation between sound power and sound pressure used for this analysis was the following:

$$L_P = L_W - 20*\text{Log}(R) + 2.5,$$

where R is the source–receiver distance of interest, in feet—as for a free field above a reflecting plane (Diehl 1973).

previously, nor would it result in a substantial noise increase. Therefore, impacts associated with on-site mechanical noise would be less than significant.

Sirens/Emergency Vehicles Noise

Phase II of the project would involve the development and operation of an EMT training building. It is anticipated that instructional activities would involve mock simulations with ambulances using sirens during training exercises. While details regarding the frequency of these activities are not yet available, it is anticipated that these events could occur during daytime hours up to once a week per class during the academic term. However, noise from emergency vehicle sirens would be relatively brief and periodic in nature and would cease once simulations are complete. Additionally, the use of sirens during training exercises is already routine at the BCTC (namely immediately south of the project site at the CAL FIRE Drill Grounds) and the use of sirens at the project site would not substantially increase the frequency or intensity of their use. Because siren exposure at any one location would remain relatively brief and siren noise is already experienced and expected at the BCTC, the Project would not result in the exceedance of applicable noise standards and would not result in a substantial noise increase. Therefore, impacts from increased emergency vehicle use would be less than significant.

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

Less-than-Significant Impact. Construction activities have the potential to expose persons to excessive groundborne vibration or groundborne noise. The California Department of Transportation has collected groundborne vibration information related to construction activities indicating that continuous vibrations with a PPV of approximately 0.1 inches per second begin to annoy people (Caltrans 2020). The heavier pieces of construction equipment, such as an excavator, would have PPVs of approximately 0.089 inches per second or less at a distance of 25 feet (FTA 2018). Groundborne vibration is typically attenuated over short distances. At the distance from the nearest residences to the nearest construction work (demolition phase; approximately 620 feet), and with the anticipated construction equipment, the PPV vibration level would be approximately 0.0007 inches per second. This vibration level would be below the vibration threshold of potential annoyance of 0.1 inches per second.

The major concern with regard to construction vibration is related to building damage. Construction vibration as a result of the proposed project would not result in structural building damage, which typically occurs at vibration levels of 0.5 inches per second or greater for buildings of reinforced-concrete, steel, or timber construction. The heavier pieces of construction equipment used would include typical construction equipment for this type of project, such as backhoes, front-end loaders, and flatbed trucks. Pile driving, blasting, and other special construction techniques would not be used for construction of the proposed project; therefore, excessive groundborne vibration and groundborne noise would not be generated. Vibration levels from project construction would be less than the thresholds of annoyance and potential for structural damage. Operation of the proposed project would not result in any sources of vibration. Therefore, impacts would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The closest airport to the project site is March Air Reserve Base/Inland Port Airport, which is located approximately 2 miles east of the project site. According to the Vision 2030 March JPA General Plan (MJPA 2010), the project site is located outside of the March Air Reserve Base/Inland Port Airport's influence area boundary. No private airstrips are located within the broader vicinity of the March JPA (AirNav.com 2021). Thus, air traffic noise associated with the airport would not expose construction workers or District employees to excessive noise levels. Therefore, no impacts associated with public airport and air traffic noise would occur.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact 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)?	☐	☐	☒	☐

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less-than-Significant Impact. The project would not directly induce substantial population growth in the area, as no residential units are proposed. However, the project involves construction and operation of two new buildings for the proposed School of Public Safety at the BCTC, which would require temporary construction and permanent operational workforces, both of which could potentially induce population growth in the project area. The temporary workforce would be needed to construct the two proposed buildings and associated on-site improvements. The number of construction workers needed during any given period would largely depend on the specific stage of construction but would likely be, on average, a few dozen workers at any given time throughout the workday. These short-term positions are anticipated to be filled primarily by workers who reside in the project area vicinity; therefore, construction of the project would not generate a permanent increase in population within the project area.

Once operational, the project would consist of two new buildings for the School of Public Safety at the BCTC. The proposed buildings would be operated by the District and would be staffed by existing District employees currently located at various permanent and temporary facilities the BCTC and MVC Main Campus. In 2018, District operations at the BCTC employed approximately 20 full time equivalent

employees. Staffing levels are a function of enrollment and are allocated on a yearly basis as part of the District's master planning and budgeting efforts. At this time, the District does not have plans to increase staffing levels as a result of the project but may do so in the future as enrollment increases. However, any increases in staff would be a proportion of existing staff levels and accounted for in long-term master planning efforts. Any such increases would be nominal and would not result in substantial unplanned population growth. Thus, impacts would be less than significant.

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

No Impact. The project consists of the construction of two buildings for the proposed School of Public Safety at the BCTC. The project site would be within the boundaries of the BCTC on an existing lot. The project would not displace existing housing and would not necessitate the construction of replacement housing elsewhere. Therefore, there would be no impact.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact 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 public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒

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 public services:

Less-than-Significant Impact. The project would result in the provision of a new governmental facility in two new educational and training buildings that would be part of the MVC School of Public Safety instructional department. The provision of these facilities is consistent with the District's educational master plans, which call for the development of permanent instructional facilities at the BCTC for MVC students. As discussed throughout this Draft IS/MND, the project would not cause significant environmental impacts. Additionally, the project would not result in substantial unplanned population growth in the area that could result in the provision of new or physically altered governmental facilities, as discussed below.

Fire protection?

Less-than-Significant Impact. The County of Riverside Fire Department (County Fire Department) provide fire services to the unincorporated areas of the County, including the project site, as well as to partner cities within the County. The closest fire station is Station 11 (Orange Crest Fire Station), located at 19595 Orange Terrace Parkway and is located approximately 1.7 miles northwest of the project site. The department operates 93 fire stations in six divisions composed of 17-line battalions, providing fire suppression, emergency medical, technical rescue, fire prevention and related services. The equipment used by the department has the versatility to respond to both urban and wildland emergencies (RCFD 2009).

As discussed in Section 3.14(a), the project would not directly induce substantial population growth in the area. Although the project would require fire protection and/or paramedic services in the event of an emergency, given the relatively low number of students and staff that would use the project site and given that fire and emergency services already serve the project site, the project is not expected to result in the need for new or physically altered fire facilities, or to result in the station's inability to maintain acceptable service ratios, response times, or other performance objectives. The increase in demand for fire protection services due to the project would result in a less than significant impact.

Police protection?

Less-than-Significant Impact. The project site is served by the Riverside County Sheriff's Department (County Sheriff's Department) which contracts with Police Departments throughout the County. In the event of an emergency, the Perris Station, located at 137 N Perris Boulevard, would respond to the site. The Perris Station is located approximately 7.3 miles south of the project site. According to the City of Perris General Plan, Safety Element, in 2002, a total of 177 Sheriff's Department personnel were assigned to the Perris Station. This includes 133 sworn peace officers. Forty of the sworn officers are assigned to serve the City of Perris under terms of the contract between the City of Perris and the County Sheriff's Department. Average response time from dispatch to on-scene arrival for an emergency call as of May 2002 was 5.3 minutes (City of Perris 2005). Additionally, the Perris Station has adopted a "Zone Policing" strategy. The intent of Zone Policing is to improve response times to calls for service, make officers more familiar with community areas, and connect the department with citizens and business owners within their assigned zones (City of Perris 2021).

While the County is served by ample police in order to address any issues in and around the BCTC, the District has its police department, consisting of Chief of Police, three Sergeants, six Corporals, Police Officers, Reserve Officers, one Community Service Coordinator, and Community Service Aids. The bulk of these resources are located at the main Riverside City College in Riverside; however, law enforcement services are provided to the District's three colleges as well as several offsite education centers, including the BCTC. As discussed in Section 3.14(a), the project would not directly induce substantial population growth in the area. Although occupants of the project could require police services throughout the life of the project, Given the relatively low number of students and staff that would use the project site and given that police services already serve the project site, the project is not anticipated to add a new strain on the existing police functions. The increase in demand for police protection services due to the project would result in a less than significant impact.

Schools?

No Impact. As discussed in Section 3.14(a), the project would not directly induce substantial population growth in the area such that new or physically altered governmental facilities, including schools, would be required. No impact to schools would occur.

Parks?

No Impact. As discussed in Section 3.14(a), the project would not directly induce substantial population growth in the area such that new or physically altered governmental facilities, including parks, would be required. Thus, no impact to parks would occur.

Other public facilities?

No Impact. As discussed in Section 3.14(a), the project would not directly induce substantial population growth in the area such that new or physically altered governmental facilities, such as libraries or medical services, would be required. Thus, no impact to other public facilities would occur.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☐	☒

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?

No Impact. The project involves construction and operation of two new buildings for the proposed School of Public Safety at the BCTC, which would require temporary construction and permanent operational workforces. However, as discussed in Section 3.14(a), the project would not directly induce substantial population growth in the area, as no residential units are proposed. Additionally, the temporary workforce needed to construct the two proposed buildings and associated on-site improvements are short-term positions anticipated to be filled primarily by workers who reside in the project area vicinity. Furthermore, the project would be staffed by existing District employees or a nominal amount of new employees consistent with long-term educational master plans. Thus, given the short-term nature of construction and because the project would not generate substantial population growth, an increase in park usage as a result of the project is not anticipated. Therefore, the project would not increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of those facilities would occur or be accelerated. No impact would occur.

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?

No Impact. The project does not include recreational facilities nor would it require the construction or expansion of recreational facilities. As discussed in Section 3.14(a), the project would not directly induce substantial population growth in the area, as no residential units are proposed. Additionally, the temporary workforce needed to construct the two proposed buildings and associated on-site improvements are short-term positions anticipated to be filled primarily by workers who reside in the project area vicinity. Furthermore, the project would be staffed by existing District employees or a nominal amount of new employees consistent with long-term educational master plans. Thus, no significant new employment would be required as part of this project resulting in the need for the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Therefore, the project would have no impact on recreational facilities.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact 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) 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?	☐	☐	☒	☐

This section analyzes the transportation impacts of the project based on CEQA Guidelines Section 15064.3(b), which focuses on recently adopted analysis criteria and impact metrics pursuant to SB 743 for determining the significance of transportation impacts. Per SB 743, the focus of transportation analysis changed from a level of service (LOS) or vehicle delay approach to the analysis of vehicle miles traveled (VMT). The related updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018, and were required to be implemented on July 1, 2020.

Accordingly, for CEQA purposes, this section analyzes the project-related impacts pertaining to VMT. An LOS/delay-based analysis has also been prepared and is provided to satisfy the Western Riverside Council of Governments (WRCOG) guidelines for LOS assessment. This analysis can be found in the Traffic Impact Analysis prepared for the project (see Appendix F). The Traffic Impact Analysis also provides more detailed

information on the existing transportation network, the estimated project trip generation and trip distribution, and additional analysis of the proposed project site access.

Project Trip Generation

Trip generation estimates were based on the project description and characteristics as well as the expected land uses associated with both phases of the project. Trip generation was estimated by using trip rates from the Institute of Transportation Engineers [1]0th Edition Trip Generation book (ITE 2017). Accordingly, AM and PM peak hour trip generation volumes were computed. Table 3.17-1 presents the trip generation estimates for the proposed project.

Table 3.17-1. Project Trip Generation

Land Use	ITE Code	Size/Units	Daily	AM Peak Hour			PM Peak Hour		
				In	*Out*	*Total*	*In*	*Out*	*Total*
Trip Rates[1]									
Junior/Community College	540	TSF	20.25	1.59	0.48	2.07	0.93	0.93	1.86
Trip Generation									
Proposed Ben Clark Training Center Project	540	54.135 TSF	1,096	86	26	112	50	50	100
Project Trip Generation			**1,096**	**86**	**26**	**112**	**50**	**50**	**100**

Notes: ITE = Institute of Transportation Engineers; TSF = thousand square feet[1] ITE 2017.

Based on Table 3.17-1, the proposed project would generate approximately 1,096 daily trips, 112 AM peak hour trips (86 inbound and 26 outbound), and 100 PM peak hour trips (50 inbound and 50 outbound).

The following describes the project's potential impacts to transportation policies and ordinances, VMT, hazards related to geometric design, and emergency access:

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less-than-Significant Impact. The proposed project could potentially affect portions of the circulation systems within the jurisdiction of the County, March JPA, the Riverside County Transportation Commission, and the Riverside Transit Agency. The applicable programs, plans, ordinances, and policies for each jurisdiction are described below. As shown in the analysis below, the project would not conflict with the programs, plans, ordinances, and policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

March Joint Powers Authority Transportation Element

The following goals and policies that are applicable to the project are provided from the March JPA General Plan (MJPA 1998):

> **Goal 2**: Build and maintain a transportation system which capitalizes on the multi-faceted elements of transportation planning and systems, designed to meet the needs of the planning area while minimizing negative effects on air quality, the environment and adjacent land uses and jurisdictions.

Policy 2.1: March JPA shall balance the need for free traffic flow with economic realities and environmental and aesthetic consideration, such that transportation facilities are capable of normal patterns and volume, with tolerance of peak and high level usage with minimal disruption, delays or impacts.

Policy 2.7: On-street parking shall be de-emphasized throughout the planning area to permit maximum capacity of roadways to be actuated by vehicular and bicycle transportation modes.

Goal 3: Develop a transportation system that is safe, convenient, efficient and provides adequate capacity to meet local and regional demands.

Policy 3.5: Driveway entrances onto surrounding arterial highways, major and minor arterials streets should be redistricted when practical, and through traffic on interior streets should be minimized.

Goal 4: Provide a balanced transportation system that ensures the safe and efficient movement of people and good throughout the planning area, while minimizing the use of land for transportation facilities.

Goal 6: Establish vehicular access control policies in order to maintain and insure the effectiveness and capacity of arterial roadways.

Policy 6.1: To the extent possible, access shall be provided on local or collector streets where the frontage is available on both local and arterials streets.

Policy 6.2: Access to an arterial road shall be limited to one point for every 300 feet of frontage or one point for parcels with less than 300 feet of frontage.

Policy 8.8: Require the installation of bus improvements such as bus turnouts, bus stops, and terminals as part of the conditions of development for employment centers and land uses that attract large numbers of persons, where appropriate.

Goal 9: Develop measures which will reduce the number of vehicle miles traveled during peak travel periods.

Goal 12: Plan for and seek to establish an area-wide system of bicycling trails, with linkages within the planning area and with adjacent jurisdictions, and in compliance with sub-regional plans.

Policy 12.5: Provide adequate right-of-way and improvements for bike lanes in accordance with the Transportation Plan.

Policy 12.7: Require sidewalks on both sides of the all streets. The March JPA encourages alternate designs including parkways and meandering and enhanced paving.

Goal 15: In accordance with state and federal law, promote and provide mobility for the disabled.

Policy 15.1: Require that all development comply with the requirements of the state and federal law for the disabled. Requirements may include ramps at street corners, access to public buildings, traffic signal timing and the like.

Riverside County Circulation Element

The following policies within the Riverside County Circulation element are applicable to the project (County of Riverside 2015d):

Policy C 1.7: Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle lanes and paths, and mixed-use community centers.

Policy C 3.1: Design, construct, and maintain Riverside County roadways as specified in the Riverside County Road Improvement Standards and Specifications. The standards shown in Figure C-4 may be modified by Specific Plans, Community Guidelines, or as approved by the Director of Transportation if alternative roadway standards are desirable to improve sustainability for the area.

Policy C 3.2: Maintain the existing transportation network, while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.

Policy C 3.10: Require private and public land developments to provide all onsite auxiliary facility improvements necessary to mitigate any development-generated circulation impacts. A review of each proposed land development project shall be undertaken to identify project impacts to the circulation system and its auxiliary facilities. The Transportation Department may require developers and/or subdividers to provide traffic impact studies prepared by qualified professionals to identify the impacts of a development.

Policy C 3.15: Provide adequate sight distances for safe vehicular movement at a road's design speed and at all intersections.

Policy C 3.24: Provide a street network with quick and efficient routes for emergency vehicles, meeting necessary street widths, turn-around radius, secondary access, and other factors as determined by the Transportation Department in consultation with the Fire Department and other emergency service providers.

Policy C 3.25: Restrict on-street parking to reduce traffic congestion and improve safety in appropriate locations such as General Plan roadways.

Policy C 4.1: Provide facilities for the safe movement of pedestrians within developments, as specified in the Riverside County Ordinances Regulating the Division of Land of the County of Riverside.

Policy C 17.1: Develop Class I Bike Paths, Class II Bike Lanes and Class I Bike Paths/Regional Trails (Combination Trails) as shown in the Trails Plan (Figure C-7), to the design standards as outlined in the California Department of Transportation Highway Design Manual, adopted Riverside County Design Guidelines (for communities that have them), the Riverside County Regional Park and Open Space Trails Standards Manual, and other Riverside County Guidelines.

The proposed project is not expected to severely delay, impact, or reduce the service level of transit in the area. Bicyclist and pedestrian safety would be maintained at existing levels in the area, as there would be no changes to the existing pedestrian or bicycle circulation system. All pedestrian areas within the project site would meet Americans with Disabilities Act requirements and adhere to County design guidelines. The proposed project would not alter the existing roadway network. Therefore, as discussed above, impacts related to applicable March JPA Transportation Element or County Circulation Element goals or policies related to transportation would be less-than-significant.

Congestion Management Program

The Congestion Management Program addresses the problem of increasing congestion on regional highways and principal arterials through a coordinated approach involving the state, county, cities, and transit providers. The Riverside County Transportation Commission has been designed as the Congestion Management Agency for the County of Riverside. The Congestion Management Program identifies arterial, highway, and freeway segments within the study area that may require additional analysis according to the procedures outlined in Riverside County Transportation Commission's Long Range Transportation Plan (RCTC 2019). The nearest Congestion Management Program facilities to the proposed project identified within the County include I-215 and Orange Terrace Parkway. The proposed project is not expected to generate a substantial amount of traffic along either facility (see Appendix F). Therefore, impacts related to applicable Congestion Management Program policies/programs related to traffic would be less-than-significant.

Transit Facilities

Currently, the project area is primarily served by the Riverside Transit Agency and by the commuter train service Metrolink. Metrolink service near the site is provided via the 91/Perris Valley line at the Moreno Valley/March Field Station, approximately 2.5 miles northeast within the City of Moreno Valley (Metrolink 2019).

As shown in Figure 7, Transit and Bicycle Facilities, the Riverside Transit Agency's Riverside-Perris Route 22 and Galleria-Perris Route 27 are located within 1 mile of the project site. Route 22 operates between the downtown area of the City of Riverside and the Perris Station Transit Center with a peak weekday service frequency of 45 minutes. Route 22 primarily operates along Wood Road and Oleander Avenue. The closest bus stop to the project site serving this route is located approximately 1 mile south of the project site, near Alexander Street/Oleander Avenue (RTA 2021a). Route 27 operates between the Galleria Mall at Tyler and the Perris Station Transit Center with a peak weekday service frequency of 60 minutes. Route 27 primarily operates along Orange Terrace Parkway and Van Buren Boulevard. The closest bus stop is approximately 1 mile north of the project site, near Orange Terrace Parkway/Van Buren Boulevard (RTA 2021b).

The project would not relocate any existing bus stops and would not require any changes to existing or future routes as described above. The project would not require an increase in service frequency or additional routes to serve the project area. Therefore, development of the project would not conflict with the existing bus routes or bus stops. Impacts to transit would be less than significant.

Pedestrian and Bicycle Facilities

Bicycle facilities are typically divided into several classifications that describe their efficacy. Class I (separated right-of-way) bicycle paths are completely separated from roadways and can be typically shared with pedestrians. Class II (painted) bicycle lanes are designed to be on-street and include a painted stripe to indicate the separation between bicyclists and motorists. Class III (signed) bicycle routes are designated to be on-street, however, they are provided on slower roadways that facilitate safe equal sharing of the roadway between bicyclists and motorists. Class IV (protected) bicycle lanes are separated from roadways and provide for exclusive use for bicyclists, including motorists, pedestrians, and other alternative transportation forms that are not permitted.

As shown in Figure 7, there are existing Class II (painted) bicycle lanes along both sides of the road for Bundy Avenue, Krameria Avenue, Coyote Bush Road, portions of Village West Drive north of Lemay Drive, Van Buren Boulevard west of Orange Terrace Parkway, and Trautwein Road/Cole Avenue north of Van Buren Boulevard. Several proposed Class II bicycle lanes are proposed in the area, including along Van Buren Boulevard east of Orange Terrace Parkway, and Trautwein Road/Cole Avenue south of Van Buren Boulevard (City of Riverside 2021).

According to the Riverside County Regional Park and Open-Space District Comprehensive Trails Plan (Riverside County Regional Park and Open-Space District 2018), there are several long-distance community multi-use trails south of the BCTC that are designed to link rural communities within the County. The nearest community trail to the proposed project site is along Nandina Avenue, approximately 0.75 miles south of the project. The community trail connects to regional trails, south of Nandina Avenue along Alexander Street.

The roadway along the northern edge of the project site, [1]1th Street, is generally unimproved and does not have sidewalks or other pedestrian facilities. The project would include improvements to the frontages of the project site, including a new concrete walkway to provide pedestrian access from [1]1th Street to the proposed project. Development of the project would not conflict with the existing pedestrian or bicycle facilities in the area and would improve pedestrian access around the project site. Therefore, impacts to pedestrian or bicycle facilities would be less-than-significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less-than-Significant Impact. CEQA Guidelines Section 15064.3(b) focuses on VMT for determining the significance of transportation impacts. As shown in the analysis below, the project's impact due to conflicts or inconsistencies with Section 15064.3(b) would be less than significant.

As stated previously, since the project is located within unincorporated Riverside County, the VMT and thresholds utilized within the analysis include guidance from the Recommended Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (WRCOG 2020) provided in a Staff Report dated February 13, 2020, by WRCOG to address the requirements of SB 743. The guidance is generally based on OPR's thresholds. The OPR Technical Advisory (OPR 2018) provides guidance and tools to properly carry out the principles within SB 743 and how to evaluate transportation impacts in CEQA. Therefore, both the OPR Technical Advisory and WRCOG Guide were used within this analysis as the primary source of analysis of VMT and transportation-related impacts.

Screening Criteria for VMT Analysis

Both the WRCOG guidelines and the OPR Technical Advisory suggest that agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing.

- **Screening Threshold for Small Projects (110 daily trips or less).** Since the project generates more than 110 daily trips as shown in Table 3.17-1, this threshold cannot be considered.
- **Map Based Screening for Residential and Office Projects:** WRCOG possesses a screening tool for map-based screening, however the project does not fall into either residential or office project categories.
- **Presumption of Less Than Significant Impact for Affordable Residential Development:** The project is not a residential development and does not include affordable residential units.
- **Presumption of Less Than Significant Impact Near Transit Stations:** Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within 0.5 miles of an existing major transit stop[18] or an existing stop along a high quality transit corridor[19] would have a less-than-significant impact on VMT. This presumption would not apply, if the project:
  - Has a Floor Area Ratio (FAR) of less than 0.75
  - Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking)
  - Is inconsistent with the SCAG RTP and/or
  - Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

  The project is not located within 0.5 miles of any bus routes or bus stop locations.

- **Presumption of Less Than Significant Impact for Local Serving Retail and Other Uses:** For development projects, if the project leads to a net increase in provision of locally-serving retail and public facility uses, transportation impacts from such uses can be presumed to be less than significant. Generally, local-serving retail and similar uses less than 50,000 square feet can be assumed to cause a less-than-significant transportation impact because by improving destination proximity, local-serving developments tend to shorten trips and therefore reduce VMT.

  The project does not include any retail components, however according to the WRCOG guidelines, local serving projects by definition would decrease the number of trips or the distance those trips travel to access the development (and are VMT-reducing projects) include:

  - Local serving K–12 schools
  - Local parks
  - Day care centers

[18] Public Resources Code Section 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.")

[19] Public Resources Code Section 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.")

- Local serving gas stations
- Local serving banks
- Local serving hotels (e.g., non-destination hotels)
- Student housing projects
- Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS

Since the project would be a community college that would serve the local area, as well as the adjoining existing BCTC area and associated land uses, the project is not anticipated to increase VMT significantly. As the project is consistent with the SCAG RTP and/or SCS, the above screening criteria would apply to the project and it would be screened out from further VMT analysis. Therefore, a detailed VMT analysis is not required, and the project would not conflict or be inconsistent with CEQA Guidelines Section 150645.3(b), and impacts would be less than significant

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

Less-than-Significant Impact. The project would not include construction of any new roadways, modifications to any existing roadway or intersection geometry, or require temporary road closures during construction. The project would include improvements to the frontages of the project site, including a new concrete walkway to provide pedestrian access from 11th Street to the proposed project. Vehicular site access is also proposed via three new driveways along 11th Street. Any and all improvements required within the public right-of-way would be required to comply with design standards set forth by the County to ensure that the project does not introduce an incompatible design feature that would impede operations on project-adjacent roadway facilities. Additional analysis of the proposed site access is provided below.

Project Site Access

As discussed previously in Section 2, Project Description, access to the project site would be provided via 11th Street, west of Bundy Avenue, via three proposed parking lot driveways. The driveways would be provided for both Phase I and Phase II of the project, while a third driveway would serve as a delivery loading area for the Phase I site. Phase I would include 84 parking spaces (inclusive of five parking spaces meeting the requirements of the Americans with Disabilities Act) located at the western corner of the project site. Phase II would include 125 parking spaces located at the eastern corner of the project site.

As described in detail within the Traffic Impact Analysis (Appendix F), 11th Street is expected to remain a two-lane undivided roadway, and a majority of the incoming traffic to the site would arrive southbound on Bundy Avenue before traveling westbound on 11th Street. Due to the relatively low level of existing vehicular traffic on 11th Street, which is primarily vehicles accessing other areas of the BCTC, the expected delay and potential queue for vehicles entering any of the driveways of the proposed project site is expected to be minimal. Similarly, in terms of egress, vehicles would be expected to exit the project site and proceed eastward on 11th Street, before traveling northward on Bundy Avenue. Therefore, all expected vehicular delay or queue would be confined on-site and would be adequately contained within each parking lot. All driveways and frontage improvements would be designed to adhere to County roadway standards.

Therefore, based on the information above and described in detail within the Traffic Impact Analysis, the project would not create a significant impact at the project driveways or impede egress or ingress for the roadways near the project site, and hazards due to geometric design features would be less-than-significant

d) Would the project result in inadequate emergency access?

Less-than-Significant Impact. As discussed in Section 2, Project Description, and in Section 3.18(c), site access would be provided via three proposed driveways along [1]1th Street. Two of the proposed driveways would lead directly to passenger vehicle parking lots, serving the eastern and western portions of the project site. A third driveway would primarily be utilized to provide a delivery loading area for the building proposed for Phase I of the project. Both parking lots would provide internal circulation that would accommodate two-way traffic and parking lot drive aisles large enough to adequately accommodate all vehicles. The project would comply with all local, regional, state, and federal guidelines related to emergency access. Emergency vehicles would be able to access all buildings and driveways within the project site. The project site would be accessible to emergency responders during construction and operation of the project. Therefore, the project would not result in inadequate emergency access and impacts would be less than significant.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
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:				
a) 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	☐	☒	☐	☐
b) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

Regulatory Framework

Assembly Bill 52

AB 52 of 2014 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that tribal cultural resources must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. PRC Section 21074 describes a tribal cultural resource as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe. A tribal cultural resource is either:

- On the CRHR or a local historic register;
- Eligible for the CRHR or a local historic register; or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in ©division (c) of PRC Section 5024.1.

AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the project area, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

Section 1 (a)(9) of AB 52 establishes that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." Effects on tribal cultural resources should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to tribal cultural resources, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

Assembly Bill 52 Consultation

The project is subject to compliance with AB 52 (PRC 21074), which requires consideration of impacts to tribal cultural resources as part of the CEQA process, and that the lead agency notify California Native American Tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the proposed Project. All NAHC-listed California Native American Tribal representatives that have requested project notification pursuant to AB 52 were sent letters by the District on December 21, 2020, via certified mailing. The letters contained a project description, outline of AB 52 timing, an invitation to consult, and contact information for the appropriate lead agency representative. To date, the District has received three responses as a result of the notification letters. Table 3.18-1 summarizes the results of the AB 52 process for the project.

Table 3.18-1. Assembly Bill 52 Native American Heritage Commission–Listed Native American Contacts

Native American Tribal Representatives	Response Received
Patricia Garcia-Plotkin, Director Agua Caliente Band of Cahuilla Indians	Response received on February 2, 2021 via email with an attached response letter from Archaeologist, Lacy Padilla, Tribal Historic Preservation office. Ms. Padilla states that the project is within the

Table 3.18-1. Assembly Bill 52 Native American Heritage Commission–Listed Native American Contacts

Native American Tribal Representatives	Response Received
	Tribe's traditional use area and requested the results of the cultural resources inventory, copies of the CHRIS records within the project site, and any additional cultural documents associated with the project. The District responded on February 11, 2021 via email and provided the requested documents. The District followed up with Ms. Padilla via email on April 9, 2021. Ms. Padilla responded on May 11, 2021 via email and requested a copy of the mitigation measures. The District responded May 14, 2021 via email to inform Ms. Padilla that the Tribal Cultural Resource mitigation measures will not be available until consultation with all tribes is concluded; however, they did provide Ms. Padilla with a copy of the Draft mitigation measures. Ms. Padilla responded on May 14, 2021 via email and stated she will review the document. No further communication was received by the District from the Tribe. The District followed up with Ms. Padilla on June 11, 2021 and provided the proposed Tribal Cultural Resources mitigation measures for the Tribes review via email and stated that if no response is received by 5:00pm on June 14, 2021, the consultation process will be considered formally completed/closed. As of release of this MND, no further communication between the Tribe and the District has occurred.
Jeff Grubbe, Chairperson Agua Caliente Band of Cahuilla Indians	Response received on February 2, 2021 via email with an attached response letter from Archaeologist, Lacy Padilla, Tribal Historic Preservation office. Ms. Padilla states that the project is within the Tribe's traditional use area and requested the results of the cultural resources inventory, copies of the CHRIS records within the project site, and any additional cultural documents associated with the project. The District responded on February 11, 2021 via email and provided the requested documents. The District followed up with Ms. Padilla via email on April 9, 2021. Ms. Padilla responded on May 11, 2021 via email and requested a copy of the mitigation measures. The District responded May 14, 2021 via email to inform Ms. Padilla that the Tribal Cultural Resource mitigation measures will not be available until consultation with all tribes is concluded; however, they did provide Ms. Padilla with a copy of the Draft mitigation measures. Ms. Padilla responded on May 14, 2021 via email and stated she will review the document. No further communication was received by the District from the Tribe. The District followed up with Ms. Padilla on June 11, 2021 and provided the proposed Tribal Cultural Resources mitigation measures for the Tribes review via email and stated that if no response is received by 5:00pm on June 14, 2021, the consultation process will be considered formally completed/closed. As of release of this MND, no further communication between the Tribe and the District has occurred.
Amanda Vance, Chairperson Augustine Band of Cahuilla Mission Indians	No response received to date.
Doug Welmas, Chairperson	No response received to date.

Table 3.18-1. Assembly Bill 52 Native American Heritage Commission–Listed Native American Contacts

Native American Tribal Representatives	Response Received
Cabazon Band of Mission Indians	
Daniel Salgado, Chairperson Cahuilla Band of Indians	No response received to date.
Shane Chapparosa, Chairperson Los Coyotes Band of Cahuilla and Cupeño Indians	No response received to date.
Denisa Torres, Cultural Resources Manager Morongo Band of Mission Indians	No response received to date.
Robert Martin, Chairperson Morongo Band of Mission Indians	No response received to date.
Shasta Gaughen, Tribal Historic Preservation Officer Pala Band of Mission Indians	No response received to date.
Paul Macarro, Cultural Resources Coordinator Pechanga Band of Luiseno Indians	Response received on January 8, 2021 via email from Juan Ochoa, MLIS, Assistant Tribal Historic Preservation Office, Pechanga Cultural Resources Department. Other Tribal representatives copied on the email include Ebru Ozdil, Andrea Fernandez, and Tina Thompson. Within the email response, Mr. Ochoa formally requested consulting party status with the District for the project as the project is within the Tribe's traditional cultural property. The Tribe requests that no archaeological studies requiring ground disturbing work (such as Phase II testing), be conducted until after Tribal consultation has taken place. Lastly, the response lists Ebru Ozdil as the formal Tribal contact person for the project. The District responded on February 11, 2021 via email and provided the requested documents. Mr. Ochoa responded on February 11, 2021 via email and requested grading plans for the proposed Project site. The District responded on February 17, 2021 via email and provided the site plan and a geotechnical report. The District stated that maximum depth of ground disturbance is 5 feet. Mr. Ochoa responded on February 17, 2021 via email and stated he will respond with possible dates for consultation. The District followed up with Mr. Ochoa on April 9, 2021 regarding the aforementioned consultation. Mr. Ochoa responded on April 9, 2021 via email and proposed two possible dates for consultation. The District responded on April 9, 2021 via email and informed Mr. Ochoa they were waiting for confirmation of the dates. Mr. Ochoa responded on April 9, 2021 via email and stated the tribe will await the District's response. The District responded on April 12, 2021 via email and proposed consultation occur on April 16, 2021 at 10:00 am. Mr. Ochoa responded on April 12, 2021 via email to confirm the consultation time proposed by the District, and to request all copied on the email be included in the Zoom invitation. Mr. Ochoa followed up on April 16, 2021 via email to reschedule the consultation to April 19, 2021 at 10:00am. The District responded on April 16, 2021 via email and informed Mr. Ochoa they would confirm the rescheduling. Mr. Ochoa responded April 16, 2021 via email indicating he had received their last email. Consultation between the District and Mr. Ochoa, Mr.

Table 3.18-1. Assembly Bill 52 Native American Heritage Commission–Listed Native American Contacts

Native American Tribal Representatives	Response Received
	Ozdil, Ms. Fernandez, and Ms. Thompson was conducted on April 19, 2021 via Zoom to further discuss previously provided documents. The District emailed Ebru Ozdil on April 22, 2021 referring to previous consultation and requested the Tribal Cultural Resources document previously discussed during the April 19, 2021 consultation; no response to this email was received.
Mark Macarro, Chairperson Pechanga Band of Luiseno Indians	Response received on January 8, 2021 via email from Juan Ochoa, MLIS, Assistant Tribal Historic Preservation Office, Pechanga Cultural Resources Department. Other Tribal representatives copied on the email include Ebru Ozdil, Andrea Fernandez, and Tina Thompson. Within the email response, Mr. Ochoa formally requested consulting party status with the District for the project as the project is within the Tribe's traditional cultural property. The Tribe requests that no archaeological studies requiring ground disturbing work (such as Phase II testing), be conducted until after Tribal consultation has taken place. Lastly, the response lists Ebru Ozdil as the formal Tribal contact person for the project. The District responded on February 11, 2021 via email and provided the requested documents. Mr. Ochoa responded on February 11, 2021 via email and requested grading plans for the proposed Project site. The District responded on February 17, 2021 via email and provided the site plan and a geotechnical report. The District stated that maximum depth of ground disturbance is 5 feet. Mr. Ochoa responded on February 17, 2021 via email and stated he will respond with possible dates for consultation. The District followed up with Mr. Ochoa on April 9, 2021 regarding the aforementioned consultation. Mr. Ochoa responded on April 9, 2021 via email and proposed two possible dates for consultation. The District responded on April 9, 2021 via email and informed Mr. Ochoa they were waiting for confirmation of the dates. Mr. Ochoa responded on April 9, 2021 via email and stated the tribe will await the District's response. The District responded on April 12, 2021 via email and proposed consultation occur on April 16, 2021 at 10:00 am. Mr. Ochoa responded on April 12, 2021 via email to confirm the consultation time proposed by the District, and to request all copied on the email be included in the Zoom invitation. Mr. Ochoa followed up on April 16, 2021 via email to reschedule the consultation to April 19, 2021 at 10:00am. The District responded on April 16, 2021 via email and informed Mr. Ochoa they would confirm the rescheduling. Mr. Ochoa responded April 16, 2021 via email indicating he had received their last email. Consultation between the District and Mr. Ochoa, Mr. Ozdil, Ms. Fernandez, and Ms. Thompson was conducted on April 19, 2021 via Zoom to further discuss previously provided documents. The District emailed Ebru Ozdil on April 22, 2021 referring to previous consultation and requested the Tribal Cultural Resources document previously discussed during the April 19, 2021 consultation; no response to this email was received. The District followed up with Ms. Padilla on June 11, 2021 and provided the proposed Tribal Cultural Resources mitigation measures for the

Table 3.18-1. Assembly Bill 52 Native American Heritage Commission–Listed Native American Contacts

Native American Tribal Representatives	Response Received
	Tribes review via email and stated that if no response is received by 5:00pm on June 14, 2021, the consultation process will be considered formally completed/closed. As of release of this MND, no further communication between the Tribe and the District has occurred.
Manfred Scott, Act'ng'Chairman Kw'ts'an Cultural Committee, Quechan Tribe of the Fort Yuma Reservation	No response received to date.
Jill McCormick, Preservation Officer Quechan Tribe of the Fort Yuma Reservation	No response received to date.
John Gomez, Environmental Coordinator Ramona Band of Cahuilla	No response received to date.
Joseph Hamilton, Chairperson Ramona Band of Cahuilla	No response received to date.
Cheryl Madrigal, Tribal Historic Preservation Officer Rincon Band of Luiseno Indians	Response received on January 5, 2021 via email with an attached response letter. In the letter, Ms. Madrigal states that the Rincon Band of Luiseno Indians is traditionally and culturally affiliated to the project area. Ms. Madrigal requested copies of existing documents, including the results of the cultural resources inventory, geotechnical report, and grading plans for the project site and indicated that the tribe would like to consult after receipt and review of the requested documents. Consultation between the District and Ms. Madrigal was conducted virtually on February 5, 2021 to further discuss the provided documents. The District followed up with Ms. Madrigal on February 5, 2021 via email to provide a copy of the Geotechnical report and building plan that Ms. Madrigal had requested during the virtual consultation. Ms. Madrigal responded February 5, 2021 via email to thank the District for the provided documents and to inquire when the Cultural Resources Assessment will be ready for review. The District responded on February 11, 2021 via email and provided the requested document as well as inquired about a follow up consultation. The District followed up with Ms. Madrigal on April 9, 2021 regarding the previously provided documents. Ms. Madrigal sent an email May 25, 2021 providing further information for the District's consideration. The District followed up with Ms. Madrigal on June 11, 2021 and provided the proposed Tribal Cultural Resources mitigation measures for the Tribes review via email and stated that if no response is received by 5:00pm on June 14, 2021, the consultation process will be considered formally completed/closed. As of release of this MND, no further communication between the Tribe and the District has occurred.
Bo Mazzetti, Chairperson Rincon Band of Luiseno Indians	No response received to date.
Lovina Redner, Tribal Chair Santa Rosa Band of Cahuilla Indians	No response received to date.

Table 3.18-1. Assembly Bill 52 Native American Heritage Commission–Listed Native American Contacts

Native American Tribal Representatives	Response Received
Joseph Ontiveros, Cultural Resource Department Soboba Band of Luiseno Indians	No response received to date.
Scott Cozart, Chairperson Soboba Band of Luiseno Indians	No response received to date.
Michael Mirelez, Cultural Resource Coordinator Torres-Martinez Desert Cahuilla Indians	No response received to date.

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)?

Less-than-Significant Impact with Mitigation Incorporated. As described under Section 3.5, Cultural Resources, a CHRIS records search and NAHC SLF search were conducted for the project site. The SLF was completed with negative results. The results of the CHRIS records search identified as many as 42 prehistoric resources comprised of milling features and a lithic scatter, one prehistoric isolated chert flake, and one multi-component site consisting of a milling feature and a historic-period can scatter within the project's 0.5-mile records search area; none of these prehistoric resources were identified within the project site. EIC records also indicate that 24 cultural resource studies have been completed within 0.5 miles of the project site between 1978 and 2018. Of the 24 previous studies, seven intersected at least a portion of the project site. Two reports, RI-4996 and RI-9971, both overlap the entirety of the project site. According to reports RI-4996 and RI-9971, all archaeological resources identified within the BCTC, which encompasses the current project site, were determined insignificant/ineligible for NRHP listing and further recommended that the study areas not be identified as a traditional cultural property. SHPO concurred with the findings for RI-4996 on September 19, 1988, and for RI-9971 on May 24, 1999, indicating they do not meet the first threshold of site significance under AB 52 to be considered a tribal cultural resource. Additionally, as provided in Section 3.5 Cultural Resources there is documented evidence that the significant ground disturbance has occurred since at least the 1940s within the proposed Project site resulting in the existence of up to 10 feet of soils consisting of a combined matrix of imported and disturbed fill soils above native deposits. However, there is always a possibility that tribal cultural resources could be encountered during construction activities within native soils and that these tribal cultural resources might be eligible for listing in the California Register of Historical Resources and impacts to these resources could be potentially significant. Therefore, **MM-TCR-1** and **MM-TCR-2** shall be implemented to reduce potential impacts to an unanticipated discovery of tribal cultural resources. Implementation of **MM-TCR-1** and **MM-TCR-2** would reduce potential impacts pertaining to the inadvertent discovery of tribal cultural resources to a less than significant level resulting in impacts associated with tribal cultural resources to be less than significant.

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less-than-Significant Impact with Mitigation Incorporated. The project is subject to compliance with AB 52 (PRC 21074), which requires consideration of impacts to tribal cultural resources as part of the CEQA process and requires lead agencies to provide notification of proposed projects to California Native American Tribal representatives that have requested such notifications. As discussed in Section 3.18.2, Assembly Bill 52 Consultation, all NAHC-listed California Native American Tribal representatives that have requested project notification pursuant to AB 52 were sent letters by the District on December 21, 2020, via certified mailing. To date, responses the AB 52 notification letter have been received from Tribal representatives from Agua Caliente Band of Cahuilla Indians, Pechanga Band of Luiseno Indians, and Rincon Band of Luiseno Indians. No TCRs have been identified to exist within the project site through tribal consultation under AB 52, and the lead agency has not identified any TCRs within the project site that would warrant discretionary designation of a resource as a TCR. However, there is always a possibility that tribal cultural resources could be encountered during construction activities within native soils and that these tribal cultural resources might be considered as a significant resource to a California Native American tribe and that impacts to these resources could be potentially significant. Therefore, **MM-TCR-1** and **MM-TCR-2** shall be implemented to reduce potential impacts to an unanticipated discovery of tribal cultural resources. Implementation of **MM-TCR-1** and **MM-TCR-2** would reduce potential impacts pertaining to the inadvertent discovery of tribal cultural resources to a less than significant level resulting in impacts associated with tribal cultural resources to be less than significant.

MM-TRC-1: All interested tribes who have requested and engaged in formal Tribal consultation for the Ben Clark Training Center School of Public Safety Project, pursuant to AB-52, shall be notified by the Riverside Community College District (RCCD) of the time and location of the Worker Environmental Awareness Program (WEAP) training no later than 72 hours prior to its scheduled occurrence. The RCCD shall provide all interested consulting tribes access and opportunity to participate in the WEAP training.

MM-TRC-2: Riverside Community College District (RCCD) shall afford all interested Tribes who have requested and engaged in formal Tribal consultation for the Ben Clark Training Center School of Public Safety Project, pursuant to AB-52, the opportunity to observe ground disturbance activities associated with the aforementioned Project upon 24-hour notice of intent by the requesting Tribe to do so. Access to the Project site shall be provided during the occurrence of ground disturbance for the duration requested by the requesting Tribe or once ground disturbance is complete for the Project or whichever is a longer duration. RCCD shall provide all Tribes who have requested and engaged in formal Tribal consultation for the Ben Clark Training Center School of Public Safety Project, pursuant to AB-52, notice 48 hours prior to ground disturbance occurring within 1 foot (12 inches) of native soils.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐

a) ***Would the project 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?***

Less-than-Significant Impact. As part of the proposed project, utility service lines, including those for water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications services, would be extended from their current locations within 11th Street to the project site for operation of the proposed buildings. Given that the activity of connecting utilities from their current locations within 11th Street to the proposed buildings would require ground disturbance and the use of heavy machinery associated with trenching, the connection of these utility services to the proposed buildings could potentially result in environmental effects. However, the extension of these utility lines is part of the proposed project analyzed herein. As such, any potential environmental impacts related to these components of the proposed project are already accounted for in this IS/MND as part of the impact assessment conducted for the entirety of the proposed project. No adverse physical effects beyond those already disclosed in this IS/MND would

occur as a result of implementation of the proposed project's utility system connections. Additionally, the project would constitute a nominal increase in utility usage, which has already been accounted for in growth projections for MVC, the County, and by each utility provider. No modifications to utility infrastructure would be necessary outside of the project site. As such, impacts associated with the construction or expansion of utility line connections would be less than significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less-than-Significant Impact. The project would be served by Western Municipal Water District (WMWD), which serves an area of approximately 527 square miles in western Riverside County. WMWD relies on three existing water sources: groundwater, imported water, and recycled water (WMWD 2015). In 2015, WMWD purchased or imported approximately 80% of its total water supply from Metropolitan Water District and from local groundwater sources from the City of Riverside, Riverside Highland Water Company, and the Meeks and Daley Water Company. However, the largest source for WMWD is the Metropolitan Water District (WMWD 2015).

As an urban water supplier, WMWD is required to assess the reliability of its water supply service under the multiple-dry year scenario. As such the 2015 Urban Water Management Plan prepared for WMWD, contains projected water supply and demand for normal year, single dry year, and multiple-year dry year scenarios. Table 3.19-1 provides the WMWD supply-and-demand comparison for a normal year, single dry year, and multiple dry years.

Table 3.19-1. Supply-and-Demand Comparison (acre-feet per year)

Normal Year Scenario	Supply and Demand	2020	2025	2030	2035	2040
	Supply totals	69,718	76,264	79,672	92,030	90,400
	Demand totals	30,814	33,714	36,415	39,170	41,704
	Difference	**38,904**	**42,550**	**43,257**	**52,860**	**48,696**
Single Dry Year Scenario	**Supply and Demand**	**2020**	**2025**	**2030**	**2035**	**2040**
	Supply totals	69,718	76,264	79,672	92,030	90,400
	Demand totals	30,814	33,714	36,415	39,170	41,704
	Difference	**38,904**	**42,550**	**43,257**	**52,860**	**48,696**
Multiple Dry Year Scenario	**Supply and Demand**	**2020**	**2025**	**2030**	**2035**	**2040**
First Year	Supply totals	69,718	76,264	79,672	92,030	90,400
	Demand totals	30,814	33,714	36,415	39,170	41,704
	Difference	**38,904**	**42,550**	**43,257**	**52,860**	**48,696**

Table 3.19-1. Supply-and-Demand Comparison (acre-feet per year)

Second Year	Supply totals	69,718	76,264	79,672	92,030	90,400
	Demand totals	30,814	33,714	36,415	39,170	41,704
	Difference	**38,904**	**42,550**	**43,257**	**52,860**	**48,696**
Third Year	Supply totals	69,718	76,264	79,672	92,030	90,400
	Demand totals	30,814	33,714	36,415	39,170	41,704
	Difference	**38,904**	**42,550**	**43,257**	**52,860**	**48,696**

Source: WMWD 2015

As shown in Table 3.19-1, WMWD anticipates that it could potentially have a supply surplus in all scenarios. To improve supply reliability, WMWD is actively seeking to diversify its supply portfolio. WMWD is planning the implementation of several projects, including conjunctive use and expansion of recycled water that will increase regional supply reliability by increasing local supplies and decreasing dependence on imported supplies from the State Water Project and the Colorado River. Additionally, WMWD's desalter expansion projects will enable WMWD to continue safely using groundwater supplies while protecting water quality and enabling groundwater storage (WMWD 2015). Therefore, impacts associated with water supplies would be less than significant.

c) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less-than-Significant Impact. Wastewater is primarily collected and treated through a regional system, operated by WMWD. There are five centralized wastewater treatment facilities to which wastewater collected within WMWD's service area is conveyed, though individual septic systems also remain popular within the region. WMWD operates the Western Water Recycling Facility, which treats domestic wastewater from March Air Reserve Base and the north-central portion of the Riverside Service Area. The Western Water Recycling Facility was upgraded in 2014 to produce 2,200 acre-feet per year of tertiary treated wastewater, which is discharged to an impoundment and then pumped to supply the recycled water system. The recycled water is provided to the Riverside National Cemetery, General Old Golf Course, and various landscaping, agricultural and commercial use sites. According to the 2015 UWMP prepared for WMWD, the Western Water Recycling Facility treats approximately 1,160 acre-feet per year (WMWP 2015).

The proposed project would generate the same types of municipal wastewater that are currently generated throughout WMWD's service area. Effluent produced by the proposed project would not require special treatment prior to entering the municipal sewer system, and no atypical measures would be required to treat the proposed project's wastewater. Based on the existing capacity, the future anticipated demand for wastewater treatment services would not result in significant impacts to wastewater treatment facilities. Therefore, impacts associated with wastewater treatment capacity would be less than significant.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less-than-Significant Impact. The Riverside County Waste Management Department manages Riverside County's solid waste system through the provision of facilities and programs that meet or exceed all applicable local, state, federal, and land use regulations. The department manages several Riverside County Sanitary Landfills: Badlands, Blythe, Desert Center, El Sobrante, Lamb Canyon, and Oasis. Each of these landfills has sufficient capacity to accommodate the project's minimal solid waste disposal needs and are permitted to receive non-hazardous municipal solid waste (Cal Recycle 2021).

Construction of the project would include the removal of existing portable classrooms within the eastern portion of the project site, demolition of the existing pavement and some landscaping, and development of the proposed buildings with associated improvements. Expected waste materials would include concrete and landscape materials. The District will make a good faith effort to recycle as much of the demolition material as feasible. Any number of local landfills typically utilized by the County have sufficient capacity to accommodate this volume of non-hazardous waste. Only minimal waste is anticipated once the proposed buildings are built. This waste can easily be folded into the existing College's handling of its day-to-day waste stream. Any impacts related to solid waste will be less than significant.

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

Less-than-Significant Impact. The project would be required to comply with all applicable federal, state, and local agency regulations related to solid waste. Under AB 939, the Integrated Waste Management Act of 1989, local jurisdictions are required to develop source reduction, reuse, recycling, and composting programs to reduce the amount of solid waste entering landfills. Local jurisdictions are mandated to divert at least 50% of their solid waste generation into recycling. The project would be subject to compliance with AB 939.

In addition, the state has set an ambitious goal of 75% recycling, composting, and source reduction of solid waste by 2020. To help reach this goal, the state has adopted AB 341 and AB 1826. AB 341 is a mandatory commercial recycling bill, and AB 1826 is mandatory organic recycling. Waste generated by the proposed project would enter the City's waste stream but would not adversely affect the City's ability to meet AB 939, AB 341, or AB 1826, since the project's waste generation would represent a nominal percentage of the waste created within the County. Therefore, impacts related to compliance with solid waste regulations would be less than significant.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less-than-Significant Impact. The project must comply with the County's EOP for both construction and operations of all phases. Construction activities that may temporarily restrict vehicular traffic during all phases would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through and around any required road closures in accordance with the County's EOP. Operation of the project would not interfere with the County's EOP because the driveways off 11th Street would be made accessible for emergency vehicles. The project applicant would be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state, and federal requirements related to emergency access and evacuation plans. Adherence to these requirements would ensure that potential impacts related to this issue remain below a level of significance and that no mitigation would be required. Thus, impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less-than-Significant Impact. A review of CAL FIRE maps show that the project site is not located within a Very High FHSZ (CAL FIRE 2021). However, according to the County General Plan, Figure S-11 identifies the

project site is as being located within a fire risk assessment area and designates the site as a high FHSZ (County of Riverside 2015b). As such, the project would be required to comply with regulations regarding wildfire hazards in the Riverside County Municipal Code. Projects which are located in high FHSZ areas as designated in the County General Plan shall require project features such as a buffer of fire retardant landscaping for appropriate distances from structures, water facility improvements, and roofs, eaves and siding constructed with Class B fire resistant roofing materials (County of Riverside 2020). The project incorporates these features into the project's site plan and design.

Under existing conditions, the project site is largely disturbed, vacant land that is located entirely within the BCTC. Upon completion of construction, the project would introduce two new buildings for the proposed School of Public Safety at the BCTC as well as associated site improvements. In the event of a wildfire in the areas proximate to the project site, all occupants at the project site and the BCTC would evacuate the area, as directed by local fire officials. Additionally, the project site topography is relatively flat and as shown in the County's General Plan, the project site would not be located in an area susceptible to landslides (County of Riverside 2015b). As such, the proposed project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors. Therefore, impacts would be less than significant.

c) Would the project 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?

Less-than-Significant Impact. Under the existing conditions, the project site is largely vacant, disturbed land. The project would construct surface parking lots, driveways, and infrastructure for the proposed development. It is not anticipated that installation or maintenance of internal driveways would exacerbate fire risk, since the driveways would be surrounded by developed land on all sides. Further, the project site is located within the BCTC and would connect to existing utilities. The project would not require installation or maintenance of other associated infrastructure such as fuel breaks, power lines, or other utilities that would exacerbate fire risk. As such, the project would not expose people or structures to significant risk involving wildland fires, exacerbate wildfire risks, or otherwise result in wildfire-related impacts. Impacts associated with installation or maintenance of associated infrastructure resulting in exacerbated fire risk would be less than significant.

d) Would the project 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?

Less-than-Significant Impact. As discussed in Section 3.20(b), the project site is located within a fire risk assessment area and is designated as a high FHSZ (County of Riverside 2015b). However, under existing conditions, the project site is largely disturbed, vacant land that is located entirely within the BCTC. Upon completion of construction, the project would introduce two new buildings for the proposed School of Public Safety at the BCTC as well as associated site improvements. The existing topography of the project site is relatively flat and as shown in the County's General Plan, the project site would not be located in an area susceptible to landslides (County of Riverside 2015b). Additionally, as discussed in Section 3.10(c)(iv) the project site is located outside of both a 1% Annual Chance Flood Hazard Zone (100-year floodplain) and 0.2% Annual Chance Flood Hazard Zone (500-year floodplain). Further, per the County General Plan, Figure S-10 Dam Failure Inundation Zones, the project site is located outside of a dam inundation area. However, implementation of the project would increase the amount of impervious areas on site and alter the existing drainage patterns. As such, the project would include a new drainage system which would be designed with

adequate capacity to capture stormwater flows and replicate existing drainage patterns. Therefore, impacts associated with the project exposing people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire stability, or drainage change would be less than significant.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☒	☐	☐

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

Less-than-Significant Impact With Mitigation Incorporated. As discussed in Section 3.4, Biological Resources, through compliance with local, state, and federal regulations, the project would not result in significant impacts to biological resources. In addition, because of the low potential for the inadvertent discovery of cultural resources within the project site, the project archaeologist determined that no additional management recommendations are necessary beyond standard measures to address

unanticipated discoveries of cultural and paleontological resources and human remains, as outlined in **MM-BIO-1** through **MM-BIO-4**, **MM-CUL-1**, **MM-CUL-2**, **MM-TCR-1, MM-TCR-2**, and **MM-GEO-1**. Based on compliance with **MM-CUL-1**, **MM-CUL-2, MM-TCR-1, MM-TCR-2**, and **MM-GEO-1**, impacts to buried, currently unrecorded/unknown archaeological and paleontological resources would be less than significant; therefore, with mitigation incorporated, the project would not 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, 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)?

Less-than-Significant Impact with Mitigation Incorporated. When evaluating cumulative impacts, it is important to remain consistent with Section 15064(h) of the CEQA Guidelines, which states that an EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Alternatively, a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable through mitigation measures set forth in an MND or if the project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located.

The proposed project would potentially result in project-related biological resources, cultural resources, geological resources, and tribal cultural resources impacts that could be potentially significant without the incorporation of mitigation. Thus, when coupled with biological resources, cultural resources, geological resources, and tribal cultural resources impacts related to the implementation of other related projects throughout the broader project area, the project would potentially result in cumulative-level impacts if these significant impacts are left unmitigated.

However, with the incorporation of mitigation identified herein, the project's biological resources, cultural resources, geological resources, and tribal cultural resources impacts would be reduced to less-than-significant levels and would not considerably contribute to cumulative impacts in the greater project region. In addition, these other related projects would presumably be bound by their applicable lead agency to (1) comply with the all applicable federal, state, and local regulatory requirements; and (2) incorporate all feasible mitigation measures, consistent with CEQA, to further ensure that their potentially cumulative impacts would be reduced to less-than-significant levels.

Although cumulative impacts are always possible, the project, by incorporating all mitigation measures outlined herein, would reduce its contribution to any such cumulative impacts to less than cumulatively

considerable; therefore, the project would result in individually limited, but not cumulatively considerable, impacts.

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

Less-than-Significant Impact With Mitigation Incorporated. As evaluated throughout this document, with incorporation of mitigation, environmental impacts associated with the proposed project would be reduced to less-than-significant levels. Thus, the proposed project would not directly or indirectly cause substantial adverse effects on human beings. Impacts would be less than significant with incorporation of mitigation.

INTENTIONALLY LEFT BLANK

4 References and Preparers

4.1 References Cited

Airnav.com. 2021. “Airport Information.” https://www.airnav.com/airports/get.

Anthony, Sharon. 1988a. Outline. Covering development of Camp Haan from July 1940 to October 1941. Series V, Folder 1: Miscellaneous; Box 1, Sharon Anthony/Camp Haan Collection, Riverside Public Library.

Basgall, M.E., and M. Hall. 1990. “Adaptive Variation in the North-Central Mojave Desert.” Paper presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas, Nevada.

Basgall, M. E., L. Johnson, and M. Hale. 2002. “An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California.” Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.

Bean, Lowell J. 1972. *Temalpakh-Cahuilla Indian Knowledge and Uses of Plants.* Malki Museum Press. Banning, CA

Bean, L.J., and F.C. Shipek. 1978. “Luiseño.” In *Handbook of North American Indians*, Vol. 8, *California*, edited by Robert F. Heizer, 550–563. Washington, D.C.: Smithsonian Institution.

Byrd, B.F., and S.N. Reddy. 2002. “Late Holocene Adaptations along the Northern San Diego Coastline: New Perspectives on Old Paradigms.” In *Cultural Complexity on the California Coast: Late Holocene Archaeological and Environmental Records*, edited by J.M. Erlandson and T.L. Jones, 41–62. Los Angeles, California: University of California–Los Angeles Press.

CAL FIRE (California Department of Forestry and Fire Protection). 2021. Fire Hazard Severity Zones Maps. Accessed January 2021. https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/.

California Natural Resources Agency. 2009. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97*. Accessed February 3, 2021. http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf.

Cal Recycle (California Department of Resources, Recycling, and Recovery). 2021. Solid Waste Information System Facility/Site Search [Database search applying filters: ‘County: Riverside’; ‘Regulatory Status: Permitted’; ‘Operational Status: Active’; ‘Facility Type: Disposal’]. Accessed February 2021. https://www2.calrecycle.ca.gov/swfacilities/Directory/.

Caltrans (California Department of Transportation). 2013. *Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol*. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. September 2013.

Caltrans. 2020. *Transportation and Construction Vibration Guidance Manual.* Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. Sacramento, CA. April, 2020.

Caltrans. 2021. "Scenic Highways." Accessed January 2021. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

CAPCOA (California Air Pollution Control Officers Association). 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. Accessed February 3, 2021. http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.

CAPCOA. 2017. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2016.3.2.* Prepared by Trinity Consultants and the California Air Districts. November 2017. http://www.caleemod.com/.

CARB (California Air Resource Basin). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005. Accessed August 2016. http://www.arb.ca.gov/ch/landuse.htm.

CARB. 2014. *First Update to the AB 32 Scoping Plan: Building on the Framework*. Accessed February 3, 2021. https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_ change_scoping_plan.pdf.

CARB. 2017a. "EMFAC2017 Web Database." Accessed January 21, 2021. https://arb.ca.gov/emfac/2017/.

CARB. 2017b. "Clean Car Standards - Pavley, Assembly Bill 1493." Accessed February 11, 2021. https://www.arb.ca.gov/cc/ccms/ccms.htm.

CARB. 2017c. *The 2017 Climate Change Scoping Plan Update.* Accessed January 21, 2021. https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2030sp_pp_final.pdf.

CARB. 2019. "Maps of State and Federal Area Designations." Accessed on January 26, 2021. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations

CARB. 2021. "Common Air Pollutants." Accessed January 26, 2021. https://ww2.arb.ca.gov/resources/common-air-pollutants.

CBC (California Building Code). 2019. 2019 California Building Code: California Code of Regulations; Title 24. Based on the 2018 International Building Code. Sacramento, California: California Building Standards Commission. July 2016. http://www.ecodes.biz/ecodes_support/Free_Resources/2013California/ 13Building/13Building_main.html.

CDFW (California Department of Fish and Wildlife). 2021. California Natural Diversity Database (CNDDB). RareFind 5.2.14 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed June 2020. https://map.dfg.ca.gov/rarefind/view/RareFind.aspx.

CDOC (California Department of Conservation). 2000. *Guidelines for Classification and Designation of Mineral Lands*. Accessed January 2021. http://www.conservation.ca.gov/smgb/guidelines/documents/classdesig.pdf.

CDOC. 2008. "Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption (P-C) Region, San Bernardino and Riverside Counties, California." Prepared by R.V. Miller and L.L. Busch.

CDOC. 2021a. "Important Farmland Finder." Accessed January 2021. https://www.conservation.ca.gov/dlrp/fmmp.

CDOC. 2021b. "Regulatory Maps." Accessed January 2021. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

CEC (California Energy Commission). 2018a. California Energy Consumption Database. Accessed January 21, 2021. http://www.ecdms.energy.ca.gov/.

CEC. 2018b. "2019 Building Energy Efficiency Standards Frequently Asked Questions." Accessed February 19, 2021. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

CEC. 2021a. "Electricity Consumption by County." Accessed January 21, 2021. https://ecdms.energy.ca.gov/elecbycounty.aspx.

CEC. 2021b. "Gas Consumption by County." Accessed January 21, 2021. https://ecdms.energy.ca.gov/gasbycounty.aspx.

City of Perris. 2005. *City of Perris General Plan, Safety Element*. Adopted October 25, 2005. Accessed January 2021. https://www.cityofperris.org/home/showpublisheddocument?id=465.

City of Perris. 2021. "Police." Accessed January 2021. https://www.cityofperris.org/departments/police.

City of Riverside. 2021. "City of Riverside Bike Lane Map." Accessed February 2021. https://cityofriverside.maps.arcgis.com/apps/Profile/index.html?appid=c691fc450bc241668cf17692ee92d3d0.

CNPS (California Native Plant Society). 2021. Inventory of Rare and Endangered Plants (online edition, v8-03 0.45). Sacramento, California: California Native Plant Society. Accessed June 2020. www.rareplants.cnps.org.

Coulombe, H.N. 1971. Behavior and population ecology of the burrowing owl, *Speotyto cunicularia*, in the Imperial Valley of California. Condor 73: 162-176.

County of Riverside. 2006. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. March 29, 2006. https://www.rctlma.org/Portals/3/EPD/consultant/burrowing_owl_survey_instructions.pdf.

County of Riverside. 2015a. *Riverside County General Plan Land Use Element*. Revised August 4, 2020. https://planning.rctlma.org/Portals/14/genplan/2020/elements/Ch03_Land%20Use_080420.pdf.

County of Riverside. 2015b. *Riverside County General Plan Safety Element*. Revised August 6, 2019. https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf.

County of Riverside. 2015c. *Riverside County General Plan Multipurpose Open Space Element*. Revised December 8, 2015. Accessed January 2021. https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch05_MOSE_120815.pdf?ver=2017-10-11-102103-833.

County of Riverside. 2015d. *Riverside County General Plan Circulation Element*. Revised July 7, 2020. https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch04_Circulation_072720v2.pdf.

County of Riverside. 2019. *Climate Action Plan Update.* Accessed on January 21, 2021. https://planning.rctlma.org/Portals/14/CAP/2019/2019_CAP_Update_Full.pdf.

County of Riverside. 2020. Riverside County Municipal Code. Updated through November 30, 2020. Accessed January 2021. https://library.municode.com/ca/riverside_county/codes/code_of_ordinances.

County of Riverside. 2021. "Map My County Tool." Accessed January 2021. https://planning.rctlma.org/General-Plan-Zoning/Whats-My-Zoning.

County of Riverside. 2003. *Western Riverside County Multiple Species Habitat Conservation Plan*. https://rctlma.org/Portals/0/mshcp/volume1/index.html.

Davis, E.L. 1978. *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*. Los Angeles, California: Natural History Museum of Los Angeles County.

Diehl, George M., ed. 1973. Machinery Acoustics. John Wiley & Sons, Inc. New York, NY.

Dotter, Kara. 2017. *Historic American Building Survey Written Documentation for Camp Haan, Riverside County, California, Ben Clark Training Center*. Prepared for County of Riverside Economic Development Agency.

DTSC (California Department of Toxic Substances Control). 2021. EnviroStor [database]. https://www.envirostor.dtsc.ca.gov/public/.

EIA (U.S. Energy Information Administration). 2021a. "California State Profile and Energy Estimates." Accessed January 21, 2021. https://www.eia.gov/state/data.php?sid=CA.

EIA. 2021b. "California Electricity Profile 2019." Accessed January 21, 2020. https://www.eia.gov/electricity/state/california/index.php.

EIA. 2021c. "California End-Use Energy Consumption 2018, Estimates." Accessed January 21, 2021. https://www.eia.gov/beta/states/states/ca/overview.

EPA. (U.S. Environmental Protection Agency). 2021. "EPA Region 9 Air Quality Maps and Geographic Information." Accessed on January 21, 2021. https://www3.epa.gov/region9/air/maps/index.html#cal

FEMA (Federal Emergency Management Agency). 2008. "Flood Rate Insurance Map 06065C0745G." Effective August 28, 2008. https://msc.fema.gov/portal/search?AddressQuery=ben%20clark%20training%20center#searchresultsanchor.

FHWA (Federal Highway Administration). 2004. FHWA Traffic Noise Model, Version 2.5. Office of Environment and Planning. Washington, DC. February.

FHWA. 2008. *Roadway Construction Noise Model (RCNM), Software Version 1.1.* U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Environmental Measurement and Modeling Division. Washington, D.C. December 8, 2008.

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

Gallegos, D.R. 1987. "San Dieguito-La Jolla: Chronology and Controversy." San Diego County Archaeological Society, Research Paper No. 1.

Giacinto, Adam, Ross Owen, Jessica Colston, Ted Roberts, and Micah Hale. 2020. *Cultural Resources Inventory Report for the BCTC Hazardous Fuel Reduction Project, Riverside County, California.* Prepared for, and on file with, Riverside County Fire and CAL FIRE.

Golla, V. 2007. "Linguistic Prehistory." In *California Prehistory: Colonization, Culture, and Complexity,* edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.

Griset, S. 1996. "Southern California Brown Ware." Unpublished PhD dissertation; University of California, Riverside.

Hale, M. 2001. "Technological Organization of the Millingstone Pattern in Southern California." Master's thesis; California State University, Sacramento.

Hale, M. 2009. "San Diego and Santa Barbara: Socioeconomic Divergence in Southern California." PhD dissertation; University of California, Davis.

Hector, S.M. 2006. Cultural Resources Study for the Maintenance of Old Mission Dam, Mission Trails Regional Park, San Diego, California. Prepared for the City of San Diego.

IPCC (Intergovernmental Panel on Climate Change). 2007. *IPCC Fourth Assessment Synthesis of Scientific-Technical Information Relevant to Interpreting Article 2 of the U.N. Framework Convention on Climate Change*. Geneva, Switzerland: Intergovernmental Panel on Climate Change. Accessed on February 3, 2021. https://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf.

ITE (Institute of Transportation Engineers) 2017. *Trip Generation Handbook*. 10th Edition.

Kroeber, A. 1925. *Handbook of the Indians of California.* Washington DC: Smithsonian Institution.

McCarthy, Daniel 1986. *An Archaeological Assessment of the West March Housing Development, March Air Force Base, Riverside County, California.* Prepared for Civil Engineering, March AFB, CA, by the Archaeological Research Unit of the University of California, Riverside.

McKenna, Jeanette A. 2001. *Cultural Resources Review of Previous Studies at the Ben Clark Public Safety Training Center at March Air Force Base, Riverside County, California.* Whittier, CA.

Meighan, C.W., and D.L. True. 1977. "Additional Comments on Molpa Archaeological Site." *The Journal of California Anthropology* 4(2).

Metrolink. 2019. "Southern California Passenger Rail System Map & Timetables." Accessed February 2021. https://metrolinktrains.com/globalassets/schedules/socal-psgr-rail-system-map–timetables_april-2019.pdf.

MJPA (March Joint Power Authority). 1998. *March JPA General Plan*. https://www.marchjpa.com/documents/docs_forms/general_plan_updt_011718.pdf.

MJPA. 2010. *Draft Vision 2030: March JPA General Plan*. March 2010.

MVC (Moreno Valley College). 2021. "Ben Clark Training Center." Accessed January 2021. https://www.mvc.edu/bctc/.

NETR (Nationwide Environmental Title Research LLC). 2021a. Historical Topographical Maps of Riverside: 1902, 1905, 1911, 1927, 1939, 1942, 1955, 1960, 1962, 1969, 1974, 1980, 1984, 2012, 2015, and 2018. Accessed January 2021. https://www.historicaerials.com/viewer.

NETR. 2021b. Historical Aerial Photographs of Riverside: 1948, 1966, 1967, 1978, 1994, 2002, 2005, 2009, 2010, 2012, 2014, and 2016. Accessed January 2021. https://www.historicaerials.com/viewer.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*. Accessed January 26, 2021. https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

OHP (California Office of Historic Preservation). 1995. "Instructions for Recording Historical Resources." March 1995. Sacramento, California: OHP.

OPR (Office of Planning and Research). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Accessed February 2021. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

RCFCWCD (Riverside County Flood Control and Water Conservation District). 2011. *Design Handbook for Low Impact Development Best Management Practices*. Accessed January 2021. http://content.rcflood.org/downloads/NPDES/Documents/LIDManual/LID_BMP_Design_Handbook.pdf.

RCCD. 2020. *Districtwide Solar Planning Initiative*. Prepared by DLR Group for the Riverside Community College District. December 1, 2020.

RCFD (Riverside County Fire Department). 2009. *Strategic Plan 2009–2019*. November 2009. Accessed January 2021. http://www.rvcfire.org/stationsAndFunctions/AdminSppt/StrategicPlanning/Documents/StrategicPlan2009.pdf.

RCSD (Riverside County Sheriff's Department). 2002. *Ben Clark Training Center Environmental Impact Report*. June 2002.

RCTC (Riverside County Transportation Commission). 2019. *Long Range Transportation Study*. December 2019. Accessed February 2021. https://www.rctc.org/wp-content/uploads/2019/12/RCTC-Draft-LRTS-120119-GV22.pdf.

Riverside County Regional Park and Open-Space District. 2018. *Comprehensive Trails Plan*. Accessed February 2021. https://altago.com/wp-content/uploads/Riverside_County_Comprehensive_Trails_Plan.pdf.

Robert D. Niehaus Inc. 1988. *Photographic Record of the Remains of Camp Haan on the Western Portion of March Air Force Base, Riverside, California.* Prepared for HQ SAC/DEP, Offutt AFB, NE and 22 CSG/DEEV, March AFB, CA, under Contract NO. F25600-88-D0002, Task Order No. 8001, Project No. 43.1, by Robert D. Niehaus, Inc., Santa Barbara, CA.

Rogers, M.J. 1929. "The Stone Art of the San Dieguito Plateau." *American Anthropologist* 31:454–467.

Rogers, M.J. 1945. "An Outline of Yuman Prehistory." *Southwestern Journal of Anthropology* 1:167–198.

RTA (Riverside Transit Authority). 2021a. "Downtown Riverside-Perris Station Transit Center Route 22 Route and Timetable." Accessed February 2021. https://www.riversidetransit.com/images/DOWNLOADS/ROUTES/022.pdf.

RTA. 2021b. "Galleria at Tyler-Perris Station Transit Center Route 27 Route and Timetable." Accessed February 2021. https://www.riversidetransit.com/images/DOWNLOADS/ROUTES/027.pdf.

RWQCB (Regional Water Quality Control Board). 2010. Order No. R8-2010-0062. Accessed February 28, 2019. https://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2010_orders.html.

SCAG (Southern California Association of Governments). 2012. *2012–2035 Regional Transportation Plan/Sustainable Communities Strategy*. Accessed February 11, 2021. http://rtpscs.scag.ca.gov/Pages/2012-2035-RTP-SCS.aspx.

SCAG. 2016. *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life.* Adopted April 2016. Accessed January 21, 2021. https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs.pdf?1606005557.

SCAG. 2020. *Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*. September 3, 2020. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.

SCAQMD (South Coast Air Quality Management District). 1976. Rule 402, Nuisance. Adopted May 7, 1976. http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf.

SCAQMD. 1993. *CEQA Air Quality Handbook*.

SCAQMD. 2003a. *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*. Accessed January 26, 2021. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf?sfvrsn=2.

SCAQMD. 2003b. *Final 2003 AQMP Appendix V Modeling and Attainment Demonstrations*. August 2003. https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2003-air-quality-management-plan/2003-aqmp-appendix-v.pdf?sfvrsn=2.

SCAQMD. 2005. Rule 403, Fugitive Dust. Adopted May 7, 1976; last amended June 3, 2005. http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf.

SCAQMD. 2008a. *Final Localized Significance Threshold Methodology.* Revised July 2008. Accessed January 21, 2021. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf.

SCAQMD. 2008b. *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans.* Accessed February 3, 2021. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2.

SCAQMD. 2008c. *Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15*. Accessed on February 3, 2021. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2

SCAQMD. 2010. *Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15*. Accessed February 3, 2021. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2.

SCAQMD. 2017. *Final 2016 Air Quality Management Plan.* Accessed January 21, 2021. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15.

SCAQMD. 2019. "SCAQMD Air Quality Significance Thresholds." Originally published in CEQA Air Quality Handbook, Table A9-11-A. Revised April 2019. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

SCE (Southern California Edison). 2020. *2019 Power Content Label.* Accessed February 19, 2021. https://www.sce.com/sites/default/files/inlinefiles/SCE_2019PowerContentLabel.pdf.

Schroth, Adella B. 1998. *Review of Traditional Cultural Properties and Ethnography of the March Joint Powers Authority Planning Area.* Prepared for March Joint Powers Authority, Moreno Valley, California, by LSA Associates Inc., Riverside, California.

Sparkman, P.S. 1908. "The Culture of the Luiseno Indians." *University of California Publications in American Archaeology and Ethnology* 8(4):187–234.

Swope, Karen K. 1987. *Final Report on an Archaeological Assessment of 970+ Acres of Land Located on March Air Force Base, Riverside County, California.* Prepared for the 22nd Civil Engineering Division, March Air Force Base, California, by the Archaeological Research Unit of the University of California, Riverside.

SWRCB (State Water Resources Control Board). 2021. GeoTracker [database].

The Climate Registry. 2020. *The Climate Registry 2020 Default Emission Factor Document.* Accessed January 21, 2021. https://www.theclimateregistry.org/wp-content/uploads/2020/04/The-Climate-Registry-2020-Default-Emission-Factor-Document.pdf.

True, D.L. 1980. "The Pauma Complex in Northern San Diego County: 1978." *Journal of New World Archaeology* 3(4):1–39.

Urban Futures Inc. 1996. *DRAFT Environmental Impact Report for the March Air Force Base Redevelopment Project.* Prepared for March Joint Powers Redevelopment Agency, March Air Force Base, CA, by Urban Futures Inc., Orange, CA.

U.S. Air Force. 1951. *Realty Control File Summary*. Haan, Camp, CA, Audit 3101, Vol. 1, Folder 1 of 3, Box 46, *RG 77 Records of the Office of the Chief of Engineers, Los Angeles District, California military Site Audit Files, 1849-1994*, National Archives at Riverside.

USDA (U.S. Department of Agriculture). 2021. Web Soil Survey. https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

U.S. Engineer Office. 1946. *Surplus Facilities Project Map Camp Haan, Riverside County, California.* Map. Prepared under the direction of Colonel R.C. Hunter, District Engineer. Haan, Camp, CA, Audit 3101, Vol. 3, Folder 3 of 3, Box 47, *RG 77 Records of the Office of the Chief of Engineers, Los Angeles District, California military Site Audit Files, 1849-1994*, National Archives at Riverside.

USFWS (U.S. Fish and Wildlife Service). 2021. Information for Planning and Consultation (iPaC). Accessed January 2021. https://ecos.fws.gov/ipac/.

Wallace, W. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." *Southwestern Journal of Anthropology* 11(3):214–230.

Warren, C.N. 1964. "Cultural Change and Continuity on the San Diego Coast." Unpublished PhD dissertation; University of California, Los Angeles.

Warren, C.N. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams, 1–14. Portales, New Mexico: Eastern New Mexico University Contributions in Anthropology.

Warren, C.N., G. Siegler, and F. Dittmer. 2004. "Paleoindian and Early Archaic Periods." In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*. Prepared for the Metropolitan Wastewater Department, City of San Diego. Encinitas, California: ASM Affiliates.

Wessel, Terri Caruso. 1995. *Historic Building Inventory and Evaluation, March Air Force Base, Riverside County, California*. Prepared for U.S. Department of the Air Force, Air Force Center for Environmental Excellence, Brooks Air Force Base, Texas, by William Manley Consulting, San Diego, California, and Earth Tech, Colton, California.

WMWD (Western Municipal Water District). 2015. *2015 Urban Water Management Plan Update*. June 2016. Accessed February 2021. https://www.wmwd.com/DocumentCenter/View/3162/Western_2015-UWMP_Final_Body-Only?bidId=.

WRCOG. 2020. *Recommended Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.*

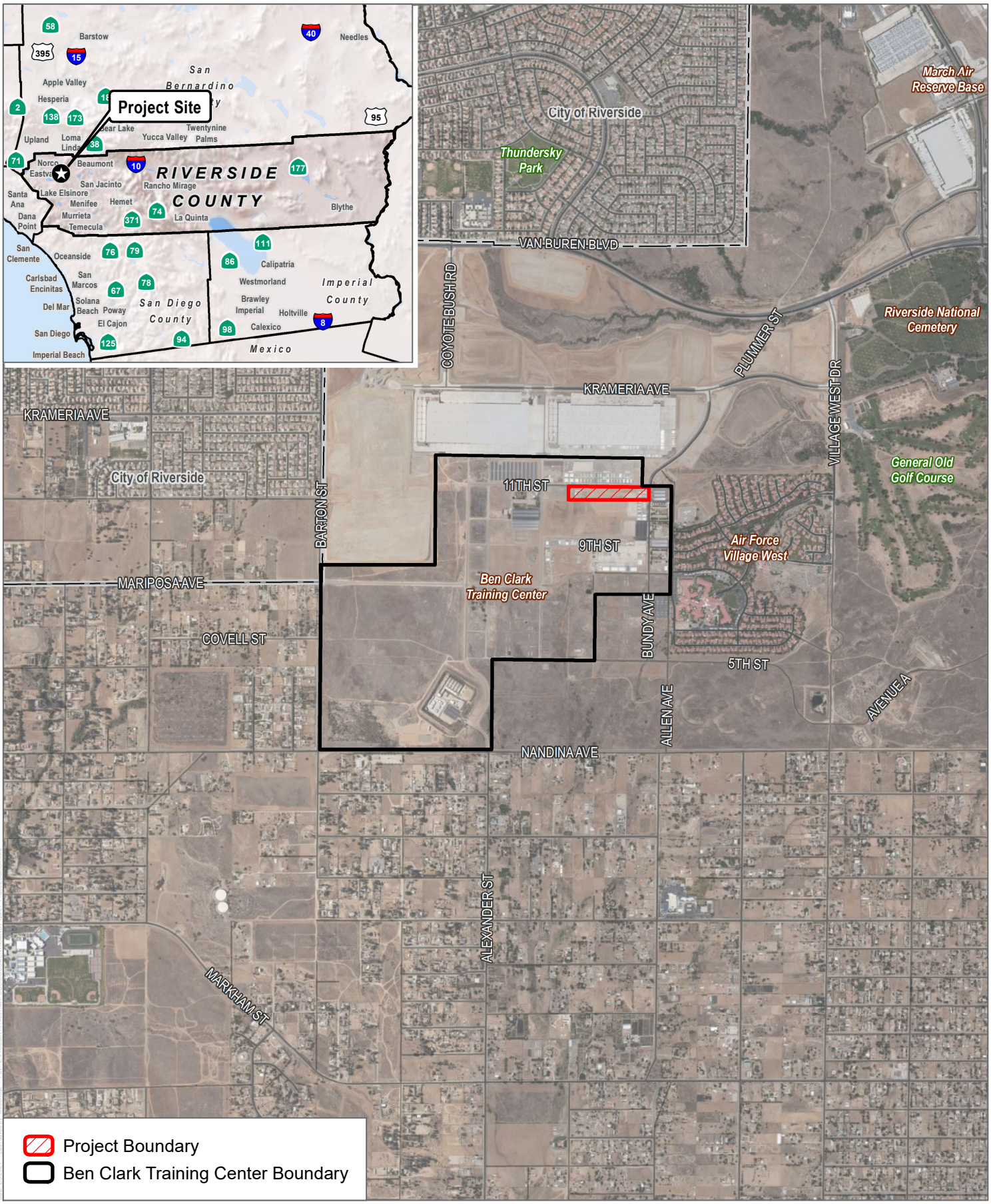
4.2 List of Preparers

Riverside Community College District

Bart Doering, Facilities Development Director, Riverside Community College District

Dudek

Rachel Struglia, PhD, AICP, Project Manager
Patrick Cruz, Environmental Analyst
Lilli Renier, Environmental Analyst
Ryan Munnikhuis, Air Quality Analyst
Mark Storm, Acoustician
Tommy Molioo, Senior Biologist
Linda Kry, Archaeologist
Mladen Popovic, Traffic Analyst
Rachel Strobridge, Geographic Information Systems Specialist
Kara Murphy, Publications Specialist



SOURCE: Bing Maps, Riverside County 2020

DUDEK

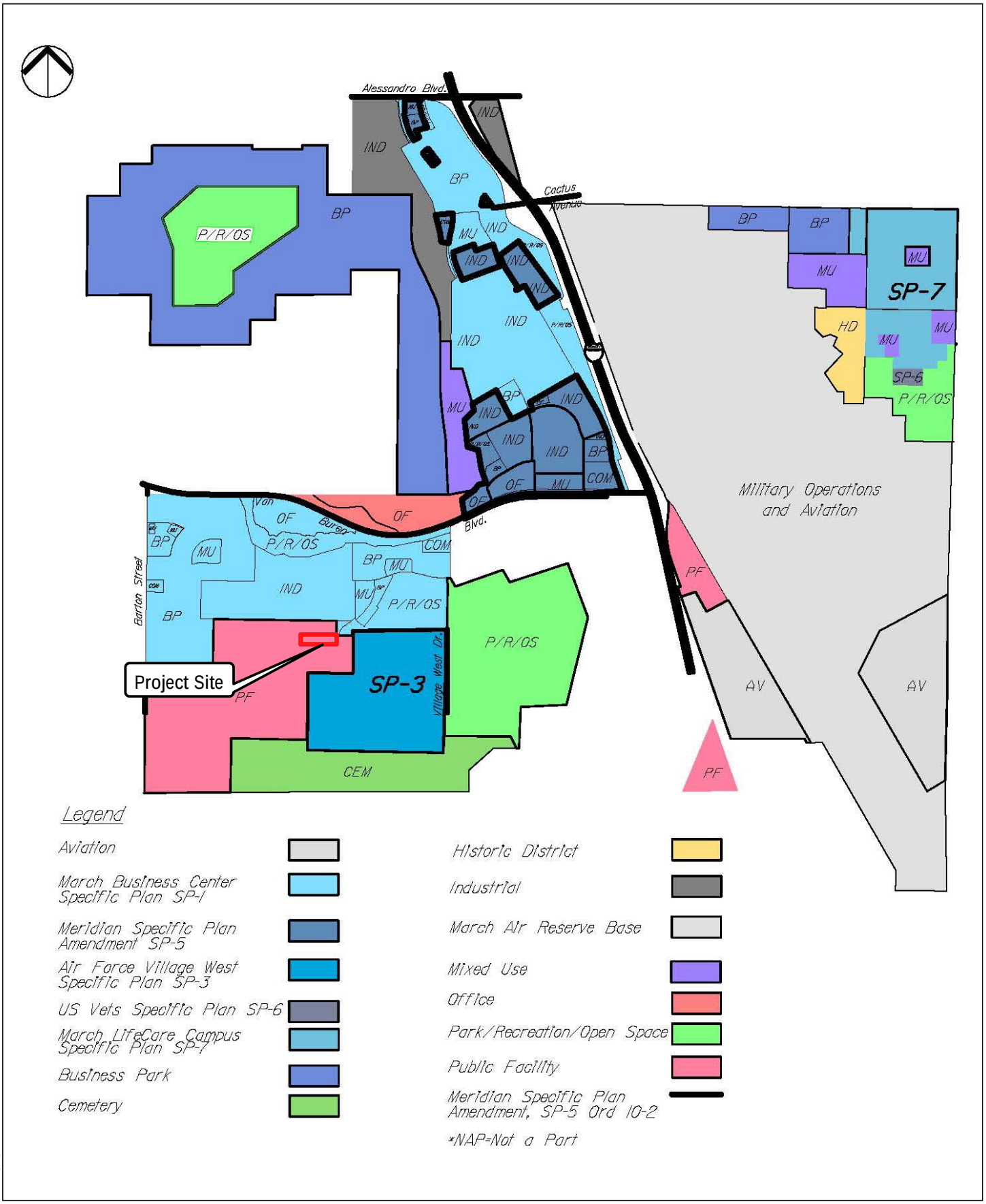
0 1,000 2,000 Feet

FIGURE 1

Project Location

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK



SOURCE: JPA 2020

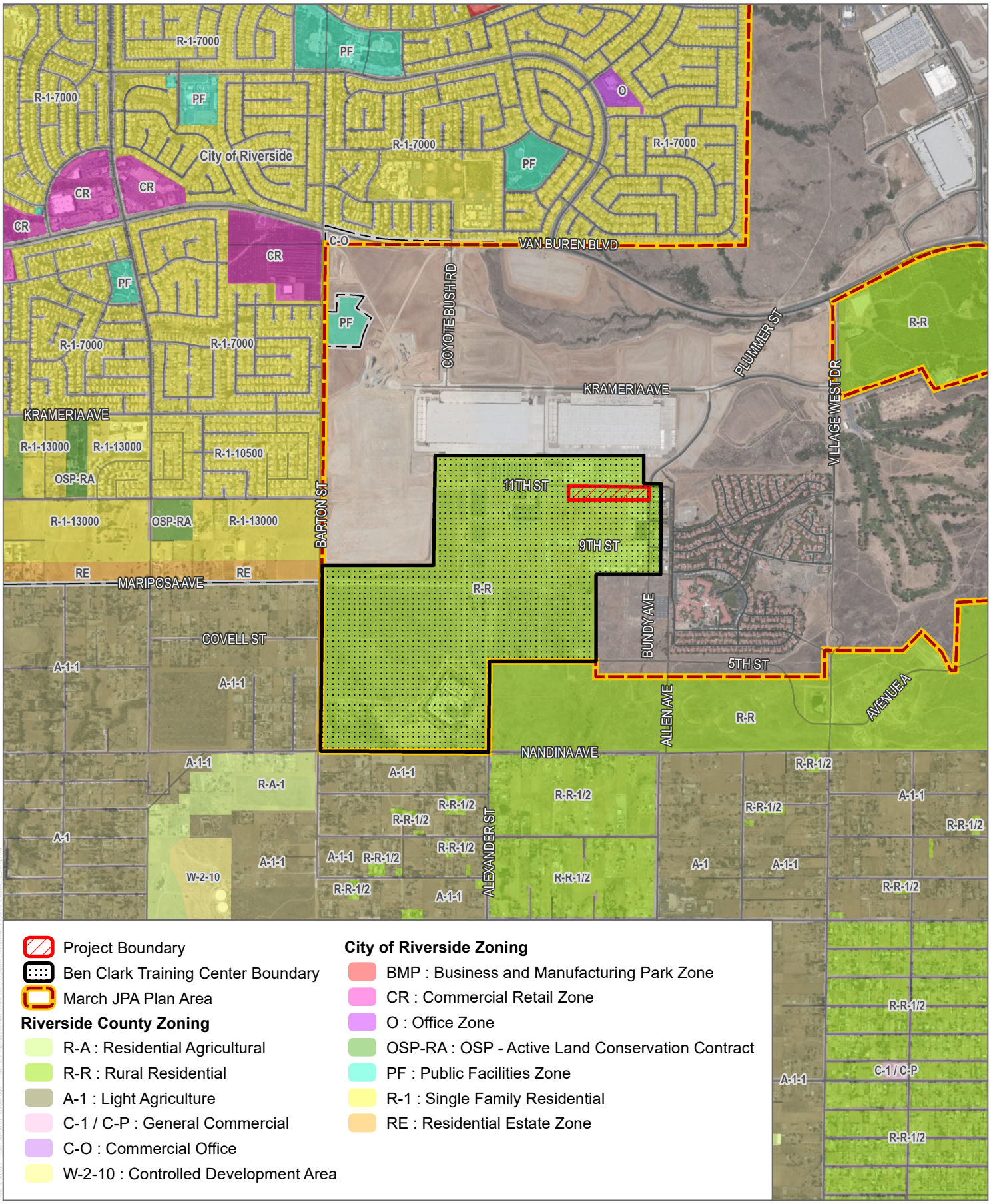
FIGURE 2

General Plan Land Use Designation

Ben Clark Training Center School of Public Safety

DUDEK

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps, Riverside County 2020

DUDEK

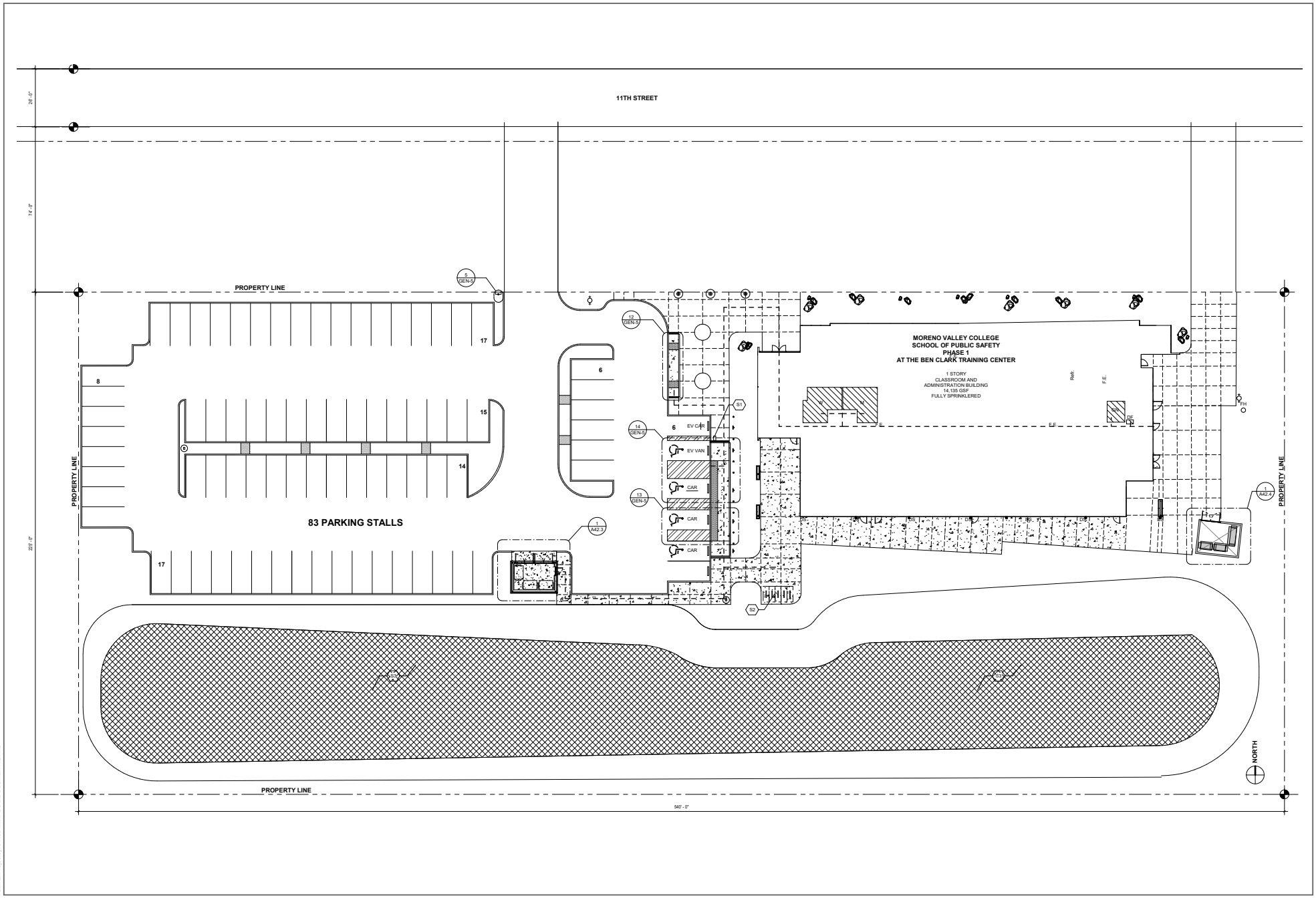
0 1,000 2,000 Feet

FIGURE 3

Existing Zoning

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK



SOURCE: SVA Architects 2020

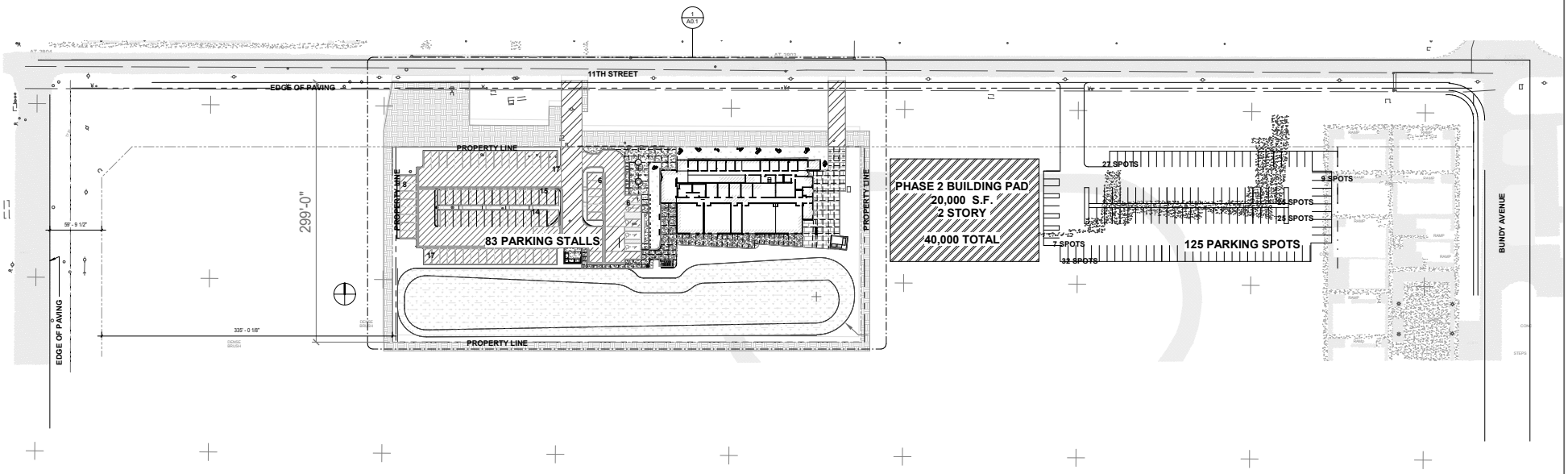
DUDEK

FIGURE 4a

Site Plan - Phase I

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK



SOURCE: SVA Architects 2020

DUDEK

FIGURE 4b

Site Plan - Phase II

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK

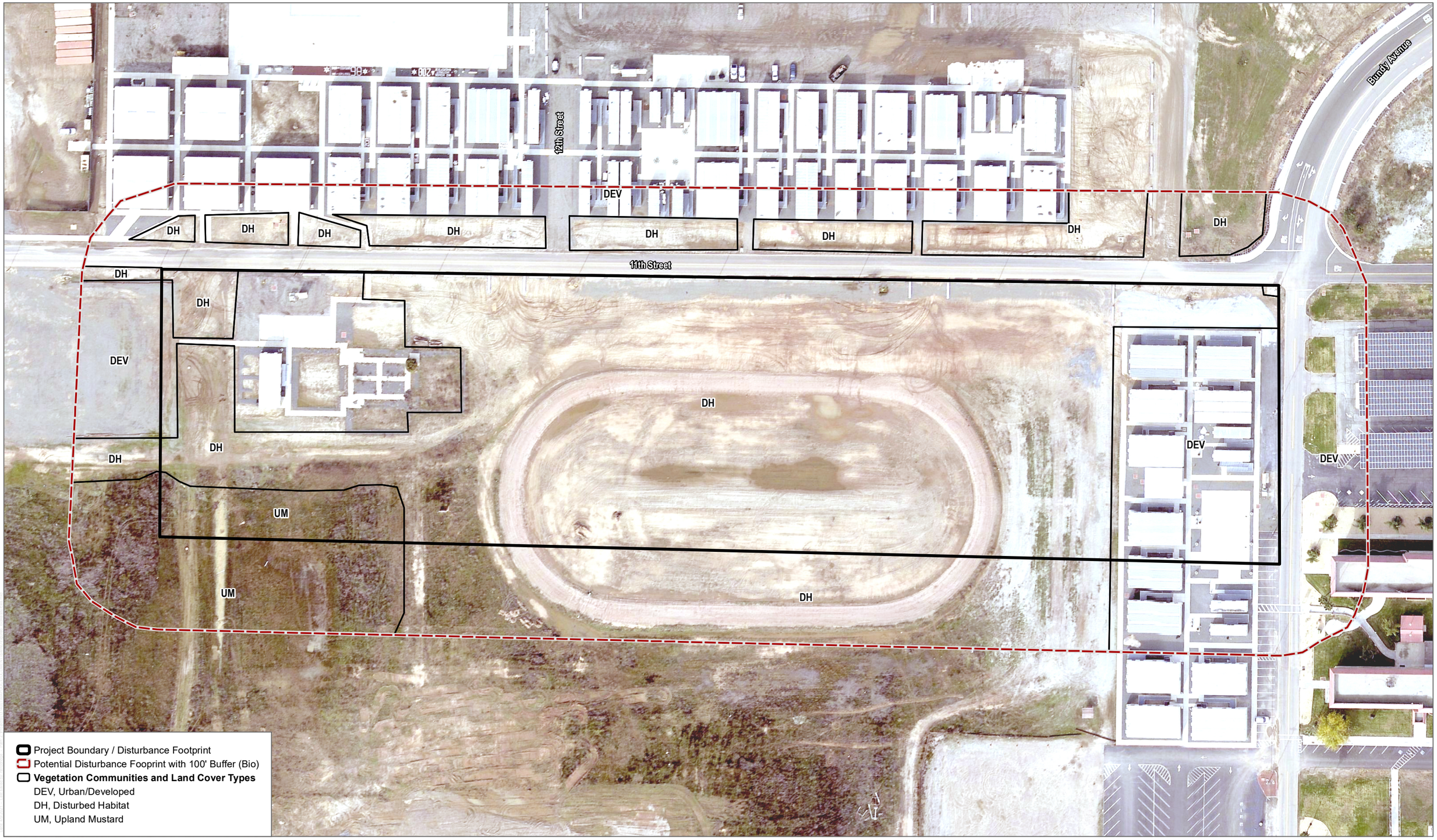
SOURCE: SVA Architects 2020

FIGURE 5

Exterior Rendering - Phase I

Ben Clark Training Center School of Public Safety

DUDEK



SOURCE: County of Riverside 2019; Open Street Map 2019

DUDEK

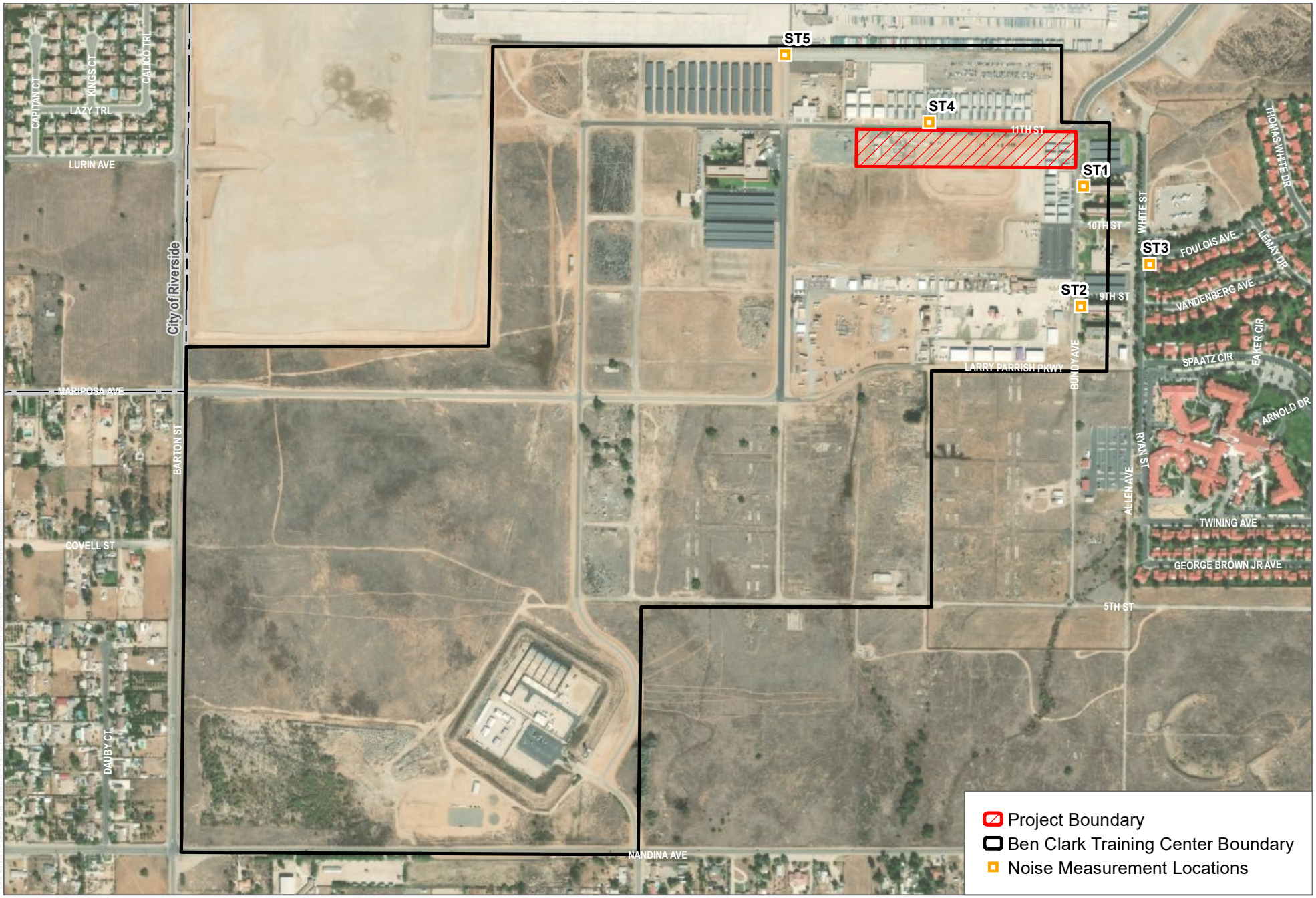
0 50 100 Feet

FIGURE 6

Biological Resources Map

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2018

DUDEK

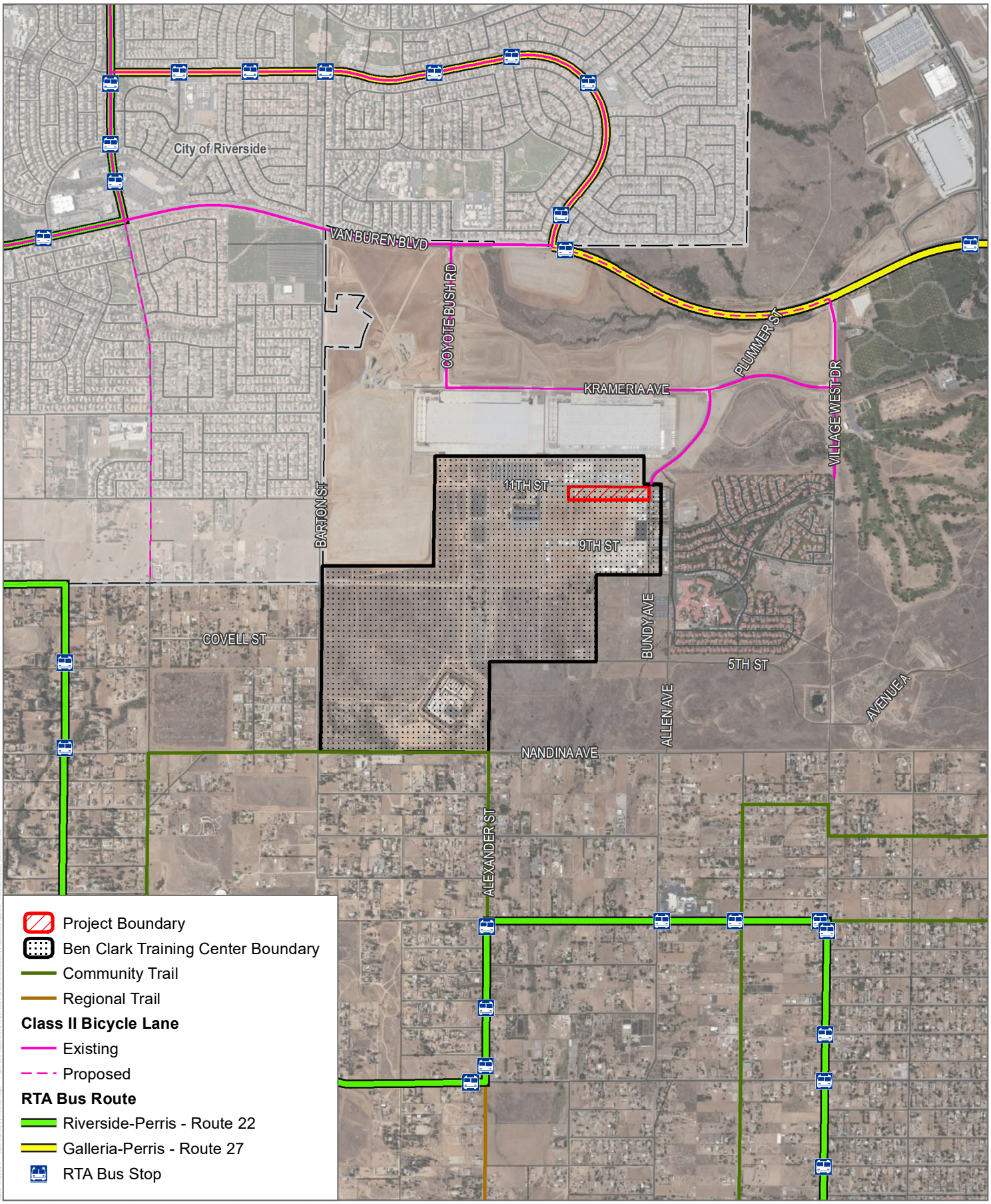
0 375 750 Feet

FIGURE 7

Noise Measurement Locations

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps, Riverside County 2020, City of Riverside 2021, RTA 2021

DUDEK

0 1,000 2,000 Feet

FIGURE 8

Transit and Bicycle Facilities

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK

RCCD Ben Clark Training Center - Phase I

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	14.13	1000sqft	1.26	14,135.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	84.00	Space	0.80	35,000.00	0
User Defined Recreational	41.00	User Defined Unit	0.94	41,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% renewables.

Land Use - Project-specific land uses.

Construction Phase - Utilites included in grading and building. Project specific schedule.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 247 tons of debris.

Grading - 2,200 C.Y. of import.

Architectural Coating - Adjusted per architectual coating phase. Adjusted Exterior and Interior to reflect project. CalEEMod User Guide calcs: 14135*2*.75= 21202.5 14135*2*.25= 7067.5

Vehicle Trips - Project specific values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Road Dust - CalEEMod default values.

Woodstoves - No hearths.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - Adjusted per Title 24 2019 energy efficent reductions.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Mobile Land Use Mitigation - No mitigation applied.

Mobile Commute Mitigation - No mitigation applied.

Waste Mitigation - No mitigation applied.

Operational Off-Road Equipment - No off-road equipment.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	14,130.00	14,135.00
tblLandUse	LandUseSquareFeet	33,600.00	35,000.00
tblLandUse	LandUseSquareFeet	0.00	41,000.00
tblLandUse	LotAcreage	0.32	1.26
tblLandUse	LotAcreage	0.76	0.80
tblLandUse	LotAcreage	0.00	0.94
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	1325.65	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripNumber	0.00	276.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00

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	3.9719	40.5474	22.0825	0.0565	18.2675	2.0457	20.3131	9.9840	1.8820	11.8660	0.0000	5,713.1789	5,713.1789	1.1960	0.0000	5,740.8691
2022	33.2722	44.1364	48.5455	0.0917	1.4377	2.1181	3.5558	0.3865	1.9843	2.3708	0.0000	8,846.2005	8,846.2005	1.8869	0.0000	8,893.3716
Maximum	**33.2722**	**44.1364**	**48.5455**	**0.0917**	**18.2675**	**2.1181**	**20.3131**	**9.9840**	**1.9843**	**11.8660**	**0.0000**	**8,846.2005**	**8,846.2005**	**1.8869**	**0.0000**	**8,893.3716**

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	3.9719	40.5474	22.0825	0.0565	8.3310	2.0457	10.3767	4.5222	1.8820	6.4042	0.0000	5,713.1789	5,713.1789	1.1960	0.0000	5,740.8691
2022	33.2722	44.1364	48.5455	0.0917	1.4377	2.1181	3.5558	0.3865	1.9843	2.3708	0.0000	8,846.2005	8,846.2005	1.8869	0.0000	8,893.3716
Maximum	**33.2722**	**44.1364**	**48.5455**	**0.0917**	**8.3310**	**2.1181**	**10.3767**	**4.5222**	**1.9843**	**6.4042**	**0.0000**	**8,846.2005**	**8,846.2005**	**1.8869**	**0.0000**	**8,893.3716**

RCCD Ben Clark Training Center - Phase I - Riverside-South Coast County, Winter

	ROG	NOx	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	50.43	0.00	41.63	52.67	0.00	38.36	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Energy	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Mobile	0.5319	3.7625	6.3019	0.0303	2.5017	0.0177	2.5195	0.6693	0.0165	0.6858		3,102.2612	3,102.2612	0.1456		3,105.9017
Total	**1.7917**	**3.8152**	**6.3616**	**0.0306**	**2.5017**	**0.0218**	**2.5235**	**0.6693**	**0.0206**	**0.6899**		**3,165.3041**	**3,165.3041**	**0.1469**	**1.1600e-003**	**3,169.3212**

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	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Energy	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Mobile	0.5319	3.7625	6.3019	0.0303	2.5017	0.0177	2.5195	0.6693	0.0165	0.6858		3,102.2612	3,102.2612	0.1456		3,105.9017
Total	**1.7917**	**3.8152**	**6.3616**	**0.0306**	**2.5017**	**0.0218**	**2.5235**	**0.6693**	**0.0206**	**0.6899**		**3,165.3041**	**3,165.3041**	**0.1469**	**1.1600e-003**	**3,169.3212**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	9/15/2021	5	20	
2	Site Preparation	Site Preparation	9/16/2021	9/20/2021	5	5	
3	Grading / Over-excavation	Grading	9/21/2021	10/4/2021	5	8	
4	Structure	Building Construction	10/6/2021	3/2/2022	5	230	
5	Interiors	Building Construction	1/20/2022	8/3/2022	5	230	
6	Plaster Exterior - Structure	Architectural Coating	3/3/2022	3/23/2022	5	18	
7	Site Improvements	Building Construction	4/12/2022	7/6/2022	5	230	
8	Paint - Primer / 1st Coat - Interior	Architectural Coating	4/14/2022	4/20/2022	5	18	
9	Final Paint - Interior	Architectural Coating	6/3/2022	6/9/2022	5	18	
10	Asphalt Paving / Cure - Site Improvement	Paving	6/22/2022	6/30/2022	5	18	
11	Striping - Site Improvement	Architectural Coating	7/1/2022	7/5/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 82,703; Non-Residential Outdoor: 27,568; Striped Parking Area: 2,910 (Architectural Coating – sqft)

OffRoad Equipment

RCCD Ben Clark Training Center - Phase I - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading / Over-excavation	Excavators	1	8.00	158	0.38
Grading / Over-excavation	Graders	1	8.00	187	0.41
Grading / Over-excavation	Rubber Tired Dozers	1	8.00	247	0.40
Grading / Over-excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Structure	Cranes	1	7.00	231	0.29
Structure	Forklifts	3	8.00	89	0.20
Structure	Generator Sets	1	8.00	84	0.74
Structure	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structure	Welders	1	8.00	46	0.45
Interiors	Cranes	1	7.00	231	0.29
Interiors	Forklifts	3	8.00	89	0.20
Interiors	Generator Sets	1	8.00	84	0.74
Interiors	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Interiors	Welders	1	8.00	46	0.45
Plaster Exterior - Structure	Air Compressors	1	6.00	78	0.48
Site Improvements	Cranes	1	7.00	231	0.29
Site Improvements	Forklifts	3	8.00	89	0.20
Site Improvements	Generator Sets	1	8.00	84	0.74
Site Improvements	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Site Improvements	Welders	1	8.00	46	0.45
Paint - Primer / 1st Coat - Interior	Air Compressors	1	6.00	78	0.48

Final Paint - Interior	Air Compressors	1	6.00	78	0.48
Asphalt Paving / Cure - Site Improvement	Cement and Mortar Mixers	2	6.00	9	0.56
Asphalt Paving / Cure - Site Improvement	Pavers	1	8.00	130	0.42
Asphalt Paving / Cure - Site Improvement	Paving Equipment	2	6.00	132	0.36
Asphalt Paving / Cure - Site Improvement	Rollers	2	6.00	80	0.38
Asphalt Paving / Cure - Site Improvement	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Striping - Site Improvement	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	24.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading / Over-excavation	6	16.00	0.00	276.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Structure	9	44.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Interiors	9	44.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Plaster Exterior - Structure	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Improvements	9	44.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paint - Primer / 1st Coat - Interior	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Final Paint - Interior	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving / Cure - Site Improvement	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Striping - Site Improvement	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					0.2659	0.0000	0.2659	0.0403	0.0000	0.0403			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.2659**	**1.5513**	**1.8173**	**0.0403**	**1.4411**	**1.4814**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.1500e-003	0.2626	0.0400	8.8000e-004	0.0340	8.1000e-004	0.0348	8.9400e-003	7.7000e-004	9.7100e-003		93.5102	93.5102	6.1000e-003		93.6626
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	0.0744	0.0447	0.4775	1.5300e-003	0.1788	1.0500e-003	0.1799	0.0474	9.7000e-004	0.0484		152.8310	152.8310	3.5300e-003		152.9193
Total	**0.0806**	**0.3073**	**0.5175**	**2.4100e-003**	**0.2128**	**1.8600e-003**	**0.2147**	**0.0564**	**1.7400e-003**	**0.0581**		**246.3412**	**246.3412**	**9.6300e-003**		**246.5819**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1197	0.0000	0.1197	0.0181	0.0000	0.0181			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.1197**	**1.5513**	**1.6710**	**0.0181**	**1.4411**	**1.4592**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.1500e-003	0.2626	0.0400	8.8000e-004	0.0340	8.1000e-004	0.0348	8.9400e-003	7.7000e-004	9.7100e-003		93.5102	93.5102	6.1000e-003		93.6626
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	0.0744	0.0447	0.4775	1.5300e-003	0.1788	1.0500e-003	0.1799	0.0474	9.7000e-004	0.0484		152.8310	152.8310	3.5300e-003		152.9193
Total	**0.0806**	**0.3073**	**0.5175**	**2.4100e-003**	**0.2128**	**1.8600e-003**	**0.2147**	**0.0564**	**1.7400e-003**	**0.0581**		**246.3412**	**246.3412**	**9.6300e-003**		**246.5819**

3.3 Site Preparation - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342
Total	**0.0838**	**0.0503**	**0.5372**	**1.7200e-003**	**0.2012**	**1.1900e-003**	**0.2024**	**0.0534**	**1.0900e-003**	**0.0545**		**171.9348**	**171.9348**	**3.9700e-003**		**172.0342**

3.3 Site Preparation - 2021

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**8.1298**	**2.0445**	**10.1743**	**4.4688**	**1.8809**	**6.3497**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342
Total	**0.0838**	**0.0503**	**0.5372**	**1.7200e-003**	**0.2012**	**1.1900e-003**	**0.2024**	**0.0534**	**1.0900e-003**	**0.0545**		**171.9348**	**171.9348**	**3.9700e-003**		**172.0342**

3.4 Grading / Over-excavation - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.1767	7.5496	1.1503	0.0253	0.5123	0.0232	0.5354	0.1430	0.0222	0.1652		2,688.4195	2,688.4195	0.1752		2,692.8003
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	0.0744	0.0447	0.4775	1.5300e-003	0.1788	1.0500e-003	0.1799	0.0474	9.7000e-004	0.0484		152.8310	152.8310	3.5300e-003		152.9193
Total	**0.2512**	**7.5943**	**1.6278**	**0.0269**	**0.6911**	**0.0242**	**0.7153**	**0.1905**	**0.0231**	**0.2136**		**2,841.2504**	**2,841.2504**	**0.1788**		**2,845.7196**

3.4 Grading / Over-excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.9486**	**1.1599**	**4.1085**	**1.5154**	**1.0671**	**2.5825**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.1767	7.5496	1.1503	0.0253	0.5123	0.0232	0.5354	0.1430	0.0222	0.1652		2,688.4195	2,688.4195	0.1752		2,692.8003
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	0.0744	0.0447	0.4775	1.5300e-003	0.1788	1.0500e-003	0.1799	0.0474	9.7000e-004	0.0484		152.8310	152.8310	3.5300e-003		152.9193
Total	**0.2512**	**7.5943**	**1.6278**	**0.0269**	**0.6911**	**0.0242**	**0.7153**	**0.1905**	**0.0231**	**0.2136**		**2,841.2504**	**2,841.2504**	**0.1788**		**2,845.7196**

3.5 Structure - 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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0446	1.6514	0.3516	4.4900e-003	0.1153	3.2600e-003	0.1185	0.0332	3.1200e-003	0.0363		473.3518	473.3518	0.0392		474.3320
Worker	0.2047	0.1229	1.3131	4.2200e-003	0.4918	2.9000e-003	0.4947	0.1304	2.6700e-003	0.1331		420.2852	420.2852	9.7100e-003		420.5280
Total	**0.2493**	**1.7743**	**1.6647**	**8.7100e-003**	**0.6071**	**6.1600e-003**	**0.6132**	**0.1636**	**5.7900e-003**	**0.1694**		**893.6370**	**893.6370**	**0.0489**		**894.8599**

3.5 Structure - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0446	1.6514	0.3516	4.4900e-003	0.1153	3.2600e-003	0.1185	0.0332	3.1200e-003	0.0363		473.3518	473.3518	0.0392		474.3320
Worker	0.2047	0.1229	1.3131	4.2200e-003	0.4918	2.9000e-003	0.4947	0.1304	2.6700e-003	0.1331		420.2852	420.2852	9.7100e-003		420.5280
Total	**0.2493**	**1.7743**	**1.6647**	**8.7100e-003**	**0.6071**	**6.1600e-003**	**0.6132**	**0.1636**	**5.7900e-003**	**0.1694**		**893.6370**	**893.6370**	**0.0489**		**894.8599**

3.5 Structure - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0417	1.5558	0.3282	4.4500e-003	0.1153	2.7500e-003	0.1180	0.0332	2.6300e-003	0.0358		469.2189	469.2189	0.0372		470.1481
Worker	0.1921	0.1106	1.2093	4.0600e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		404.9491	404.9491	8.7300e-003		405.1674
Total	**0.2337**	**1.6664**	**1.5375**	**8.5100e-003**	**0.6071**	**5.5700e-003**	**0.6127**	**0.1636**	**5.2300e-003**	**0.1688**		**874.1680**	**874.1680**	**0.0459**		**875.3155**

3.5 Structure - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0417	1.5558	0.3282	4.4500e-003	0.1153	2.7500e-003	0.1180	0.0332	2.6300e-003	0.0358		469.2189	469.2189	0.0372		470.1481
Worker	0.1921	0.1106	1.2093	4.0600e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		404.9491	404.9491	8.7300e-003		405.1674
Total	**0.2337**	**1.6664**	**1.5375**	**8.5100e-003**	**0.6071**	**5.5700e-003**	**0.6127**	**0.1636**	**5.2300e-003**	**0.1688**		**874.1680**	**874.1680**	**0.0459**		**875.3155**

3.6 Interiors - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0417	1.5558	0.3282	4.4500e-003	0.1153	2.7500e-003	0.1180	0.0332	2.6300e-003	0.0358		469.2189	469.2189	0.0372		470.1481
Worker	0.1921	0.1106	1.2093	4.0600e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		404.9491	404.9491	8.7300e-003		405.1674
Total	**0.2337**	**1.6664**	**1.5375**	**8.5100e-003**	**0.6071**	**5.5700e-003**	**0.6127**	**0.1636**	**5.2300e-003**	**0.1688**		**874.1680**	**874.1680**	**0.0459**		**875.3155**

3.6 Interiors - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0417	1.5558	0.3282	4.4500e-003	0.1153	2.7500e-003	0.1180	0.0332	2.6300e-003	0.0358		469.2189	469.2189	0.0372		470.1481
Worker	0.1921	0.1106	1.2093	4.0600e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		404.9491	404.9491	8.7300e-003		405.1674
Total	**0.2337**	**1.6664**	**1.5375**	**8.5100e-003**	**0.6071**	**5.5700e-003**	**0.6127**	**0.1636**	**5.2300e-003**	**0.1688**		**874.1680**	**874.1680**	**0.0459**		**875.3155**

3.7 Plaster Exterior - Structure - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835
Total	**0.0437**	**0.0251**	**0.2748**	**9.2000e-004**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**92.0339**	**92.0339**	**1.9800e-003**		**92.0835**

3.7 Plaster Exterior - Structure - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835
Total	**0.0437**	**0.0251**	**0.2748**	**9.2000e-004**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**92.0339**	**92.0339**	**1.9800e-003**		**92.0835**

3.8 Site Improvements - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0417	1.5558	0.3282	4.4500e-003	0.1153	2.7500e-003	0.1180	0.0332	2.6300e-003	0.0358		469.2189	469.2189	0.0372		470.1481
Worker	0.1921	0.1106	1.2093	4.0600e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		404.9491	404.9491	8.7300e-003		405.1674
Total	**0.2337**	**1.6664**	**1.5375**	**8.5100e-003**	**0.6071**	**5.5700e-003**	**0.6127**	**0.1636**	**5.2300e-003**	**0.1688**		**874.1680**	**874.1680**	**0.0459**		**875.3155**

3.8 Site Improvements - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0417	1.5558	0.3282	4.4500e-003	0.1153	2.7500e-003	0.1180	0.0332	2.6300e-003	0.0358		469.2189	469.2189	0.0372		470.1481
Worker	0.1921	0.1106	1.2093	4.0600e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		404.9491	404.9491	8.7300e-003		405.1674
Total	**0.2337**	**1.6664**	**1.5375**	**8.5100e-003**	**0.6071**	**5.5700e-003**	**0.6127**	**0.1636**	**5.2300e-003**	**0.1688**		**874.1680**	**874.1680**	**0.0459**		**875.3155**

3.9 Paint - Primer / 1st Coat - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835
Total	**0.0437**	**0.0251**	**0.2748**	**9.2000e-004**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**92.0339**	**92.0339**	**1.9800e-003**		**92.0835**

3.9 Paint - Primer / 1st Coat - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835
Total	**0.0437**	**0.0251**	**0.2748**	**9.2000e-004**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**92.0339**	**92.0339**	**1.9800e-003**		**92.0835**

3.10 Final Paint - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835
Total	**0.0437**	**0.0251**	**0.2748**	**9.2000e-004**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**92.0339**	**92.0339**	**1.9800e-003**		**92.0835**

3.10 Final Paint - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835
Total	**0.0437**	**0.0251**	**0.2748**	**9.2000e-004**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**92.0339**	**92.0339**	**1.9800e-003**		**92.0835**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0930**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**		**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

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	0.0873	0.0503	0.5497	1.8500e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		184.0678	184.0678	3.9700e-003		184.1670
Total	**0.0873**	**0.0503**	**0.5497**	**1.8500e-003**	**0.2236**	**1.2800e-003**	**0.2248**	**0.0593**	**1.1800e-003**	**0.0605**		**184.0678**	**184.0678**	**3.9700e-003**		**184.1670**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0930**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**	**0.0000**	**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

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	0.0873	0.0503	0.5497	1.8500e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		184.0678	184.0678	3.9700e-003		184.1670
Total	**0.0873**	**0.0503**	**0.5497**	**1.8500e-003**	**0.2236**	**1.2800e-003**	**0.2248**	**0.0593**	**1.1800e-003**	**0.0605**		**184.0678**	**184.0678**	**3.9700e-003**		**184.1670**

3.12 Striping - Site Improvement - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835
Total	**0.0437**	**0.0251**	**0.2748**	**9.2000e-004**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**92.0339**	**92.0339**	**1.9800e-003**		**92.0835**

3.12 Striping - Site Improvement - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835
Total	**0.0437**	**0.0251**	**0.2748**	**9.2000e-004**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**92.0339**	**92.0339**	**1.9800e-003**		**92.0835**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5319	3.7625	6.3019	0.0303	2.5017	0.0177	2.5195	0.6693	0.0165	0.6858		3,102.2612	3,102.2612	0.1456		3,105.9017
Unmitigated	0.5319	3.7625	6.3019	0.0303	2.5017	0.0177	2.5195	0.6693	0.0165	0.6858		3,102.2612	3,102.2612	0.1456		3,105.9017

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	388.43	158.68	17.10	913,851	913,851
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	388.43	158.68	17.10	913,851	913,851

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Other Non-Asphalt Surfaces	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Parking Lot	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
User Defined Recreational	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
NaturalGas Unmitigated	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840

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					
Junior College (2Yr)	535.581	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**5.7800e-003**	**0.0525**	**0.0441**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**		**63.0095**	**63.0095**	**1.2100e-003**	**1.1600e-003**	**63.3840**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	0.535581	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**5.7800e-003**	**0.0525**	**0.0441**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**		**63.0095**	**63.0095**	**1.2100e-003**	**1.1600e-003**	**63.3840**

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	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Unmitigated	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1437					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4400e-003	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Total	**1.2540**	**1.4000e-004**	**0.0156**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0334**	**0.0334**	**9.0000e-005**		**0.0356**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1437					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4400e-003	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Total	**1.2540**	**1.4000e-004**	**0.0156**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0334**	**0.0334**	**9.0000e-005**		**0.0356**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center - Phase I

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	14.13	1000sqft	1.26	14,135.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	84.00	Space	0.80	35,000.00	0
User Defined Recreational	41.00	User Defined Unit	0.94	41,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% renewables.

Land Use - Project-specific land uses.

Construction Phase - Utilites included in grading and building. Project specific schedule.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 247 tons of debris.

Grading - 2,200 C.Y. of import.

Architectural Coating - Adjusted per architectual coating phase. Adjusted Exterior and Interior to reflect project. CalEEMod User Guide calcs: 14135*2*.75= 21202.5 14135*2*.25= 7067.5

Vehicle Trips - Project specific values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Road Dust - CalEEMod default values.

Woodstoves - No hearths.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - Adjusted per Title 24 2019 energy efficent reductions.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Mobile Land Use Mitigation - No mitigation applied.

Mobile Commute Mitigation - No mitigation applied.

Waste Mitigation - No mitigation applied.

Operational Off-Road Equipment - No off-road equipment.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	14,130.00	14,135.00
tblLandUse	LandUseSquareFeet	33,600.00	35,000.00
tblLandUse	LandUseSquareFeet	0.00	41,000.00
tblLandUse	LotAcreage	0.32	1.26
tblLandUse	LotAcreage	0.76	0.80
tblLandUse	LotAcreage	0.00	0.94
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	1325.65	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripNumber	0.00	276.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00

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	3.9735	40.5457	22.1909	0.0573	18.2675	2.0457	20.3131	9.9840	1.8820	11.8660	0.0000	5,799.9945	5,799.9945	1.1966	0.0000	5,827.3215
2022	33.2741	44.1590	49.1566	0.0932	1.4377	2.1179	3.5556	0.3865	1.9841	2.3707	0.0000	8,997.0412	8,997.0412	1.8823	0.0000	9,044.0998
Maximum	**33.2741**	**44.1590**	**49.1566**	**0.0932**	**18.2675**	**2.1179**	**20.3131**	**9.9840**	**1.9841**	**11.8660**	**0.0000**	**8,997.0412**	**8,997.0412**	**1.8823**	**0.0000**	**9,044.0998**

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	3.9735	40.5457	22.1909	0.0573	8.3310	2.0457	10.3767	4.5222	1.8820	6.4042	0.0000	5,799.9945	5,799.9945	1.1966	0.0000	5,827.3215
2022	33.2741	44.1590	49.1566	0.0932	1.4377	2.1179	3.5556	0.3865	1.9841	2.3707	0.0000	8,997.0412	8,997.0412	1.8823	0.0000	9,044.0998
Maximum	**33.2741**	**44.1590**	**49.1566**	**0.0932**	**8.3310**	**2.1179**	**10.3767**	**4.5222**	**1.9841**	**6.4042**	**0.0000**	**8,997.0412**	**8,997.0412**	**1.8823**	**0.0000**	**9,044.0998**

RCCD Ben Clark Training Center - Phase I - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	50.43	0.00	41.63	52.67	0.00	38.36	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Energy	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Mobile	0.6355	3.7819	7.2796	0.0329	2.5017	0.0176	2.5194	0.6693	0.0164	0.6857		3,358.5129	3,358.5129	0.1416		3,362.0535
Total	**1.8953**	**3.8346**	**7.3393**	**0.0332**	**2.5017**	**0.0217**	**2.5234**	**0.6693**	**0.0205**	**0.6897**		**3,421.5559**	**3,421.5559**	**0.1429**	**1.1600e-003**	**3,425.4731**

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	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Energy	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Mobile	0.6355	3.7819	7.2796	0.0329	2.5017	0.0176	2.5194	0.6693	0.0164	0.6857		3,358.5129	3,358.5129	0.1416		3,362.0535
Total	**1.8953**	**3.8346**	**7.3393**	**0.0332**	**2.5017**	**0.0217**	**2.5234**	**0.6693**	**0.0205**	**0.6897**		**3,421.5559**	**3,421.5559**	**0.1429**	**1.1600e-003**	**3,425.4731**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	9/15/2021	5	20	
2	Site Preparation	Site Preparation	9/16/2021	9/20/2021	5	5	
3	Grading / Over-excavation	Grading	9/21/2021	10/4/2021	5	8	
4	Structure	Building Construction	10/6/2021	3/2/2022	5	230	
5	Interiors	Building Construction	1/20/2022	8/3/2022	5	230	
6	Plaster Exterior - Structure	Architectural Coating	3/3/2022	3/23/2022	5	18	
7	Site Improvements	Building Construction	4/12/2022	7/6/2022	5	230	
8	Paint - Primer / 1st Coat - Interior	Architectural Coating	4/14/2022	4/20/2022	5	18	
9	Final Paint - Interior	Architectural Coating	6/3/2022	6/9/2022	5	18	
10	Asphalt Paving / Cure - Site Improvement	Paving	6/22/2022	6/30/2022	5	18	
11	Striping - Site Improvement	Architectural Coating	7/1/2022	7/5/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 82,703; Non-Residential Outdoor: 27,568; Striped Parking Area: 2,910 (Architectural Coating – sqft)

OffRoad Equipment

RCCD Ben Clark Training Center - Phase I - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading / Over-excavation	Excavators	1	8.00	158	0.38
Grading / Over-excavation	Graders	1	8.00	187	0.41
Grading / Over-excavation	Rubber Tired Dozers	1	8.00	247	0.40
Grading / Over-excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Structure	Cranes	1	7.00	231	0.29
Structure	Forklifts	3	8.00	89	0.20
Structure	Generator Sets	1	8.00	84	0.74
Structure	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structure	Welders	1	8.00	46	0.45
Interiors	Cranes	1	7.00	231	0.29
Interiors	Forklifts	3	8.00	89	0.20
Interiors	Generator Sets	1	8.00	84	0.74
Interiors	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Interiors	Welders	1	8.00	46	0.45
Plaster Exterior - Structure	Air Compressors	1	6.00	78	0.48
Site Improvements	Cranes	1	7.00	231	0.29
Site Improvements	Forklifts	3	8.00	89	0.20
Site Improvements	Generator Sets	1	8.00	84	0.74
Site Improvements	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Site Improvements	Welders	1	8.00	46	0.45
Paint - Primer / 1st Coat - Interior	Air Compressors	1	6.00	78	0.48

Final Paint - Interior	Air Compressors	1	6.00	78	0.48
Asphalt Paving / Cure - Site Improvement	Cement and Mortar Mixers	2	6.00	9	0.56
Asphalt Paving / Cure - Site Improvement	Pavers	1	8.00	130	0.42
Asphalt Paving / Cure - Site Improvement	Paving Equipment	2	6.00	132	0.36
Asphalt Paving / Cure - Site Improvement	Rollers	2	6.00	80	0.38
Asphalt Paving / Cure - Site Improvement	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Striping - Site Improvement	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	24.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading / Over-excavation	6	16.00	0.00	276.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Structure	9	44.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Interiors	9	44.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Plaster Exterior - Structure	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Improvements	9	44.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paint - Primer / 1st Coat - Interior	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Final Paint - Interior	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving / Cure - Site Improvement	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Striping - Site Improvement	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					0.2659	0.0000	0.2659	0.0403	0.0000	0.0403			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.2659**	**1.5513**	**1.8173**	**0.0403**	**1.4411**	**1.4814**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	5.8400e-003	0.2608	0.0343	9.0000e-004	0.0340	7.9000e-004	0.0348	8.9400e-003	7.6000e-004	9.7000e-003		95.9202	95.9202	5.5700e-003		96.0595
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	0.0759	0.0432	0.5915	1.7100e-003	0.1788	1.0500e-003	0.1799	0.0474	9.7000e-004	0.0484		170.3602	170.3602	4.0600e-003		170.4617
Total	**0.0817**	**0.3040**	**0.6258**	**2.6100e-003**	**0.2128**	**1.8400e-003**	**0.2147**	**0.0564**	**1.7300e-003**	**0.0581**		**266.2804**	**266.2804**	**9.6300e-003**		**266.5212**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1197	0.0000	0.1197	0.0181	0.0000	0.0181			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.1197**	**1.5513**	**1.6710**	**0.0181**	**1.4411**	**1.4592**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	5.8400e-003	0.2608	0.0343	9.0000e-004	0.0340	7.9000e-004	0.0348	8.9400e-003	7.6000e-004	9.7000e-003		95.9202	95.9202	5.5700e-003		96.0595
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	0.0759	0.0432	0.5915	1.7100e-003	0.1788	1.0500e-003	0.1799	0.0474	9.7000e-004	0.0484		170.3602	170.3602	4.0600e-003		170.4617
Total	**0.0817**	**0.3040**	**0.6258**	**2.6100e-003**	**0.2128**	**1.8400e-003**	**0.2147**	**0.0564**	**1.7300e-003**	**0.0581**		**266.2804**	**266.2804**	**9.6300e-003**		**266.5212**

3.3 Site Preparation - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694
Total	**0.0853**	**0.0486**	**0.6655**	**1.9200e-003**	**0.2012**	**1.1900e-003**	**0.2024**	**0.0534**	**1.0900e-003**	**0.0545**		**191.6552**	**191.6552**	**4.5700e-003**		**191.7694**

3.3 Site Preparation - 2021

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**8.1298**	**2.0445**	**10.1743**	**4.4688**	**1.8809**	**6.3497**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694
Total	**0.0853**	**0.0486**	**0.6655**	**1.9200e-003**	**0.2012**	**1.1900e-003**	**0.2024**	**0.0534**	**1.0900e-003**	**0.0545**		**191.6552**	**191.6552**	**4.5700e-003**		**191.7694**

3.4 Grading / Over-excavation - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.1679	7.4988	0.9861	0.0260	0.5123	0.0228	0.5351	0.1430	0.0218	0.1649		2,757.7059	2,757.7059	0.1602		2,761.7103
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	0.0759	0.0432	0.5915	1.7100e-003	0.1788	1.0500e-003	0.1799	0.0474	9.7000e-004	0.0484		170.3602	170.3602	4.0600e-003		170.4617
Total	**0.2438**	**7.5420**	**1.5776**	**0.0277**	**0.6911**	**0.0239**	**0.7150**	**0.1905**	**0.0228**	**0.2133**		**2,928.0660**	**2,928.0660**	**0.1642**		**2,932.1720**

3.4 Grading / Over-excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.9486**	**1.1599**	**4.1085**	**1.5154**	**1.0671**	**2.5825**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.1679	7.4988	0.9861	0.0260	0.5123	0.0228	0.5351	0.1430	0.0218	0.1649		2,757.7059	2,757.7059	0.1602		2,761.7103
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	0.0759	0.0432	0.5915	1.7100e-003	0.1788	1.0500e-003	0.1799	0.0474	9.7000e-004	0.0484		170.3602	170.3602	4.0600e-003		170.4617
Total	**0.2438**	**7.5420**	**1.5776**	**0.0277**	**0.6911**	**0.0239**	**0.7150**	**0.1905**	**0.0228**	**0.2133**		**2,928.0660**	**2,928.0660**	**0.1642**		**2,932.1720**

3.5 Structure - 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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0420	1.6657	0.2972	4.6600e-003	0.1153	3.1700e-003	0.1184	0.0332	3.0300e-003	0.0362		491.8518	491.8518	0.0352		492.7315
Worker	0.2086	0.1188	1.6267	4.7000e-003	0.4918	2.9000e-003	0.4947	0.1304	2.6700e-003	0.1331		468.4904	468.4904	0.0112		468.7697
Total	**0.2506**	**1.7845**	**1.9239**	**9.3600e-003**	**0.6071**	**6.0700e-003**	**0.6131**	**0.1636**	**5.7000e-003**	**0.1693**		**960.3422**	**960.3422**	**0.0464**		**961.5012**

3.5 Structure - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0420	1.6657	0.2972	4.6600e-003	0.1153	3.1700e-003	0.1184	0.0332	3.0300e-003	0.0362		491.8518	491.8518	0.0352		492.7315
Worker	0.2086	0.1188	1.6267	4.7000e-003	0.4918	2.9000e-003	0.4947	0.1304	2.6700e-003	0.1331		468.4904	468.4904	0.0112		468.7697
Total	**0.2506**	**1.7845**	**1.9239**	**9.3600e-003**	**0.6071**	**6.0700e-003**	**0.6131**	**0.1636**	**5.7000e-003**	**0.1693**		**960.3422**	**960.3422**	**0.0464**		**961.5012**

3.5 Structure - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0392	1.5715	0.2764	4.6200e-003	0.1153	2.6600e-003	0.1179	0.0332	2.5500e-003	0.0357		487.6653	487.6653	0.0333		488.4984
Worker	0.1951	0.1070	1.5004	4.5300e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		451.3723	451.3723	0.0100		451.6231
Total	**0.2343**	**1.6785**	**1.7769**	**9.1500e-003**	**0.6071**	**5.4800e-003**	**0.6126**	**0.1636**	**5.1500e-003**	**0.1688**		**939.0376**	**939.0376**	**0.0434**		**940.1216**

3.5 Structure - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0392	1.5715	0.2764	4.6200e-003	0.1153	2.6600e-003	0.1179	0.0332	2.5500e-003	0.0357		487.6653	487.6653	0.0333		488.4984
Worker	0.1951	0.1070	1.5004	4.5300e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		451.3723	451.3723	0.0100		451.6231
Total	**0.2343**	**1.6785**	**1.7769**	**9.1500e-003**	**0.6071**	**5.4800e-003**	**0.6126**	**0.1636**	**5.1500e-003**	**0.1688**		**939.0376**	**939.0376**	**0.0434**		**940.1216**

3.6 Interiors - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0392	1.5715	0.2764	4.6200e-003	0.1153	2.6600e-003	0.1179	0.0332	2.5500e-003	0.0357		487.6653	487.6653	0.0333		488.4984
Worker	0.1951	0.1070	1.5004	4.5300e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		451.3723	451.3723	0.0100		451.6231
Total	**0.2343**	**1.6785**	**1.7769**	**9.1500e-003**	**0.6071**	**5.4800e-003**	**0.6126**	**0.1636**	**5.1500e-003**	**0.1688**		**939.0376**	**939.0376**	**0.0434**		**940.1216**

3.6 Interiors - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0392	1.5715	0.2764	4.6200e-003	0.1153	2.6600e-003	0.1179	0.0332	2.5500e-003	0.0357		487.6653	487.6653	0.0333		488.4984
Worker	0.1951	0.1070	1.5004	4.5300e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		451.3723	451.3723	0.0100		451.6231
Total	**0.2343**	**1.6785**	**1.7769**	**9.1500e-003**	**0.6071**	**5.4800e-003**	**0.6126**	**0.1636**	**5.1500e-003**	**0.1688**		**939.0376**	**939.0376**	**0.0434**		**940.1216**

3.7 Plaster Exterior - Structure - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416
Total	**0.0444**	**0.0243**	**0.3410**	**1.0300e-003**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**102.5846**	**102.5846**	**2.2800e-003**		**102.6416**

3.7 Plaster Exterior - Structure - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416
Total	**0.0444**	**0.0243**	**0.3410**	**1.0300e-003**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**102.5846**	**102.5846**	**2.2800e-003**		**102.6416**

3.8 Site Improvements - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0392	1.5715	0.2764	4.6200e-003	0.1153	2.6600e-003	0.1179	0.0332	2.5500e-003	0.0357		487.6653	487.6653	0.0333		488.4984
Worker	0.1951	0.1070	1.5004	4.5300e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		451.3723	451.3723	0.0100		451.6231
Total	**0.2343**	**1.6785**	**1.7769**	**9.1500e-003**	**0.6071**	**5.4800e-003**	**0.6126**	**0.1636**	**5.1500e-003**	**0.1688**		**939.0376**	**939.0376**	**0.0434**		**940.1216**

3.8 Site Improvements - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0392	1.5715	0.2764	4.6200e-003	0.1153	2.6600e-003	0.1179	0.0332	2.5500e-003	0.0357		487.6653	487.6653	0.0333		488.4984
Worker	0.1951	0.1070	1.5004	4.5300e-003	0.4918	2.8200e-003	0.4946	0.1304	2.6000e-003	0.1330		451.3723	451.3723	0.0100		451.6231
Total	**0.2343**	**1.6785**	**1.7769**	**9.1500e-003**	**0.6071**	**5.4800e-003**	**0.6126**	**0.1636**	**5.1500e-003**	**0.1688**		**939.0376**	**939.0376**	**0.0434**		**940.1216**

3.9 Paint - Primer / 1st Coat - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416
Total	**0.0444**	**0.0243**	**0.3410**	**1.0300e-003**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**102.5846**	**102.5846**	**2.2800e-003**		**102.6416**

3.9 Paint - Primer / 1st Coat - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416
Total	**0.0444**	**0.0243**	**0.3410**	**1.0300e-003**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**102.5846**	**102.5846**	**2.2800e-003**		**102.6416**

3.10 Final Paint - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416
Total	**0.0444**	**0.0243**	**0.3410**	**1.0300e-003**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**102.5846**	**102.5846**	**2.2800e-003**		**102.6416**

3.10 Final Paint - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416
Total	**0.0444**	**0.0243**	**0.3410**	**1.0300e-003**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**102.5846**	**102.5846**	**2.2800e-003**		**102.6416**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0930**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**		**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

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	0.0887	0.0486	0.6820	2.0600e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		205.1692	205.1692	4.5600e-003		205.2832
Total	**0.0887**	**0.0486**	**0.6820**	**2.0600e-003**	**0.2236**	**1.2800e-003**	**0.2248**	**0.0593**	**1.1800e-003**	**0.0605**		**205.1692**	**205.1692**	**4.5600e-003**		**205.2832**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0930**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**	**0.0000**	**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

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	0.0887	0.0486	0.6820	2.0600e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		205.1692	205.1692	4.5600e-003		205.2832
Total	**0.0887**	**0.0486**	**0.6820**	**2.0600e-003**	**0.2236**	**1.2800e-003**	**0.2248**	**0.0593**	**1.1800e-003**	**0.0605**		**205.1692**	**205.1692**	**4.5600e-003**		**205.2832**

3.12 Striping - Site Improvement - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416
Total	**0.0444**	**0.0243**	**0.3410**	**1.0300e-003**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**102.5846**	**102.5846**	**2.2800e-003**		**102.6416**

3.12 Striping - Site Improvement - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416
Total	**0.0444**	**0.0243**	**0.3410**	**1.0300e-003**	**0.1118**	**6.4000e-004**	**0.1124**	**0.0296**	**5.9000e-004**	**0.0302**		**102.5846**	**102.5846**	**2.2800e-003**		**102.6416**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6355	3.7819	7.2796	0.0329	2.5017	0.0176	2.5194	0.6693	0.0164	0.6857		3,358.5129	3,358.5129	0.1416		3,362.0535
Unmitigated	0.6355	3.7819	7.2796	0.0329	2.5017	0.0176	2.5194	0.6693	0.0164	0.6857		3,358.5129	3,358.5129	0.1416		3,362.0535

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	388.43	158.68	17.10	913,851	913,851
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	388.43	158.68	17.10	913,851	913,851

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Other Non-Asphalt Surfaces	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Parking Lot	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
User Defined Recreational	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
NaturalGas Unmitigated	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840

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					
Junior College (2Yr)	535.581	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**5.7800e-003**	**0.0525**	**0.0441**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**		**63.0095**	**63.0095**	**1.2100e-003**	**1.1600e-003**	**63.3840**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	0.535581	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**5.7800e-003**	**0.0525**	**0.0441**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**		**63.0095**	**63.0095**	**1.2100e-003**	**1.1600e-003**	**63.3840**

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	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Unmitigated	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1437					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4400e-003	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Total	**1.2540**	**1.4000e-004**	**0.0156**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0334**	**0.0334**	**9.0000e-005**		**0.0356**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1437					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4400e-003	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Total	**1.2540**	**1.4000e-004**	**0.0156**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0334**	**0.0334**	**9.0000e-005**		**0.0356**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center - Phase I

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	14.13	1000sqft	1.26	14,135.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	84.00	Space	0.80	35,000.00	0
User Defined Recreational	41.00	User Defined Unit	0.94	41,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% renewables.

Land Use - Project-specific land uses.

Construction Phase - Utilites included in grading and building. Project specific schedule.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 247 tons of debris.

Grading - 2,200 C.Y. of import.

Architectural Coating - Adjusted per architectual coating phase. Adjusted Exterior and Interior to reflect project. CalEEMod User Guide calcs: 14135*2*.75= 21202.5 14135*2*.25= 7067.5

Vehicle Trips - Project specific values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Road Dust - CalEEMod default values.

Woodstoves - No hearths.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - Adjusted per Title 24 2019 energy efficent reductions.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Mobile Land Use Mitigation - No mitigation applied.

Mobile Commute Mitigation - No mitigation applied.

Waste Mitigation - No mitigation applied.

Operational Off-Road Equipment - No off-road equipment.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	14,130.00	14,135.00
tblLandUse	LandUseSquareFeet	33,600.00	35,000.00
tblLandUse	LandUseSquareFeet	0.00	41,000.00
tblLandUse	LotAcreage	0.32	1.26
tblLandUse	LotAcreage	0.76	0.80
tblLandUse	LotAcreage	0.00	0.94
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	1325.65	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripNumber	0.00	276.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1036	1.0037	0.8172	1.7000e-003	0.0850	0.0479	0.1329	0.0384	0.0448	0.0831	0.0000	150.4446	150.4446	0.0309	0.0000	151.2164
2022	0.6511	2.1742	2.2718	4.4900e-003	0.0755	0.1026	0.1781	0.0204	0.0966	0.1170	0.0000	394.4619	394.4619	0.0750	0.0000	396.3361
Maximum	**0.6511**	**2.1742**	**2.2718**	**4.4900e-003**	**0.0850**	**0.1026**	**0.1781**	**0.0384**	**0.0966**	**0.1170**	**0.0000**	**394.4619**	**394.4619**	**0.0750**	**0.0000**	**396.3361**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1036	1.0037	0.8172	1.7000e-003	0.0513	0.0479	0.0992	0.0208	0.0448	0.0656	0.0000	150.4445	150.4445	0.0309	0.0000	151.2162
2022	0.6511	2.1742	2.2718	4.4900e-003	0.0755	0.1026	0.1781	0.0204	0.0966	0.1170	0.0000	394.4615	394.4615	0.0750	0.0000	396.3358
Maximum	**0.6511**	**2.1742**	**2.2718**	**4.4900e-003**	**0.0755**	**0.1026**	**0.1781**	**0.0208**	**0.0966**	**0.1170**	**0.0000**	**394.4615**	**394.4615**	**0.0750**	**0.0000**	**396.3358**

	ROG	NOx	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**	**21.02**	**0.00**	**10.84**	**29.94**	**0.00**	**8.79**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-1-2021**	**9-30-2021**	0.3913	0.3913
2	**10-1-2021**	**12-31-2021**	0.7134	0.7134
3	**1-1-2022**	**3-31-2022**	1.8089	1.8089
4	**4-1-2022**	**6-30-2022**	1.3634	1.3634
5	**7-1-2022**	**9-30-2022**	0.3298	0.3298
		Highest	1.8089	1.8089

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2288	2.0000e-005	1.9500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7900e-003	3.7900e-003	1.0000e-005	0.0000	4.0400e-003
Energy	1.0500e-003	9.5800e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	42.1841	42.1841	1.4900e-003	4.7000e-004	42.3619
Mobile	0.0757	0.5424	0.9211	4.4000e-003	0.3489	2.5000e-003	0.3514	0.0935	2.3300e-003	0.0958	0.0000	408.2719	408.2719	0.0182	0.0000	408.7277
Waste						0.0000	0.0000		0.0000	0.0000	3.7289	0.0000	3.7289	0.2204	0.0000	9.2383
Water						0.0000	0.0000		0.0000	0.0000	0.2199	5.4107	5.6306	0.0228	5.8000e-004	6.3738
Total	**0.3055**	**0.5520**	**0.9311**	**4.4600e-003**	**0.3489**	**3.2400e-003**	**0.3521**	**0.0935**	**3.0700e-003**	**0.0965**	**3.9488**	**455.8704**	**459.8193**	**0.2629**	**1.0500e-003**	**466.7057**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2288	2.0000e-005	1.9500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7900e-003	3.7900e-003	1.0000e-005	0.0000	4.0400e-003
Energy	1.0500e-003	9.5800e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	42.1841	42.1841	1.4900e-003	4.7000e-004	42.3619
Mobile	0.0757	0.5424	0.9211	4.4000e-003	0.3489	2.5000e-003	0.3514	0.0935	2.3300e-003	0.0958	0.0000	408.2719	408.2719	0.0182	0.0000	408.7277
Waste						0.0000	0.0000		0.0000	0.0000	3.7289	0.0000	3.7289	0.2204	0.0000	9.2383
Water						0.0000	0.0000		0.0000	0.0000	0.2199	5.4107	5.6306	0.0228	5.8000e-004	6.3738
Total	**0.3055**	**0.5520**	**0.9311**	**4.4600e-003**	**0.3489**	**3.2400e-003**	**0.3521**	**0.0935**	**3.0700e-003**	**0.0965**	**3.9488**	**455.8704**	**459.8193**	**0.2629**	**1.0500e-003**	**466.7057**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

RCCD Ben Clark Training Center - Phase I - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	9/15/2021	5	20	
2	Site Preparation	Site Preparation	9/16/2021	9/20/2021	5	5	
3	Grading / Over-excavation	Grading	9/21/2021	10/4/2021	5	8	
4	Structure	Building Construction	10/6/2021	3/2/2022	5	230	
5	Interiors	Building Construction	1/20/2022	8/3/2022	5	230	
6	Plaster Exterior - Structure	Architectural Coating	3/3/2022	3/23/2022	5	18	
7	Site Improvements	Building Construction	4/12/2022	7/6/2022	5	230	
8	Paint - Primer / 1st Coat - Interior	Architectural Coating	4/14/2022	4/20/2022	5	18	
9	Final Paint - Interior	Architectural Coating	6/3/2022	6/9/2022	5	18	
10	Asphalt Paving / Cure - Site Improvement	Paving	6/22/2022	6/30/2022	5	18	
11	Striping - Site Improvement	Architectural Coating	7/1/2022	7/5/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 82,703; Non-Residential Outdoor: 27,568; Striped Parking Area: 2,910 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Grading / Over-excavation	Excavators	1	8.00	158	0.38
Grading / Over-excavation	Graders	1	8.00	187	0.41
Grading / Over-excavation	Rubber Tired Dozers	1	8.00	247	0.40
Grading / Over-excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Structure	Cranes	1	7.00	231	0.29
Structure	Forklifts	3	8.00	89	0.20
Structure	Generator Sets	1	8.00	84	0.74
Structure	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structure	Welders	1	8.00	46	0.45
Interiors	Cranes	1	7.00	231	0.29
Interiors	Forklifts	3	8.00	89	0.20
Interiors	Generator Sets	1	8.00	84	0.74
Interiors	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Interiors	Welders	1	8.00	46	0.45
Plaster Exterior - Structure	Air Compressors	1	6.00	78	0.48
Site Improvements	Cranes	1	7.00	231	0.29
Site Improvements	Forklifts	3	8.00	89	0.20
Site Improvements	Generator Sets	1	8.00	84	0.74
Site Improvements	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Site Improvements	Welders	1	8.00	46	0.45
Paint - Primer / 1st Coat - Interior	Air Compressors	1	6.00	78	0.48
Final Paint - Interior	Air Compressors	1	6.00	78	0.48
Asphalt Paving / Cure - Site Improvement	Cement and Mortar Mixers	2	6.00	9	0.56
Asphalt Paving / Cure - Site Improvement	Pavers	1	8.00	130	0.42
Asphalt Paving / Cure - Site Improvement	Paving Equipment	2	6.00	132	0.36
Asphalt Paving / Cure - Site Improvement	Rollers	2	6.00	80	0.38

Asphalt Paving / Cure - Site Improvement	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Striping - Site Improvement	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	24.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading / Over-excavation	6	16.00	0.00	276.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Structure	9	44.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Interiors	9	44.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Plaster Exterior - Structure	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Improvements	9	44.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paint - Primer / 1st Coat - Interior	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Final Paint - Interior	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving / Cure - Site Improvement	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Striping - Site Improvement	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4600e-003	0.0000	1.4600e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0174	0.1729	0.1186	2.1000e-004		8.5300e-003	8.5300e-003		7.9300e-003	7.9300e-003	0.0000	18.7004	18.7004	5.2600e-003	0.0000	18.8320
Total	**0.0174**	**0.1729**	**0.1186**	**2.1000e-004**	**1.4600e-003**	**8.5300e-003**	**9.9900e-003**	**2.2000e-004**	**7.9300e-003**	**8.1500e-003**	**0.0000**	**18.7004**	**18.7004**	**5.2600e-003**	**0.0000**	**18.8320**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.4700e-003	2.0000e-004	0.0000	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.4736	0.4736	3.0000e-005	0.0000	0.4743
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.7700e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7822	0.7822	2.0000e-005	0.0000	0.7826
Total	**4.1000e-004**	**1.7200e-003**	**2.9700e-003**	**1.0000e-005**	**1.1500e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**1.2557**	**1.2557**	**5.0000e-005**	**0.0000**	**1.2569**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.6000e-004	0.0000	6.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0174	0.1729	0.1186	2.1000e-004		8.5300e-003	8.5300e-003		7.9300e-003	7.9300e-003	0.0000	18.7004	18.7004	5.2600e-003	0.0000	18.8320
Total	**0.0174**	**0.1729**	**0.1186**	**2.1000e-004**	**6.6000e-004**	**8.5300e-003**	**9.1900e-003**	**1.0000e-004**	**7.9300e-003**	**8.0300e-003**	**0.0000**	**18.7004**	**18.7004**	**5.2600e-003**	**0.0000**	**18.8320**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.4700e-003	2.0000e-004	0.0000	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.4736	0.4736	3.0000e-005	0.0000	0.4743
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.7700e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7822	0.7822	2.0000e-005	0.0000	0.7826
Total	**4.1000e-004**	**1.7200e-003**	**2.9700e-003**	**1.0000e-005**	**1.1500e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**1.2557**	**1.2557**	**5.0000e-005**	**0.0000**	**1.2569**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0271	0.0000	0.0271	0.0149	0.0000	0.0149	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8300e-003	0.0608	0.0317	6.0000e-005		3.0700e-003	3.0700e-003		2.8200e-003	2.8200e-003	0.0000	5.0154	5.0154	1.6200e-003	0.0000	5.0559
Total	**5.8300e-003**	**0.0608**	**0.0317**	**6.0000e-005**	**0.0271**	**3.0700e-003**	**0.0302**	**0.0149**	**2.8200e-003**	**0.0177**	**0.0000**	**5.0154**	**5.0154**	**1.6200e-003**	**0.0000**	**5.0559**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	8.5000e-004	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2400	0.2400	1.0000e-005	0.0000	0.2401
Total	**1.2000e-004**	**8.0000e-005**	**8.5000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**3.0000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2400**	**0.2400**	**1.0000e-005**	**0.0000**	**0.2401**

3.3 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0122	0.0000	0.0122	6.7000e-003	0.0000	6.7000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8300e-003	0.0608	0.0317	6.0000e-005		3.0700e-003	3.0700e-003		2.8200e-003	2.8200e-003	0.0000	5.0154	5.0154	1.6200e-003	0.0000	5.0559
Total	**5.8300e-003**	**0.0608**	**0.0317**	**6.0000e-005**	**0.0122**	**3.0700e-003**	**0.0153**	**6.7000e-003**	**2.8200e-003**	**9.5200e-003**	**0.0000**	**5.0154**	**5.0154**	**1.6200e-003**	**0.0000**	**5.0559**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	8.5000e-004	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2400	0.2400	1.0000e-005	0.0000	0.2401
Total	**1.2000e-004**	**8.0000e-005**	**8.5000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**3.0000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2400**	**0.2400**	**1.0000e-005**	**0.0000**	**0.2401**

3.4 Grading / Over-excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0328	0.0000	0.0328	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1237	0.0793	1.5000e-004		5.8000e-003	5.8000e-003		5.3400e-003	5.3400e-003	0.0000	13.0269	13.0269	4.2100e-003	0.0000	13.1322
Total	**0.0115**	**0.1237**	**0.0793**	**1.5000e-004**	**0.0328**	**5.8000e-003**	**0.0386**	**0.0168**	**5.3400e-003**	**0.0222**	**0.0000**	**13.0269**	**13.0269**	**4.2100e-003**	**0.0000**	**13.1322**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6000e-004	0.0383	5.2800e-003	1.3000e-004	2.5300e-003	1.1000e-004	2.6400e-003	7.1000e-004	1.1000e-004	8.2000e-004	0.0000	12.3768	12.3768	7.6000e-004	0.0000	12.3956
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.3000e-004	2.5200e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.7111	0.7111	2.0000e-005	0.0000	0.7115
Total	**1.2000e-003**	**0.0386**	**7.8000e-003**	**1.4000e-004**	**3.4100e-003**	**1.2000e-004**	**3.5200e-003**	**9.4000e-004**	**1.1000e-004**	**1.0600e-003**	**0.0000**	**13.0878**	**13.0878**	**7.8000e-004**	**0.0000**	**13.1071**

3.4 Grading / Over-excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0147	0.0000	0.0147	7.5800e-003	0.0000	7.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1237	0.0793	1.5000e-004		5.8000e-003	5.8000e-003		5.3400e-003	5.3400e-003	0.0000	13.0268	13.0268	4.2100e-003	0.0000	13.1322
Total	**0.0115**	**0.1237**	**0.0793**	**1.5000e-004**	**0.0147**	**5.8000e-003**	**0.0205**	**7.5800e-003**	**5.3400e-003**	**0.0129**	**0.0000**	**13.0268**	**13.0268**	**4.2100e-003**	**0.0000**	**13.1322**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6000e-004	0.0383	5.2800e-003	1.3000e-004	2.5300e-003	1.1000e-004	2.6400e-003	7.1000e-004	1.1000e-004	8.2000e-004	0.0000	12.3768	12.3768	7.6000e-004	0.0000	12.3956
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.3000e-004	2.5200e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.7111	0.7111	2.0000e-005	0.0000	0.7115
Total	**1.2000e-003**	**0.0386**	**7.8000e-003**	**1.4000e-004**	**3.4100e-003**	**1.2000e-004**	**3.5200e-003**	**9.4000e-004**	**1.1000e-004**	**1.0600e-003**	**0.0000**	**13.0878**	**13.0878**	**7.8000e-004**	**0.0000**	**13.1071**

3.5 Structure - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0599	0.5491	0.5221	8.5000e-004		0.0302	0.0302		0.0284	0.0284	0.0000	72.9657	72.9657	0.0176	0.0000	73.4058
Total	**0.0599**	**0.5491**	**0.5221**	**8.5000e-004**		**0.0302**	**0.0302**		**0.0284**	**0.0284**	**0.0000**	**72.9657**	**72.9657**	**0.0176**	**0.0000**	**73.4058**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3500e-003	0.0529	0.0102	1.4000e-004	3.5800e-003	1.0000e-004	3.6800e-003	1.0300e-003	1.0000e-004	1.1300e-003	0.0000	13.8333	13.8333	1.0600e-003	0.0000	13.8597
Worker	5.9400e-003	4.0000e-003	0.0436	1.4000e-004	0.0152	9.0000e-005	0.0153	4.0500e-003	8.0000e-005	4.1300e-003	0.0000	12.3194	12.3194	2.9000e-004	0.0000	12.3266
Total	**7.2900e-003**	**0.0569**	**0.0538**	**2.8000e-004**	**0.0188**	**1.9000e-004**	**0.0190**	**5.0800e-003**	**1.8000e-004**	**5.2600e-003**	**0.0000**	**26.1527**	**26.1527**	**1.3500e-003**	**0.0000**	**26.1862**

3.5 Structure - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0599	0.5491	0.5221	8.5000e-004		0.0302	0.0302		0.0284	0.0284	0.0000	72.9657	72.9657	0.0176	0.0000	73.4057
Total	**0.0599**	**0.5491**	**0.5221**	**8.5000e-004**		**0.0302**	**0.0302**		**0.0284**	**0.0284**	**0.0000**	**72.9657**	**72.9657**	**0.0176**	**0.0000**	**73.4057**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3500e-003	0.0529	0.0102	1.4000e-004	3.5800e-003	1.0000e-004	3.6800e-003	1.0300e-003	1.0000e-004	1.1300e-003	0.0000	13.8333	13.8333	1.0600e-003	0.0000	13.8597
Worker	5.9400e-003	4.0000e-003	0.0436	1.4000e-004	0.0152	9.0000e-005	0.0153	4.0500e-003	8.0000e-005	4.1300e-003	0.0000	12.3194	12.3194	2.9000e-004	0.0000	12.3266
Total	**7.2900e-003**	**0.0569**	**0.0538**	**2.8000e-004**	**0.0188**	**1.9000e-004**	**0.0190**	**5.0800e-003**	**1.8000e-004**	**5.2600e-003**	**0.0000**	**26.1527**	**26.1527**	**1.3500e-003**	**0.0000**	**26.1862**

3.5 Structure - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0367	0.3357	0.3518	5.8000e-004		0.0174	0.0174		0.0164	0.0164	0.0000	49.8209	49.8209	0.0119	0.0000	50.1193
Total	**0.0367**	**0.3357**	**0.3518**	**5.8000e-004**		**0.0174**	**0.0174**		**0.0164**	**0.0164**	**0.0000**	**49.8209**	**49.8209**	**0.0119**	**0.0000**	**50.1193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0340	6.4700e-003	1.0000e-004	2.4400e-003	6.0000e-005	2.5000e-003	7.1000e-004	6.0000e-005	7.6000e-004	0.0000	9.3606	9.3606	6.8000e-004	0.0000	9.3776
Worker	3.8000e-003	2.4600e-003	0.0274	9.0000e-005	0.0104	6.0000e-005	0.0105	2.7600e-003	6.0000e-005	2.8200e-003	0.0000	8.1017	8.1017	1.8000e-004	0.0000	8.1061
Total	**4.6600e-003**	**0.0365**	**0.0339**	**1.9000e-004**	**0.0128**	**1.2000e-004**	**0.0130**	**3.4700e-003**	**1.2000e-004**	**3.5800e-003**	**0.0000**	**17.4622**	**17.4622**	**8.6000e-004**	**0.0000**	**17.4837**

3.5 Structure - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0367	0.3357	0.3518	5.8000e-004		0.0174	0.0174		0.0164	0.0164	0.0000	49.8209	49.8209	0.0119	0.0000	50.1193
Total	**0.0367**	**0.3357**	**0.3518**	**5.8000e-004**		**0.0174**	**0.0174**		**0.0164**	**0.0164**	**0.0000**	**49.8209**	**49.8209**	**0.0119**	**0.0000**	**50.1193**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0340	6.4700e-003	1.0000e-004	2.4400e-003	6.0000e-005	2.5000e-003	7.1000e-004	6.0000e-005	7.6000e-004	0.0000	9.3606	9.3606	6.8000e-004	0.0000	9.3776
Worker	3.8000e-003	2.4600e-003	0.0274	9.0000e-005	0.0104	6.0000e-005	0.0105	2.7600e-003	6.0000e-005	2.8200e-003	0.0000	8.1017	8.1017	1.8000e-004	0.0000	8.1061
Total	**4.6600e-003**	**0.0365**	**0.0339**	**1.9000e-004**	**0.0128**	**1.2000e-004**	**0.0130**	**3.4700e-003**	**1.2000e-004**	**3.5800e-003**	**0.0000**	**17.4622**	**17.4622**	**8.6000e-004**	**0.0000**	**17.4837**

3.6 Interiors - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1194	1.0931	1.1454	1.8900e-003		0.0566	0.0566		0.0533	0.0533	0.0000	162.2077	162.2077	0.0389	0.0000	163.1792
Total	**0.1194**	**1.0931**	**1.1454**	**1.8900e-003**		**0.0566**	**0.0566**		**0.0533**	**0.0533**	**0.0000**	**162.2077**	**162.2077**	**0.0389**	**0.0000**	**163.1792**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8000e-003	0.1107	0.0211	3.2000e-004	7.9600e-003	1.9000e-004	8.1500e-003	2.3000e-003	1.8000e-004	2.4800e-003	0.0000	30.4762	30.4762	2.2200e-003	0.0000	30.5317
Worker	0.0124	8.0100e-003	0.0893	2.9000e-004	0.0339	2.0000e-004	0.0341	8.9900e-003	1.8000e-004	9.1700e-003	0.0000	26.3775	26.3775	5.7000e-004	0.0000	26.3918
Total	**0.0152**	**0.1187**	**0.1104**	**6.1000e-004**	**0.0418**	**3.9000e-004**	**0.0422**	**0.0113**	**3.6000e-004**	**0.0117**	**0.0000**	**56.8537**	**56.8537**	**2.7900e-003**	**0.0000**	**56.9235**

3.6 Interiors - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1194	1.0931	1.1454	1.8900e-003		0.0566	0.0566		0.0533	0.0533	0.0000	162.2075	162.2075	0.0389	0.0000	163.1790
Total	**0.1194**	**1.0931**	**1.1454**	**1.8900e-003**		**0.0566**	**0.0566**		**0.0533**	**0.0533**	**0.0000**	**162.2075**	**162.2075**	**0.0389**	**0.0000**	**163.1790**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8000e-003	0.1107	0.0211	3.2000e-004	7.9600e-003	1.9000e-004	8.1500e-003	2.3000e-003	1.8000e-004	2.4800e-003	0.0000	30.4762	30.4762	2.2200e-003	0.0000	30.5317
Worker	0.0124	8.0100e-003	0.0893	2.9000e-004	0.0339	2.0000e-004	0.0341	8.9900e-003	1.8000e-004	9.1700e-003	0.0000	26.3775	26.3775	5.7000e-004	0.0000	26.3918
Total	**0.0152**	**0.1187**	**0.1104**	**6.1000e-004**	**0.0418**	**3.9000e-004**	**0.0422**	**0.0113**	**3.6000e-004**	**0.0117**	**0.0000**	**56.8537**	**56.8537**	**2.7900e-003**	**0.0000**	**56.9235**

3.7 Plaster Exterior - Structure - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5300e-003	0.0106	0.0136	2.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	1.9149	1.9149	1.2000e-004	0.0000	1.9181
Total	**0.2201**	**0.0106**	**0.0136**	**2.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**1.9149**	**1.9149**	**1.2000e-004**	**0.0000**	**1.9181**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	1.9000e-004	2.1700e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6423	0.6423	1.0000e-005	0.0000	0.6427
Total	**3.0000e-004**	**1.9000e-004**	**2.1700e-003**	**1.0000e-005**	**8.2000e-004**	**0.0000**	**8.3000e-004**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6423**	**0.6423**	**1.0000e-005**	**0.0000**	**0.6427**

3.7 Plaster Exterior - Structure - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5300e-003	0.0106	0.0136	2.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	1.9149	1.9149	1.2000e-004	0.0000	1.9181
Total	**0.2201**	**0.0106**	**0.0136**	**2.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**1.9149**	**1.9149**	**1.2000e-004**	**0.0000**	**1.9181**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	1.9000e-004	2.1700e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6423	0.6423	1.0000e-005	0.0000	0.6427
Total	**3.0000e-004**	**1.9000e-004**	**2.1700e-003**	**1.0000e-005**	**8.2000e-004**	**0.0000**	**8.3000e-004**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6423**	**0.6423**	**1.0000e-005**	**0.0000**	**0.6427**

3.8 Site Improvements - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0529	0.4841	0.5073	8.3000e-004		0.0251	0.0251		0.0236	0.0236	0.0000	71.8348	71.8348	0.0172	0.0000	72.2651
Total	**0.0529**	**0.4841**	**0.5073**	**8.3000e-004**		**0.0251**	**0.0251**		**0.0236**	**0.0236**	**0.0000**	**71.8348**	**71.8348**	**0.0172**	**0.0000**	**72.2651**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2400e-003	0.0490	9.3200e-003	1.4000e-004	3.5200e-003	8.0000e-005	3.6100e-003	1.0200e-003	8.0000e-005	1.1000e-003	0.0000	13.4966	13.4966	9.8000e-004	0.0000	13.5212
Worker	5.4800e-003	3.5500e-003	0.0396	1.3000e-004	0.0150	9.0000e-005	0.0151	3.9800e-003	8.0000e-005	4.0600e-003	0.0000	11.6815	11.6815	2.5000e-004	0.0000	11.6878
Total	**6.7200e-003**	**0.0526**	**0.0489**	**2.7000e-004**	**0.0185**	**1.7000e-004**	**0.0187**	**5.0000e-003**	**1.6000e-004**	**5.1600e-003**	**0.0000**	**25.1781**	**25.1781**	**1.2300e-003**	**0.0000**	**25.2090**

3.8 Site Improvements - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0529	0.4841	0.5073	8.3000e-004		0.0251	0.0251		0.0236	0.0236	0.0000	71.8347	71.8347	0.0172	0.0000	72.2650
Total	**0.0529**	**0.4841**	**0.5073**	**8.3000e-004**		**0.0251**	**0.0251**		**0.0236**	**0.0236**	**0.0000**	**71.8347**	**71.8347**	**0.0172**	**0.0000**	**72.2650**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2400e-003	0.0490	9.3200e-003	1.4000e-004	3.5200e-003	8.0000e-005	3.6100e-003	1.0200e-003	8.0000e-005	1.1000e-003	0.0000	13.4966	13.4966	9.8000e-004	0.0000	13.5212
Worker	5.4800e-003	3.5500e-003	0.0396	1.3000e-004	0.0150	9.0000e-005	0.0151	3.9800e-003	8.0000e-005	4.0600e-003	0.0000	11.6815	11.6815	2.5000e-004	0.0000	11.6878
Total	**6.7200e-003**	**0.0526**	**0.0489**	**2.7000e-004**	**0.0185**	**1.7000e-004**	**0.0187**	**5.0000e-003**	**1.6000e-004**	**5.1600e-003**	**0.0000**	**25.1781**	**25.1781**	**1.2300e-003**	**0.0000**	**25.2090**

3.9 Paint - Primer / 1st Coat - Interior - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0729					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0734**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	6.0000e-005	7.2000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2141	0.2141	0.0000	0.0000	0.2142
Total	**1.0000e-004**	**6.0000e-005**	**7.2000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2141**	**0.2141**	**0.0000**	**0.0000**	**0.2142**

3.9 Paint - Primer / 1st Coat - Interior - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0729					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0734**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	6.0000e-005	7.2000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2141	0.2141	0.0000	0.0000	0.2142
Total	**1.0000e-004**	**6.0000e-005**	**7.2000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2141**	**0.2141**	**0.0000**	**0.0000**	**0.2142**

3.10 Final Paint - Interior - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0729					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0734**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	6.0000e-005	7.2000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2141	0.2141	0.0000	0.0000	0.2142
Total	**1.0000e-004**	**6.0000e-005**	**7.2000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2141**	**0.2141**	**0.0000**	**0.0000**	**0.2142**

3.10 Final Paint - Interior - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0729					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0734**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	6.0000e-005	7.2000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2141	0.2141	0.0000	0.0000	0.2142
Total	**1.0000e-004**	**6.0000e-005**	**7.2000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2141**	**0.2141**	**0.0000**	**0.0000**	**0.2142**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4200e-003	0.0333	0.0427	7.0000e-005		1.7100e-003	1.7100e-003		1.5800e-003	1.5800e-003	0.0000	5.7316	5.7316	1.8000e-003	0.0000	5.7766
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.8300e-003**	**0.0333**	**0.0427**	**7.0000e-005**		**1.7100e-003**	**1.7100e-003**		**1.5800e-003**	**1.5800e-003**	**0.0000**	**5.7316**	**5.7316**	**1.8000e-003**	**0.0000**	**5.7766**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.8000e-004	2.0300e-003	1.0000e-005	7.7000e-004	0.0000	7.7000e-004	2.0000e-004	0.0000	2.1000e-004	0.0000	0.5995	0.5995	1.0000e-005	0.0000	0.5998
Total	**2.8000e-004**	**1.8000e-004**	**2.0300e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**	**7.7000e-004**	**2.0000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5995**	**0.5995**	**1.0000e-005**	**0.0000**	**0.5998**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4200e-003	0.0333	0.0427	7.0000e-005		1.7100e-003	1.7100e-003		1.5800e-003	1.5800e-003	0.0000	5.7315	5.7315	1.8000e-003	0.0000	5.7766
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.8300e-003**	**0.0333**	**0.0427**	**7.0000e-005**		**1.7100e-003**	**1.7100e-003**		**1.5800e-003**	**1.5800e-003**	**0.0000**	**5.7315**	**5.7315**	**1.8000e-003**	**0.0000**	**5.7766**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.8000e-004	2.0300e-003	1.0000e-005	7.7000e-004	0.0000	7.7000e-004	2.0000e-004	0.0000	2.1000e-004	0.0000	0.5995	0.5995	1.0000e-005	0.0000	0.5998
Total	**2.8000e-004**	**1.8000e-004**	**2.0300e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**	**7.7000e-004**	**2.0000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5995**	**0.5995**	**1.0000e-005**	**0.0000**	**0.5998**

3.12 Striping - Site Improvement - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1000e-004	2.1100e-003	2.7200e-003	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	0.3830	0.3830	2.0000e-005	0.0000	0.3836
Total	**0.0440**	**2.1100e-003**	**2.7200e-003**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**0.3830**	**0.3830**	**2.0000e-005**	**0.0000**	**0.3836**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1285	0.1285	0.0000	0.0000	0.1285
Total	**6.0000e-005**	**4.0000e-005**	**4.3000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.7000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1285**	**0.1285**	**0.0000**	**0.0000**	**0.1285**

3.12 Striping - Site Improvement - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1000e-004	2.1100e-003	2.7200e-003	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	0.3830	0.3830	2.0000e-005	0.0000	0.3836
Total	**0.0440**	**2.1100e-003**	**2.7200e-003**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**0.3830**	**0.3830**	**2.0000e-005**	**0.0000**	**0.3836**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1285	0.1285	0.0000	0.0000	0.1285
Total	**6.0000e-005**	**4.0000e-005**	**4.3000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.7000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1285**	**0.1285**	**0.0000**	**0.0000**	**0.1285**

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	0.0757	0.5424	0.9211	4.4000e-003	0.3489	2.5000e-003	0.3514	0.0935	2.3300e-003	0.0958	0.0000	408.2719	408.2719	0.0182	0.0000	408.7277
Unmitigated	0.0757	0.5424	0.9211	4.4000e-003	0.3489	2.5000e-003	0.3514	0.0935	2.3300e-003	0.0958	0.0000	408.2719	408.2719	0.0182	0.0000	408.7277

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	388.43	158.68	17.10	913,851	913,851
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	388.43	158.68	17.10	913,851	913,851

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Other Non-Asphalt Surfaces	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Parking Lot	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
User Defined Recreational	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	31.7521	31.7521	1.2900e-003	2.8000e-004	31.8679
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	31.7521	31.7521	1.2900e-003	2.8000e-004	31.8679
NaturalGas Mitigated	1.0500e-003	9.5800e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4319	10.4319	2.0000e-004	1.9000e-004	10.4939
NaturalGas Unmitigated	1.0500e-003	9.5800e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4319	10.4319	2.0000e-004	1.9000e-004	10.4939

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					
Junior College (2Yr)	195487	1.0500e-003	9.5800e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4319	10.4319	2.0000e-004	1.9000e-004	10.4939
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**1.0500e-003**	**9.5800e-003**	**8.0500e-003**	**6.0000e-005**		**7.3000e-004**	**7.3000e-004**		**7.3000e-004**	**7.3000e-004**	**0.0000**	**10.4319**	**10.4319**	**2.0000e-004**	**1.9000e-004**	**10.4939**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	195487	1.0500e-003	9.5800e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4319	10.4319	2.0000e-004	1.9000e-004	10.4939
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**1.0500e-003**	**9.5800e-003**	**8.0500e-003**	**6.0000e-005**		**7.3000e-004**	**7.3000e-004**		**7.3000e-004**	**7.3000e-004**	**0.0000**	**10.4319**	**10.4319**	**2.0000e-004**	**1.9000e-004**	**10.4939**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	111384	28.6060	1.1600e-003	2.5000e-004	28.7104
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	12250	3.1461	1.3000e-004	3.0000e-005	3.1576
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**31.7521**	**1.2900e-003**	**2.8000e-004**	**31.8679**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	111384	28.6060	1.1600e-003	2.5000e-004	28.7104
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	12250	3.1461	1.3000e-004	3.0000e-005	3.1576
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**31.7521**	**1.2900e-003**	**2.8000e-004**	**31.8679**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2288	2.0000e-005	1.9500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7900e-003	3.7900e-003	1.0000e-005	0.0000	4.0400e-003
Unmitigated	0.2288	2.0000e-005	1.9500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7900e-003	3.7900e-003	1.0000e-005	0.0000	4.0400e-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	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2024					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7900e-003	3.7900e-003	1.0000e-005	0.0000	4.0400e-003
Total	**0.2288**	**2.0000e-005**	**1.9500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.7900e-003**	**3.7900e-003**	**1.0000e-005**	**0.0000**	**4.0400e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2024					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7900e-003	3.7900e-003	1.0000e-005	0.0000	4.0400e-003
Total	**0.2288**	**2.0000e-005**	**1.9500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.7900e-003**	**3.7900e-003**	**1.0000e-005**	**0.0000**	**4.0400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.6306	0.0228	5.8000e-004	6.3738
Unmitigated	5.6306	0.0228	5.8000e-004	6.3738

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0.693063 / 1.08402	5.6306	0.0228	5.8000e-004	6.3738
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.6306**	**0.0228**	**5.8000e-004**	**6.3738**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0.693063 / 1.08402	5.6306	0.0228	5.8000e-004	6.3738
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.6306**	**0.0228**	**5.8000e-004**	**6.3738**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.7289	0.2204	0.0000	9.2383
Unmitigated	3.7289	0.2204	0.0000	9.2383

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	18.37	3.7289	0.2204	0.0000	9.2383
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**3.7289**	**0.2204**	**0.0000**	**9.2383**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	18.37	3.7289	0.2204	0.0000	9.2383
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**3.7289**	**0.2204**	**0.0000**	**9.2383**

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

RCCD Ben Clark Training Center - Phase I - LST

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	14.13	1000sqft	1.26	14,135.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	84.00	Space	0.80	35,000.00	0
User Defined Recreational	41.00	User Defined Unit	0.94	41,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% renewables.

Land Use - Project-specific land uses.

Construction Phase - Utilites included in grading and building. Project specific schedule.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers. Assumed 1000ft (0.19mi) to represent onsite trip portion.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 247 tons of debris.

Grading - 2,200 C.Y. of import.

Architectural Coating - Adjusted per architectual coating phase. Adjusted Exterior and Interior to reflect project. CalEEMod User Guide calcs: 14135*2*.75= 21202.5 14135*2*.25= 7067.5

Vehicle Trips - Project specific values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Road Dust - CalEEMod default values.

Woodstoves - No hearths.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - Adjusted per Title 24 2019 energy efficent reductions.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Mobile Land Use Mitigation - No mitigation applied.

Mobile Commute Mitigation - No mitigation applied.

Waste Mitigation - No mitigation applied.

Operational Off-Road Equipment - No off-road equipment.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	14,130.00	14,135.00
tblLandUse	LandUseSquareFeet	33,600.00	35,000.00
tblLandUse	LandUseSquareFeet	0.00	41,000.00
tblLandUse	LotAcreage	0.32	1.26
tblLandUse	LotAcreage	0.76	0.80
tblLandUse	LotAcreage	0.00	0.94
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	1325.65	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00

tblTripsAndVMT	HaulingTripNumber	0.00	276.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripNumber	15.00	16.00

tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00

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	3.9072	40.5028	21.6545	0.0390	18.0690	2.0446	20.1136	9.9314	1.8810	11.8125	0.0000	3,770.1772	3,770.1772	1.1925	0.0000	3,796.6689
2022	32.9100	43.0503	45.8424	0.0757	0.0239	2.1072	2.1312	6.7400e-003	1.9741	1.9809	0.0000	7,219.3524	7,219.3524	1.8582	0.0000	7,265.8069
Maximum	**32.9100**	**43.0503**	**45.8424**	**0.0757**	**18.0690**	**2.1072**	**20.1136**	**9.9314**	**1.9741**	**11.8125**	**0.0000**	**7,219.3524**	**7,219.3524**	**1.8582**	**0.0000**	**7,265.8069**

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	3.9072	40.5028	21.6545	0.0390	8.1326	2.0446	10.1772	4.4696	1.8810	6.3506	0.0000	3,770.1772	3,770.1772	1.1925	0.0000	3,796.6689
2022	32.9100	43.0503	45.8424	0.0757	0.0239	2.1072	2.1312	6.7400e-003	1.9741	1.9809	0.0000	7,219.3524	7,219.3524	1.8582	0.0000	7,265.8069
Maximum	**32.9100**	**43.0503**	**45.8424**	**0.0757**	**8.1326**	**2.1072**	**10.1772**	**4.4696**	**1.9741**	**6.3506**	**0.0000**	**7,219.3524**	**7,219.3524**	**1.8582**	**0.0000**	**7,265.8069**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.92**	**0.00**	**44.67**	**54.96**	**0.00**	**39.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Energy	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Mobile	0.5319	3.7625	6.3019	0.0303	2.5017	0.0177	2.5195	0.6693	0.0165	0.6858		3,102.2612	3,102.2612	0.1456		3,105.9017
Total	**1.7917**	**3.8152**	**6.3616**	**0.0306**	**2.5017**	**0.0218**	**2.5235**	**0.6693**	**0.0206**	**0.6899**		**3,165.3041**	**3,165.3041**	**0.1469**	**1.1600e-003**	**3,169.3212**

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	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Energy	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Mobile	0.5319	3.7625	6.3019	0.0303	2.5017	0.0177	2.5195	0.6693	0.0165	0.6858		3,102.2612	3,102.2612	0.1456		3,105.9017
Total	**1.7917**	**3.8152**	**6.3616**	**0.0306**	**2.5017**	**0.0218**	**2.5235**	**0.6693**	**0.0206**	**0.6899**		**3,165.3041**	**3,165.3041**	**0.1469**	**1.1600e-003**	**3,169.3212**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	9/15/2021	5	20	
2	Site Preparation	Site Preparation	9/16/2021	9/20/2021	5	5	
3	Grading / Over-excavation	Grading	9/21/2021	10/4/2021	5	8	
4	Structure	Building Construction	10/6/2021	3/2/2022	5	230	
5	Interiors	Building Construction	1/20/2022	8/3/2022	5	230	
6	Plaster Exterior - Structure	Architectural Coating	3/3/2022	3/23/2022	5	18	
7	Site Improvements	Building Construction	4/12/2022	7/6/2022	5	230	
8	Paint - Primer / 1st Coat - Interior	Architectural Coating	4/14/2022	4/20/2022	5	18	
9	Final Paint - Interior	Architectural Coating	6/3/2022	6/9/2022	5	18	
10	Asphalt Paving / Cure - Site Improvement	Paving	6/22/2022	6/30/2022	5	18	
11	Striping - Site Improvement	Architectural Coating	7/1/2022	7/5/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 82,703; Non-Residential Outdoor: 27,568; Striped Parking Area: 2,910 (Architectural Coating – sqft)

OffRoad Equipment

RCCD Ben Clark Training Center - Phase I - LST - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading / Over-excavation	Excavators	1	8.00	158	0.38
Grading / Over-excavation	Graders	1	8.00	187	0.41
Grading / Over-excavation	Rubber Tired Dozers	1	8.00	247	0.40
Grading / Over-excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Structure	Cranes	1	7.00	231	0.29
Structure	Forklifts	3	8.00	89	0.20
Structure	Generator Sets	1	8.00	84	0.74
Structure	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structure	Welders	1	8.00	46	0.45
Interiors	Cranes	1	7.00	231	0.29
Interiors	Forklifts	3	8.00	89	0.20
Interiors	Generator Sets	1	8.00	84	0.74
Interiors	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Interiors	Welders	1	8.00	46	0.45
Plaster Exterior - Structure	Air Compressors	1	6.00	78	0.48
Site Improvements	Cranes	1	7.00	231	0.29
Site Improvements	Forklifts	3	8.00	89	0.20
Site Improvements	Generator Sets	1	8.00	84	0.74
Site Improvements	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Site Improvements	Welders	1	8.00	46	0.45
Paint - Primer / 1st Coat - Interior	Air Compressors	1	6.00	78	0.48

Final Paint - Interior	Air Compressors	1	6.00	78	0.48
Asphalt Paving / Cure - Site Improvement	Cement and Mortar Mixers	2	6.00	9	0.56
Asphalt Paving / Cure - Site Improvement	Pavers	1	8.00	130	0.42
Asphalt Paving / Cure - Site Improvement	Paving Equipment	2	6.00	132	0.36
Asphalt Paving / Cure - Site Improvement	Rollers	2	6.00	80	0.38
Asphalt Paving / Cure - Site Improvement	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Striping - Site Improvement	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	24.00	0.19	0.00	0.19	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Grading / Over-excavation	6	16.00	0.00	276.00	0.19	0.00	0.19	LD_Mix	HDT_Mix	HHDT
Structure	9	44.00	18.00	0.00	0.19	0.19	0.00	LD_Mix	HDT_Mix	HHDT
Interiors	9	44.00	18.00	0.00	0.19	0.19	0.00	LD_Mix	HDT_Mix	HHDT
Plaster Exterior - Structure	1	10.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Site Improvements	9	44.00	18.00	0.00	0.19	0.19	0.00	LD_Mix	HDT_Mix	HHDT
Paint - Primer / 1st Coat - Interior	1	10.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Final Paint - Interior	1	10.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving / Cure - Site Improvement	8	20.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Striping - Site Improvement	1	10.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					0.2659	0.0000	0.2659	0.0403	0.0000	0.0403			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.2659**	**1.5513**	**1.8173**	**0.0403**	**1.4411**	**1.4814**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	2.6000e-003	0.1226	0.0162	1.6000e-004	3.5000e-004	6.0000e-005	4.0000e-004	9.0000e-005	5.0000e-005	1.5000e-004		16.8934	16.8934	4.3800e-003		17.0030
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	0.0169	5.0900e-003	0.0733	5.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.3388	5.3388	3.9000e-004		5.3485
Total	**0.0195**	**0.1277**	**0.0895**	**2.1000e-004**	**2.8200e-003**	**1.7000e-004**	**2.9800e-003**	**7.6000e-004**	**1.5000e-004**	**9.3000e-004**		**22.2323**	**22.2323**	**4.7700e-003**		**22.3515**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1197	0.0000	0.1197	0.0181	0.0000	0.0181			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.1197**	**1.5513**	**1.6710**	**0.0181**	**1.4411**	**1.4592**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	2.6000e-003	0.1226	0.0162	1.6000e-004	3.5000e-004	6.0000e-005	4.0000e-004	9.0000e-005	5.0000e-005	1.5000e-004		16.8934	16.8934	4.3800e-003		17.0030
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	0.0169	5.0900e-003	0.0733	5.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.3388	5.3388	3.9000e-004		5.3485
Total	**0.0195**	**0.1277**	**0.0895**	**2.1000e-004**	**2.8200e-003**	**1.7000e-004**	**2.9800e-003**	**7.6000e-004**	**1.5000e-004**	**9.3000e-004**		**22.2323**	**22.2323**	**4.7700e-003**		**22.3515**

3.3 Site Preparation - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0190	5.7200e-003	0.0825	6.0000e-005	2.7800e-003	1.3000e-004	2.9000e-003	7.6000e-004	1.2000e-004	8.8000e-004		6.0062	6.0062	4.4000e-004		6.0171
Total	**0.0190**	**5.7200e-003**	**0.0825**	**6.0000e-005**	**2.7800e-003**	**1.3000e-004**	**2.9000e-003**	**7.6000e-004**	**1.2000e-004**	**8.8000e-004**		**6.0062**	**6.0062**	**4.4000e-004**		**6.0171**

3.3 Site Preparation - 2021

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**8.1298**	**2.0445**	**10.1743**	**4.4688**	**1.8809**	**6.3497**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0190	5.7200e-003	0.0825	6.0000e-005	2.7800e-003	1.3000e-004	2.9000e-003	7.6000e-004	1.2000e-004	8.8000e-004		6.0062	6.0062	4.4000e-004		6.0171
Total	**0.0190**	**5.7200e-003**	**0.0825**	**6.0000e-005**	**2.7800e-003**	**1.3000e-004**	**2.9000e-003**	**7.6000e-004**	**1.2000e-004**	**8.8000e-004**		**6.0062**	**6.0062**	**4.4000e-004**		**6.0171**

3.4 Grading / Over-excavation - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0747	3.5247	0.4650	4.5900e-003	5.5900e-003	1.6200e-003	7.2100e-003	1.6200e-003	1.5500e-003	3.1700e-003		485.6861	485.6861	0.1260		488.8355
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	0.0169	5.0900e-003	0.0733	5.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.3388	5.3388	3.9000e-004		5.3485
Total	**0.0916**	**3.5298**	**0.5383**	**4.6400e-003**	**8.0600e-003**	**1.7300e-003**	**9.7900e-003**	**2.2900e-003**	**1.6500e-003**	**3.9500e-003**		**491.0249**	**491.0249**	**0.1264**		**494.1841**

3.4 Grading / Over-excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.9486**	**1.1599**	**4.1085**	**1.5154**	**1.0671**	**2.5825**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0747	3.5247	0.4650	4.5900e-003	5.5900e-003	1.6200e-003	7.2100e-003	1.6200e-003	1.5500e-003	3.1700e-003		485.6861	485.6861	0.1260		488.8355
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	0.0169	5.0900e-003	0.0733	5.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.3388	5.3388	3.9000e-004		5.3485
Total	**0.0916**	**3.5298**	**0.5383**	**4.6400e-003**	**8.0600e-003**	**1.7300e-003**	**9.7900e-003**	**2.2900e-003**	**1.6500e-003**	**3.9500e-003**		**491.0249**	**491.0249**	**0.1264**		**494.1841**

3.5 Structure - 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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0288	1.1655	0.2545	1.3000e-003	3.6300e-003	5.0000e-004	4.1400e-003	1.0900e-003	4.8000e-004	1.5700e-003		136.7075	136.7075	0.0344		137.5666
Worker	0.0465	0.0140	0.2017	1.5000e-004	6.7900e-003	3.1000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1400e-003		14.6818	14.6818	1.0700e-003		14.7085
Total	**0.0753**	**1.1794**	**0.4562**	**1.4500e-003**	**0.0104**	**8.1000e-004**	**0.0112**	**2.9500e-003**	**7.6000e-004**	**3.7100e-003**		**151.3893**	**151.3893**	**0.0354**		**152.2751**

3.5 Structure - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0288	1.1655	0.2545	1.3000e-003	3.6300e-003	5.0000e-004	4.1400e-003	1.0900e-003	4.8000e-004	1.5700e-003		136.7075	136.7075	0.0344		137.5666
Worker	0.0465	0.0140	0.2017	1.5000e-004	6.7900e-003	3.1000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1400e-003		14.6818	14.6818	1.0700e-003		14.7085
Total	**0.0753**	**1.1794**	**0.4562**	**1.4500e-003**	**0.0104**	**8.1000e-004**	**0.0112**	**2.9500e-003**	**7.6000e-004**	**3.7100e-003**		**151.3893**	**151.3893**	**0.0354**		**152.2751**

3.5 Structure - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0268	1.1332	0.2368	1.2800e-003	3.6300e-003	4.0000e-004	4.0400e-003	1.0900e-003	3.9000e-004	1.4800e-003		135.3845	135.3845	0.0324		136.1944
Worker	0.0427	0.0124	0.1825	1.4000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		14.1723	14.1723	9.5000e-004		14.1960
Total	**0.0696**	**1.1456**	**0.4193**	**1.4200e-003**	**0.0104**	**7.0000e-004**	**0.0111**	**2.9500e-003**	**6.7000e-004**	**3.6100e-003**		**149.5568**	**149.5568**	**0.0334**		**150.3904**

3.5 Structure - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0268	1.1332	0.2368	1.2800e-003	3.6300e-003	4.0000e-004	4.0400e-003	1.0900e-003	3.9000e-004	1.4800e-003		135.3845	135.3845	0.0324		136.1944
Worker	0.0427	0.0124	0.1825	1.4000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		14.1723	14.1723	9.5000e-004		14.1960
Total	**0.0696**	**1.1456**	**0.4193**	**1.4200e-003**	**0.0104**	**7.0000e-004**	**0.0111**	**2.9500e-003**	**6.7000e-004**	**3.6100e-003**		**149.5568**	**149.5568**	**0.0334**		**150.3904**

3.6 Interiors - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0268	1.1332	0.2368	1.2800e-003	3.6300e-003	4.0000e-004	4.0400e-003	1.0900e-003	3.9000e-004	1.4800e-003		135.3845	135.3845	0.0324		136.1944
Worker	0.0427	0.0124	0.1825	1.4000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		14.1723	14.1723	9.5000e-004		14.1960
Total	**0.0696**	**1.1456**	**0.4193**	**1.4200e-003**	**0.0104**	**7.0000e-004**	**0.0111**	**2.9500e-003**	**6.7000e-004**	**3.6100e-003**		**149.5568**	**149.5568**	**0.0334**		**150.3904**

3.6 Interiors - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0268	1.1332	0.2368	1.2800e-003	3.6300e-003	4.0000e-004	4.0400e-003	1.0900e-003	3.9000e-004	1.4800e-003		135.3845	135.3845	0.0324		136.1944
Worker	0.0427	0.0124	0.1825	1.4000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		14.1723	14.1723	9.5000e-004		14.1960
Total	**0.0696**	**1.1456**	**0.4193**	**1.4200e-003**	**0.0104**	**7.0000e-004**	**0.0111**	**2.9500e-003**	**6.7000e-004**	**3.6100e-003**		**149.5568**	**149.5568**	**0.0334**		**150.3904**

3.7 Plaster Exterior - Structure - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	9.7100e-003	2.8100e-003	0.0415	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.2210	3.2210	2.1000e-004		3.2264
Total	**9.7100e-003**	**2.8100e-003**	**0.0415**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.2210**	**3.2210**	**2.1000e-004**		**3.2264**

3.7 Plaster Exterior - Structure - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	9.7100e-003	2.8100e-003	0.0415	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.2210	3.2210	2.1000e-004		3.2264
Total	**9.7100e-003**	**2.8100e-003**	**0.0415**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.2210**	**3.2210**	**2.1000e-004**		**3.2264**

3.8 Site Improvements - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0268	1.1332	0.2368	1.2800e-003	3.6300e-003	4.0000e-004	4.0400e-003	1.0900e-003	3.9000e-004	1.4800e-003		135.3845	135.3845	0.0324		136.1944
Worker	0.0427	0.0124	0.1825	1.4000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		14.1723	14.1723	9.5000e-004		14.1960
Total	**0.0696**	**1.1456**	**0.4193**	**1.4200e-003**	**0.0104**	**7.0000e-004**	**0.0111**	**2.9500e-003**	**6.7000e-004**	**3.6100e-003**		**149.5568**	**149.5568**	**0.0334**		**150.3904**

3.8 Site Improvements - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0268	1.1332	0.2368	1.2800e-003	3.6300e-003	4.0000e-004	4.0400e-003	1.0900e-003	3.9000e-004	1.4800e-003		135.3845	135.3845	0.0324		136.1944
Worker	0.0427	0.0124	0.1825	1.4000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		14.1723	14.1723	9.5000e-004		14.1960
Total	**0.0696**	**1.1456**	**0.4193**	**1.4200e-003**	**0.0104**	**7.0000e-004**	**0.0111**	**2.9500e-003**	**6.7000e-004**	**3.6100e-003**		**149.5568**	**149.5568**	**0.0334**		**150.3904**

3.9 Paint - Primer / 1st Coat - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	9.7100e-003	2.8100e-003	0.0415	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.2210	3.2210	2.1000e-004		3.2264
Total	**9.7100e-003**	**2.8100e-003**	**0.0415**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.2210**	**3.2210**	**2.1000e-004**		**3.2264**

3.9 Paint - Primer / 1st Coat - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	9.7100e-003	2.8100e-003	0.0415	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.2210	3.2210	2.1000e-004		3.2264
Total	**9.7100e-003**	**2.8100e-003**	**0.0415**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.2210**	**3.2210**	**2.1000e-004**		**3.2264**

3.10 Final Paint - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	9.7100e-003	2.8100e-003	0.0415	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.2210	3.2210	2.1000e-004		3.2264
Total	**9.7100e-003**	**2.8100e-003**	**0.0415**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.2210**	**3.2210**	**2.1000e-004**		**3.2264**

3.10 Final Paint - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	9.7100e-003	2.8100e-003	0.0415	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.2210	3.2210	2.1000e-004		3.2264
Total	**9.7100e-003**	**2.8100e-003**	**0.0415**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.2210**	**3.2210**	**2.1000e-004**		**3.2264**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0930**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**		**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

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	0.0194	5.6300e-003	0.0830	7.0000e-005	3.0800e-003	1.4000e-004	3.2200e-003	8.4000e-004	1.3000e-004	9.7000e-004		6.4420	6.4420	4.3000e-004		6.4527
Total	**0.0194**	**5.6300e-003**	**0.0830**	**7.0000e-005**	**3.0800e-003**	**1.4000e-004**	**3.2200e-003**	**8.4000e-004**	**1.3000e-004**	**9.7000e-004**		**6.4420**	**6.4420**	**4.3000e-004**		**6.4527**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0930**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**	**0.0000**	**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

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	0.0194	5.6300e-003	0.0830	7.0000e-005	3.0800e-003	1.4000e-004	3.2200e-003	8.4000e-004	1.3000e-004	9.7000e-004		6.4420	6.4420	4.3000e-004		6.4527
Total	**0.0194**	**5.6300e-003**	**0.0830**	**7.0000e-005**	**3.0800e-003**	**1.4000e-004**	**3.2200e-003**	**8.4000e-004**	**1.3000e-004**	**9.7000e-004**		**6.4420**	**6.4420**	**4.3000e-004**		**6.4527**

3.12 Striping - Site Improvement - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	9.7100e-003	2.8100e-003	0.0415	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.2210	3.2210	2.1000e-004		3.2264
Total	**9.7100e-003**	**2.8100e-003**	**0.0415**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.2210**	**3.2210**	**2.1000e-004**		**3.2264**

3.12 Striping - Site Improvement - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	9.7100e-003	2.8100e-003	0.0415	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.2210	3.2210	2.1000e-004		3.2264
Total	**9.7100e-003**	**2.8100e-003**	**0.0415**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.2210**	**3.2210**	**2.1000e-004**		**3.2264**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5319	3.7625	6.3019	0.0303	2.5017	0.0177	2.5195	0.6693	0.0165	0.6858		3,102.2612	3,102.2612	0.1456		3,105.9017
Unmitigated	0.5319	3.7625	6.3019	0.0303	2.5017	0.0177	2.5195	0.6693	0.0165	0.6858		3,102.2612	3,102.2612	0.1456		3,105.9017

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	388.43	158.68	17.10	913,851	913,851
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	388.43	158.68	17.10	913,851	913,851

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Other Non-Asphalt Surfaces	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Parking Lot	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
User Defined Recreational	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
NaturalGas Unmitigated	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840

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					
Junior College (2Yr)	535.581	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**5.7800e-003**	**0.0525**	**0.0441**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**		**63.0095**	**63.0095**	**1.2100e-003**	**1.1600e-003**	**63.3840**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	0.535581	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**5.7800e-003**	**0.0525**	**0.0441**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**		**63.0095**	**63.0095**	**1.2100e-003**	**1.1600e-003**	**63.3840**

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	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Unmitigated	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1437					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4400e-003	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Total	**1.2540**	**1.4000e-004**	**0.0156**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0334**	**0.0334**	**9.0000e-005**		**0.0356**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1437					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4400e-003	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Total	**1.2540**	**1.4000e-004**	**0.0156**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0334**	**0.0334**	**9.0000e-005**		**0.0356**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center - Phase I - LST

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	14.13	1000sqft	1.26	14,135.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	84.00	Space	0.80	35,000.00	0
User Defined Recreational	41.00	User Defined Unit	0.94	41,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% renewables.

Land Use - Project-specific land uses.

Construction Phase - Utilites included in grading and building. Project specific schedule.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers. Assumed 1000ft (0.19mi) to represent onsite trip portion.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 247 tons of debris.

Grading - 2,200 C.Y. of import.

Architectural Coating - Adjusted per architectual coating phase. Adjusted Exterior and Interior to reflect project. CalEEMod User Guide calcs: 14135*2*.75= 21202.5 14135*2*.25= 7067.5

Vehicle Trips - Project specific values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Road Dust - CalEEMod default values.

Woodstoves - No hearths.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - Adjusted per Title 24 2019 energy efficent reductions.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Mobile Land Use Mitigation - No mitigation applied.

Mobile Commute Mitigation - No mitigation applied.

Waste Mitigation - No mitigation applied.

Operational Off-Road Equipment - No off-road equipment.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	14,130.00	14,135.00
tblLandUse	LandUseSquareFeet	33,600.00	35,000.00
tblLandUse	LandUseSquareFeet	0.00	41,000.00
tblLandUse	LotAcreage	0.32	1.26
tblLandUse	LotAcreage	0.76	0.80
tblLandUse	LotAcreage	0.00	0.94
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	1325.65	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00

tblTripsAndVMT	HaulingTripNumber	0.00	276.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripNumber	15.00	16.00

tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00

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	3.9143	40.5026	21.6423	0.0391	18.0690	2.0446	20.1136	9.9314	1.8810	11.8125	0.0000	3,772.9306	3,772.9306	1.1924	0.0000	3,799.4082
2022	32.9410	43.1232	45.6979	0.0761	0.0239	2.1071	2.1310	6.7400e-003	1.9740	1.9807	0.0000	7,258.4781	7,258.4781	1.8503	0.0000	7,304.7341
Maximum	**32.9410**	**43.1232**	**45.6979**	**0.0761**	**18.0690**	**2.1071**	**20.1136**	**9.9314**	**1.9740**	**11.8125**	**0.0000**	**7,258.4781**	**7,258.4781**	**1.8503**	**0.0000**	**7,304.7341**

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	3.9143	40.5026	21.6423	0.0391	8.1326	2.0446	10.1772	4.4696	1.8810	6.3506	0.0000	3,772.9306	3,772.9306	1.1924	0.0000	3,799.4082
2022	32.9410	43.1232	45.6979	0.0761	0.0239	2.1071	2.1310	6.7400e-003	1.9740	1.9807	0.0000	7,258.4781	7,258.4781	1.8503	0.0000	7,304.7341
Maximum	**32.9410**	**43.1232**	**45.6979**	**0.0761**	**8.1326**	**2.1071**	**10.1772**	**4.4696**	**1.9740**	**6.3506**	**0.0000**	**7,258.4781**	**7,258.4781**	**1.8503**	**0.0000**	**7,304.7341**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.92**	**0.00**	**44.67**	**54.96**	**0.00**	**39.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Energy	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Mobile	0.6355	3.7819	7.2796	0.0329	2.5017	0.0176	2.5194	0.6693	0.0164	0.6857		3,358.5129	3,358.5129	0.1416		3,362.0535
Total	**1.8953**	**3.8346**	**7.3393**	**0.0332**	**2.5017**	**0.0217**	**2.5234**	**0.6693**	**0.0205**	**0.6897**		**3,421.5559**	**3,421.5559**	**0.1429**	**1.1600e-003**	**3,425.4731**

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	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Energy	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Mobile	0.6355	3.7819	7.2796	0.0329	2.5017	0.0176	2.5194	0.6693	0.0164	0.6857		3,358.5129	3,358.5129	0.1416		3,362.0535
Total	**1.8953**	**3.8346**	**7.3393**	**0.0332**	**2.5017**	**0.0217**	**2.5234**	**0.6693**	**0.0205**	**0.6897**		**3,421.5559**	**3,421.5559**	**0.1429**	**1.1600e-003**	**3,425.4731**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	9/15/2021	5	20	
2	Site Preparation	Site Preparation	9/16/2021	9/20/2021	5	5	
3	Grading / Over-excavation	Grading	9/21/2021	10/4/2021	5	8	
4	Structure	Building Construction	10/6/2021	3/2/2022	5	230	
5	Interiors	Building Construction	1/20/2022	8/3/2022	5	230	
6	Plaster Exterior - Structure	Architectural Coating	3/3/2022	3/23/2022	5	18	
7	Site Improvements	Building Construction	4/12/2022	7/6/2022	5	230	
8	Paint - Primer / 1st Coat - Interior	Architectural Coating	4/14/2022	4/20/2022	5	18	
9	Final Paint - Interior	Architectural Coating	6/3/2022	6/9/2022	5	18	
10	Asphalt Paving / Cure - Site Improvement	Paving	6/22/2022	6/30/2022	5	18	
11	Striping - Site Improvement	Architectural Coating	7/1/2022	7/5/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 82,703; Non-Residential Outdoor: 27,568; Striped Parking Area: 2,910 (Architectural Coating – sqft)

OffRoad Equipment

RCCD Ben Clark Training Center - Phase I - LST - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading / Over-excavation	Excavators	1	8.00	158	0.38
Grading / Over-excavation	Graders	1	8.00	187	0.41
Grading / Over-excavation	Rubber Tired Dozers	1	8.00	247	0.40
Grading / Over-excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Structure	Cranes	1	7.00	231	0.29
Structure	Forklifts	3	8.00	89	0.20
Structure	Generator Sets	1	8.00	84	0.74
Structure	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structure	Welders	1	8.00	46	0.45
Interiors	Cranes	1	7.00	231	0.29
Interiors	Forklifts	3	8.00	89	0.20
Interiors	Generator Sets	1	8.00	84	0.74
Interiors	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Interiors	Welders	1	8.00	46	0.45
Plaster Exterior - Structure	Air Compressors	1	6.00	78	0.48
Site Improvements	Cranes	1	7.00	231	0.29
Site Improvements	Forklifts	3	8.00	89	0.20
Site Improvements	Generator Sets	1	8.00	84	0.74
Site Improvements	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Site Improvements	Welders	1	8.00	46	0.45
Paint - Primer / 1st Coat - Interior	Air Compressors	1	6.00	78	0.48

Final Paint - Interior	Air Compressors	1	6.00	78	0.48
Asphalt Paving / Cure - Site Improvement	Cement and Mortar Mixers	2	6.00	9	0.56
Asphalt Paving / Cure - Site Improvement	Pavers	1	8.00	130	0.42
Asphalt Paving / Cure - Site Improvement	Paving Equipment	2	6.00	132	0.36
Asphalt Paving / Cure - Site Improvement	Rollers	2	6.00	80	0.38
Asphalt Paving / Cure - Site Improvement	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Striping - Site Improvement	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	24.00	0.19	0.00	0.19	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Grading / Over-excavation	6	16.00	0.00	276.00	0.19	0.00	0.19	LD_Mix	HDT_Mix	HHDT
Structure	9	44.00	18.00	0.00	0.19	0.19	0.00	LD_Mix	HDT_Mix	HHDT
Interiors	9	44.00	18.00	0.00	0.19	0.19	0.00	LD_Mix	HDT_Mix	HHDT
Plaster Exterior - Structure	1	10.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Site Improvements	9	44.00	18.00	0.00	0.19	0.19	0.00	LD_Mix	HDT_Mix	HHDT
Paint - Primer / 1st Coat - Interior	1	10.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Final Paint - Interior	1	10.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving / Cure - Site Improvement	8	20.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Striping - Site Improvement	1	10.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					0.2659	0.0000	0.2659	0.0403	0.0000	0.0403			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.2659**	**1.5513**	**1.8173**	**0.0403**	**1.4411**	**1.4814**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	2.2900e-003	0.1278	0.0104	1.8000e-004	3.5000e-004	4.0000e-005	3.9000e-004	9.0000e-005	4.0000e-005	1.4000e-004		19.3034	19.3034	3.8600e-003		19.3998
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	0.0232	4.9100e-003	0.0669	6.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.6823	5.6823	3.5000e-004		5.6911
Total	**0.0255**	**0.1327**	**0.0772**	**2.4000e-004**	**2.8200e-003**	**1.5000e-004**	**2.9700e-003**	**7.6000e-004**	**1.4000e-004**	**9.2000e-004**		**24.9857**	**24.9857**	**4.2100e-003**		**25.0909**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1197	0.0000	0.1197	0.0181	0.0000	0.0181			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.1197**	**1.5513**	**1.6710**	**0.0181**	**1.4411**	**1.4592**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	2.2900e-003	0.1278	0.0104	1.8000e-004	3.5000e-004	4.0000e-005	3.9000e-004	9.0000e-005	4.0000e-005	1.4000e-004		19.3034	19.3034	3.8600e-003		19.3998
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	0.0232	4.9100e-003	0.0669	6.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.6823	5.6823	3.5000e-004		5.6911
Total	**0.0255**	**0.1327**	**0.0772**	**2.4000e-004**	**2.8200e-003**	**1.5000e-004**	**2.9700e-003**	**7.6000e-004**	**1.4000e-004**	**9.2000e-004**		**24.9857**	**24.9857**	**4.2100e-003**		**25.0909**

3.3 Site Preparation - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0261	5.5200e-003	0.0752	7.0000e-005	2.7800e-003	1.3000e-004	2.9000e-003	7.6000e-004	1.2000e-004	8.8000e-004		6.3926	6.3926	3.9000e-004		6.4024
Total	**0.0261**	**5.5200e-003**	**0.0752**	**7.0000e-005**	**2.7800e-003**	**1.3000e-004**	**2.9000e-003**	**7.6000e-004**	**1.2000e-004**	**8.8000e-004**		**6.3926**	**6.3926**	**3.9000e-004**		**6.4024**

3.3 Site Preparation - 2021

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**8.1298**	**2.0445**	**10.1743**	**4.4688**	**1.8809**	**6.3497**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0261	5.5200e-003	0.0752	7.0000e-005	2.7800e-003	1.3000e-004	2.9000e-003	7.6000e-004	1.2000e-004	8.8000e-004		6.3926	6.3926	3.9000e-004		6.4024
Total	**0.0261**	**5.5200e-003**	**0.0752**	**7.0000e-005**	**2.7800e-003**	**1.3000e-004**	**2.9000e-003**	**7.6000e-004**	**1.2000e-004**	**8.8000e-004**		**6.3926**	**6.3926**	**3.9000e-004**		**6.4024**

3.4 Grading / Over-excavation - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0658	3.6738	0.2976	5.2400e-003	5.5900e-003	1.2900e-003	6.8800e-003	1.6200e-003	1.2300e-003	2.8500e-003		554.9725	554.9725	0.1109		557.7450
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	0.0232	4.9100e-003	0.0669	6.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.6823	5.6823	3.5000e-004		5.6911
Total	**0.0890**	**3.6788**	**0.3645**	**5.3000e-003**	**8.0600e-003**	**1.4000e-003**	**9.4600e-003**	**2.2900e-003**	**1.3300e-003**	**3.6300e-003**		**560.6548**	**560.6548**	**0.1113**		**563.4361**

3.4 Grading / Over-excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.9486**	**1.1599**	**4.1085**	**1.5154**	**1.0671**	**2.5825**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0658	3.6738	0.2976	5.2400e-003	5.5900e-003	1.2900e-003	6.8800e-003	1.6200e-003	1.2300e-003	2.8500e-003		554.9725	554.9725	0.1109		557.7450
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	0.0232	4.9100e-003	0.0669	6.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.6823	5.6823	3.5000e-004		5.6911
Total	**0.0890**	**3.6788**	**0.3645**	**5.3000e-003**	**8.0600e-003**	**1.4000e-003**	**9.4600e-003**	**2.2900e-003**	**1.3300e-003**	**3.6300e-003**		**560.6548**	**560.6548**	**0.1113**		**563.4361**

3.5 Structure - 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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0263	1.2043	0.1991	1.4700e-003	3.6300e-003	4.1000e-004	4.0400e-003	1.0900e-003	3.9000e-004	1.4800e-003		155.2076	155.2076	0.0303		155.9658
Worker	0.0638	0.0135	0.1839	1.6000e-004	6.7900e-003	3.1000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1400e-003		15.6263	15.6263	9.6000e-004		15.6504
Total	**0.0901**	**1.2178**	**0.3830**	**1.6300e-003**	**0.0104**	**7.2000e-004**	**0.0111**	**2.9500e-003**	**6.7000e-004**	**3.6200e-003**		**170.8339**	**170.8339**	**0.0313**		**171.6162**

3.5 Structure - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0263	1.2043	0.1991	1.4700e-003	3.6300e-003	4.1000e-004	4.0400e-003	1.0900e-003	3.9000e-004	1.4800e-003		155.2076	155.2076	0.0303		155.9658
Worker	0.0638	0.0135	0.1839	1.6000e-004	6.7900e-003	3.1000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1400e-003		15.6263	15.6263	9.6000e-004		15.6504
Total	**0.0901**	**1.2178**	**0.3830**	**1.6300e-003**	**0.0104**	**7.2000e-004**	**0.0111**	**2.9500e-003**	**6.7000e-004**	**3.6200e-003**		**170.8339**	**170.8339**	**0.0313**		**171.6162**

3.5 Structure - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0245	1.1702	0.1842	1.4600e-003	3.6300e-003	3.2000e-004	3.9500e-003	1.0900e-003	3.0000e-004	1.4000e-003		153.8309	153.8309	0.0285		154.5445
Worker	0.0588	0.0120	0.1665	1.5000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		15.0820	15.0820	8.5000e-004		15.1033
Total	**0.0833**	**1.1822**	**0.3507**	**1.6100e-003**	**0.0104**	**6.2000e-004**	**0.0110**	**2.9500e-003**	**5.8000e-004**	**3.5300e-003**		**168.9129**	**168.9129**	**0.0294**		**169.6478**

3.5 Structure - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0245	1.1702	0.1842	1.4600e-003	3.6300e-003	3.2000e-004	3.9500e-003	1.0900e-003	3.0000e-004	1.4000e-003		153.8309	153.8309	0.0285		154.5445
Worker	0.0588	0.0120	0.1665	1.5000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		15.0820	15.0820	8.5000e-004		15.1033
Total	**0.0833**	**1.1822**	**0.3507**	**1.6100e-003**	**0.0104**	**6.2000e-004**	**0.0110**	**2.9500e-003**	**5.8000e-004**	**3.5300e-003**		**168.9129**	**168.9129**	**0.0294**		**169.6478**

3.6 Interiors - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0245	1.1702	0.1842	1.4600e-003	3.6300e-003	3.2000e-004	3.9500e-003	1.0900e-003	3.0000e-004	1.4000e-003		153.8309	153.8309	0.0285		154.5445
Worker	0.0588	0.0120	0.1665	1.5000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		15.0820	15.0820	8.5000e-004		15.1033
Total	**0.0833**	**1.1822**	**0.3507**	**1.6100e-003**	**0.0104**	**6.2000e-004**	**0.0110**	**2.9500e-003**	**5.8000e-004**	**3.5300e-003**		**168.9129**	**168.9129**	**0.0294**		**169.6478**

3.6 Interiors - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0245	1.1702	0.1842	1.4600e-003	3.6300e-003	3.2000e-004	3.9500e-003	1.0900e-003	3.0000e-004	1.4000e-003		153.8309	153.8309	0.0285		154.5445
Worker	0.0588	0.0120	0.1665	1.5000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		15.0820	15.0820	8.5000e-004		15.1033
Total	**0.0833**	**1.1822**	**0.3507**	**1.6100e-003**	**0.0104**	**6.2000e-004**	**0.0110**	**2.9500e-003**	**5.8000e-004**	**3.5300e-003**		**168.9129**	**168.9129**	**0.0294**		**169.6478**

3.7 Plaster Exterior - Structure - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0134	2.7100e-003	0.0378	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.4277	3.4277	1.9000e-004		3.4326
Total	**0.0134**	**2.7100e-003**	**0.0378**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.4277**	**3.4277**	**1.9000e-004**		**3.4326**

3.7 Plaster Exterior - Structure - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0134	2.7100e-003	0.0378	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.4277	3.4277	1.9000e-004		3.4326
Total	**0.0134**	**2.7100e-003**	**0.0378**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.4277**	**3.4277**	**1.9000e-004**		**3.4326**

3.8 Site Improvements - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0245	1.1702	0.1842	1.4600e-003	3.6300e-003	3.2000e-004	3.9500e-003	1.0900e-003	3.0000e-004	1.4000e-003		153.8309	153.8309	0.0285		154.5445
Worker	0.0588	0.0120	0.1665	1.5000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		15.0820	15.0820	8.5000e-004		15.1033
Total	**0.0833**	**1.1822**	**0.3507**	**1.6100e-003**	**0.0104**	**6.2000e-004**	**0.0110**	**2.9500e-003**	**5.8000e-004**	**3.5300e-003**		**168.9129**	**168.9129**	**0.0294**		**169.6478**

3.8 Site Improvements - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0245	1.1702	0.1842	1.4600e-003	3.6300e-003	3.2000e-004	3.9500e-003	1.0900e-003	3.0000e-004	1.4000e-003		153.8309	153.8309	0.0285		154.5445
Worker	0.0588	0.0120	0.1665	1.5000e-004	6.7900e-003	3.0000e-004	7.0900e-003	1.8600e-003	2.8000e-004	2.1300e-003		15.0820	15.0820	8.5000e-004		15.1033
Total	**0.0833**	**1.1822**	**0.3507**	**1.6100e-003**	**0.0104**	**6.2000e-004**	**0.0110**	**2.9500e-003**	**5.8000e-004**	**3.5300e-003**		**168.9129**	**168.9129**	**0.0294**		**169.6478**

3.9 Paint - Primer / 1st Coat - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0134	2.7100e-003	0.0378	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.4277	3.4277	1.9000e-004		3.4326
Total	**0.0134**	**2.7100e-003**	**0.0378**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.4277**	**3.4277**	**1.9000e-004**		**3.4326**

3.9 Paint - Primer / 1st Coat - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0134	2.7100e-003	0.0378	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.4277	3.4277	1.9000e-004		3.4326
Total	**0.0134**	**2.7100e-003**	**0.0378**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.4277**	**3.4277**	**1.9000e-004**		**3.4326**

3.10 Final Paint - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0134	2.7100e-003	0.0378	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.4277	3.4277	1.9000e-004		3.4326
Total	**0.0134**	**2.7100e-003**	**0.0378**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.4277**	**3.4277**	**1.9000e-004**		**3.4326**

3.10 Final Paint - Interior - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0134	2.7100e-003	0.0378	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.4277	3.4277	1.9000e-004		3.4326
Total	**0.0134**	**2.7100e-003**	**0.0378**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.4277**	**3.4277**	**1.9000e-004**		**3.4326**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0930**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**		**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

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	0.0267	5.4300e-003	0.0757	7.0000e-005	3.0800e-003	1.4000e-004	3.2200e-003	8.4000e-004	1.3000e-004	9.7000e-004		6.8554	6.8554	3.9000e-004		6.8651
Total	**0.0267**	**5.4300e-003**	**0.0757**	**7.0000e-005**	**3.0800e-003**	**1.4000e-004**	**3.2200e-003**	**8.4000e-004**	**1.3000e-004**	**9.7000e-004**		**6.8554**	**6.8554**	**3.9000e-004**		**6.8651**

3.11 Asphalt Paving / Cure - Site Improvement - 2022

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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0930**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**	**0.0000**	**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

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	0.0267	5.4300e-003	0.0757	7.0000e-005	3.0800e-003	1.4000e-004	3.2200e-003	8.4000e-004	1.3000e-004	9.7000e-004		6.8554	6.8554	3.9000e-004		6.8651
Total	**0.0267**	**5.4300e-003**	**0.0757**	**7.0000e-005**	**3.0800e-003**	**1.4000e-004**	**3.2200e-003**	**8.4000e-004**	**1.3000e-004**	**9.7000e-004**		**6.8554**	**6.8554**	**3.9000e-004**		**6.8651**

3.12 Striping - Site Improvement - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0134	2.7100e-003	0.0378	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.4277	3.4277	1.9000e-004		3.4326
Total	**0.0134**	**2.7100e-003**	**0.0378**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.4277**	**3.4277**	**1.9000e-004**		**3.4326**

3.12 Striping - Site Improvement - 2022

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	29.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**29.3487**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0134	2.7100e-003	0.0378	3.0000e-005	1.5400e-003	7.0000e-005	1.6100e-003	4.2000e-004	6.0000e-005	4.8000e-004		3.4277	3.4277	1.9000e-004		3.4326
Total	**0.0134**	**2.7100e-003**	**0.0378**	**3.0000e-005**	**1.5400e-003**	**7.0000e-005**	**1.6100e-003**	**4.2000e-004**	**6.0000e-005**	**4.8000e-004**		**3.4277**	**3.4277**	**1.9000e-004**		**3.4326**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6355	3.7819	7.2796	0.0329	2.5017	0.0176	2.5194	0.6693	0.0164	0.6857		3,358.5129	3,358.5129	0.1416		3,362.0535
Unmitigated	0.6355	3.7819	7.2796	0.0329	2.5017	0.0176	2.5194	0.6693	0.0164	0.6857		3,358.5129	3,358.5129	0.1416		3,362.0535

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	388.43	158.68	17.10	913,851	913,851
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	388.43	158.68	17.10	913,851	913,851

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Other Non-Asphalt Surfaces	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
Parking Lot	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898
User Defined Recreational	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
NaturalGas Unmitigated	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840

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					
Junior College (2Yr)	535.581	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**5.7800e-003**	**0.0525**	**0.0441**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**		**63.0095**	**63.0095**	**1.2100e-003**	**1.1600e-003**	**63.3840**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	0.535581	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0095	63.0095	1.2100e-003	1.1600e-003	63.3840
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**5.7800e-003**	**0.0525**	**0.0441**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**		**63.0095**	**63.0095**	**1.2100e-003**	**1.1600e-003**	**63.3840**

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	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Unmitigated	1.2540	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1437					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4400e-003	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Total	**1.2540**	**1.4000e-004**	**0.0156**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0334**	**0.0334**	**9.0000e-005**		**0.0356**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1437					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4400e-003	1.4000e-004	0.0156	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0334	0.0334	9.0000e-005		0.0356
Total	**1.2540**	**1.4000e-004**	**0.0156**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0334**	**0.0334**	**9.0000e-005**		**0.0356**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center - Phase II

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	40.00	1000sqft	3.04	40,000.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	180.00	Space	1.62	72,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% eligible renewables.

Land Use - Project-specific land uses.

Construction Phase - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 630 tons of debris.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod default values.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves - No Hearths.

Energy Use - Adjusted per Title 24 2019 energy efficient standards.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Operational Off-Road Equipment - No off-road equipment needed.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Vehicle Trips - Project specific values.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.99	3.56
tblEnergyUse	LightingElect	0.35	0.31
tblEnergyUse	NT24E	1.92	1.71
tblEnergyUse	T24E	1.97	1.76
tblEnergyUse	T24NG	13.82	12.34
tblLandUse	LotAcreage	0.92	3.04
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	21.00	22.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblVehicleTrips	ST_TR	11.23	8.27
tblVehicleTrips	SU_TR	1.21	0.89
tblVehicleTrips	WD_TR	27.49	20.25

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					
2022	3.2487	33.1288	21.1339	0.0426	18.2675	1.6137	19.8812	9.9840	1.4846	11.4687	0.0000	4,132.7998	4,132.7998	1.1957	0.0000	4,159.5677
2023	22.1619	15.9319	17.9556	0.0370	0.7445	0.7046	1.4491	0.2006	0.6630	0.8636	0.0000	3,591.9182	3,591.9182	0.6521	0.0000	3,608.2213
Maximum	**22.1619**	**33.1288**	**21.1339**	**0.0426**	**18.2675**	**1.6137**	**19.8812**	**9.9840**	**1.4846**	**11.4687**	**0.0000**	**4,132.7998**	**4,132.7998**	**1.1957**	**0.0000**	**4,159.5677**

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					
2022	3.2487	33.1288	21.1339	0.0426	8.3310	1.6137	9.9447	4.5222	1.4846	6.0068	0.0000	4,132.7998	4,132.7998	1.1957	0.0000	4,159.5677
2023	22.1619	15.9319	17.9556	0.0370	0.7445	0.7046	1.4491	0.2006	0.6630	0.8636	0.0000	3,591.9182	3,591.9182	0.6521	0.0000	3,608.2213
Maximum	**22.1619**	**33.1288**	**21.1339**	**0.0426**	**8.3310**	**1.6137**	**9.9447**	**4.5222**	**1.4846**	**6.0068**	**0.0000**	**4,132.7998**	**4,132.7998**	**1.1957**	**0.0000**	**4,159.5677**

	ROG	NOx	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**	**52.26**	**0.00**	**46.58**	**53.63**	**0.00**	**44.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Energy	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Mobile	1.0505	7.6205	12.4100	0.0616	5.2158	0.0363	5.2521	1.3952	0.0339	1.4290		6,306.1606	6,306.1606	0.2924		6,313.4712
Total	**1.9977**	**7.7534**	**12.5453**	**0.0624**	**5.2158**	**0.0465**	**5.2623**	**1.3952**	**0.0440**	**1.4392**		**6,465.4381**	**6,465.4381**	**0.2956**	**2.9200e-003**	**6,473.6983**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Energy	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Mobile	1.0505	7.6205	12.4100	0.0616	5.2158	0.0363	5.2521	1.3952	0.0339	1.4290		6,306.1606	6,306.1606	0.2924		6,313.4712
Total	**1.9977**	**7.7534**	**12.5453**	**0.0624**	**5.2158**	**0.0465**	**5.2623**	**1.3952**	**0.0440**	**1.4392**		**6,465.4381**	**6,465.4381**	**0.2956**	**2.9200e-003**	**6,473.6983**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/8/2022	9/2/2022	5	20	
2	Site Preparation	Site Preparation	9/3/2022	9/9/2022	5	5	
3	Grading	Grading	9/10/2022	9/21/2022	5	8	
4	Building Construction	Building Construction	9/22/2022	8/9/2023	5	230	
5	Paving	Paving	8/10/2023	9/4/2023	5	18	
6	Architectural Coating	Architectural Coating	9/5/2023	9/28/2023	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.93

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 60,000; Non-Residential Outdoor: 20,000; Striped Parking Area: 5,130 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6782	0.0000	0.6782	0.1027	0.0000	0.1027			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.6782**	**1.2427**	**1.9209**	**0.1027**	**1.1553**	**1.2580**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

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	0.0149	0.6166	0.1000	2.2500e-003	0.0542	1.7300e-003	0.0560	0.0149	1.6500e-003	0.0165		238.7644	238.7644	0.0151		239.1420
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	0.0698	0.0402	0.4398	1.4800e-003	0.1788	1.0300e-003	0.1799	0.0474	9.4000e-004	0.0484		147.2542	147.2542	3.1800e-003		147.3336
Total	**0.0848**	**0.6568**	**0.5398**	**3.7300e-003**	**0.2331**	**2.7600e-003**	**0.2358**	**0.0623**	**2.5900e-003**	**0.0649**		**386.0186**	**386.0186**	**0.0183**		**386.4756**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3052	0.0000	0.3052	0.0462	0.0000	0.0462			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.3052**	**1.2427**	**1.5479**	**0.0462**	**1.1553**	**1.2015**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

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	0.0149	0.6166	0.1000	2.2500e-003	0.0542	1.7300e-003	0.0560	0.0149	1.6500e-003	0.0165		238.7644	238.7644	0.0151		239.1420
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	0.0698	0.0402	0.4398	1.4800e-003	0.1788	1.0300e-003	0.1799	0.0474	9.4000e-004	0.0484		147.2542	147.2542	3.1800e-003		147.3336
Total	**0.0848**	**0.6568**	**0.5398**	**3.7300e-003**	**0.2331**	**2.7600e-003**	**0.2358**	**0.0623**	**2.5900e-003**	**0.0649**		**386.0186**	**386.0186**	**0.0183**		**386.4756**

3.3 Site Preparation - 2022

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

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	0.0786	0.0452	0.4947	1.6600e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		165.6610	165.6610	3.5700e-003		165.7503
Total	**0.0786**	**0.0452**	**0.4947**	**1.6600e-003**	**0.2012**	**1.1500e-003**	**0.2024**	**0.0534**	**1.0600e-003**	**0.0544**		**165.6610**	**165.6610**	**3.5700e-003**		**165.7503**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.1298**	**1.6126**	**9.7424**	**4.4688**	**1.4836**	**5.9524**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

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	0.0786	0.0452	0.4947	1.6600e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		165.6610	165.6610	3.5700e-003		165.7503
Total	**0.0786**	**0.0452**	**0.4947**	**1.6600e-003**	**0.2012**	**1.1500e-003**	**0.2024**	**0.0534**	**1.0600e-003**	**0.0544**		**165.6610**	**165.6610**	**3.5700e-003**		**165.7503**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

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	0.0698	0.0402	0.4398	1.4800e-003	0.1788	1.0300e-003	0.1799	0.0474	9.4000e-004	0.0484		147.2542	147.2542	3.1800e-003		147.3336
Total	**0.0698**	**0.0402**	**0.4398**	**1.4800e-003**	**0.1788**	**1.0300e-003**	**0.1799**	**0.0474**	**9.4000e-004**	**0.0484**		**147.2542**	**147.2542**	**3.1800e-003**		**147.3336**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**2.9486**	**0.9409**	**3.8894**	**1.5154**	**0.8656**	**2.3810**	**0.0000**	**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

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	0.0698	0.0402	0.4398	1.4800e-003	0.1788	1.0300e-003	0.1799	0.0474	9.4000e-004	0.0484		147.2542	147.2542	3.1800e-003		147.3336
Total	**0.0698**	**0.0402**	**0.4398**	**1.4800e-003**	**0.1788**	**1.0300e-003**	**0.1799**	**0.0474**	**9.4000e-004**	**0.0484**		**147.2542**	**147.2542**	**3.1800e-003**		**147.3336**

3.5 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.0509	1.9015	0.4011	5.4400e-003	0.1409	3.3600e-003	0.1442	0.0406	3.2100e-003	0.0438		573.4897	573.4897	0.0454		574.6255
Worker	0.2357	0.1357	1.4842	4.9800e-003	0.6036	3.4600e-003	0.6071	0.1601	3.1900e-003	0.1633		496.9830	496.9830	0.0107		497.2510
Total	**0.2866**	**2.0372**	**1.8853**	**0.0104**	**0.7445**	**6.8200e-003**	**0.7513**	**0.2006**	**6.4000e-003**	**0.2070**		**1,070.4727**	**1,070.4727**	**0.0562**		**1,071.8764**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.0509	1.9015	0.4011	5.4400e-003	0.1409	3.3600e-003	0.1442	0.0406	3.2100e-003	0.0438		573.4897	573.4897	0.0454		574.6255
Worker	0.2357	0.1357	1.4842	4.9800e-003	0.6036	3.4600e-003	0.6071	0.1601	3.1900e-003	0.1633		496.9830	496.9830	0.0107		497.2510
Total	**0.2866**	**2.0372**	**1.8853**	**0.0104**	**0.7445**	**6.8200e-003**	**0.7513**	**0.2006**	**6.4000e-003**	**0.2070**		**1,070.4727**	**1,070.4727**	**0.0562**		**1,071.8764**

3.5 Building Construction - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.0389	1.4247	0.3439	5.2900e-003	0.1409	1.5000e-003	0.1424	0.0406	1.4400e-003	0.0420		558.5858	558.5858	0.0346		559.4519
Worker	0.2217	0.1223	1.3677	4.7900e-003	0.6036	3.3800e-003	0.6070	0.1601	3.1100e-003	0.1632		478.1225	478.1225	9.6300e-003		478.3634
Total	**0.2606**	**1.5470**	**1.7116**	**0.0101**	**0.7445**	**4.8800e-003**	**0.7493**	**0.2006**	**4.5500e-003**	**0.2052**		**1,036.7083**	**1,036.7083**	**0.0443**		**1,037.8153**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.0389	1.4247	0.3439	5.2900e-003	0.1409	1.5000e-003	0.1424	0.0406	1.4400e-003	0.0420		558.5858	558.5858	0.0346		559.4519
Worker	0.2217	0.1223	1.3677	4.7900e-003	0.6036	3.3800e-003	0.6070	0.1601	3.1100e-003	0.1632		478.1225	478.1225	9.6300e-003		478.3634
Total	**0.2606**	**1.5470**	**1.7116**	**0.0101**	**0.7445**	**4.8800e-003**	**0.7493**	**0.2006**	**4.5500e-003**	**0.2052**		**1,036.7083**	**1,036.7083**	**0.0443**		**1,037.8153**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1539**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**		**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

3.6 Paving - 2023

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	0.0821	0.0453	0.5066	1.7800e-003	0.2236	1.2500e-003	0.2248	0.0593	1.1500e-003	0.0604		177.0824	177.0824	3.5700e-003		177.1716
Total	**0.0821**	**0.0453**	**0.5066**	**1.7800e-003**	**0.2236**	**1.2500e-003**	**0.2248**	**0.0593**	**1.1500e-003**	**0.0604**		**177.0824**	**177.0824**	**3.5700e-003**		**177.1716**

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	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1539**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**	**0.0000**	**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

3.6 Paving - 2023

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	0.0821	0.0453	0.5066	1.7800e-003	0.2236	1.2500e-003	0.2248	0.0593	1.1500e-003	0.0604		177.0824	177.0824	3.5700e-003		177.1716
Total	**0.0821**	**0.0453**	**0.5066**	**1.7800e-003**	**0.2236**	**1.2500e-003**	**0.2248**	**0.0593**	**1.1500e-003**	**0.0604**		**177.0824**	**177.0824**	**3.5700e-003**		**177.1716**

3.7 Architectural Coating - 2023

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	21.9210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**22.1126**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.0493	0.0272	0.3039	1.0700e-003	0.1341	7.5000e-004	0.1349	0.0356	6.9000e-004	0.0363		106.2495	106.2495	2.1400e-003		106.3030
Total	**0.0493**	**0.0272**	**0.3039**	**1.0700e-003**	**0.1341**	**7.5000e-004**	**0.1349**	**0.0356**	**6.9000e-004**	**0.0363**		**106.2495**	**106.2495**	**2.1400e-003**		**106.3030**

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	21.9210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**22.1126**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.0493	0.0272	0.3039	1.0700e-003	0.1341	7.5000e-004	0.1349	0.0356	6.9000e-004	0.0363		106.2495	106.2495	2.1400e-003		106.3030
Total	**0.0493**	**0.0272**	**0.3039**	**1.0700e-003**	**0.1341**	**7.5000e-004**	**0.1349**	**0.0356**	**6.9000e-004**	**0.0363**		**106.2495**	**106.2495**	**2.1400e-003**		**106.3030**

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	1.0505	7.6205	12.4100	0.0616	5.2158	0.0363	5.2521	1.3952	0.0339	1.4290		6,306.1606	6,306.1606	0.2924		6,313.4712
Unmitigated	1.0505	7.6205	12.4100	0.0616	5.2158	0.0363	5.2521	1.3952	0.0339	1.4290		6,306.1606	6,306.1606	0.2924		6,313.4712

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	810.00	330.80	35.60	1,905,587	1,905,587
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	810.00	330.80	35.60	1,905,587	1,905,587

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Other Non-Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Parking Lot	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
NaturalGas Unmitigated	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726

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					
Junior College (2Yr)	1353.42	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1327**	**0.1115**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.2264**	**159.2264**	**3.0500e-003**	**2.9200e-003**	**160.1726**

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					
Junior College (2Yr)	1.35342	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1327**	**0.1115**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.2264**	**159.2264**	**3.0500e-003**	**2.9200e-003**	**160.1726**

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	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Unmitigated	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1081					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-003	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Total	**0.9326**	**2.2000e-004**	**0.0238**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0511**	**0.0511**	**1.3000e-004**		**0.0544**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1081					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-003	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Total	**0.9326**	**2.2000e-004**	**0.0238**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0511**	**0.0511**	**1.3000e-004**		**0.0544**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center - Phase II

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	40.00	1000sqft	3.04	40,000.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	180.00	Space	1.62	72,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% eligible renewables.

Land Use - Project-specific land uses.

Construction Phase - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 630 tons of debris.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod default values.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves - No Hearths.

Energy Use - Adjusted per Title 24 2019 energy efficient standards.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Operational Off-Road Equipment - No off-road equipment needed.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Vehicle Trips - Project specific values.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.99	3.56
tblEnergyUse	LightingElect	0.35	0.31
tblEnergyUse	NT24E	1.92	1.71
tblEnergyUse	T24E	1.97	1.76
tblEnergyUse	T24NG	13.82	12.34
tblLandUse	LotAcreage	0.92	3.04
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	21.00	22.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblVehicleTrips	ST_TR	11.23	8.27
tblVehicleTrips	SU_TR	1.21	0.89
tblVehicleTrips	WD_TR	27.49	20.25

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					
2022	3.2500	33.1273	21.2257	0.0428	18.2675	1.6137	19.8812	9.9840	1.4846	11.4687	0.0000	4,155.8877	4,155.8877	1.1963	0.0000	4,182.6350
2023	22.1625	15.9476	18.2412	0.0378	0.7445	0.7046	1.4490	0.2006	0.6629	0.8636	0.0000	3,668.2980	3,668.2980	0.6502	0.0000	3,684.5518
Maximum	**22.1625**	**33.1273**	**21.2257**	**0.0428**	**18.2675**	**1.6137**	**19.8812**	**9.9840**	**1.4846**	**11.4687**	**0.0000**	**4,155.8877**	**4,155.8877**	**1.1963**	**0.0000**	**4,182.6350**

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					
2022	3.2500	33.1273	21.2257	0.0428	8.3310	1.6137	9.9447	4.5222	1.4846	6.0068	0.0000	4,155.8877	4,155.8877	1.1963	0.0000	4,182.6350
2023	22.1625	15.9476	18.2412	0.0378	0.7445	0.7046	1.4490	0.2006	0.6629	0.8636	0.0000	3,668.2980	3,668.2980	0.6502	0.0000	3,684.5518
Maximum	**22.1625**	**33.1273**	**21.2257**	**0.0428**	**8.3310**	**1.6137**	**9.9447**	**4.5222**	**1.4846**	**6.0068**	**0.0000**	**4,155.8877**	**4,155.8877**	**1.1963**	**0.0000**	**4,182.6350**

	ROG	NOx	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**	**52.26**	**0.00**	**46.58**	**53.63**	**0.00**	**44.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Energy	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Mobile	1.2544	7.6666	14.3430	0.0667	5.2158	0.0361	5.2519	1.3952	0.0336	1.4288		6,823.8166	6,823.8166	0.2837		6,830.9099
Total	**2.2016**	**7.7995**	**14.4783**	**0.0675**	**5.2158**	**0.0463**	**5.2621**	**1.3952**	**0.0438**	**1.4390**		**6,983.0941**	**6,983.0941**	**0.2869**	**2.9200e-003**	**6,991.1370**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Energy	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Mobile	1.2544	7.6666	14.3430	0.0667	5.2158	0.0361	5.2519	1.3952	0.0336	1.4288		6,823.8166	6,823.8166	0.2837		6,830.9099
Total	**2.2016**	**7.7995**	**14.4783**	**0.0675**	**5.2158**	**0.0463**	**5.2621**	**1.3952**	**0.0438**	**1.4390**		**6,983.0941**	**6,983.0941**	**0.2869**	**2.9200e-003**	**6,991.1370**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/8/2022	9/2/2022	5	20	
2	Site Preparation	Site Preparation	9/3/2022	9/9/2022	5	5	
3	Grading	Grading	9/10/2022	9/21/2022	5	8	
4	Building Construction	Building Construction	9/22/2022	8/9/2023	5	230	
5	Paving	Paving	8/10/2023	9/4/2023	5	18	
6	Architectural Coating	Architectural Coating	9/5/2023	9/28/2023	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.93

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 60,000; Non-Residential Outdoor: 20,000; Striped Parking Area: 5,130 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6782	0.0000	0.6782	0.1027	0.0000	0.1027			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.6782**	**1.2427**	**1.9209**	**0.1027**	**1.1553**	**1.2580**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

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	0.0142	0.6139	0.0860	2.3100e-003	0.0542	1.7000e-003	0.0559	0.0149	1.6300e-003	0.0165		244.9712	244.9712	0.0138		245.3164
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	0.0710	0.0389	0.5456	1.6500e-003	0.1788	1.0300e-003	0.1799	0.0474	9.4000e-004	0.0484		164.1354	164.1354	3.6500e-003		164.2266
Total	**0.0851**	**0.6528**	**0.6316**	**3.9600e-003**	**0.2331**	**2.7300e-003**	**0.2358**	**0.0623**	**2.5700e-003**	**0.0649**		**409.1065**	**409.1065**	**0.0175**		**409.5430**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3052	0.0000	0.3052	0.0462	0.0000	0.0462			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.3052**	**1.2427**	**1.5479**	**0.0462**	**1.1553**	**1.2015**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

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	0.0142	0.6139	0.0860	2.3100e-003	0.0542	1.7000e-003	0.0559	0.0149	1.6300e-003	0.0165		244.9712	244.9712	0.0138		245.3164
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	0.0710	0.0389	0.5456	1.6500e-003	0.1788	1.0300e-003	0.1799	0.0474	9.4000e-004	0.0484		164.1354	164.1354	3.6500e-003		164.2266
Total	**0.0851**	**0.6528**	**0.6316**	**3.9600e-003**	**0.2331**	**2.7300e-003**	**0.2358**	**0.0623**	**2.5700e-003**	**0.0649**		**409.1065**	**409.1065**	**0.0175**		**409.5430**

3.3 Site Preparation - 2022

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

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	0.0798	0.0438	0.6138	1.8500e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		184.6523	184.6523	4.1000e-003		184.7549
Total	**0.0798**	**0.0438**	**0.6138**	**1.8500e-003**	**0.2012**	**1.1500e-003**	**0.2024**	**0.0534**	**1.0600e-003**	**0.0544**		**184.6523**	**184.6523**	**4.1000e-003**		**184.7549**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.1298**	**1.6126**	**9.7424**	**4.4688**	**1.4836**	**5.9524**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

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	0.0798	0.0438	0.6138	1.8500e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		184.6523	184.6523	4.1000e-003		184.7549
Total	**0.0798**	**0.0438**	**0.6138**	**1.8500e-003**	**0.2012**	**1.1500e-003**	**0.2024**	**0.0534**	**1.0600e-003**	**0.0544**		**184.6523**	**184.6523**	**4.1000e-003**		**184.7549**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

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	0.0710	0.0389	0.5456	1.6500e-003	0.1788	1.0300e-003	0.1799	0.0474	9.4000e-004	0.0484		164.1354	164.1354	3.6500e-003		164.2266
Total	**0.0710**	**0.0389**	**0.5456**	**1.6500e-003**	**0.1788**	**1.0300e-003**	**0.1799**	**0.0474**	**9.4000e-004**	**0.0484**		**164.1354**	**164.1354**	**3.6500e-003**		**164.2266**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**2.9486**	**0.9409**	**3.8894**	**1.5154**	**0.8656**	**2.3810**	**0.0000**	**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

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	0.0710	0.0389	0.5456	1.6500e-003	0.1788	1.0300e-003	0.1799	0.0474	9.4000e-004	0.0484		164.1354	164.1354	3.6500e-003		164.2266
Total	**0.0710**	**0.0389**	**0.5456**	**1.6500e-003**	**0.1788**	**1.0300e-003**	**0.1799**	**0.0474**	**9.4000e-004**	**0.0484**		**164.1354**	**164.1354**	**3.6500e-003**		**164.2266**

3.5 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.0479	1.9208	0.3379	5.6500e-003	0.1409	3.2600e-003	0.1441	0.0406	3.1100e-003	0.0437		596.0354	596.0354	0.0407		597.0537
Worker	0.2395	0.1313	1.8415	5.5600e-003	0.6036	3.4600e-003	0.6071	0.1601	3.1900e-003	0.1633		553.9569	553.9569	0.0123		554.2647
Total	**0.2874**	**2.0520**	**2.1793**	**0.0112**	**0.7445**	**6.7200e-003**	**0.7512**	**0.2006**	**6.3000e-003**	**0.2069**		**1,149.9923**	**1,149.9923**	**0.0530**		**1,151.3184**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.0479	1.9208	0.3379	5.6500e-003	0.1409	3.2600e-003	0.1441	0.0406	3.1100e-003	0.0437		596.0354	596.0354	0.0407		597.0537
Worker	0.2395	0.1313	1.8415	5.5600e-003	0.6036	3.4600e-003	0.6071	0.1601	3.1900e-003	0.1633		553.9569	553.9569	0.0123		554.2647
Total	**0.2874**	**2.0520**	**2.1793**	**0.0112**	**0.7445**	**6.7200e-003**	**0.7512**	**0.2006**	**6.3000e-003**	**0.2069**		**1,149.9923**	**1,149.9923**	**0.0530**		**1,151.3184**

3.5 Building Construction - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.0367	1.4443	0.2978	5.5000e-003	0.1409	1.4500e-003	0.1423	0.0406	1.3900e-003	0.0419		580.1830	580.1830	0.0313		580.9644
Worker	0.2245	0.1184	1.6994	5.3500e-003	0.6036	3.3800e-003	0.6070	0.1601	3.1100e-003	0.1632		532.9051	532.9051	0.0111		533.1814
Total	**0.2613**	**1.5627**	**1.9972**	**0.0109**	**0.7445**	**4.8300e-003**	**0.7493**	**0.2006**	**4.5000e-003**	**0.2051**		**1,113.0881**	**1,113.0881**	**0.0423**		**1,114.1457**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.0367	1.4443	0.2978	5.5000e-003	0.1409	1.4500e-003	0.1423	0.0406	1.3900e-003	0.0419		580.1830	580.1830	0.0313		580.9644
Worker	0.2245	0.1184	1.6994	5.3500e-003	0.6036	3.3800e-003	0.6070	0.1601	3.1100e-003	0.1632		532.9051	532.9051	0.0111		533.1814
Total	**0.2613**	**1.5627**	**1.9972**	**0.0109**	**0.7445**	**4.8300e-003**	**0.7493**	**0.2006**	**4.5000e-003**	**0.2051**		**1,113.0881**	**1,113.0881**	**0.0423**		**1,114.1457**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1539**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**		**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

3.6 Paving - 2023

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	0.0832	0.0438	0.6294	1.9800e-003	0.2236	1.2500e-003	0.2248	0.0593	1.1500e-003	0.0604		197.3722	197.3722	4.0900e-003		197.4746
Total	**0.0832**	**0.0438**	**0.6294**	**1.9800e-003**	**0.2236**	**1.2500e-003**	**0.2248**	**0.0593**	**1.1500e-003**	**0.0604**		**197.3722**	**197.3722**	**4.0900e-003**		**197.4746**

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	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1539**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**	**0.0000**	**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

3.6 Paving - 2023

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	0.0832	0.0438	0.6294	1.9800e-003	0.2236	1.2500e-003	0.2248	0.0593	1.1500e-003	0.0604		197.3722	197.3722	4.0900e-003		197.4746
Total	**0.0832**	**0.0438**	**0.6294**	**1.9800e-003**	**0.2236**	**1.2500e-003**	**0.2248**	**0.0593**	**1.1500e-003**	**0.0604**		**197.3722**	**197.3722**	**4.0900e-003**		**197.4746**

3.7 Architectural Coating - 2023

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	21.9210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**22.1126**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.0499	0.0263	0.3777	1.1900e-003	0.1341	7.5000e-004	0.1349	0.0356	6.9000e-004	0.0363		118.4234	118.4234	2.4600e-003		118.4848
Total	**0.0499**	**0.0263**	**0.3777**	**1.1900e-003**	**0.1341**	**7.5000e-004**	**0.1349**	**0.0356**	**6.9000e-004**	**0.0363**		**118.4234**	**118.4234**	**2.4600e-003**		**118.4848**

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	21.9210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**22.1126**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.0499	0.0263	0.3777	1.1900e-003	0.1341	7.5000e-004	0.1349	0.0356	6.9000e-004	0.0363		118.4234	118.4234	2.4600e-003		118.4848
Total	**0.0499**	**0.0263**	**0.3777**	**1.1900e-003**	**0.1341**	**7.5000e-004**	**0.1349**	**0.0356**	**6.9000e-004**	**0.0363**		**118.4234**	**118.4234**	**2.4600e-003**		**118.4848**

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	1.2544	7.6666	14.3430	0.0667	5.2158	0.0361	5.2519	1.3952	0.0336	1.4288		6,823.8166	6,823.8166	0.2837		6,830.9099
Unmitigated	1.2544	7.6666	14.3430	0.0667	5.2158	0.0361	5.2519	1.3952	0.0336	1.4288		6,823.8166	6,823.8166	0.2837		6,830.9099

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	810.00	330.80	35.60	1,905,587	1,905,587
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	810.00	330.80	35.60	1,905,587	1,905,587

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Other Non-Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Parking Lot	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
NaturalGas Unmitigated	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726

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					
Junior College (2Yr)	1353.42	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1327**	**0.1115**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.2264**	**159.2264**	**3.0500e-003**	**2.9200e-003**	**160.1726**

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					
Junior College (2Yr)	1.35342	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1327**	**0.1115**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.2264**	**159.2264**	**3.0500e-003**	**2.9200e-003**	**160.1726**

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	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Unmitigated	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1081					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-003	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Total	**0.9326**	**2.2000e-004**	**0.0238**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0511**	**0.0511**	**1.3000e-004**		**0.0544**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1081					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-003	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Total	**0.9326**	**2.2000e-004**	**0.0238**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0511**	**0.0511**	**1.3000e-004**		**0.0544**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center - Phase II

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	40.00	1000sqft	3.04	40,000.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	180.00	Space	1.62	72,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% eligible renewables.

Land Use - Project-specific land uses.

Construction Phase - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 630 tons of debris.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod default values.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves - No Hearths.

Energy Use - Adjusted per Title 24 2019 energy efficient standards.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Operational Off-Road Equipment - No off-road equipment needed.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Vehicle Trips - Project specific values.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.99	3.56
tblEnergyUse	LightingElect	0.35	0.31
tblEnergyUse	NT24E	1.92	1.71
tblEnergyUse	T24E	1.97	1.76
tblEnergyUse	T24NG	13.82	12.34
tblLandUse	LotAcreage	0.92	3.04
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	21.00	22.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblVehicleTrips	ST_TR	11.23	8.27
tblVehicleTrips	SU_TR	1.21	0.89
tblVehicleTrips	WD_TR	27.49	20.25

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1143	1.0671	0.9837	2.0000e-003	0.1080	0.0496	0.1576	0.0474	0.0464	0.0938	0.0000	176.5006	176.5006	0.0376	0.0000	177.4393
2023	0.3538	1.3521	1.5563	3.1700e-003	0.0610	0.0602	0.1213	0.0165	0.0567	0.0731	0.0000	278.6154	278.6154	0.0514	0.0000	279.9014
Maximum	**0.3538**	**1.3521**	**1.5563**	**3.1700e-003**	**0.1080**	**0.0602**	**0.1576**	**0.0474**	**0.0567**	**0.0938**	**0.0000**	**278.6154**	**278.6154**	**0.0514**	**0.0000**	**279.9014**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1143	1.0671	0.9837	2.0000e-003	0.0650	0.0496	0.1147	0.0257	0.0464	0.0721	0.0000	176.5004	176.5004	0.0376	0.0000	177.4391
2023	0.3538	1.3521	1.5563	3.1700e-003	0.0610	0.0602	0.1213	0.0165	0.0567	0.0731	0.0000	278.6152	278.6152	0.0514	0.0000	279.9011
Maximum	**0.3538**	**1.3521**	**1.5563**	**3.1700e-003**	**0.0650**	**0.0602**	**0.1213**	**0.0257**	**0.0567**	**0.0731**	**0.0000**	**278.6152**	**278.6152**	**0.0514**	**0.0000**	**279.9011**

	ROG	NOx	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**	**25.43**	**0.00**	**15.41**	**33.89**	**0.00**	**12.96**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-8-2022	11-7-2022	0.7891	0.7891
2	11-8-2022	2-7-2023	0.6200	0.6200
3	2-8-2023	5-7-2023	0.5649	0.5649
4	5-8-2023	8-7-2023	0.5843	0.5843
5	8-8-2023	9-30-2023	0.3076	0.3076
		Highest	0.7891	0.7891

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1701	3.0000e-005	2.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7900e-003	5.7900e-003	2.0000e-005	0.0000	6.1700e-003
Energy	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	104.3129	104.3129	3.6700e-003	1.1700e-003	104.7539
Mobile	0.1494	1.0984	1.8136	8.9400e-003	0.7273	5.1200e-003	0.7324	0.1948	4.7700e-003	0.1996	0.0000	829.8985	829.8985	0.0366	0.0000	830.8131
Waste						0.0000	0.0000		0.0000	0.0000	10.5555	0.0000	10.5555	0.6238	0.0000	26.1509
Water						0.0000	0.0000		0.0000	0.0000	0.6224	15.3170	15.9394	0.0646	1.6400e-003	18.0434
Total	**0.3222**	**1.1226**	**1.8369**	**9.0900e-003**	**0.7273**	**6.9700e-003**	**0.7343**	**0.1948**	**6.6200e-003**	**0.2014**	**11.1780**	**949.5342**	**960.7122**	**0.7286**	**2.8100e-003**	**979.7674**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1701	3.0000e-005	2.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7900e-003	5.7900e-003	2.0000e-005	0.0000	6.1700e-003
Energy	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	104.3129	104.3129	3.6700e-003	1.1700e-003	104.7539
Mobile	0.1494	1.0984	1.8136	8.9400e-003	0.7273	5.1200e-003	0.7324	0.1948	4.7700e-003	0.1996	0.0000	829.8985	829.8985	0.0366	0.0000	830.8131
Waste						0.0000	0.0000		0.0000	0.0000	10.5555	0.0000	10.5555	0.6238	0.0000	26.1509
Water						0.0000	0.0000		0.0000	0.0000	0.6224	15.3170	15.9394	0.0646	1.6400e-003	18.0434
Total	**0.3222**	**1.1226**	**1.8369**	**9.0900e-003**	**0.7273**	**6.9700e-003**	**0.7343**	**0.1948**	**6.6200e-003**	**0.2014**	**11.1780**	**949.5342**	**960.7122**	**0.7286**	**2.8100e-003**	**979.7674**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

RCCD Ben Clark Training Center - Phase II - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/8/2022	9/2/2022	5	20	
2	Site Preparation	Site Preparation	9/3/2022	9/9/2022	5	5	
3	Grading	Grading	9/10/2022	9/21/2022	5	8	
4	Building Construction	Building Construction	9/22/2022	8/9/2023	5	230	
5	Paving	Paving	8/10/2023	9/4/2023	5	18	
6	Architectural Coating	Architectural Coating	9/5/2023	9/28/2023	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.93

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 60,000; Non-Residential Outdoor: 20,000; Striped Parking Area: 5,130 (Architectural Coating – sqft)

OffRoad Equipment

RCCD Ben Clark Training Center - Phase II - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.7800e-003	0.0000	6.7800e-003	1.0300e-003	0.0000	1.0300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	**0.0264**	**0.2572**	**0.2059**	**3.9000e-004**	**6.7800e-003**	**0.0124**	**0.0192**	**1.0300e-003**	**0.0116**	**0.0126**	**0.0000**	**33.9902**	**33.9902**	**9.5500e-003**	**0.0000**	**34.2289**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	6.2600e-003	9.2000e-004	2.0000e-005	5.3000e-004	2.0000e-005	5.5000e-004	1.5000e-004	2.0000e-005	1.6000e-004	0.0000	2.1987	2.1987	1.3000e-004	0.0000	2.2020
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.2000e-004	4.6400e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3703	1.3703	3.0000e-005	0.0000	1.3710
Total	**7.8000e-004**	**6.6800e-003**	**5.5600e-003**	**4.0000e-005**	**2.2900e-003**	**3.0000e-005**	**2.3200e-003**	**6.2000e-004**	**3.0000e-005**	**6.4000e-004**	**0.0000**	**3.5690**	**3.5690**	**1.6000e-004**	**0.0000**	**3.5730**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0500e-003	0.0000	3.0500e-003	4.6000e-004	0.0000	4.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	**0.0264**	**0.2572**	**0.2059**	**3.9000e-004**	**3.0500e-003**	**0.0124**	**0.0155**	**4.6000e-004**	**0.0116**	**0.0120**	**0.0000**	**33.9902**	**33.9902**	**9.5500e-003**	**0.0000**	**34.2289**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	6.2600e-003	9.2000e-004	2.0000e-005	5.3000e-004	2.0000e-005	5.5000e-004	1.5000e-004	2.0000e-005	1.6000e-004	0.0000	2.1987	2.1987	1.3000e-004	0.0000	2.2020
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.2000e-004	4.6400e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3703	1.3703	3.0000e-005	0.0000	1.3710
Total	**7.8000e-004**	**6.6800e-003**	**5.5600e-003**	**4.0000e-005**	**2.2900e-003**	**3.0000e-005**	**2.3200e-003**	**6.2000e-004**	**3.0000e-005**	**6.4000e-004**	**0.0000**	**3.5690**	**3.5690**	**1.6000e-004**	**0.0000**	**3.5730**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0827	0.0492	1.0000e-004		4.0300e-003	4.0300e-003		3.7100e-003	3.7100e-003	0.0000	8.3599	8.3599	2.7000e-003	0.0000	8.4274
Total	**7.9300e-003**	**0.0827**	**0.0492**	**1.0000e-004**	**0.0452**	**4.0300e-003**	**0.0492**	**0.0248**	**3.7100e-003**	**0.0285**	**0.0000**	**8.3599**	**8.3599**	**2.7000e-003**	**0.0000**	**8.4274**

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.2000e-004	1.3000e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3854	0.3854	1.0000e-005	0.0000	0.3856
Total	**1.8000e-004**	**1.2000e-004**	**1.3000e-003**	**0.0000**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3854**	**0.3854**	**1.0000e-005**	**0.0000**	**0.3856**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0827	0.0492	1.0000e-004		4.0300e-003	4.0300e-003		3.7100e-003	3.7100e-003	0.0000	8.3598	8.3598	2.7000e-003	0.0000	8.4274
Total	**7.9300e-003**	**0.0827**	**0.0492**	**1.0000e-004**	**0.0203**	**4.0300e-003**	**0.0244**	**0.0112**	**3.7100e-003**	**0.0149**	**0.0000**	**8.3598**	**8.3598**	**2.7000e-003**	**0.0000**	**8.4274**

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.2000e-004	1.3000e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3854	0.3854	1.0000e-005	0.0000	0.3856
Total	**1.8000e-004**	**1.2000e-004**	**1.3000e-003**	**0.0000**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3854**	**0.3854**	**1.0000e-005**	**0.0000**	**0.3856**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.0834	0.0611	1.2000e-004		3.7600e-003	3.7600e-003		3.4600e-003	3.4600e-003	0.0000	10.4219	10.4219	3.3700e-003	0.0000	10.5062
Total	**7.7900e-003**	**0.0834**	**0.0611**	**1.2000e-004**	**0.0262**	**3.7600e-003**	**0.0300**	**0.0135**	**3.4600e-003**	**0.0169**	**0.0000**	**10.4219**	**10.4219**	**3.3700e-003**	**0.0000**	**10.5062**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	1.8600e-003	1.0000e-005	7.0000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5481	0.5481	1.0000e-005	0.0000	0.5484
Total	**2.6000e-004**	**1.7000e-004**	**1.8600e-003**	**1.0000e-005**	**7.0000e-004**	**0.0000**	**7.1000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5481**	**0.5481**	**1.0000e-005**	**0.0000**	**0.5484**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0118	0.0000	0.0118	6.0600e-003	0.0000	6.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.0834	0.0611	1.2000e-004		3.7600e-003	3.7600e-003		3.4600e-003	3.4600e-003	0.0000	10.4219	10.4219	3.3700e-003	0.0000	10.5062
Total	**7.7900e-003**	**0.0834**	**0.0611**	**1.2000e-004**	**0.0118**	**3.7600e-003**	**0.0156**	**6.0600e-003**	**3.4600e-003**	**9.5200e-003**	**0.0000**	**10.4219**	**10.4219**	**3.3700e-003**	**0.0000**	**10.5062**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	1.8600e-003	1.0000e-005	7.0000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5481	0.5481	1.0000e-005	0.0000	0.5484
Total	**2.6000e-004**	**1.7000e-004**	**1.8600e-003**	**1.0000e-005**	**7.0000e-004**	**0.0000**	**7.1000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5481**	**0.5481**	**1.0000e-005**	**0.0000**	**0.5484**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0614	0.5622	0.5891	9.7000e-004		0.0291	0.0291		0.0274	0.0274	0.0000	83.4211	83.4211	0.0200	0.0000	83.9207
Total	**0.0614**	**0.5622**	**0.5891**	**9.7000e-004**		**0.0291**	**0.0291**		**0.0274**	**0.0274**	**0.0000**	**83.4211**	**83.4211**	**0.0200**	**0.0000**	**83.9207**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7600e-003	0.0696	0.0132	2.0000e-004	5.0000e-003	1.2000e-004	5.1200e-003	1.4400e-003	1.1000e-004	1.5600e-003	0.0000	19.1565	19.1565	1.4000e-003	0.0000	19.1914
Worker	7.8100e-003	5.0500e-003	0.0564	1.8000e-004	0.0214	1.2000e-004	0.0215	5.6700e-003	1.1000e-004	5.7900e-003	0.0000	16.6486	16.6486	3.6000e-004	0.0000	16.6577
Total	**9.5700e-003**	**0.0746**	**0.0696**	**3.8000e-004**	**0.0264**	**2.4000e-004**	**0.0266**	**7.1100e-003**	**2.2000e-004**	**7.3500e-003**	**0.0000**	**35.8051**	**35.8051**	**1.7600e-003**	**0.0000**	**35.8491**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0614	0.5622	0.5891	9.7000e-004		0.0291	0.0291		0.0274	0.0274	0.0000	83.4210	83.4210	0.0200	0.0000	83.9206
Total	**0.0614**	**0.5622**	**0.5891**	**9.7000e-004**		**0.0291**	**0.0291**		**0.0274**	**0.0274**	**0.0000**	**83.4210**	**83.4210**	**0.0200**	**0.0000**	**83.9206**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7600e-003	0.0696	0.0132	2.0000e-004	5.0000e-003	1.2000e-004	5.1200e-003	1.4400e-003	1.1000e-004	1.5600e-003	0.0000	19.1565	19.1565	1.4000e-003	0.0000	19.1914
Worker	7.8100e-003	5.0500e-003	0.0564	1.8000e-004	0.0214	1.2000e-004	0.0215	5.6700e-003	1.1000e-004	5.7900e-003	0.0000	16.6486	16.6486	3.6000e-004	0.0000	16.6577
Total	**9.5700e-003**	**0.0746**	**0.0696**	**3.8000e-004**	**0.0264**	**2.4000e-004**	**0.0266**	**7.1100e-003**	**2.2000e-004**	**7.3500e-003**	**0.0000**	**35.8051**	**35.8051**	**1.7600e-003**	**0.0000**	**35.8491**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1243	1.1364	1.2833	2.1300e-003		0.0553	0.0553		0.0520	0.0520	0.0000	183.1258	183.1258	0.0436	0.0000	184.2148
Total	**0.1243**	**1.1364**	**1.2833**	**2.1300e-003**		**0.0553**	**0.0553**		**0.0520**	**0.0520**	**0.0000**	**183.1258**	**183.1258**	**0.0436**	**0.0000**	**184.2148**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9600e-003	0.1142	0.0253	4.3000e-004	0.0110	1.2000e-004	0.0111	3.1700e-003	1.1000e-004	3.2800e-003	0.0000	40.9303	40.9303	2.3500e-003	0.0000	40.9889
Worker	0.0161	0.0100	0.1140	3.9000e-004	0.0469	2.7000e-004	0.0472	0.0125	2.5000e-004	0.0127	0.0000	35.1479	35.1479	7.1000e-004	0.0000	35.1657
Total	**0.0191**	**0.1242**	**0.1393**	**8.2000e-004**	**0.0579**	**3.9000e-004**	**0.0583**	**0.0156**	**3.6000e-004**	**0.0160**	**0.0000**	**76.0781**	**76.0781**	**3.0600e-003**	**0.0000**	**76.1546**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1243	1.1364	1.2833	2.1300e-003		0.0553	0.0553		0.0520	0.0520	0.0000	183.1255	183.1255	0.0436	0.0000	184.2146
Total	**0.1243**	**1.1364**	**1.2833**	**2.1300e-003**		**0.0553**	**0.0553**		**0.0520**	**0.0520**	**0.0000**	**183.1255**	**183.1255**	**0.0436**	**0.0000**	**184.2146**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9600e-003	0.1142	0.0253	4.3000e-004	0.0110	1.2000e-004	0.0111	3.1700e-003	1.1000e-004	3.2800e-003	0.0000	40.9303	40.9303	2.3500e-003	0.0000	40.9889
Worker	0.0161	0.0100	0.1140	3.9000e-004	0.0469	2.7000e-004	0.0472	0.0125	2.5000e-004	0.0127	0.0000	35.1479	35.1479	7.1000e-004	0.0000	35.1657
Total	**0.0191**	**0.1242**	**0.1393**	**8.2000e-004**	**0.0579**	**3.9000e-004**	**0.0583**	**0.0156**	**3.6000e-004**	**0.0160**	**0.0000**	**76.0781**	**76.0781**	**3.0600e-003**	**0.0000**	**76.1546**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2600e-003	0.0791	0.1097	1.7000e-004		3.9200e-003	3.9200e-003		3.6200e-003	3.6200e-003	0.0000	14.7407	14.7407	4.6300e-003	0.0000	14.8565
Paving	2.1200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0104**	**0.0791**	**0.1097**	**1.7000e-004**		**3.9200e-003**	**3.9200e-003**		**3.6200e-003**	**3.6200e-003**	**0.0000**	**14.7407**	**14.7407**	**4.6300e-003**	**0.0000**	**14.8565**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	4.2000e-004	4.8100e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.4830	1.4830	3.0000e-005	0.0000	1.4838
Total	**6.8000e-004**	**4.2000e-004**	**4.8100e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.4830**	**1.4830**	**3.0000e-005**	**0.0000**	**1.4838**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2600e-003	0.0791	0.1097	1.7000e-004		3.9200e-003	3.9200e-003		3.6200e-003	3.6200e-003	0.0000	14.7407	14.7407	4.6300e-003	0.0000	14.8565
Paving	2.1200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0104**	**0.0791**	**0.1097**	**1.7000e-004**		**3.9200e-003**	**3.9200e-003**		**3.6200e-003**	**3.6200e-003**	**0.0000**	**14.7407**	**14.7407**	**4.6300e-003**	**0.0000**	**14.8565**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	4.2000e-004	4.8100e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.4830	1.4830	3.0000e-005	0.0000	1.4838
Total	**6.8000e-004**	**4.2000e-004**	**4.8100e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.4830**	**1.4830**	**3.0000e-005**	**0.0000**	**1.4838**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1973					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7200e-003	0.0117	0.0163	3.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	2.2979	2.2979	1.4000e-004	0.0000	2.3014
Total	**0.1990**	**0.0117**	**0.0163**	**3.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.4000e-004**	**0.0000**	**2.3014**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	2.5000e-004	2.8900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.8898	0.8898	2.0000e-005	0.0000	0.8903
Total	**4.1000e-004**	**2.5000e-004**	**2.8900e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.1900e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.8898**	**0.8898**	**2.0000e-005**	**0.0000**	**0.8903**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1973					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7200e-003	0.0117	0.0163	3.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	2.2979	2.2979	1.4000e-004	0.0000	2.3014
Total	**0.1990**	**0.0117**	**0.0163**	**3.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.4000e-004**	**0.0000**	**2.3014**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	2.5000e-004	2.8900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.8898	0.8898	2.0000e-005	0.0000	0.8903
Total	**4.1000e-004**	**2.5000e-004**	**2.8900e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.1900e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.8898**	**0.8898**	**2.0000e-005**	**0.0000**	**0.8903**

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	0.1494	1.0984	1.8136	8.9400e-003	0.7273	5.1200e-003	0.7324	0.1948	4.7700e-003	0.1996	0.0000	829.8985	829.8985	0.0366	0.0000	830.8131
Unmitigated	0.1494	1.0984	1.8136	8.9400e-003	0.7273	5.1200e-003	0.7324	0.1948	4.7700e-003	0.1996	0.0000	829.8985	829.8985	0.0366	0.0000	830.8131

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	810.00	330.80	35.60	1,905,587	1,905,587
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	810.00	330.80	35.60	1,905,587	1,905,587

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Other Non-Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Parking Lot	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	77.9512	77.9512	3.1700e-003	6.9000e-004	78.2355
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	77.9512	77.9512	3.1700e-003	6.9000e-004	78.2355
NaturalGas Mitigated	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.3617	26.3617	5.1000e-004	4.8000e-004	26.5184
NaturalGas Unmitigated	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.3617	26.3617	5.1000e-004	4.8000e-004	26.5184

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					
Junior College (2Yr)	494000	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.3617	26.3617	5.1000e-004	4.8000e-004	26.5184
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6600e-003**	**0.0242**	**0.0203**	**1.5000e-004**		**1.8400e-003**	**1.8400e-003**		**1.8400e-003**	**1.8400e-003**	**0.0000**	**26.3617**	**26.3617**	**5.1000e-004**	**4.8000e-004**	**26.5184**

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					
Junior College (2Yr)	494000	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.3617	26.3617	5.1000e-004	4.8000e-004	26.5184
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6600e-003**	**0.0242**	**0.0203**	**1.5000e-004**		**1.8400e-003**	**1.8400e-003**		**1.8400e-003**	**1.8400e-003**	**0.0000**	**26.3617**	**26.3617**	**5.1000e-004**	**4.8000e-004**	**26.5184**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	281200	72.2189	2.9300e-003	6.4000e-004	72.4823
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22320	5.7323	2.3000e-004	5.0000e-005	5.7532
Total		**77.9512**	**3.1600e-003**	**6.9000e-004**	**78.2355**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	281200	72.2189	2.9300e-003	6.4000e-004	72.4823
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22320	5.7323	2.3000e-004	5.0000e-005	5.7532
Total		**77.9512**	**3.1600e-003**	**6.9000e-004**	**78.2355**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1701	3.0000e-005	2.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7900e-003	5.7900e-003	2.0000e-005	0.0000	6.1700e-003
Unmitigated	0.1701	3.0000e-005	2.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7900e-003	5.7900e-003	2.0000e-005	0.0000	6.1700e-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	0.0197					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1501					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7900e-003	5.7900e-003	2.0000e-005	0.0000	6.1700e-003
Total	**0.1701**	**3.0000e-005**	**2.9800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.7900e-003**	**5.7900e-003**	**2.0000e-005**	**0.0000**	**6.1700e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0197					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1501					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7900e-003	5.7900e-003	2.0000e-005	0.0000	6.1700e-003
Total	**0.1701**	**3.0000e-005**	**2.9800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.7900e-003**	**5.7900e-003**	**2.0000e-005**	**0.0000**	**6.1700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	15.9394	0.0646	1.6400e-003	18.0434
Unmitigated	15.9394	0.0646	1.6400e-003	18.0434

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.96196 / 3.06871	15.9394	0.0646	1.6400e-003	18.0434
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**15.9394**	**0.0646**	**1.6400e-003**	**18.0434**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.96196 / 3.06871	15.9394	0.0646	1.6400e-003	18.0434
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**15.9394**	**0.0646**	**1.6400e-003**	**18.0434**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.5555	0.6238	0.0000	26.1509
Unmitigated	10.5555	0.6238	0.0000	26.1509

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	52	10.5555	0.6238	0.0000	26.1509
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.5555**	**0.6238**	**0.0000**	**26.1509**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	52	10.5555	0.6238	0.0000	26.1509
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.5555**	**0.6238**	**0.0000**	**26.1509**

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

RCCD Ben Clark Training Center - Phase II - LST

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	40.00	1000sqft	3.04	40,000.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	180.00	Space	1.62	72,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% eligible renewables.

Land Use - Project-specific land uses.

Construction Phase - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers. Assumed 1000ft (0.19 miles) to represent onsite trip portion.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 630 tons of debris.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod default values.

Vehicle Trips - Project specific values.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves - No Hearths.

Energy Use - Adjusted per Title 24 2019 energy efficient standards.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Operational Off-Road Equipment - No off-road equipment needed.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

RCCD Ben Clark Training Center - Phase II - LST - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.99	3.56
tblEnergyUse	LightingElect	0.35	0.31
tblEnergyUse	NT24E	1.92	1.71
tblEnergyUse	T24E	1.97	1.76
tblEnergyUse	T24NG	13.82	12.34
tblLandUse	LotAcreage	0.92	3.04
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripNumber	21.00	22.00
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19

tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblVehicleTrips	ST_TR	11.23	8.27
tblVehicleTrips	SU_TR	1.21	0.89
tblVehicleTrips	WD_TR	27.49	20.25

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					
2022	3.1876	33.0886	20.7003	0.0393	18.0690	1.6127	19.6817	9.9314	1.4837	11.4151	0.0000	3,795.1302	3,795.1302	1.1925	0.0000	3,821.7167
2023	22.1234	15.5913	16.6915	0.0286	0.0128	0.7003	0.7131	3.6200e-003	0.6590	0.6626	0.0000	2,730.8481	2,730.8481	0.6379	0.0000	2,746.7957
Maximum	**22.1234**	**33.0886**	**20.7003**	**0.0393**	**18.0690**	**1.6127**	**19.6817**	**9.9314**	**1.4837**	**11.4151**	**0.0000**	**3,795.1302**	**3,795.1302**	**1.1925**	**0.0000**	**3,821.7167**

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					
2022	3.1876	33.0886	20.7003	0.0393	8.1326	1.6127	9.7453	4.4696	1.4837	5.9533	0.0000	3,795.1302	3,795.1302	1.1925	0.0000	3,821.7167
2023	22.1234	15.5913	16.6915	0.0286	0.0128	0.7003	0.7131	3.6200e-003	0.6590	0.6626	0.0000	2,730.8481	2,730.8481	0.6379	0.0000	2,746.7957
Maximum	**22.1234**	**33.0886**	**20.7003**	**0.0393**	**8.1326**	**1.6127**	**9.7453**	**4.4696**	**1.4837**	**5.9533**	**0.0000**	**3,795.1302**	**3,795.1302**	**1.1925**	**0.0000**	**3,821.7167**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.95**	**0.00**	**48.72**	**54.98**	**0.00**	**45.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Energy	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Mobile	1.0505	7.6205	12.4100	0.0616	5.2158	0.0363	5.2521	1.3952	0.0339	1.4290		6,306.1606	6,306.1606	0.2924		6,313.4712
Total	**1.9977**	**7.7534**	**12.5453**	**0.0624**	**5.2158**	**0.0465**	**5.2623**	**1.3952**	**0.0440**	**1.4392**		**6,465.4381**	**6,465.4381**	**0.2956**	**2.9200e-003**	**6,473.6983**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Energy	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Mobile	1.0505	7.6205	12.4100	0.0616	5.2158	0.0363	5.2521	1.3952	0.0339	1.4290		6,306.1606	6,306.1606	0.2924		6,313.4712
Total	**1.9977**	**7.7534**	**12.5453**	**0.0624**	**5.2158**	**0.0465**	**5.2623**	**1.3952**	**0.0440**	**1.4392**		**6,465.4381**	**6,465.4381**	**0.2956**	**2.9200e-003**	**6,473.6983**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/8/2022	9/2/2022	5	20	
2	Site Preparation	Site Preparation	9/3/2022	9/9/2022	5	5	
3	Grading	Grading	9/10/2022	9/21/2022	5	8	
4	Building Construction	Building Construction	9/22/2022	8/9/2023	5	230	
5	Paving	Paving	8/10/2023	9/4/2023	5	18	
6	Architectural Coating	Architectural Coating	9/5/2023	9/28/2023	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.93

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 60,000; Non-Residential Outdoor: 20,000; Striped Parking Area: 5,130 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	62.00	0.19	0.00	0.19	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	22.00	0.00	0.19	0.19	0.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6782	0.0000	0.6782	0.1027	0.0000	0.1027			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.6782**	**1.2427**	**1.9209**	**0.1027**	**1.1553**	**1.2580**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.3200e-003	0.3058	0.0398	4.1000e-004	5.8000e-004	1.1000e-004	7.0000e-004	1.6000e-004	1.1000e-004	2.7000e-004		43.1955	43.1955	0.0107		43.4625
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	0.0155	4.5000e-003	0.0664	5.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.1536	5.1536	3.4000e-004		5.1622
Total	**0.0219**	**0.3103**	**0.1062**	**4.6000e-004**	**3.0500e-003**	**2.2000e-004**	**3.2800e-003**	**8.3000e-004**	**2.1000e-004**	**1.0500e-003**		**48.3491**	**48.3491**	**0.0110**		**48.6247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3052	0.0000	0.3052	0.0462	0.0000	0.0462			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.3052**	**1.2427**	**1.5479**	**0.0462**	**1.1553**	**1.2015**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.3200e-003	0.3058	0.0398	4.1000e-004	5.8000e-004	1.1000e-004	7.0000e-004	1.6000e-004	1.1000e-004	2.7000e-004		43.1955	43.1955	0.0107		43.4625
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	0.0155	4.5000e-003	0.0664	5.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.1536	5.1536	3.4000e-004		5.1622
Total	**0.0219**	**0.3103**	**0.1062**	**4.6000e-004**	**3.0500e-003**	**2.2000e-004**	**3.2800e-003**	**8.3000e-004**	**2.1000e-004**	**1.0500e-003**		**48.3491**	**48.3491**	**0.0110**		**48.6247**

3.3 Site Preparation - 2022

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

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	0.0175	5.0600e-003	0.0747	6.0000e-005	2.7800e-003	1.2000e-004	2.9000e-003	7.6000e-004	1.1000e-004	8.7000e-004		5.7978	5.7978	3.9000e-004		5.8074
Total	**0.0175**	**5.0600e-003**	**0.0747**	**6.0000e-005**	**2.7800e-003**	**1.2000e-004**	**2.9000e-003**	**7.6000e-004**	**1.1000e-004**	**8.7000e-004**		**5.7978**	**5.7978**	**3.9000e-004**		**5.8074**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.1298**	**1.6126**	**9.7424**	**4.4688**	**1.4836**	**5.9524**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

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	0.0175	5.0600e-003	0.0747	6.0000e-005	2.7800e-003	1.2000e-004	2.9000e-003	7.6000e-004	1.1000e-004	8.7000e-004		5.7978	5.7978	3.9000e-004		5.8074
Total	**0.0175**	**5.0600e-003**	**0.0747**	**6.0000e-005**	**2.7800e-003**	**1.2000e-004**	**2.9000e-003**	**7.6000e-004**	**1.1000e-004**	**8.7000e-004**		**5.7978**	**5.7978**	**3.9000e-004**		**5.8074**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

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	0.0155	4.5000e-003	0.0664	5.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.1536	5.1536	3.4000e-004		5.1622
Total	**0.0155**	**4.5000e-003**	**0.0664**	**5.0000e-005**	**2.4700e-003**	**1.1000e-004**	**2.5800e-003**	**6.7000e-004**	**1.0000e-004**	**7.8000e-004**		**5.1536**	**5.1536**	**3.4000e-004**		**5.1622**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**2.9486**	**0.9409**	**3.8894**	**1.5154**	**0.8656**	**2.3810**	**0.0000**	**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

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	0.0155	4.5000e-003	0.0664	5.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.1536	5.1536	3.4000e-004		5.1622
Total	**0.0155**	**4.5000e-003**	**0.0664**	**5.0000e-005**	**2.4700e-003**	**1.1000e-004**	**2.5800e-003**	**6.7000e-004**	**1.0000e-004**	**7.8000e-004**		**5.1536**	**5.1536**	**3.4000e-004**		**5.1622**

3.5 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.0328	1.3851	0.2894	1.5700e-003	4.4400e-003	4.9000e-004	4.9400e-003	1.3400e-003	4.7000e-004	1.8100e-003		165.4699	165.4699	0.0396		166.4598
Worker	0.0524	0.0152	0.2240	1.8000e-004	8.3300e-003	3.7000e-004	8.7000e-003	2.2800e-003	3.4000e-004	2.6200e-003		17.3933	17.3933	1.1600e-003		17.4223
Total	**0.0852**	**1.4003**	**0.5134**	**1.7500e-003**	**0.0128**	**8.6000e-004**	**0.0136**	**3.6200e-003**	**8.1000e-004**	**4.4300e-003**		**182.8632**	**182.8632**	**0.0408**		**183.8822**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.0328	1.3851	0.2894	1.5700e-003	4.4400e-003	4.9000e-004	4.9400e-003	1.3400e-003	4.7000e-004	1.8100e-003		165.4699	165.4699	0.0396		166.4598
Worker	0.0524	0.0152	0.2240	1.8000e-004	8.3300e-003	3.7000e-004	8.7000e-003	2.2800e-003	3.4000e-004	2.6200e-003		17.3933	17.3933	1.1600e-003		17.4223
Total	**0.0852**	**1.4003**	**0.5134**	**1.7500e-003**	**0.0128**	**8.6000e-004**	**0.0136**	**3.6200e-003**	**8.1000e-004**	**4.4300e-003**		**182.8632**	**182.8632**	**0.0408**		**183.8822**

3.5 Building Construction - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.0252	1.1929	0.2443	1.5000e-003	4.4400e-003	2.3000e-004	4.6700e-003	1.3400e-003	2.2000e-004	1.5600e-003		158.8761	158.8761	0.0290		159.6018
Worker	0.0483	0.0135	0.2032	1.7000e-004	8.3300e-003	3.6000e-004	8.6900e-003	2.2800e-003	3.3000e-004	2.6100e-003		16.7622	16.7622	1.0300e-003		16.7879
Total	**0.0735**	**1.2064**	**0.4475**	**1.6700e-003**	**0.0128**	**5.9000e-004**	**0.0134**	**3.6200e-003**	**5.5000e-004**	**4.1700e-003**		**175.6382**	**175.6382**	**0.0301**		**176.3897**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.0252	1.1929	0.2443	1.5000e-003	4.4400e-003	2.3000e-004	4.6700e-003	1.3400e-003	2.2000e-004	1.5600e-003		158.8761	158.8761	0.0290		159.6018
Worker	0.0483	0.0135	0.2032	1.7000e-004	8.3300e-003	3.6000e-004	8.6900e-003	2.2800e-003	3.3000e-004	2.6100e-003		16.7622	16.7622	1.0300e-003		16.7879
Total	**0.0735**	**1.2064**	**0.4475**	**1.6700e-003**	**0.0128**	**5.9000e-004**	**0.0134**	**3.6200e-003**	**5.5000e-004**	**4.1700e-003**		**175.6382**	**175.6382**	**0.0301**		**176.3897**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1539**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**		**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

3.6 Paving - 2023

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	0.0179	5.0000e-003	0.0753	6.0000e-005	3.0800e-003	1.3000e-004	3.2200e-003	8.4000e-004	1.2000e-004	9.7000e-004		6.2082	6.2082	3.8000e-004		6.2177
Total	**0.0179**	**5.0000e-003**	**0.0753**	**6.0000e-005**	**3.0800e-003**	**1.3000e-004**	**3.2200e-003**	**8.4000e-004**	**1.2000e-004**	**9.7000e-004**		**6.2082**	**6.2082**	**3.8000e-004**		**6.2177**

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	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1539**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**	**0.0000**	**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

3.6 Paving - 2023

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	0.0179	5.0000e-003	0.0753	6.0000e-005	3.0800e-003	1.3000e-004	3.2200e-003	8.4000e-004	1.2000e-004	9.7000e-004		6.2082	6.2082	3.8000e-004		6.2177
Total	**0.0179**	**5.0000e-003**	**0.0753**	**6.0000e-005**	**3.0800e-003**	**1.3000e-004**	**3.2200e-003**	**8.4000e-004**	**1.2000e-004**	**9.7000e-004**		**6.2082**	**6.2082**	**3.8000e-004**		**6.2177**

3.7 Architectural Coating - 2023

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	21.9210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**22.1126**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.0107	3.0000e-003	0.0452	4.0000e-005	1.8500e-003	8.0000e-005	1.9300e-003	5.1000e-004	7.0000e-005	5.8000e-004		3.7249	3.7249	2.3000e-004		3.7306
Total	**0.0107**	**3.0000e-003**	**0.0452**	**4.0000e-005**	**1.8500e-003**	**8.0000e-005**	**1.9300e-003**	**5.1000e-004**	**7.0000e-005**	**5.8000e-004**		**3.7249**	**3.7249**	**2.3000e-004**		**3.7306**

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	21.9210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**22.1126**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.0107	3.0000e-003	0.0452	4.0000e-005	1.8500e-003	8.0000e-005	1.9300e-003	5.1000e-004	7.0000e-005	5.8000e-004		3.7249	3.7249	2.3000e-004		3.7306
Total	**0.0107**	**3.0000e-003**	**0.0452**	**4.0000e-005**	**1.8500e-003**	**8.0000e-005**	**1.9300e-003**	**5.1000e-004**	**7.0000e-005**	**5.8000e-004**		**3.7249**	**3.7249**	**2.3000e-004**		**3.7306**

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	1.0505	7.6205	12.4100	0.0616	5.2158	0.0363	5.2521	1.3952	0.0339	1.4290		6,306.1606	6,306.1606	0.2924		6,313.4712
Unmitigated	1.0505	7.6205	12.4100	0.0616	5.2158	0.0363	5.2521	1.3952	0.0339	1.4290		6,306.1606	6,306.1606	0.2924		6,313.4712

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	810.00	330.80	35.60	1,905,587	1,905,587
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	810.00	330.80	35.60	1,905,587	1,905,587

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Other Non-Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Parking Lot	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
NaturalGas Unmitigated	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726

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					
Junior College (2Yr)	1353.42	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1327**	**0.1115**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.2264**	**159.2264**	**3.0500e-003**	**2.9200e-003**	**160.1726**

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					
Junior College (2Yr)	1.35342	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1327**	**0.1115**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.2264**	**159.2264**	**3.0500e-003**	**2.9200e-003**	**160.1726**

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	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Unmitigated	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1081					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-003	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Total	**0.9326**	**2.2000e-004**	**0.0238**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0511**	**0.0511**	**1.3000e-004**		**0.0544**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1081					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-003	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Total	**0.9326**	**2.2000e-004**	**0.0238**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0511**	**0.0511**	**1.3000e-004**		**0.0544**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center - Phase II - LST

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	40.00	1000sqft	3.04	40,000.00	0
Other Non-Asphalt Surfaces	13.50	1000sqft	0.31	13,500.00	0
Parking Lot	180.00	Space	1.62	72,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% eligible renewables.

Land Use - Project-specific land uses.

Construction Phase - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Off-road Equipment - CalEEMod default values.

Trips and VMT - CalEEMod default values. Rounded up to even numbers. Assumed 1000ft (0.19 miles) to represent onsite trip portion.

On-road Fugitive Dust - CalEEMod default values.

Demolition - 630 tons of debris.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod default values.

Vehicle Trips - Project specific values.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves - No Hearths.

Energy Use - Adjusted per Title 24 2019 energy efficient standards.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Water exposed area 2x per day.

Operational Off-Road Equipment - No off-road equipment needed.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

RCCD Ben Clark Training Center - Phase II - LST - Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.99	3.56
tblEnergyUse	LightingElect	0.35	0.31
tblEnergyUse	NT24E	1.92	1.71
tblEnergyUse	T24E	1.97	1.76
tblEnergyUse	T24NG	13.82	12.34
tblLandUse	LotAcreage	0.92	3.04
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripNumber	21.00	22.00
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19

tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripLength	14.70	0.19
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblVehicleTrips	ST_TR	11.23	8.27
tblVehicleTrips	SU_TR	1.21	0.89
tblVehicleTrips	WD_TR	27.49	20.25

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					
2022	3.1942	33.0884	20.6801	0.0394	18.0690	1.6127	19.6817	9.9314	1.4837	11.4151	0.0000	3,801.6678	3,801.6678	1.1925	0.0000	3,828.2210
2023	22.1275	15.6225	16.6267	0.0288	0.0128	0.7003	0.7130	3.6200e-003	0.6589	0.6625	0.0000	2,753.5188	2,753.5188	0.6344	0.0000	2,769.3788
Maximum	**22.1275**	**33.0884**	**20.6801**	**0.0394**	**18.0690**	**1.6127**	**19.6817**	**9.9314**	**1.4837**	**11.4151**	**0.0000**	**3,801.6678**	**3,801.6678**	**1.1925**	**0.0000**	**3,828.2210**

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					
2022	3.1942	33.0884	20.6801	0.0394	8.1326	1.6127	9.7453	4.4696	1.4837	5.9533	0.0000	3,801.6678	3,801.6678	1.1925	0.0000	3,828.2210
2023	22.1275	15.6225	16.6267	0.0288	0.0128	0.7003	0.7130	3.6200e-003	0.6589	0.6625	0.0000	2,753.5188	2,753.5188	0.6344	0.0000	2,769.3788
Maximum	**22.1275**	**33.0884**	**20.6801**	**0.0394**	**8.1326**	**1.6127**	**9.7453**	**4.4696**	**1.4837**	**5.9533**	**0.0000**	**3,801.6678**	**3,801.6678**	**1.1925**	**0.0000**	**3,828.2210**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.95**	**0.00**	**48.72**	**54.98**	**0.00**	**45.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Energy	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Mobile	1.2544	7.6666	14.3430	0.0667	5.2158	0.0361	5.2519	1.3952	0.0336	1.4288		6,823.8166	6,823.8166	0.2837		6,830.9099
Total	**2.2016**	**7.7995**	**14.4783**	**0.0675**	**5.2158**	**0.0463**	**5.2621**	**1.3952**	**0.0438**	**1.4390**		**6,983.0941**	**6,983.0941**	**0.2869**	**2.9200e-003**	**6,991.1370**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Energy	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Mobile	1.2544	7.6666	14.3430	0.0667	5.2158	0.0361	5.2519	1.3952	0.0336	1.4288		6,823.8166	6,823.8166	0.2837		6,830.9099
Total	**2.2016**	**7.7995**	**14.4783**	**0.0675**	**5.2158**	**0.0463**	**5.2621**	**1.3952**	**0.0438**	**1.4390**		**6,983.0941**	**6,983.0941**	**0.2869**	**2.9200e-003**	**6,991.1370**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/8/2022	9/2/2022	5	20	
2	Site Preparation	Site Preparation	9/3/2022	9/9/2022	5	5	
3	Grading	Grading	9/10/2022	9/21/2022	5	8	
4	Building Construction	Building Construction	9/22/2022	8/9/2023	5	230	
5	Paving	Paving	8/10/2023	9/4/2023	5	18	
6	Architectural Coating	Architectural Coating	9/5/2023	9/28/2023	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.93

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 60,000; Non-Residential Outdoor: 20,000; Striped Parking Area: 5,130 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	62.00	0.19	0.00	0.19	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	22.00	0.00	0.19	0.19	0.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	0.19	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6782	0.0000	0.6782	0.1027	0.0000	0.1027			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.6782**	**1.2427**	**1.9209**	**0.1027**	**1.1553**	**1.2580**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

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	5.5600e-003	0.3186	0.0255	4.7000e-004	5.8000e-004	9.0000e-005	6.7000e-004	1.6000e-004	8.0000e-005	2.5000e-004		49.4022	49.4022	9.3800e-003		49.6369
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	0.0214	4.3400e-003	0.0606	6.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.4844	5.4844	3.1000e-004		5.4921
Total	**0.0270**	**0.3229**	**0.0860**	**5.3000e-004**	**3.0500e-003**	**2.0000e-004**	**3.2500e-003**	**8.3000e-004**	**1.8000e-004**	**1.0300e-003**		**54.8866**	**54.8866**	**9.6900e-003**		**55.1290**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3052	0.0000	0.3052	0.0462	0.0000	0.0462			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.3052**	**1.2427**	**1.5479**	**0.0462**	**1.1553**	**1.2015**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

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	5.5600e-003	0.3186	0.0255	4.7000e-004	5.8000e-004	9.0000e-005	6.7000e-004	1.6000e-004	8.0000e-005	2.5000e-004		49.4022	49.4022	9.3800e-003		49.6369
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	0.0214	4.3400e-003	0.0606	6.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.4844	5.4844	3.1000e-004		5.4921
Total	**0.0270**	**0.3229**	**0.0860**	**5.3000e-004**	**3.0500e-003**	**2.0000e-004**	**3.2500e-003**	**8.3000e-004**	**1.8000e-004**	**1.0300e-003**		**54.8866**	**54.8866**	**9.6900e-003**		**55.1290**

3.3 Site Preparation - 2022

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

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	0.0241	4.8900e-003	0.0681	6.0000e-005	2.7800e-003	1.2000e-004	2.9000e-003	7.6000e-004	1.1000e-004	8.7000e-004		6.1699	6.1699	3.5000e-004		6.1786
Total	**0.0241**	**4.8900e-003**	**0.0681**	**6.0000e-005**	**2.7800e-003**	**1.2000e-004**	**2.9000e-003**	**7.6000e-004**	**1.1000e-004**	**8.7000e-004**		**6.1699**	**6.1699**	**3.5000e-004**		**6.1786**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.1298**	**1.6126**	**9.7424**	**4.4688**	**1.4836**	**5.9524**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

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	0.0241	4.8900e-003	0.0681	6.0000e-005	2.7800e-003	1.2000e-004	2.9000e-003	7.6000e-004	1.1000e-004	8.7000e-004		6.1699	6.1699	3.5000e-004		6.1786
Total	**0.0241**	**4.8900e-003**	**0.0681**	**6.0000e-005**	**2.7800e-003**	**1.2000e-004**	**2.9000e-003**	**7.6000e-004**	**1.1000e-004**	**8.7000e-004**		**6.1699**	**6.1699**	**3.5000e-004**		**6.1786**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

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	0.0214	4.3400e-003	0.0606	6.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.4844	5.4844	3.1000e-004		5.4921
Total	**0.0214**	**4.3400e-003**	**0.0606**	**6.0000e-005**	**2.4700e-003**	**1.1000e-004**	**2.5800e-003**	**6.7000e-004**	**1.0000e-004**	**7.8000e-004**		**5.4844**	**5.4844**	**3.1000e-004**		**5.4921**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**2.9486**	**0.9409**	**3.8894**	**1.5154**	**0.8656**	**2.3810**	**0.0000**	**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

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	0.0214	4.3400e-003	0.0606	6.0000e-005	2.4700e-003	1.1000e-004	2.5800e-003	6.7000e-004	1.0000e-004	7.8000e-004		5.4844	5.4844	3.1000e-004		5.4921
Total	**0.0214**	**4.3400e-003**	**0.0606**	**6.0000e-005**	**2.4700e-003**	**1.1000e-004**	**2.5800e-003**	**6.7000e-004**	**1.0000e-004**	**7.8000e-004**		**5.4844**	**5.4844**	**3.1000e-004**		**5.4921**

3.5 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.0299	1.4303	0.2251	1.7800e-003	4.4400e-003	3.9000e-004	4.8300e-003	1.3400e-003	3.7000e-004	1.7100e-003		188.0156	188.0156	0.0349		188.8877
Worker	0.0722	0.0147	0.2044	1.9000e-004	8.3300e-003	3.7000e-004	8.7000e-003	2.2800e-003	3.4000e-004	2.6200e-003		18.5097	18.5097	1.0500e-003		18.5358
Total	**0.1021**	**1.4449**	**0.4294**	**1.9700e-003**	**0.0128**	**7.6000e-004**	**0.0135**	**3.6200e-003**	**7.1000e-004**	**4.3300e-003**		**206.5253**	**206.5253**	**0.0359**		**207.4235**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.0299	1.4303	0.2251	1.7800e-003	4.4400e-003	3.9000e-004	4.8300e-003	1.3400e-003	3.7000e-004	1.7100e-003		188.0156	188.0156	0.0349		188.8877
Worker	0.0722	0.0147	0.2044	1.9000e-004	8.3300e-003	3.7000e-004	8.7000e-003	2.2800e-003	3.4000e-004	2.6200e-003		18.5097	18.5097	1.0500e-003		18.5358
Total	**0.1021**	**1.4449**	**0.4294**	**1.9700e-003**	**0.0128**	**7.6000e-004**	**0.0135**	**3.6200e-003**	**7.1000e-004**	**4.3300e-003**		**206.5253**	**206.5253**	**0.0359**		**207.4235**

3.5 Building Construction - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.0232	1.2246	0.1973	1.7100e-003	4.4400e-003	1.8000e-004	4.6200e-003	1.3400e-003	1.7000e-004	1.5100e-003		180.4733	180.4733	0.0256		181.1139
Worker	0.0667	0.0130	0.1855	1.8000e-004	8.3300e-003	3.6000e-004	8.6900e-003	2.2800e-003	3.3000e-004	2.6100e-003		17.8356	17.8356	9.3000e-004		17.8588
Total	**0.0899**	**1.2376**	**0.3827**	**1.8900e-003**	**0.0128**	**5.4000e-004**	**0.0133**	**3.6200e-003**	**5.0000e-004**	**4.1200e-003**		**198.3089**	**198.3089**	**0.0266**		**198.9727**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.0232	1.2246	0.1973	1.7100e-003	4.4400e-003	1.8000e-004	4.6200e-003	1.3400e-003	1.7000e-004	1.5100e-003		180.4733	180.4733	0.0256		181.1139
Worker	0.0667	0.0130	0.1855	1.8000e-004	8.3300e-003	3.6000e-004	8.6900e-003	2.2800e-003	3.3000e-004	2.6100e-003		17.8356	17.8356	9.3000e-004		17.8588
Total	**0.0899**	**1.2376**	**0.3827**	**1.8900e-003**	**0.0128**	**5.4000e-004**	**0.0133**	**3.6200e-003**	**5.0000e-004**	**4.1200e-003**		**198.3089**	**198.3089**	**0.0266**		**198.9727**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1539**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**		**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

3.6 Paving - 2023

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	0.0247	4.8300e-003	0.0687	7.0000e-005	3.0800e-003	1.3000e-004	3.2200e-003	8.4000e-004	1.2000e-004	9.7000e-004		6.6058	6.6058	3.4000e-004		6.6144
Total	**0.0247**	**4.8300e-003**	**0.0687**	**7.0000e-005**	**3.0800e-003**	**1.3000e-004**	**3.2200e-003**	**8.4000e-004**	**1.2000e-004**	**9.7000e-004**		**6.6058**	**6.6058**	**3.4000e-004**		**6.6144**

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	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1539**	**8.7903**	**12.1905**	**0.0189**		**0.4357**	**0.4357**		**0.4025**	**0.4025**	**0.0000**	**1,805.4304**	**1,805.4304**	**0.5673**		**1,819.6122**

3.6 Paving - 2023

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	0.0247	4.8300e-003	0.0687	7.0000e-005	3.0800e-003	1.3000e-004	3.2200e-003	8.4000e-004	1.2000e-004	9.7000e-004		6.6058	6.6058	3.4000e-004		6.6144
Total	**0.0247**	**4.8300e-003**	**0.0687**	**7.0000e-005**	**3.0800e-003**	**1.3000e-004**	**3.2200e-003**	**8.4000e-004**	**1.2000e-004**	**9.7000e-004**		**6.6058**	**6.6058**	**3.4000e-004**		**6.6144**

3.7 Architectural Coating - 2023

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	21.9210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**22.1126**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.0148	2.9000e-003	0.0412	4.0000e-005	1.8500e-003	8.0000e-005	1.9300e-003	5.1000e-004	7.0000e-005	5.8000e-004		3.9635	3.9635	2.1000e-004		3.9686
Total	**0.0148**	**2.9000e-003**	**0.0412**	**4.0000e-005**	**1.8500e-003**	**8.0000e-005**	**1.9300e-003**	**5.1000e-004**	**7.0000e-005**	**5.8000e-004**		**3.9635**	**3.9635**	**2.1000e-004**		**3.9686**

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	21.9210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**22.1126**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.0148	2.9000e-003	0.0412	4.0000e-005	1.8500e-003	8.0000e-005	1.9300e-003	5.1000e-004	7.0000e-005	5.8000e-004		3.9635	3.9635	2.1000e-004		3.9686
Total	**0.0148**	**2.9000e-003**	**0.0412**	**4.0000e-005**	**1.8500e-003**	**8.0000e-005**	**1.9300e-003**	**5.1000e-004**	**7.0000e-005**	**5.8000e-004**		**3.9635**	**3.9635**	**2.1000e-004**		**3.9686**

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	1.2544	7.6666	14.3430	0.0667	5.2158	0.0361	5.2519	1.3952	0.0336	1.4288		6,823.8166	6,823.8166	0.2837		6,830.9099
Unmitigated	1.2544	7.6666	14.3430	0.0667	5.2158	0.0361	5.2519	1.3952	0.0336	1.4288		6,823.8166	6,823.8166	0.2837		6,830.9099

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	810.00	330.80	35.60	1,905,587	1,905,587
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	810.00	330.80	35.60	1,905,587	1,905,587

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Other Non-Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Parking Lot	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
NaturalGas Unmitigated	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726

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					
Junior College (2Yr)	1353.42	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1327**	**0.1115**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.2264**	**159.2264**	**3.0500e-003**	**2.9200e-003**	**160.1726**

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					
Junior College (2Yr)	1.35342	0.0146	0.1327	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.2264	159.2264	3.0500e-003	2.9200e-003	160.1726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1327**	**0.1115**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.2264**	**159.2264**	**3.0500e-003**	**2.9200e-003**	**160.1726**

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	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Unmitigated	0.9326	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1081					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-003	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Total	**0.9326**	**2.2000e-004**	**0.0238**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0511**	**0.0511**	**1.3000e-004**		**0.0544**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1081					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-003	2.2000e-004	0.0238	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0511	0.0511	1.3000e-004		0.0544
Total	**0.9326**	**2.2000e-004**	**0.0238**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0511**	**0.0511**	**1.3000e-004**		**0.0544**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center Operational

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	54.13	1000sqft	1.24	54,130.00	0
Other Non-Asphalt Surfaces	27.00	1000sqft	0.62	27,000.00	0
Parking Lot	264.00	1000sqft	6.06	264,000.00	0
User Defined Recreational	41.00	User Defined Unit	0.94	41,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% eligible renewables.

Land Use - Construction values not included in model. Operational output only.

Construction Phase - Construction values not included in model. Operational output only.

Off-road Equipment - Construction values not included in model. Operational output only.

Trips and VMT - Construction values not included in model. Operational output only.

Vehicle Trips - Weekday trip rate from traffic analysis. Weekend trip rates scaled based on CalEEMod default values and project-specific weekday trip rate.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values (no woodstoves or fireplaces).

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values for Non-Title 24 and Lighting. Adjustments to Title 24 values to reflect 2019 Title 24 compliance.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

RCCD Ben Clark Training Center Operational - South Coast AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	1.00
tblEnergyUse	T24E	1.97	1.76
tblEnergyUse	T24NG	13.82	13.68
tblLandUse	LandUseSquareFeet	0.00	41,000.00
tblLandUse	LotAcreage	0.00	0.94
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	63.00	0.00
tblTripsAndVMT	WorkerTripNumber	162.00	0.00
tblVehicleTrips	ST_TR	11.23	8.27
tblVehicleTrips	SU_TR	1.21	0.89
tblVehicleTrips	WD_TR	27.49	20.25

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	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**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2541	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Energy	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
Mobile	1.4894	7.1405	18.7908	0.0770	7.0392	0.0563	7.0955	1.8832	0.0523	1.9355		7,861.3847	7,861.3847	0.3584		7,870.3452
Total	**3.7653**	**7.3399**	**18.9974**	**0.0782**	**7.0392**	**0.0715**	**7.1108**	**1.8832**	**0.0676**	**1.9508**		**8,100.3217**	**8,100.3217**	**0.3632**	**4.3800e-003**	**8,110.7070**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2541	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Energy	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
Mobile	1.4894	7.1405	18.7908	0.0770	7.0392	0.0563	7.0955	1.8832	0.0523	1.9355		7,861.3847	7,861.3847	0.3584		7,870.3452
Total	**3.7653**	**7.3399**	**18.9974**	**0.0782**	**7.0392**	**0.0715**	**7.1108**	**1.8832**	**0.0676**	**1.9508**		**8,100.3217**	**8,100.3217**	**0.3632**	**4.3800e-003**	**8,110.7070**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/22/2021	4/22/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.68

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

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
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	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**

3.2 Building Construction - 2021

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	0.0000	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**

3.2 Building Construction - 2021

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**

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	1.4894	7.1405	18.7908	0.0770	7.0392	0.0563	7.0955	1.8832	0.0523	1.9355		7,861.3847	7,861.3847	0.3584		7,870.3452
Unmitigated	1.4894	7.1405	18.7908	0.0770	7.0392	0.0563	7.0955	1.8832	0.0523	1.9355		7,861.3847	7,861.3847	0.3584		7,870.3452

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	1,096.13	447.66	48.18	2,578,736	2,578,736
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	1,096.13	447.66	48.18	2,578,736	2,578,736

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845
Other Non-Asphalt Surfaces	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845
Parking Lot	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845
User Defined Recreational	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
NaturalGas Unmitigated	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718

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					
Junior College (2Yr)	2030.25	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**0.0219**	**0.1990**	**0.1672**	**1.1900e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**		**238.8524**	**238.8524**	**4.5800e-003**	**4.3800e-003**	**240.2718**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	2.03025	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**0.0219**	**0.1990**	**0.1672**	**1.1900e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**		**238.8524**	**238.8524**	**4.5800e-003**	**4.3800e-003**	**240.2718**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2541	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Unmitigated	2.2541	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9867					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6300e-003	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Total	**2.2541**	**3.6000e-004**	**0.0394**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0845**	**0.0845**	**2.2000e-004**		**0.0900**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9867					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6300e-003	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Total	**2.2541**	**3.6000e-004**	**0.0394**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0845**	**0.0845**	**2.2000e-004**		**0.0900**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center Operational

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	54.13	1000sqft	1.24	54,130.00	0
Other Non-Asphalt Surfaces	27.00	1000sqft	0.62	27,000.00	0
Parking Lot	264.00	1000sqft	6.06	264,000.00	0
User Defined Recreational	41.00	User Defined Unit	0.94	41,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% eligible renewables.

Land Use - Construction values not included in model. Operational output only.

Construction Phase - Construction values not included in model. Operational output only.

Off-road Equipment - Construction values not included in model. Operational output only.

Trips and VMT - Construction values not included in model. Operational output only.

Vehicle Trips - Weekday trip rate from traffic analysis. Weekend trip rates scaled based on CalEEMod default values and project-specific weekday trip rate.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values (no woodstoves or fireplaces).

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values for Non-Title 24 and Lighting. Adjustments to Title 24 values to reflect 2019 Title 24 compliance.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

RCCD Ben Clark Training Center Operational - South Coast AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	1.00
tblEnergyUse	T24E	1.97	1.76
tblEnergyUse	T24NG	13.82	13.68
tblLandUse	LandUseSquareFeet	0.00	41,000.00
tblLandUse	LotAcreage	0.00	0.94
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	63.00	0.00
tblTripsAndVMT	WorkerTripNumber	162.00	0.00
tblVehicleTrips	ST_TR	11.23	8.27
tblVehicleTrips	SU_TR	1.21	0.89
tblVehicleTrips	WD_TR	27.49	20.25

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	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**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2541	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Energy	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
Mobile	1.5748	7.0274	20.0923	0.0814	7.0392	0.0560	7.0952	1.8832	0.0521	1.9353		8,298.5321	8,298.5321	0.3581		8,307.4845
Total	**3.8508**	**7.2268**	**20.2989**	**0.0826**	**7.0392**	**0.0713**	**7.1105**	**1.8832**	**0.0673**	**1.9506**		**8,537.4691**	**8,537.4691**	**0.3629**	**4.3800e-003**	**8,547.8463**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2541	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Energy	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
Mobile	1.5748	7.0274	20.0923	0.0814	7.0392	0.0560	7.0952	1.8832	0.0521	1.9353		8,298.5321	8,298.5321	0.3581		8,307.4845
Total	**3.8508**	**7.2268**	**20.2989**	**0.0826**	**7.0392**	**0.0713**	**7.1105**	**1.8832**	**0.0673**	**1.9506**		**8,537.4691**	**8,537.4691**	**0.3629**	**4.3800e-003**	**8,547.8463**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/22/2021	4/22/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.68

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

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
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	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**

3.2 Building Construction - 2021

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	0.0000	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**

3.2 Building Construction - 2021

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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

RCCD Ben Clark Training Center Operational - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5748	7.0274	20.0923	0.0814	7.0392	0.0560	7.0952	1.8832	0.0521	1.9353		8,298.5321	8,298.5321	0.3581		8,307.4845
Unmitigated	1.5748	7.0274	20.0923	0.0814	7.0392	0.0560	7.0952	1.8832	0.0521	1.9353		8,298.5321	8,298.5321	0.3581		8,307.4845

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	1,096.13	447.66	48.18	2,578,736	2,578,736
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	1,096.13	447.66	48.18	2,578,736	2,578,736

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845
Other Non-Asphalt Surfaces	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845
Parking Lot	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845
User Defined Recreational	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
NaturalGas Unmitigated	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718

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					
Junior College (2Yr)	2030.25	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**0.0219**	**0.1990**	**0.1672**	**1.1900e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**		**238.8524**	**238.8524**	**4.5800e-003**	**4.3800e-003**	**240.2718**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	2.03025	0.0219	0.1990	0.1672	1.1900e-003		0.0151	0.0151		0.0151	0.0151		238.8524	238.8524	4.5800e-003	4.3800e-003	240.2718
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**0.0219**	**0.1990**	**0.1672**	**1.1900e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**		**238.8524**	**238.8524**	**4.5800e-003**	**4.3800e-003**	**240.2718**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2541	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Unmitigated	2.2541	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9867					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6300e-003	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Total	**2.2541**	**3.6000e-004**	**0.0394**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0845**	**0.0845**	**2.2000e-004**		**0.0900**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9867					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6300e-003	3.6000e-004	0.0394	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0845	0.0845	2.2000e-004		0.0900
Total	**2.2541**	**3.6000e-004**	**0.0394**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0845**	**0.0845**	**2.2000e-004**		**0.0900**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

RCCD Ben Clark Training Center Operational

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	54.13	1000sqft	1.24	54,130.00	0
Other Non-Asphalt Surfaces	27.00	1000sqft	0.62	27,000.00	0
Parking Lot	264.00	1000sqft	6.06	264,000.00	0
User Defined Recreational	41.00	User Defined Unit	0.94	41,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See section 1.0 Project Characteristics. GHG intensity factor adjusted for 2018 power content label assuming 36% eligible renewables.

Land Use - Construction values not included in model. Operational output only.

Construction Phase - Construction values not included in model. Operational output only.

Off-road Equipment - Construction values not included in model. Operational output only.

Trips and VMT - Construction values not included in model. Operational output only.

Vehicle Trips - Weekday trip rate from traffic analysis. Weekend trip rates scaled based on CalEEMod default values and project-specific weekday trip rate.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Vehicle Emission Factors - CalEEMod default values.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values (no woodstoves or fireplaces).

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values for Non-Title 24 and Lighting. Adjustments to Title 24 values to reflect 2019 Title 24 compliance.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

RCCD Ben Clark Training Center Operational - South Coast AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	1.00
tblEnergyUse	T24E	1.97	1.76
tblEnergyUse	T24NG	13.82	13.68
tblLandUse	LandUseSquareFeet	0.00	41,000.00
tblLandUse	LotAcreage	0.00	0.94
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	63.00	0.00
tblTripsAndVMT	WorkerTripNumber	162.00	0.00
tblVehicleTrips	ST_TR	11.23	8.27
tblVehicleTrips	SU_TR	1.21	0.89
tblVehicleTrips	WD_TR	27.49	20.25

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4112	4.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5800e-003	9.5800e-003	3.0000e-005	0.0000	0.0102
Energy	4.0000e-003	0.0363	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	169.8566	169.8566	6.0500e-003	1.8800e-003	170.5671
Mobile	0.2066	1.0289	2.7072	0.0111	0.9798	7.9500e-003	0.9877	0.2625	7.3900e-003	0.2699	0.0000	1,026.0902	1,026.0902	0.0458	0.0000	1,027.2346
Waste						0.0000	0.0000		0.0000	0.0000	14.2845	0.0000	14.2845	0.8442	0.0000	35.3892
Water						0.0000	0.0000		0.0000	0.0000	0.8423	20.7204	21.5627	0.0874	2.2300e-003	24.4099
Total	**0.6218**	**1.0653**	**2.7427**	**0.0113**	**0.9798**	**0.0107**	**0.9905**	**0.2625**	**0.0102**	**0.2727**	**15.1268**	**1,216.6768**	**1,231.8036**	**0.9834**	**4.1100e-003**	**1,257.6109**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4112	4.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5800e-003	9.5800e-003	3.0000e-005	0.0000	0.0102
Energy	4.0000e-003	0.0363	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	169.8566	169.8566	6.0500e-003	1.8800e-003	170.5671
Mobile	0.2066	1.0289	2.7072	0.0111	0.9798	7.9500e-003	0.9877	0.2625	7.3900e-003	0.2699	0.0000	1,026.0902	1,026.0902	0.0458	0.0000	1,027.2346
Waste						0.0000	0.0000		0.0000	0.0000	14.2845	0.0000	14.2845	0.8442	0.0000	35.3892
Water						0.0000	0.0000		0.0000	0.0000	0.8423	20.7204	21.5627	0.0874	2.2300e-003	24.4099
Total	**0.6218**	**1.0653**	**2.7427**	**0.0113**	**0.9798**	**0.0107**	**0.9905**	**0.2625**	**0.0102**	**0.2727**	**15.1268**	**1,216.6768**	**1,231.8036**	**0.9834**	**4.1100e-003**	**1,257.6109**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/22/2021	4/22/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.68

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

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
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	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**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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 Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2066	1.0289	2.7072	0.0111	0.9798	7.9500e-003	0.9877	0.2625	7.3900e-003	0.2699	0.0000	1,026.0902	1,026.0902	0.0458	0.0000	1,027.2346
Unmitigated	0.2066	1.0289	2.7072	0.0111	0.9798	7.9500e-003	0.9877	0.2625	7.3900e-003	0.2699	0.0000	1,026.0902	1,026.0902	0.0458	0.0000	1,027.2346

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	1,096.13	447.66	48.18	2,578,736	2,578,736
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	1,096.13	447.66	48.18	2,578,736	2,578,736

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
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845
Other Non-Asphalt Surfaces	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845
Parking Lot	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845
User Defined Recreational	0.550809	0.042355	0.203399	0.115606	0.014562	0.005806	0.021810	0.035336	0.002134	0.001736	0.004891	0.000712	0.000845

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.3119	130.3119	5.3000e-003	1.1500e-003	130.7874
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.3119	130.3119	5.3000e-003	1.1500e-003	130.7874
NaturalGas Mitigated	4.0000e-003	0.0363	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	39.5447	39.5447	7.6000e-004	7.2000e-004	39.7797
NaturalGas Unmitigated	4.0000e-003	0.0363	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	39.5447	39.5447	7.6000e-004	7.2000e-004	39.7797

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					
Junior College (2Yr)	741040	4.0000e-003	0.0363	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	39.5447	39.5447	7.6000e-004	7.2000e-004	39.7797
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**4.0000e-003**	**0.0363**	**0.0305**	**2.2000e-004**		**2.7600e-003**	**2.7600e-003**		**2.7600e-003**	**2.7600e-003**	**0.0000**	**39.5447**	**39.5447**	**7.6000e-004**	**7.2000e-004**	**39.7797**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	741040	4.0000e-003	0.0363	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	39.5447	39.5447	7.6000e-004	7.2000e-004	39.7797
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	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		**4.0000e-003**	**0.0363**	**0.0305**	**2.2000e-004**		**2.7600e-003**	**2.7600e-003**		**2.7600e-003**	**2.7600e-003**	**0.0000**	**39.5447**	**39.5447**	**7.6000e-004**	**7.2000e-004**	**39.7797**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	415177	106.5898	4.3300e-003	9.4000e-004	106.9787
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	92400	23.7222	9.6000e-004	2.1000e-004	23.8087
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**130.3119**	**5.2900e-003**	**1.1500e-003**	**130.7874**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	415177	106.5898	4.3300e-003	9.4000e-004	106.9787
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	92400	23.7222	9.6000e-004	2.1000e-004	23.8087
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**130.3119**	**5.2900e-003**	**1.1500e-003**	**130.7874**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4112	4.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5800e-003	9.5800e-003	3.0000e-005	0.0000	0.0102
Unmitigated	0.4112	4.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5800e-003	9.5800e-003	3.0000e-005	0.0000	0.0102

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	0.0481					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3626					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.5000e-004	4.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5800e-003	9.5800e-003	3.0000e-005	0.0000	0.0102
Total	**0.4112**	**4.0000e-005**	**4.9200e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.5800e-003**	**9.5800e-003**	**3.0000e-005**	**0.0000**	**0.0102**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0481					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3626					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.5000e-004	4.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5800e-003	9.5800e-003	3.0000e-005	0.0000	0.0102
Total	**0.4112**	**4.0000e-005**	**4.9200e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.5800e-003**	**9.5800e-003**	**3.0000e-005**	**0.0000**	**0.0102**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	21.5627	0.0874	2.2300e-003	24.4099
Unmitigated	21.5627	0.0874	2.2300e-003	24.4099

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	2.65502 / 4.15273	21.5627	0.0874	2.2300e-003	24.4099
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**21.5627**	**0.0874**	**2.2300e-003**	**24.4099**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	2.65502 / 4.15273	21.5627	0.0874	2.2300e-003	24.4099
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**21.5627**	**0.0874**	**2.2300e-003**	**24.4099**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.2845	0.8442	0.0000	35.3892
Unmitigated	14.2845	0.8442	0.0000	35.3892

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	70.37	14.2845	0.8442	0.0000	35.3892
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**14.2845**	**0.8442**	**0.0000**	**35.3892**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	70.37	14.2845	0.8442	0.0000	35.3892
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**14.2845**	**0.8442**	**0.0000**	**35.3892**

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

Table 1: Special Status Plant Species Potentially Occurring on the Project Site

Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia villosa var. aurita	chaparral sand-verbena	None/None/1B.1	Chaparral, Coastal scrub, Desert dunes; sandy/annual herb/(Jan)Mar–Sep/246–5,245	Not expected to occur. The project site lacks suitable habitat for this species.
Allium munzii	Munz's onion	FE/ST/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; mesic, clay/perennial bulbiferous herb/Mar–May/974–3,510	Not expected to occur. The project site lacks suitable habitat (mesic conditions or clay soils) for this species.
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; sandy loam or clay, often in disturbed areas, sometimes alkaline/perennial rhizomatous herb/Apr–Oct/66–1,360	Not expected to occur. The site is outside of the species' known elevation range.
Arenaria paludicola	marsh sandwort	FE/SE/1B.1	Marshes and swamps (freshwater or brackish); sandy, openings/perennial stoloniferous herb/May–Aug/10–560	Not expected to occur. The site is outside of the species' known elevation range.
Artemisia palmeri	San Diego sagewort	None/None/4.2	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland; sandy, mesic/perennial deciduous shrub/(Feb)May–Sep/49–3,000	Not expected to occur. The project site lacks suitable habitat for this species.
Asplenium vespertinum	western spleenwort	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub; rocky/perennial rhizomatous herb/Feb–June/591–3,280	Not expected to occur. The project site lacks suitable habitat for this species.
Astragalus hornii var. hornii	Horn's milk-vetch	None/None/1B.1	Meadows and seeps, Playas; lake margins, alkaline/annual herb/May–Oct/197–2,785	Not expected to occur. The project site lacks suitable habitat for this species.
Atriplex coronata var. notatior	San Jacinto Valley crownscale	FE/None/1B.1	Playas, Valley and foothill grassland (mesic), Vernal pools; alkaline/annual herb/Apr–Aug/456–1,640	Not expected to occur. The project site lacks suitable habitat (mesic conditions or alkaline soils for this species.
Atriplex pacifica	South Coast saltscale	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar–Oct/0–460	Not expected to occur. The site is outside of the species' known elevation range.
Atriplex parishii	Parish's brittlescale	None/None/1B.1	Chenopod scrub, Playas, Vernal pools; alkaline/annual herb/June–Oct/82–6,230	Not expected to occur. The project site lacks suitable habitat for this species.
Atriplex serenana var. davidsonii	Davidson's saltscale	None/None/1B.2	Coastal bluff scrub, Coastal scrub; alkaline/annual herb/Apr–Oct/33–655	Not expected to occur. The site is outside of the species' known elevation range.
Berberis nevinii	Nevin's barberry	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; sandy or gravelly/perennial evergreen shrub/(Feb)Mar–June/230–2,705	Not expected to occur. The project site lacks suitable habitat for this species.
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1	Chaparral (openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; often clay/perennial bulbiferous herb/Mar–June/82–3,670	Not expected to occur. The project site lacks suitable habitat (clay soils) for this species.

Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Calochortus plummerae	Plummer's mariposa lily	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland; granitic, rocky/perennial bulbiferous herb/May–July/328–5,575	Not expected to occur. The project site lacks suitable habitat (granitic or rocky soils) for this species.
Carex comosa	bristly sedge	None/None/2B.1	Coastal prairie, Marshes and swamps (lake margins), Valley and foothill grassland/perennial rhizomatous herb/May–Sep/0–2,050	Not expected to occur. The project site lacks suitable habitat (native grassland or mesic conditions) for this species.
Caulanthus simulans	Payson's jewelflower	None/None/4.2	Chaparral, Coastal scrub; sandy, granitic/annual herb/(Feb)Mar–May(June)/295–7,215	Not expected to occur. The project site lacks suitable habitat for this species.
Centromadia pungens ssp. laevis	smooth tarplant	None/None/1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; alkaline/annual herb/Apr–Sep/0–2,095	Moderate potential to occur. This species was documented 3.4 miles from the project site in 2013. The project site contains grassland vegetation but no seeps or playas. Species is known to occur in disturbed settings.
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	FE/SE/1B.2	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	Not expected to occur. The site is outside of the species' known elevation range.
Chorizanthe leptotheca	Peninsular spineflower	None/None/4.2	Chaparral, Coastal scrub, Lower montane coniferous forest; alluvial fan, granitic/annual herb/May–Aug/984–6,230	Not expected to occur. The project site lacks suitable habitat for this species.
Chorizanthe parryi var. parryi	Parry's spineflower	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; sandy or rocky, openings/annual herb/Apr–June/902–4,000	Not expected to occur. The project site lacks suitable habitat (sandy or rocky opening) for this species.
Chorizanthe polygonoides var. longispina	long-spined spineflower	None/None/1B.2	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; often clay/annual herb/Apr–July/98–5,015	Not expected to occur. The project site lacks suitable habitat (vernal pools or clay soils) for this species.
Convolvulus simulans	small-flowered morning-glory	None/None/4.2	Chaparral (openings), Coastal scrub, Valley and foothill grassland; clay, serpentinite seeps/annual herb/Mar–July/98–2,425	Not expected to occur. The project site lacks suitable habitat (clay or serpentine soils) for this species.
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	None/None/2B.2	Marshes and swamps (freshwater)/annual vine (parasitic)/July–Oct/49–920	Not expected to occur. The site is outside of the species' known elevation range.
Cylindropuntia californica var. californica	snake cholla	None/None/1B.1	Chaparral, Coastal scrub/perennial stem succulent/Apr–May/98–490	Not expected to occur. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Deinandra paniculata	paniculate tarplant	None/None/4.2	Coastal scrub, Valley and foothill grassland, Vernal pools; usually vernally mesic, sometimes sandy/annual herb/(Mar)Apr–Nov(Dec)/82–3,080	Moderate potential to occur. The project site contains grassland vegetation that could provide suitable habitat for this species; however vernal pools are absent from the project site. Species is known to occur in disturbed settings.
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub (alluvial fan); sandy/annual herb/Apr–June/656–2,490	Not expected to occur. The project site lacks suitable habitat for this species.
Dudleya multicaulis	many-stemmed dudleya	None/None/1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; often clay/perennial herb/Apr–July/49–2,590	Not expected to occur. The project site lacks suitable habitat (clay soils) for this species.
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	FE/SE/1B.1	Chaparral, Coastal scrub (alluvial fan); sandy or gravelly/perennial herb/Apr–Sep/299–2,000	Not expected to occur. The project site lacks suitable habitat for this species.
Galium californicum ssp. primum	Alvin Meadow bedstraw	None/None/1B.2	Chaparral, Lower montane coniferous forest; granitic, sandy/perennial herb/May–July/4,425–5,575	Not expected to occur. The site is outside of the species' known elevation range.
Harpagonella palmeri	Palmer's grapplinghook	None/None/4.2	Chaparral, Coastal scrub, Valley and foothill grassland; Clay; open grassy areas within shrubland/annual herb/Mar–May/66–3,130	Not expected to occur. The project site lacks suitable habitat (clay soils) for this species.
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	None/None/1A	Marshes and swamps (coastal salt and freshwater)/perennial rhizomatous herb/Aug–Oct/33–5,000	Not expected to occur. The project site lacks suitable habitat for this species.
Hordeum intercedens	vernal barley	None/None/3.2	Coastal dunes, Coastal scrub, Valley and foothill grassland (saline flats and depressions), Vernal pools/annual herb/Mar–June/16–3,280	Not expected to occur. The project site lacks suitable habitat (saline soils or depressions) for this species.
Horkelia cuneata var. puberula	mesa horkelia	None/None/1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; sandy or gravelly/perennial herb/Feb–July(Sep)/230–2,655	Not expected to occur. The project site lacks suitable habitat for this species.
Imperata brevifolia	California satintail	None/None/2B.1	Chaparral, Coastal scrub, Mojavean desert scrub, Meadows and seeps (often alkali), Riparian scrub; mesic/perennial rhizomatous herb/Sep–May/0–3,985	Not expected to occur. The project site lacks suitable habitat for this species.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None/None/1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb–June/3–4,000	Not expected to occur. The project site lacks suitable habitat for this species.
Lepidium virginicum	Robinson's pepper-grass	None/None/4.3	Chaparral, Coastal scrub/annual herb/Jan–July/3–2,900	Not expected to occur. The project site lacks suitable habitat for this species.

Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
var. robinsonii				
Lycium parishii	Parish's desert-thorn	None/None/2B.3	Coastal scrub, Sonoran desert scrub/perennial shrub/Mar–Apr/443–3,280	Not expected to occur. The project site lacks suitable habitat for this species.
Malacothamnus parishii	Parish's bush-mallow	None/None/1A	Chaparral, Coastal scrub/perennial deciduous shrub/June–July/1,000–1,490	Not expected to occur. The site is outside of the species' known elevation range.
Microseris douglasii ssp. platycarpha	small-flowered microseris	None/None/4.2	Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools; clay/annual herb/Mar–May/49–3,510	Not expected to occur. The project site lacks suitable habitat (clay soils) for this species.
Monardella pringlei	Pringle's monardella	None/None/1A	Coastal scrub (sandy)/annual herb/May–June/984–1,310	Not expected to occur. The site is outside of the species' known elevation range.
Myosurus minimus ssp. apus	little mousetail	None/None/3.1	Valley and foothill grassland, Vernal pools (alkaline)/annual herb/Mar–June/66–2,095	Not expected to occur. The project site lacks suitable habitat (alkaline soils) for this species.
Nasturtium gambelii	Gambel's water cress	FE/ST/1B.1	Marshes and swamps (freshwater or brackish)/perennial rhizomatous herb/Apr–Oct/16–1,080	Not expected to occur. The site is outside of the species' known elevation range.
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/98–2,145	Not expected to occur. The project site lacks suitable habitat for this species.
Phacelia stellaris	Brand's star phacelia	None/None/1B.1	Coastal dunes, Coastal scrub/annual herb/Mar–June/3–1,310	Not expected to occur. The site is outside of the species' known elevation range.
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; sandy, gravelly/perennial herb/(July)Aug–Nov(Dec)/0–6,885	Not expected to occur. The project site lacks suitable habitat for this species.
Ribes divaricatum var. parishii	Parish's gooseberry	None/None/1A	Riparian woodland/perennial deciduous shrub/Feb–Apr/213–985	Not expected to occur. The site is outside of the species' known elevation range.
Romneya coulteri	Coulter's matilija poppy	None/None/4.2	Chaparral, Coastal scrub; Often in burns/perennial rhizomatous herb/Mar–July(Aug)/66–3,935	Not expected to occur. The project site lacks suitable habitat for this species.
Senecio aphanactis	chaparral ragwort	None/None/2B.2	Chaparral, Cismontane woodland, Coastal scrub; sometimes alkaline/annual herb/Jan–Apr(May)/49–2,620	Not expected to occur. The project site lacks suitable habitat for this species.
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar–June/49–5,015	Not expected to occur. The project site lacks suitable habitat for this species.

Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Sphenopholis obtusata	prairie wedge grass	None/None/2B.2	Cismontane woodland, Meadows and seeps; mesic/perennial herb/Apr–July/984–6,560	Not expected to occur. The project site lacks suitable habitat for this species.
Symphyotrichum defoliatum	San Bernardino aster	None/None/1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland (vernally mesic); near ditches, streams, springs/perennial rhizomatous herb/July–Nov(Dec)/7–6,690	Not expected to occur. The project site lacks suitable habitat (vernally mesic conditions) for this species.
Texosporium sancti-jacobi	woven-spored lichen	None/None/3	Chaparral (openings); On soil, small mammal pellets, dead twigs, and on Selaginella spp/crustose lichen (terricolous)/N.A./197–2,165	Not expected to occur. The project site lacks suitable habitat for this species.
Trichocoronis wrightii var. wrightii	Wright's trichocoronis	None/None/2B.1	Meadows and seeps, Marshes and swamps, Riparian forest, Vernal pools; alkaline/annual herb/May–Sep/16–1,425	Not expected to occur. The site is outside of the species' known elevation range.

Table 2: Special Status Wildlife Species Potentially Occurring on the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Amphibians				
Rana muscosa	mountain yellow-legged frog	FE/SE, WL	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral	Not expected to occur. No suitable vegetation present.
Spea hammondii	western spadefoot	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	Low potential to occur. This species was documented in 2017 approximately 1.8 miles north east from the project site (CNDDB). However, no ephemeral wetlands were identified onsite.
Reptiles				
Actinemys marmorata	northwestern pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. No suitable vegetation present.
Anniella stebbinsi	southern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Not expected to occur. No suitable vegetation present.
Arizona elegans occidentalis	California glossy snake	None/SSC	Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas.	Not expected to occur. No suitable vegetation present.
Aspidoscelis hyperythra	orange-throated whiptail	None/WL	Low-elevation coastal scrub, chaparral, and valley–foothill hardwood	Not expected to occur. Though this species has been documented within approximately 4 miles of the project site with the most recent documentation in 1989 (CNDDB), the project site lacks suitable habitat for this species.
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	Not expected to occur. No suitable vegetation present.
Coleonyx variegatus abbotti	San Diego banded gecko	None/SSC	Rocky areas within coastal scrub and chaparral	Not expected to occur. No suitable vegetation present.
Crotalus ruber	red diamondback rattlesnake	None/SSC	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Low potential to occur. Limited suitable vegetation present and site is isolated from larger habitat areas.

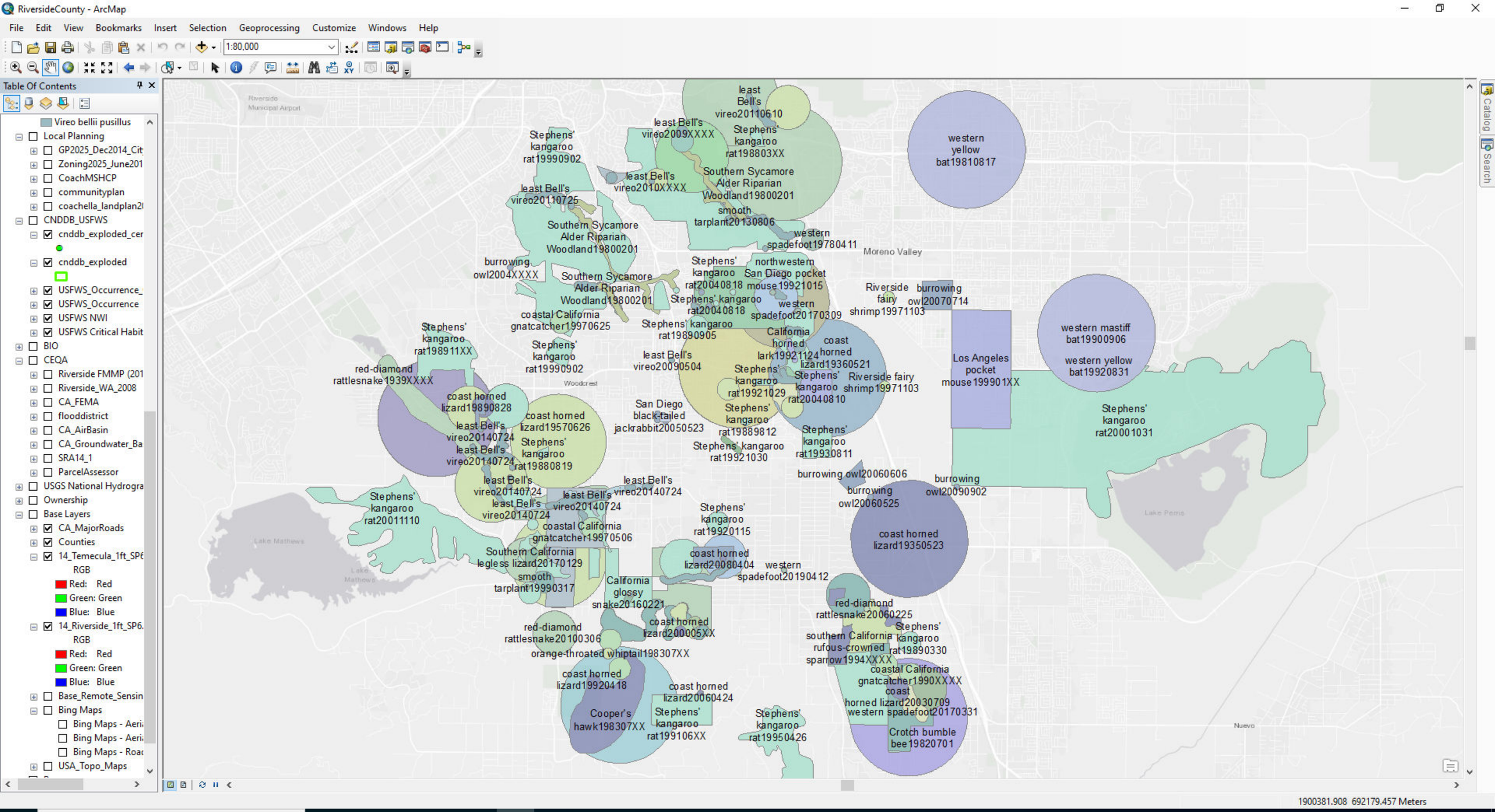
Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Diadophis punctatus modestus	San Bernardino ring-necked snake	None/None	Moist habitats including wet meadows, rocky hillsides, gardens, farmland grassland, chaparral, mixed-conifer forest, and woodland	Not expected to occur. No suitable habitat (moist conditions) present.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Low potential to occur. No suitable vegetation present.
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Not expected to occur. No suitable vegetation present.
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. No suitable vegetation present.
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	Not expected to occur. No suitable vegetation present.
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	Not expected to occur. No suitable nesting habitat present.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	Not expected to occur. No suitable vegetation present.
Artemisiospiza belli belli	Bell's sage sparrow	BCC/WL	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	Not expected to occur. No suitable vegetation present.
Asio otus (nesting)	long-eared owl	None/SSC	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats	Not expected to occur. No suitable vegetation present.
Athene cunicularia (burrow sites & some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Moderate potential to occur. This species was documented approximately 1.7 miles north west of the project site in 2006 (CNDDB). Ground squirrels activity was observed onsite.
Buteo regalis (wintering)	ferruginous hawk	BCC/WL	Winters and forages in open, dry country, grasslands, open fields, agriculture	Not expected to nest onsite. This species may forage on site but the site lacks suitable nesting habitat for this species.
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and	Not expected to nest onsite. Vegetation onsite is not

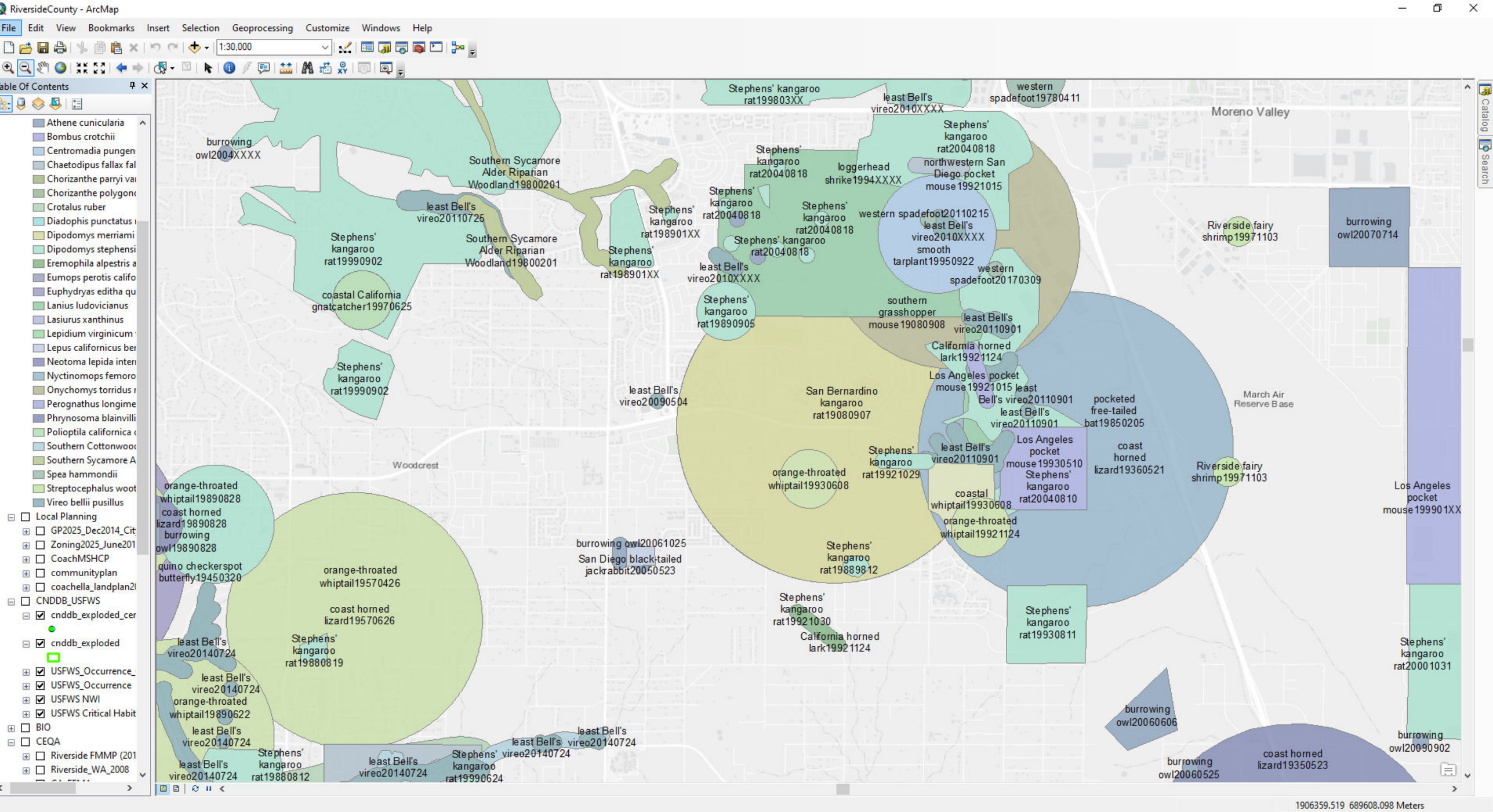
Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
			agricultural areas such as wheat and alfalfa fields and pasture	suitable for nesting given surrounding urbanization.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT, BCC/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. No suitable vegetation present.
Coturnicops noveboracensis	yellow rail	BCC/SSC	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	Not expected to occur. No suitable vegetation present.
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Not expected to nest onsite. No suitable nesting vegetation present.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. No suitable vegetation present.
Eremophila alpestris actia	California horned lark	None/WL	This subspecies of horned lark occurs on the state's southern and central coastal slope and in the San Joaquin Valley. Nests and forages in grasslands, disturbed lands, agriculture, and beaches.	Moderate potential to occur. This species was documented approximate 1 mile northeast of the project site in 1992 (CNDDB).
Falco columbarius (wintering)	merlin	None/WL	Forages in semi-open areas, including coastline, grassland, agriculture, savanna, woodland, lakes, and wetlands	Not expected to nest onsite. Limited suitable vegetation present.
Haliaeetus leucocephalus (nesting & wintering)	bald eagle	FDL, BCC/FP, SE	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	Not expected to occur. No suitable vegetation present.
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	Not expected to occur. No suitable vegetation present.
Lanius ludovicianus (nesting)	loggerhead shrike	BCC/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Low potential to occur. This species has been documented approximately 1.2 miles north of the project site in 1994(CNDDB).
Laterallus jamaicensis coturniculus	California black rail	BCC/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	Not expected to occur. No suitable vegetation present.
Pandion haliaetus (nesting)	osprey	None/WL	Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats, but widely observed along the coast	Not expected to occur. No suitable vegetation present.

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur. Though this species was documented within approximately 2 miles of the project site in 1997 (CNDDB), the project site lacks suitable vegetation for this species.
Setophaga petechia (nesting)	yellow warbler	BCC/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Not expected to occur. No suitable vegetation present.
Spinus lawrencei (nesting)	Lawrence's goldfinch	BCC/None	Nests and forages in open oak, arid woodlands, and chaparral near water	Not expected to occur. No suitable vegetation present.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. Though this species was documented in 2009, 2010, and 2011 in close proximity to the project site (CNDDB), there is no suitable habitat for this species present within the study area.
Fishes				
Catostomus santaanae	Santa Ana sucker	FT/None	Small, shallow, cool, clear streams less than 7 meters (23 feet) in width and a few centimeters to more than a meter (1.5 inches to more than 3 feet) in depth; substrates are generally coarse gravel, rubble, and boulder	Not expected to occur. No suitable stream habitat present.
Gila orcuttii	arroyo chub	None/SSC	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths >40 centimeters (16 inches); substrates of sand or mud	Not expected to occur. No suitable stream habitat present.
Oncorhynchus mykiss irideus pop. 10	southern steelhead - southern California DPS	FE/None	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn	Not expected to occur. No suitable stream habitat present.
Rhinichthys osculus ssp. 3	Santa Ana speckled dace	None/SSC	Headwaters of the Santa Ana and San Gabriel Rivers; may be extirpated from the Los Angeles River system	Not expected to occur. No suitable headwater habitat present.
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Low potential to roost and forage. The open, dry disturbed areas on site may provide suitable foraging habitat for this species.

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland	Low potential to occur. No suitable scrub habitat present.
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE/SSC, PSE	Sparse scrub habitat, alluvial scrub/coastal scrub habitats on gravelly and sandy soils near river and stream terraces	Not expected to occur. No suitable vegetation present.
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	Low potential to occur. This species has been documented multiple times in close proximity to the project site with the most recent nearby documentation in 2004. However, there are no dry desert washes or drainages on site, limiting the potential for this species to occur.
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Not expected to occur. No suitable vegetation present.
Lasiurus xanthinus	western yellow bat	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	Not expected to occur. No suitable vegetation present.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/SSC	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Moderate potential to occur. This species was documented within approximately 2 miles of the project site in 2005.
Myotis yumanensis	Yuma myotis	None/None	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees	Not expected to occur. No suitable habitat present.
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Not expected to occur. No suitable vegetation present.
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Not expected to occur. No suitable vegetation present.
Onychomys torridus ramona	southern grasshopper mouse	None/SSC	Grassland and sparse coastal scrub	Low potential to occur. The majority of the project site does not contain suitable habitat for this species.

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None/SSC	Lower-elevation grassland, alluvial sage scrub, and coastal scrub	Low potential to occur. Though this species was documented within 1 mile of the project site in 1993, the project site lacks suitable habitat for this species.
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. Limited suitable vegetation present and existing urbanization likely precludes species occurrence onsite.
Invertebrates				
Bombus crotchii	Crotch bumble bee	None/PSE	Open grassland and scrub communities supporting suitable floral resources.	Low potential to occur. The grassland habitat on site has been significantly disturbed.
Carolella busckana	Busck's gallmoth	None/None	Coastal scrub dunes	Not expected to occur. No suitable vegetation present.
Ceratochrysis longimala	Desert cuckoo wasp	None/None	(blank)	Not expected to occur. No suitable vegetation present.
Cicindela tranquebarica viridissima	greenest tiger beetle	None/None	Inhabits the woodlands adjacent to the Santa Ana River basin	Not expected to occur. No suitable vegetation present.
Euphydryas editha quino	quino checkerspot butterfly	FE/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include Plantago erecta, Antirrhinum coulterianum, and Plantago patagonica (Silverado Occurrence Complex)	Not expected to occur. No suitable vegetation present. There was no plantago observed. There are no areas for hilltopping and it is outside the survey area for Quino.
Neolarra alba	white cuckoo bee	None/None	Known only from 6 historical localities in Southern California; has not been collected since 1946	Not expected to occur. No suitable vegetation present.
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	FE/None	Delhi fine sandy soils and dunes, scrub and ruderal vegetation in the sand verbena series with <50% cover	Not expected to occur. No suitable vegetation present.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No suitable habitat present.


RiversideCounty - ArcMap
File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
1:80,000
Table Of Contents
Vireo bellii pusillus
Local Planning
GP2025_Dec2014_Cit
Zoning2025_June201
CoachMSHCP
communityplan
coachella_landplan2
CNDDB_USFWS
cnddb_exploded_cer
cnddb_exploded
USFWS_Occurrence_
USFWS_Occurrence
USFWS NWI
USFWS Critical Habit
BIO
CEQA
Riverside FMMP (201
Riverside_WA_2008
CA_FEMA
flooddistrict
CA_AirBasin
CA_Groundwater_Ba
SRA14_1
ParcelAssessor
USGS National Hydrogra
Ownership
Base Layers
CA_MajorRoads
Counties
14_Temecula_1ft_SP6
RGB
Red: Red
Green: Green
Blue: Blue
14_Riverside_1ft_SP6.
RGB
Red: Red
Green: Green
Blue: Blue
Base_Remote_Sensin
Bing Maps
Bing Maps - Aeri
Bing Maps - Aeri
Bing Maps - Roac
USA_Topo_Maps
Riverside Municipal Airport
Moreno Valley
Woodcrest
Lake Mathews
Lake Perris
Nuevo
least Bell's vireo20110610
Stephens' kangaroo rat19990902
least Bell's vireo2009XXXX
Stephens' kangaroo rat198803XX
western yellow bat19810817
least Bell's vireo2010XXXX
Southern Sycamore Alder Riparian Woodland19800201
least Bell's vireo20110725
smooth tarplant20130806
western spadefoot19780411
Southern Sycamore Alder Riparian Woodland19800201
burrowing owl2004XXXX
Stephens' kangaroo rat20040818
northwestern San Diego pocket mouse19921015
Southern Sycamore Alder Riparian Woodland19800201
Stephens' kangaroo rat20040818
western spadefoot20170309
Riverside fairy shrimp19971103
burrowing owl20070714
coastal California gnatcatcher19970625
Stephens' kangaroo rat19890905
California horned lark19921124
coast horned lizard19360521
western mastiff bat19900906
western yellow bat19920831
Stephens' kangaroo rat198911XX
Stephens' kangaroo rat19990902
least Bell's vireo20090504
Los Angeles pocket mouse199901XX
red-diamond rattlesnake1939XXXX
Stephens' kangaroo rat19921029
Stephens' kangaroo rat20040810
Riverside fairy shrimp19971103
coast horned lizard19890828
San Diego black-tailed jackrabbit20050523
Stephens' kangaroo rat20001031
coast horned lizard19570626
Stephens' kangaroo rat19889812
least Bell's vireo20140724
Stephens' kangaroo rat19880819
Stephens' kangaroo rat19921030
Stephens' kangaroo rat19930811
least Bell's vireo20140724
burrowing owl20060606
burrowing owl20060525
burrowing owl20090902
Stephens' kangaroo rat20011110
least Bell's vireo20140724
least Bell's vireo20140724
Stephens' kangaroo rat19920115
coastal California gnatcatcher19970506
coast horned lizard19350523
coast horned lizard20080404
western spadefoot20190412
Southern California legless lizard20170129
smooth tarplant19990317
California glossy snake20160221
red-diamond rattlesnake20060225
Stephens' kangaroo rat19890330
red-diamond rattlesnake20100306
coast horned lizard200005XX
southern California rufous-crowned sparrow1994XXXX
orange-throated whiptail198307XX
coastal California gnatcatcher1990XXXX
coast horned lizard19920418
coast horned lizard20060424
coast horned lizard20030709
western spadefoot20170331
Cooper's hawk198307XX
Stephens' kangaroo rat199106XX
Stephens' kangaroo rat19950426
Crotch bumble bee19820701
1900381.908 692179.457 Meters
Type here to search
1:54 PM
12/23/2020


RiversideCounty - ArcMap
File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
1:30,000
able Of Contents
Athene cunicularia
Bombus crotchii
Centromadia pungen
Chaetodipus fallax fal
Chorizanthe parryi var
Chorizanthe polygonc
Crotalus ruber
Diadophis punctatus
Dipodomys merriami
Dipodomys stephensi
Eremophila alpestris a
Eumops perotis califo
Euphydryas editha qu
Lanius ludovicianus
Lasiurus xanthinus
Lepidium virginicum
Lepus californicus ber
Neotoma lepida inter
Nyctinomops femoro
Onychomys torridus
Perognathus longime
Phrynosoma blainvilli
Polioptila californica
Southern Cottonwoo
Southern Sycamore A
Spea hammondii
Streptocephalus woot
Vireo bellii pusillus
Local Planning
GP2025_Dec2014_Cit
Zoning2025_June201
CoachMSHCP
communityplan
coachella_landplan2
CNDDB_USFWS
cnddb_exploded_cer
cnddb_exploded
USFWS_Occurrence_
USFWS_Occurrence
USFWS NWI
USFWS Critical Habit
BIO
CEQA
Riverside FMMP (201
Riverside_WA_2008
Stephens' kangaroo rat199803XX
least Bell's vireo2010XXXX
western spadefoot19780411
Moreno Valley
burrowing owl2004XXXX
Southern Sycamore Alder Riparian Woodland19800201
Stephens' kangaroo rat20040818
loggerhead shrike1994XXXX
northwestern San Diego pocket mouse19921015
least Bell's vireo20110725
Stephens' kangaroo rat198901XX
western spadefoot20110215
least Bell's vireo2010XXXX
smooth tarplant19950922
Riverside fairy shrimp19971103
burrowing owl20070714
Stephens' kangaroo rat19990902
Southern Sycamore Alder Riparian Woodland19800201
Stephens' kangaroo rat198901XX
Stephens' kangaroo rat20040818
least Bell's vireo2010XXXX
western spadefoot20170309
coastal California gnatcatcher19970625
Stephens' kangaroo rat19890905
southern grasshopper mouse19080908
least Bell's vireo20110901
California horned lark19921124
Stephens' kangaroo rat19990902
Los Angeles pocket mouse19921015
least Bell's vireo20110901
least Bell's vireo20090504
San Bernardino kangaroo rat19080907
pocketed free-tailed bat19850205
least Bell's vireo20110901
March Air Reserve Base
Woodcrest
Stephens' kangaroo rat19921029
least Bell's vireo20110901
Los Angeles pocket mouse19930510
coast horned lizard19360521
orange-throated whiptail19930608
Stephens' kangaroo rat20040810
Riverside fairy shrimp19971103
orange-throated whiptail19890828
coast horned lizard19890828
burrowing owl19890828
coastal whiptail19930608
orange-throated whiptail19921124
Los Angeles pocket mouse199901XX
quino checkerspot butterfly19450320
burrowing owl20061025
San Diego black-tailed jackrabbit20050523
Stephens' kangaroo rat19889812
orange-throated whiptail19570426
Stephens' kangaroo rat19921030
Stephens' kangaroo rat19930811
coast horned lizard19570626
California horned lark19921124
Stephens' kangaroo rat20001031
least Bell's vireo20140724
Stephens' kangaroo rat19880819
least Bell's vireo20140724
orange-throated whiptail19890622
burrowing owl20060606
least Bell's vireo20140724
least Bell's vireo20140724
burrowing owl20090902
least Bell's vireo20140724
Stephens' kangaroo rat19880812
least Bell's vireo20140724
least Bell's vireo20140724
Stephens' kangaroo rat19990624
burrowing owl20060525
coast horned lizard19350523
1906359.519 689608.098 Meters
Type here to search
1:56 PM
12/23/2020

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Fontana (3411714) OR San Bernardino South (3411713) OR Redlands (3411712) OR Riverside West (3311784) OR Sunnymead (3311782) OR Lake Mathews (3311774) OR Perris (3311772) OR Steele Peak (3311773) OR Riverside East (3311783))

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
Abronia villosa var. aurita	chaparral sand-verbena	Dicots	PDNYC010P1	98	3	None	None	G5T2?	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Desert dunes
Accipiter cooperii	Cooper's hawk	Birds	ABNKC12040	118	4	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	7	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	28	None	None	G5T3	S3	null	CDFW_WL-Watch List	Chaparral, Coastal scrub
Allium munzii	Munz's onion	Monocots	PMLIL022Z0	21	6	Endangered	Threatened	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub, Pinon & juniper woodlands, Valley & foothill grassland
Ambrosia pumila	San Diego ambrosia	Dicots	PDAST0C0M0	59	1	Endangered	None	G1	S1	1B.1	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, Coastal scrub, Valley & foothill grassland
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	417	47	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	1	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
Arenaria paludicola	marsh sandwort	Dicots	PDCAR040L0	16	1	Endangered	Endangered	G1	S1	1B.1	SB_SBBG-Santa Barbara Botanic Garden	Freshwater marsh, Marsh & swamp, Wetland
Arizona elegans occidentalis	California glossy snake	Reptiles	ARADB01017	260	16	None	None	G5T2	S2	null	CDFW_SSC-Species of Special Concern	null
Artemisiospiza belli belli	Bell's sage sparrow	Birds	ABPBX97021	61	7	None	None	G5T2T3	S3	null	CDFW_WL-Watch List, USFWS_BCC-Birds of	Chaparral, Coastal scrub

											Conservation Concern	
Asio otus	long-eared owl	Birds	ABNSB13010	48	2	None	None	G5	S3?	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Cismontane woodland, Great Basin scrub, Riparian forest, Riparian woodland, Upper montane coniferous forest
Aspidoscelis hyperythra	orange-throated whiptail	Reptiles	ARACJ02060	369	42	None	None	G5	S2S3	null	CDFW_WL-Watch List, IUCN_LC-Least Concern, USFS_S-Sensitive	Chaparral, Cismontane woodland, Coastal scrub
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	ARACJ02143	148	15	None	None	G5T5	S3	null	CDFW_SSC-Species of Special Concern	null
Astragalus hornii var. hornii	Horn's milk-vetch	Dicots	PDFAB0F421	28	1	None	None	GUT1	S1	1B.1	BLM_S-Sensitive	Alkali playa, Meadow & seep, Wetland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	2011	29	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
Atriplex coronata var. notatior	San Jacinto Valley crownscale	Dicots	PDCHE040C2	16	4	Endangered	None	G4T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Alkali playa, Valley & foothill grassland, Vernal pool, Wetland
Atriplex parishii	Parish's brittlescale	Dicots	PDCHE041D0	15	2	None	None	G1G2	S1	1B.1	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive	Alkali playa, Chenopod scrub, Meadow & seep, Vernal pool, Wetland
Atriplex serenana var. davidsonii	Davidson's saltscale	Dicots	PDCHE041T1	27	2	None	None	G5T1	S1	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal bluff scrub, Coastal scrub
Berberis nevinii	Nevin's barberry	Dicots	PDBER060A0	32	4	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	369	9	None	Candidate Endangered	G3G4	S1S2	null	null	null
Brodiaea filifolia	thread-leaved brodiaea	Monocots	PMLIL0C050	136	5	Threatened	Endangered	G2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
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
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2535	2	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Calochortus plummerae	Plummer's mariposa-lily	Monocots	PMLIL0D150	230	5	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
Carex comosa	bristly sedge	Monocots	PMCYP032Y0	29	1	None	None	G5	S2	2B.1	null	Coastal prairie, Freshwater marsh, Marsh & swamp, Valley & foothill grassland, Wetland

Carolella busckana	Busck's gallmoth	Insects	IILEM2X090	4	2	None	None	G1G3	SH	null	null	Coastal dunes, Coastal scrub
Catostomus santaanae	Santa Ana sucker	Fish	AFCJC02190	28	5	Threatened	None	G1	S1	null	AFS_TH-Threatened, IUCN_VU-Vulnerable	Aquatic, South coast flowing waters
Caulanthus simulans	Payson's jewelflower	Dicots	PDBRA0M0H0	31	1	None	None	G4	S4	4.2	USFS_S-Sensitive	Chaparral, Coastal scrub
Centromadia pungens ssp. laevis	smooth tarplant	Dicots	PDAST4R0R4	126	28	None	None	G3G4T2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Alkali playa, Chenopod scrub, Meadow & seep, Riparian woodland, Valley & foothill grassland, Wetland
Ceratochrysis longimala	Desert cuckoo wasp	Insects	IIHYM71040	2	1	None	None	G1	S1	null	null	null
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	Mammals	AMAFD05031	101	32	None	None	G5T3T4	S3S4	null	CDFW_SSC-Species of Special Concern	Chaparral, Coastal scrub
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	PDSCR0J0C2	30	1	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	22	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
Chorizanthe polygonoides var. longispina	long-spined spineflower	Dicots	PDPGN040K1	166	16	None	None	G5T3	S3	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, Coastal scrub, Meadow & seep, Ultramafic, Valley & foothill grassland, Vernal pool
Cicindela tranquebarica viridissima	greenest tiger beetle	Insects	IICOL02201	1	1	None	None	G5T1	S1	null	null	Riparian woodland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	165	4	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Riparian forest
Coleonyx variegatus abbotti	San Diego banded gecko	Reptiles	ARACD01031	8	1	None	None	G5T3T4	S1S2	null	CDFW_SSC-Species of Special Concern	Chaparral, Coastal scrub
Coturnicops noveboracensis	yellow rail	Birds	ABNME01010	45	1	None	None	G4	S1S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Meadow & seep
Crotalus ruber	red-diamond rattlesnake	Reptiles	ARADE02090	192	53	None	None	G4	S3	null	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Chaparral, Mojavean desert scrub, Sonoran desert scrub
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Dicots	PDCUS01111	6	1	None	None	G5T4?	SH	2B.2	null	Marsh & swamp, Wetland
Diadophis punctatus modestus	San Bernardino ringneck snake	Reptiles	ARADB10015	14	1	None	None	G5T2T3	S2?	null	USFS_S-Sensitive	null
Dipodomys merriami parvus	San Bernardino kangaroo rat	Mammals	AMAFD03143	81	20	Endangered	Candidate Endangered	G5T1	S1	null	CDFW_SSC-Species of Special Concern	Coastal scrub
Dipodomys stephensi	Stephens' kangaroo rat	Mammals	AMAFD03100	220	83	Endangered	Threatened	G2	S2	null	IUCN_EN-Endangered	Coastal scrub, Valley & foothill grassland
Dodecahema leptoceras	slender-horned spineflower	Dicots	PDPGN0V010	41	7	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho	Chaparral, Cismontane

											Santa Ana Botanic Garden	woodland, Coastal scrub
Dudleya multicaulis	many-stemmed dudleya	Dicots	PDCRA040H0	154	8	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Valley & foothill grassland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	180	1	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
Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	70	1	Endangered	Endangered	G5T2	S1	null	NABCI_RWL-Red Watch List	Riparian woodland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1398	2	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	4	None	None	G5T4Q	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Marine intertidal & splash zone communities, Meadow & seep
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Dicots	PDPLM03035	31	18	Endangered	Endangered	G4T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Coastal scrub
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	296	9	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	8	Endangered	None	G5T1T2	S1S2	null	null	Chaparral, Coastal scrub
Falco columbarius	merlin	Birds	ABNKD06030	37	1	None	None	G5	S3S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Estuary, Great Basin grassland, Valley & foothill grassland
Galium californicum ssp. primum	Alvin Meadow bedstraw	Dicots	PDRUB0N0E6	12	1	None	None	G5T2	S2	1B.2	USFS_S-Sensitive	Chaparral, Lower montane coniferous forest
Gila orcuttii	arroyo chub	Fish	AFCJB13120	49	5	None	None	G2	S2	null	AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Aquatic, South coast flowing waters
Haliaeetus leucocephalus	bald eagle	Birds	ABNKC10010	329	5	Delisted	Endangered	G5	S3	null	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Lower montane coniferous forest, Oldgrowth
Harpagonella palmeri	Palmer's grapplinghook	Dicots	PDBOR0H010	57	3	None	None	G4	S3	4.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, Coastal scrub, Valley & foothill grassland
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Dicots	PDAST4N102	7	1	None	None	G5TX	SX	1A	null	Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
Horkelia cuneata	mesa horkelia	Dicots	PDROS0W045	103	4	None	None	G4T1	S1	1B.1	USFS_S-Sensitive	Chaparral,

var. puberula												Cismontane woodland, Coastal scrub
Icteria virens	yellow-breasted chat	Birds	ABPBX24010	100	5	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Imperata brevifolia	California satintail	Monocots	PMPOA3D020	32	1	None	None	G4	S3	2B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Meadow & seep, Mojavean desert scrub, Riparian scrub, Wetland
Lanius ludovicianus	loggerhead shrike	Birds	ABPBR01030	110	2	None	None	G4	S4	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest, Desert wash, Joshua tree woodland, Mojavean desert scrub, Pinon & juniper woodlands, Riparian woodland, Sonoran desert scrub
Lasiurus xanthinus	western yellow bat	Mammals	AMACC05070	58	9	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_H-High Priority	Desert wash
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	111	10	None	None	G4T2	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Alkali playa, Marsh & swamp, Salt marsh, Vernal pool, Wetland
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	303	2	None	Threatened	G3G4T1	S1	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_NT-Near Threatened, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Brackish marsh, Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Dicots	PDBRA1M114	142	11	None	None	G5T3	S3	4.3	null	Chaparral, Coastal scrub
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	AMAEB03051	103	14	None	None	G5T3T4	S3S4	null	CDFW_SSC-Species of Special Concern	Coastal scrub
Lycium parishii	Parish's desert-thorn	Dicots	PDSOL0G0D0	21	1	None	None	G4	S1	2B.3	null	Coastal scrub, Sonoran desert scrub
Malacothamnus parishii	Parish's bush-mallow	Dicots	PDMAL0Q0C0	1	1	None	None	GXQ	SX	1A	null	Chaparral, Coastal scrub
Monardella pringlei	Pringle's monardella	Dicots	PDLAM180J0	2	2	None	None	GX	SX	1A	null	Coastal scrub
Myosurus minimus ssp. apus	little mousetail	Dicots	PDRAN0H031	24	1	None	None	G5T2Q	S2	3.1	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Valley & foothill grassland, Vernal pool, Wetland
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
Nasturtium gambelii	Gambel's water cress	Dicots	PDBRA270V0	13	1	Endangered	Threatened	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Brackish marsh, Freshwater marsh, Marsh & swamp, Wetland
Navarretia fossalis	spreading navarretia	Dicots	PDPLM0C080	78	7	Threatened	None	G2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Alkali playa, Chenopod scrub, Marsh & swamp, Vernal pool, Wetland
Neolarra alba	white cuckoo bee	Insects	IIHYM81010	8	4	None	None	GH	SH	null	null	null

Neotoma lepida intermedia	San Diego desert woodrat	Mammals	AMAFF08041	132	3	None	None	G5T3T4	S3S4	null	CDFW_SSC-Species of Special Concern	Coastal scrub
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	AMACD04010	90	4	None	None	G4	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_M-Medium Priority	Joshua tree woodland, Pinon & juniper woodlands, Riparian scrub, Sonoran desert scrub
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	Fish	AFCHA0209J	20	1	Endangered	None	G5T1Q	S1	null	AFS_EN-Endangered	Aquatic, South coast flowing waters
Onychomys torridus ramona	southern grasshopper mouse	Mammals	AMAFF06022	28	3	None	None	G5T3	S3	null	CDFW_SSC-Species of Special Concern	Chenopod scrub
Pandion haliaetus	osprey	Birds	ABNKC01010	504	1	None	None	G5	S4	null	CDF_S-Sensitive, CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest
Perognathus longimembris brevinasus	Los Angeles pocket mouse	Mammals	AMAFD01041	70	12	None	None	G5T1T2	S1S2	null	CDFW_SSC-Species of Special Concern	Coastal scrub
Phacelia stellaris	Brand's star phacelia	Dicots	PDHYD0C510	15	1	None	None	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal dunes, Coastal scrub
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	784	29	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	907	56	Threatened	None	G4G5T2Q	S2	null	CDFW_SSC-Species of Special Concern, NABCI_YWL-Yellow Watch List	Coastal bluff scrub, Coastal scrub
Pseudognaphalium leucocephalum	white rabbit-tobacco	Dicots	PDAST440C0	62	3	None	None	G4	S2	2B.2	null	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland
Rana muscosa	southern mountain yellow-legged frog	Amphibians	AAABH01330	186	1	Endangered	Endangered	G1	S1	null	CDFW_WL-Watch List, IUCN_EN-Endangered, USFS_S-Sensitive	Aquatic
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	Insects	IIDIP05021	36	30	Endangered	None	G1T1	S1	null	null	Interior dunes
Rhinichthys osculus ssp. 3	Santa Ana speckled dace	Fish	AFCJB3705K	13	2	None	None	G5T1	S1	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Aquatic, South coast flowing waters
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	PDGRO020F3	5	1	None	None	G5TX	SX	1A	null	Riparian woodland
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	Scrub	CTT32720CA	30	3	None	None	G1	S1.1	null	null	Coastal scrub
Salvadora hexalepis virgultea	coast patch-nosed snake	Reptiles	ARADB30033	34	1	None	None	G5T4	S2S3	null	CDFW_SSC-Species of Special Concern	Coastal scrub
Senecio aphanactis	chaparral ragwort	Dicots	PDAST8H060	98	3	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	2	None	None	G5	S3S4	null	CDFW_SSC-Species of Special Concern, USFWS_BCC-Birds of Conservation Concern	Riparian forest, Riparian scrub, Riparian woodland
Sidalcea	salt spring	Dicots	PDMAL110J0	30	1	None	None	G4	S2	2B.2	USFS_S-Sensitive	Alkali playa,

neomexicana	checkerbloom											Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Wetland
Southern California Arroyo Chub/Santa Ana Sucker Stream	Southern California Arroyo Chub/Santa Ana Sucker Stream	Inland Waters	CARE2330CA	4	1	None	None	GNR	SNR	null	null	null
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	CTT61310CA	246	4	None	None	G4	S4	null	null	Riparian forest
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Riparian	CTT61330CA	111	8	None	None	G3	S3.2	null	null	Riparian forest
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	1	None	None	G3	S3.2	null	null	Riparian scrub
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	CTT62400CA	230	19	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	43	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
Sphenopholis obtusata	prairie wedge grass	Monocots	PMPOA5T030	19	2	None	None	G5	S2	2B.2	null	Cismontane woodland, Meadow & seep, Wetland
Spinus lawrencei	Lawrence's goldfinch	Birds	ABPBY06100	4	2	None	None	G3G4	S3S4	null	IUCN_LC-Least Concern, NABCI_YWL-Yellow Watch List, USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest, Chaparral, Pinon & juniper woodlands, Riparian woodland
Streptocephalus woottoni	Riverside fairy shrimp	Crustaceans	ICBRA07010	83	2	Endangered	None	G1G2	S1S2	null	IUCN_EN-Endangered	Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Symphyotrichum defoliatum	San Bernardino aster	Dicots	PDASTE80C0	102	4	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Valley & foothill grassland
Taxidea taxus	American badger	Mammals	AMAJF04010	594	3	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	2	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
Trichocoronis wrightii var. wrightii	Wright's trichocoronis	Dicots	PDAST9F031	12	3	None	None	G4T3	S1	2B.1	null	Marsh & swamp, Meadow & seep, Riparian forest, Vernal pool, Wetland
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	503	49	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

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

52 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3411714, 3411713, 3411712, 3311784, 3311782, 3311774, 3311772 3311773 and 3311783;

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 villosa var. aurita	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	1B.1	S2	G5T2?
Allium munzii	Munz's onion	Alliaceae	perennial bulbiferous herb	Mar-May	1B.1	S1	G1
Ambrosia pumila	San Diego ambrosia	Asteraceae	perennial rhizomatous herb	Apr-Oct	1B.1	S1	G1
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	1B.1	S1	G1
Artemisia palmeri	San Diego sagewort	Asteraceae	perennial deciduous shrub	(Feb)May-Sep	4.2	S3?	G3?
Asplenium vespertinum	western spleenwort	Aspleniaceae	perennial rhizomatous herb	Feb-Jun	4.2	S4	G4
Astragalus hornii var. hornii	Horn's milk-vetch	Fabaceae	annual herb	May-Oct	1B.1	S1	G4G5T1T2
Atriplex coronata var. notatior	San Jacinto Valley crownscale	Chenopodiaceae	annual herb	Apr-Aug	1B.1	S1	G4T1
Atriplex pacifica	South Coast saltscale	Chenopodiaceae	annual herb	Mar-Oct	1B.2	S2	G4
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	1B.1	S1	G1G2
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S1	G5T1
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	1B.1	S1	G1
Brodiaea filifolia	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	Mar-Jun	1B.1	S2	G2
Calochortus plummerae	Plummer's mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	4.2	S4	G4
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	2B.1	S2	G5

Caulanthus simulans	Payson's jewelflower	Brassicaceae	annual herb	(Feb)Mar-May(Jun)	4.2	S4	G4
Centromadia pungens ssp. laevis	smooth tarplant	Asteraceae	annual herb	Apr-Sep	1B.1	S2	G3G4T2
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	1B.2	S1	G4?T1
Chorizanthe leptotheca	Peninsular spineflower	Polygonaceae	annual herb	May-Aug	4.2	S3	G3
Chorizanthe parryi var. parryi	Parry's spineflower	Polygonaceae	annual herb	Apr-Jun	1B.1	S2	G3T2
Chorizanthe polygonoides var. longispina	long-spined spineflower	Polygonaceae	annual herb	Apr-Jul	1B.2	S3	G5T3
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	4.2	S4	G4
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4?
Cylindropuntia californica var. californica	snake cholla	Cactaceae	perennial stem succulent	Apr-May	1B.1	S1	G3T2
Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov(Dec)	4.2	S4	G4
Dodecahema leptoceras	slender-horned spineflower	Polygonaceae	annual herb	Apr-Jun	1B.1	S1	G1
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	1B.2	S2	G2
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Polemoniaceae	perennial herb	Apr-Sep	1B.1	S1	G4T1
Galium californicum ssp. primum	Alvin Meadow bedstraw	Rubiaceae	perennial herb	May-Jul	1B.2	S2	G5T2
Harpagonella palmeri	Palmer's grapplinghook	Boraginaceae	annual herb	Mar-May	4.2	S3	G4
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	Aug-Oct	1A	SH	G5TH
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
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	2B.1	S3	G4
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	4.3	S3	G5T3
Malacothamnus parishii	Parish's bush-mallow	Malvaceae	perennial deciduous shrub	Jun-Jul	1A	SX	GXQ
Microseris douglasii ssp. platycarpha	small-flowered microseris	Asteraceae	annual herb	Mar-May	4.2	S4	G4T4
Monardella pringlei	Pringle's monardella	Lamiaceae	annual herb	May-Jun	1A	SX	GX
Myosurus minimus ssp. apus	little mousetail	Ranunculaceae	annual herb	Mar-Jun	3.1	S2	G5T2Q

Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	1B.1	S1	G1
Navarretia fossalis	spreading navarretia	Polemoniaceae	annual herb	Apr-Jun	1B.1	S2	G2
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	1B.1	S1	G1
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	2B.2	S2	G4
Ribes divaricatum var. parishii	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	Feb-Apr	1A	SX	G5TX
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	Mar-Jul(Aug)	4.2	S4	G4
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	2B.2	S2	G3
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	2B.2	S2	G4
Sphenopholis obtusata	prairie wedge grass	Poaceae	perennial herb	Apr-Jul	2B.2	S2	G5
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov(Dec)	1B.2	S2	G2
Texosporium sancti-jacobi	woven-spored lichen	Caliciaceae	crustose lichen (terricolous)		3	S1	G3
Trichocoronis wrightii var. wrightii	Wright's trichocoronis	Asteraceae	annual herb	May-Sep	2B.1	S1	G4T3

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 23 December 2020].

Search the Inventory
Simple Search
Advanced Search
Glossary

Information
About the Inventory
About the Rare Plant Program
CNPS Home Page
About CNPS
Join CNPS

Contributors
The Calflora Database
The California Lichen Society
California Natural Diversity Database
The Jepson Flora Project
The Consortium of California Herbaria
CalPhotos

Questions and Comments
rareplants@cnps.org

IPaC **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

Riverside County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

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.

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:

Mammals

NAME	STATUS

Stephens' Kangaroo Rat Dipodomys stephensi (incl. D. cascus) — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/3495

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker Catostomus santaanae There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3785	Threatened

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp Streptocephalus woottoni There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8148	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS

Nevin's Barberry Berberis nevinii — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8025

San Diego Ambrosia Ambrosia pumila — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8287

Santa Ana River Woolly-star Eriastrum densifolium ssp. sanctorum — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6575

Spreading Navarretia Navarretia fossalis — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/1334

Thread-leaved Brodiaea Brodiaea filifolia — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6087

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.

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.)
Burrowing Owl Athene cunicularia 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/9737	Breeds Mar 15 to Aug 31
Common Yellowthroat Geothlypis trichas sinuosa 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/2084	Breeds May 20 to Jul 31

Costa's Hummingbird Calypte costae — Breeds Jan 15 to Jun 10
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/9470

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
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.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 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/9410

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

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.

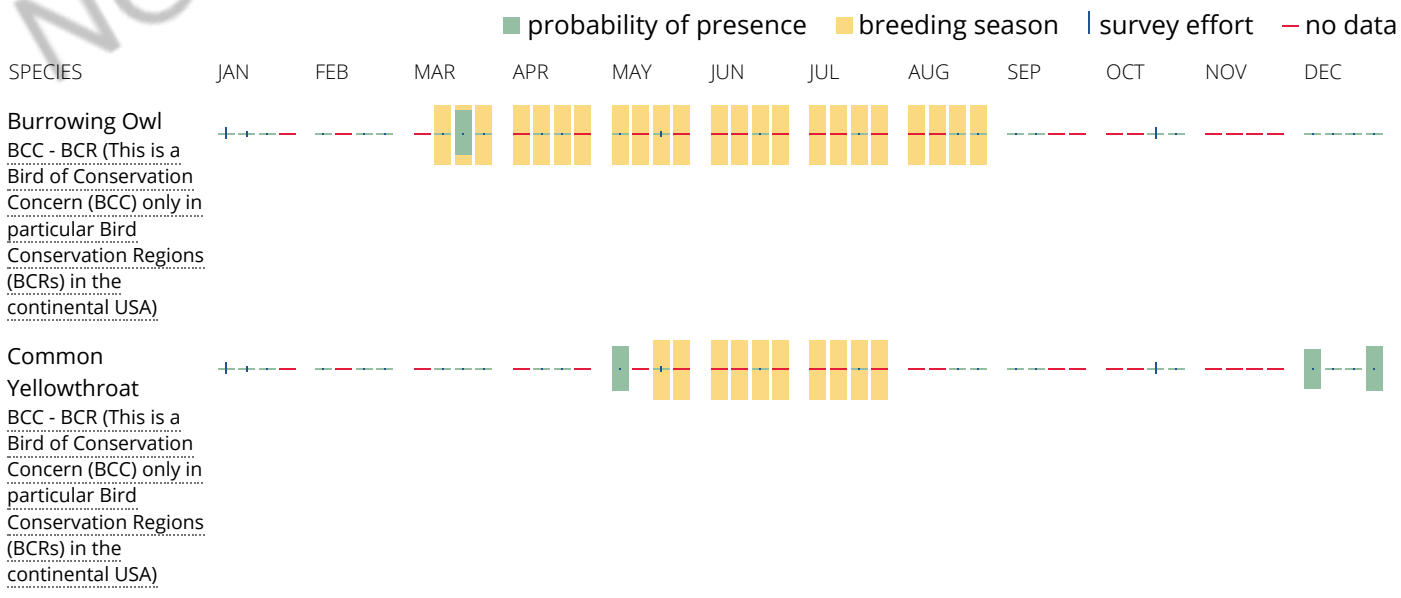
Breeding Season (▬)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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.



Costa's Hummingbird
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

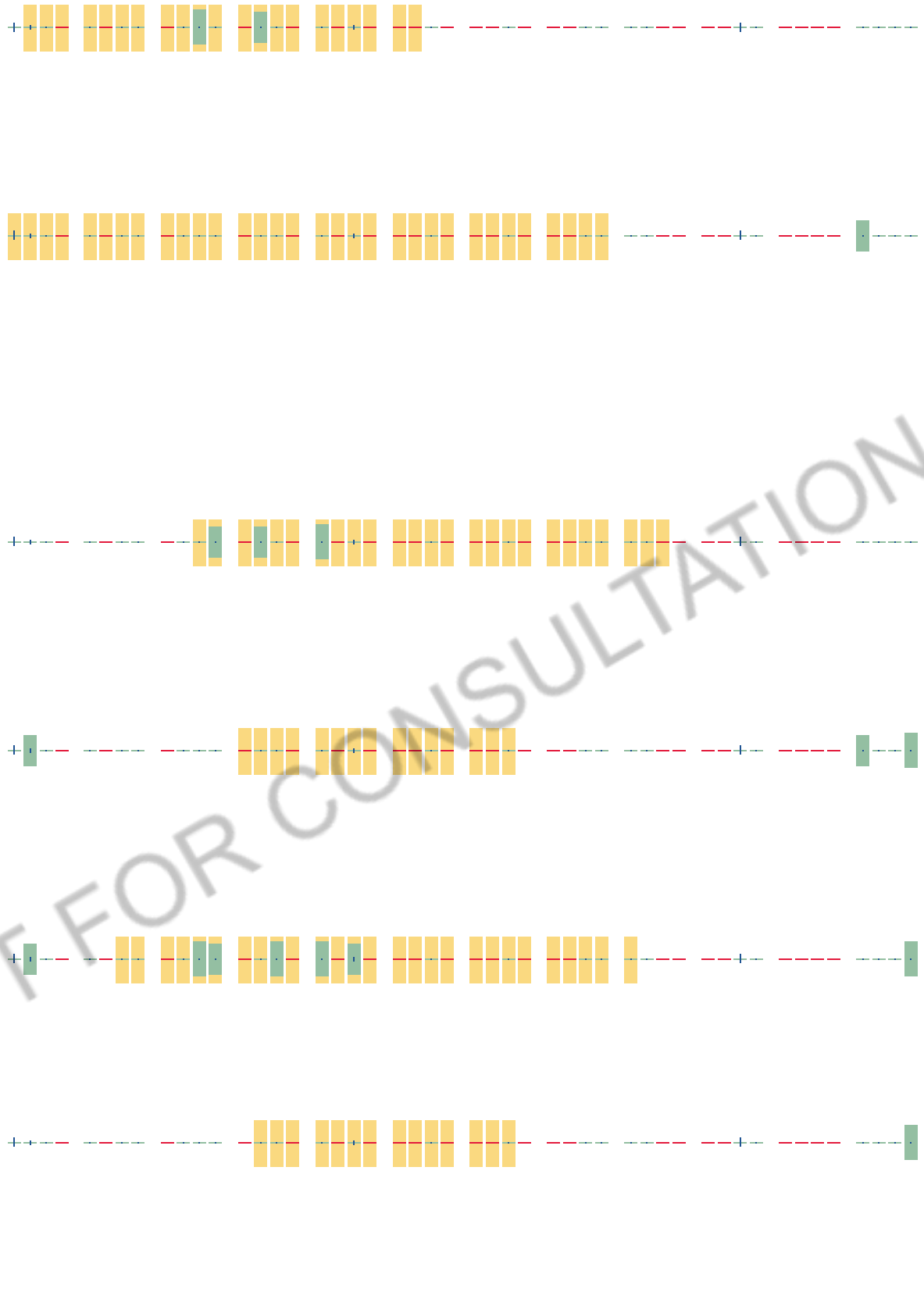
Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

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)

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)



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

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

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.

MEMORANDUM

To:	Riverside Community College District
From:	Dudek
Subject:	Ben Clark Training Center School of Public Safety Project – Cultural Resources Study – Summary of Investigation
Date:	February 4, 2021

CHRIS Records Search

A California Historical Resources Information System (CHRIS) records search conducted at the Eastern information Center (EIC), located on the campus of University of California, Riverside, was conducted on January 22, 2020.

Previous Cultural Resource Studies

EIC records indicate that 24 cultural resource studies have been completed within a 0.5-mile of the proposed project site between 1978 and 2018. Of the 24 previous studies on file with EIC, seven intersected at least a portion of the proposed project site. The remaining 17 of these previously conducted studies were conducted outside the proposed project site in all cardinal directions, but within the 0.5-mile radius. Two additional studies. Not yet on file with the EIC, have been prepared by Dudek for the area overlapping the Project site; these are also summarized within the present memorandum. Table 1, below, summarizes all 26 reports identified followed by a brief summary of the seven reports overlapping the proposed Project site.

Table 1. Previous Technical Studies within 0.5-Mile of Proposed Project Site

EIC Report Number (RI-)	Authors	Date	Title	Proximity to Project Site
00422	Richard Lando	1978	Environmental Impact Evaluation: Archaeological Survey of Six Road Right-of-ways, Mead Valley, Riverside County, California	Outside
01144	D.M Van Horn	1980	Archaeological Survey Report: The 1500 Acre Woodcrest Agricultural Preserve Located Adjacent to March AFB, Riverside County, California	Outside
02042	McCarthy, Daniel F.	1986	An Archaeological Assessment of the West March Housing Development, March Air Force Base, Riverside County, California	Overlaps
02125	Swope, Karen K.	1987	An Archaeological Assessment of 970+ Acres of Land Located on March Air Force Base, Riverside County, California	Overlaps
02159	Drover, C.E.	1987	An Archaeological Assessment of the Air Force Village West, Riverside County, California	Outside

Table 1. Previous Technical Studies within 0.5-Mile of Proposed Project Site

EIC Report Number (RI-)	Authors	Date	Title	Proximity to Project Site
02293	Drover, C.E.	1988	An Archaeological Assessment of the Proposed Barton Street Pipeline and Access Road Near Glen Valley, California	Outside
02653	De Munck, Victor C.	1989	A Cultural Resource Assessment of 375 Acres of Land Located in the Indio Area of Riverside, California.	Outside
03465	Drover, Christopher	1992	A Cultural Resources Assessment of the 800-Acre Alta Cresta Ranch Specific Plan, Riverside East - Steele Peak USGS Quads, Woodcrest CA	Outside
03510	McDonald, Meg and Barb Giacomini	1996	An Intensive Survey of Approximately 2,500 Acres of March Air Force Base, Riverside County, California	Adjacent
04996	McKenna et al.	2001	Cultural Resources Review of Previous Studies at the Ben Clark Public Safety Training Center at March Air Force Base, Riverside County, California.	Overlaps
05179	LSA Associates, Inc.	2003	Cultural Resource Assessment, Beazer Homes Tract 30756, Riverside County, California	Outside
05458	Mason, Roger D.	2005	Phase I Archaeological Survey Report for the Sawada Parcel (APN 266-160-006), Riverside County, CA	Outside
05994	Dahdul, Mariam, Daniel Ballester, and Josh Smallwood	2003	Archaeological Testing at Sites CA-RIV-4736/H. Alta Cresta Specific Plan, Tentative Tract Map NO.S 31237, 31238, 31360 TO 31362, Near the City of Riverside, Riverside County	Outside
06276	Mason, Rodger, D.	2005	Phase I Archaeological Survey Report for the Geiser Parcel (APN 266-160-008) Riverside County, California	Outside
06718	Jordan, Stacey C.	2007	Archaeological Survey Report for Southern California Edison Company: March JPA Village West Projects, March Air Force Base, Riverside County, California (WO #6477-2000, AI #P2206; WO #6077-7947, AI #K7992)	Outside
07068	Stacey C. Jordan, Ph.D., RPA	2007	Archaeological Survey Report for Southern California Edison Company New Underground System Project on March Air Force Base Riverside County, California	Outside
07332	Bonner, Wayne H. and Marnie Aislin-Kay	2006	Report Letter: Cultural Resource Records Search and Site Visit Results for T-Mobile Telecommunications Facility Candidate IE04728A (MBM Farm), 20197 Nandina Avenue, Perris, Riverside County, California.	Outside
08272	William Manely Consulting and Earth Tech	1995	Historic Building Inventory and Evaluation, March Air Force Base, Riverside County, California	Overlaps
09362	Michael Hogan	2015	Archaeological Monitoring Program March Joint Powers Authority Project Near March Air Reserve Base, Riverside County, California CRM TECH Contract No. 2833	Outside

Table 1. Previous Technical Studies within 0.5-Mile of Proposed Project Site

EIC Report Number (RI-)	Authors	Date	Title	Proximity to Project Site
09971	Adella B. Schroth	1998	Review of Traditional Cultural Properties and Ethnography of the March Joint Powers Authority Planning Area	Overlaps
10093	Urban Future, Inc.	1996	Environmental Impact Report for the March Air Force Base Redevelopment Project	Overlaps
10144	Robert D Niehaus Inc	1988	Photographic Record of the Remains of Camp Haan on the Western Portion of March Air Force Base, Riverside, California	Overlaps
01036	Christopher E. Drover	1980	Environmental Impact Evaluation: Archaeological Assessment of Proposed Rock Quarrying Area of Pacific Industrial Properties Near Home Gardens, California	Outside
10307	Bai "Tom" Tang	2018	Historical/ Archaeological Resources Survey Addition to South Campus (Balance of Lot 41), Meridian Business Park Near the City of Riverside, Riverside County, California CRM TECH Contract 3349	Outside
--	Dotter, Kara	2017	HABS Written Documentation for Camp Haan, Riverside County, California, Ben Clark Training Center. Prepared for County of Riverside Economic Development Agency.	Overlaps
--	Giacinto, Adam, Ross Owen, Jessica Colston, Ted Roberts, and Micah Hale	2020	Cultural Resources Inventory Report for the BCTC Hazardous Fuel Reduction Project, Riverside County, California. Prepared for, and on file with, Riverside County Fire and CAL FIRE.	Overlaps

Report No. RI-2042

An Archaeological Assessment of the West March Housing Development, March Airforce Base, Riverside County, California (McCarthy 1986), documents the results of an archaeological resource study consisting of pedestrian survey and archival record search. The study area overlaps the eastern half of the proposed Project site. Six previously unrecorded prehistoric archaeological resources were identified during the course of this study; none of which intersect the current proposed Project site.

Report No. RI-2125

An Archaeological Assessment of 970+/- Acres of Land Located on March Air Force Base, Riverside County, California (Swope 1987), documents the results of an archaeological investigation conducted on behalf of the US Air Force to determine effects on cultural resources in a proposed area of housing development. The study consists of a pedestrian survey. The survey area overlaps the majority of the proposed Project site. Swope identified 19 archaeological sites within the area of study, only one of which intersects the proposed project site [CA-RIV-3285H]. The site is described as various foundations and tent platform remnants of Camp Haan. Swope explains it is unlikely the current remnants of the site can provide significant archaeological or architectural information; however, Swope

states that the information associated with Camp Haan provides important information into the WWII period. Swope recommended that a formal historic document search of all available records be conducted before any additional demolition or removal of Camp Haan structures as a means to reveal any information associated with prisoner of war activities in the United States and further inform on the history of the WWII period. It is noted that CA-RIV-3285H may be eligible for the NRHP, although no further documentation or nomination forms are included. No new archaeological resources were identified during the course of this study. A portion of the historic-period resource, P-33-003285/CA-RIV-3285H, was identified within the current proposed Project site.

Report No. RI-4996

Cultural Resources Review of Previous Studies at the Ben Clark Public Safety Training Center at March Air Force Base, Riverside County, California (McKenna et al. 2001), documents the review and analysis of previously conducted cultural studies. The study area overlaps the entirety of the proposed Project site. McKenna et al. cites a 1987 study conducted by Swope and Neiditch, claiming CA-RIV-3285H was deemed not eligible for the NRHP according to SHPO. McKenna et al. concludes that there are no significant cultural resources within the study location, and therefore within the proposed project site. Construction monitoring was recommended for initial ground disturbing activities. No new archaeological resources were identified during the course of this study.

Report No. RI-8272

Historic Building Inventory and Evaluation, March Air Force Base, Riverside County, California (William Manley Consulting and Earth Tech 1995), documents the results of archival research, pedestrian survey, and evaluation of historic buildings on behalf of US Department of the Air Force. The study area overlaps the entirety of the proposed Project site and did not identify any cultural resources within the current proposed Project site.

Report No. RI-9971

Review of Traditional Cultural Properties and Ethnography of the March Joint Powers Authority Planning Area (Schroth 1998), documents the results of a literature review conducted to determine if cultural resources would be impacted if various cities within Riverside were to be re-zoned. The study area encompasses the entirety of the proposed Project site. Various bedrock milling sites are identified throughout the subject project site, none of which are considered culturally significant and do not intersect the proposed Project site. No new archaeological resources were identified during the course of this study within the current proposed Project site.

Report No. RI-10093

Environmental Impact Report for the march Air Force Base Development Project (Urban Futures, Inc. 1996), documents the results of an environmental impact report prepared on behalf of March Joint Powers Redevelopment Agency to determine environmental impacts on a proposed multifaceted development plan. The study area encompasses the entirety of the proposed project site. It is concluded that due to current level of development in the area, potential impact to archaeological resources are anticipated to be insignificant. No new archaeological resources were identified during the course of this study.

Report No. RI-10144

Photographic Record of the Remains of Camp Haan on the Western Portion of March Air Force Base Riverside, California (Niehaus 1988), documents the condition of Camp Haan (P-33-003285/CA-RIV-3285H) through a series of photographs. The study location overlaps the western half of the proposed Project site. Niehaus depicts Camp Haan as consisting of concrete foundations, pipes, conduit segments, concrete pilings serving as previous tent supports, and various electrical accessories. No new archaeological resources were identified during the course of this report. A portion of the historic-period resource, P-33-003285/CA-RIV-3285H, was identified within the current proposed Project site.

Reports Pending EIC ID

HABS Written Documentation for Camp Haan, Riverside County, California, Ben Clark Training Center (Dotter 2017). Kara Dotter of Dudek prepared a Historic American Building Survey (HABS) documentation for Camp Haan in 2017 (Dotter 2017). This study included a detailed historic context, copies of original photographs, maps, and plans, and other descriptive information. Dudek additionally supported Archaeological efforts for fuel reduction projects within the Cam Haan area, as documented by *Cultural Resources Inventory Report for the BCTC Hazardous Fuel Reduction Project, Riverside County, California (Giacinto et al. 2020).* This study, focussing on the aea west of the footprint historically occupied by the Camp Hann buildings, confirmed that the majority of prehistoric bedrock milling sites had been substanially disurbed or destroyed since previous recordation. This study additionally supplemented records of P-33-003285/CA-RIV-3285H, recording a previously undocumented refuse scatter with potential WW II-era cultural material. No resources documented as part of these studies would be affected by the present project

Previously Recorded Cultural Resources

EIC records indicate that 49 previously recorded cultural resources are located within a 0.5-mile of the proposed Project site. Forty-two resources are prehistoric archaeological resources, five are historic-era archaeological resources, one is a prehistoric isolate, and one is a multicomponent site consisting of both prehistoric and historic-period resources. Only one historic-period archaeological resource (P-33-003285/CA-RIV-3285H) overlaps the current proposed project site. No prehistoric resources have been identified within the proposed Project site based on records held at the EIC. Table 2, below, summarizes all 49 identified resources followed by a brief summary of the resource (P-33-003285/CA-RIV-3285H) that overlaps the current proposed Project site.

Table 2. Previously Recorded Cultural Resources within 0.5-Mile of Proposed Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Proposed Project Site
003096	CA-RIV-003096	Multicomponent	Prehistoric bedrock milling feature and a historic can scatter	1986 (Daniel F. McCarthy); 2007 (Koji Tsunoda, Jones & Stokes)	Unknown	Outside

Table 2. Previously Recorded Cultural Resources within 0.5-Mile of Proposed Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Proposed Project Site
003097	CA-RIV-003097	Prehistoric	Two bedrock milling features	1986 (Daniel F. McCarthy)	Unknown	Outside
003098	CA-RIV-003098	Prehistoric	Two bedrock milling features	1986 (Daniel F. McCarthy)	Unknown	Outside
003099	CA-RIV-003099	Prehistoric	Bedrock milling feature	1986 (Daniel F. McCarthy)	Unknown	Outside
003100	CA-RIV-003100	Prehistoric	Three bedrock milling features	1986 (Daniel F. McCarthy); 2014 (Daniel Ballester)	Unknown	Outside
003105	CA-RIV-003105	Prehistoric	Two milling features	1986 (Daniel F. McCarthy); 2014 (Daniel Ballester)	Unknown	Outside
003285	CA-RIV-003285/H	Historic	Previous Location of Camp Haan a WWII-Era Military Base: Majority of buildings have been demolished, current site consists of concrete foundations, paved roads, portions of barrack structures, structural rock alignments, and various trash pits.	1987 (K. Swope and B. Neiditch); 1990 (Fred Budinger Jr.); 2007 (Adrian Sanchez Moreno)	Not Eligible (According to SHPO, see RI-4996)	Overlaps
d	CA-RIV-003286	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003287	CA-RIV-003287	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003288	CA-RIV-003288	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003289	CA-RIV-003289	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch.)	Unknown	Outside
003290	CA-RIV-003290	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside

Table 2. Previously Recorded Cultural Resources within 0.5-Mile of Proposed Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Proposed Project Site
003291	CA-RIV-003291	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003292	CA-RIV-003292	Prehistoric	Two boulders with series of milling features	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003293	CA-RIV-003293	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditc)	Unknown	Outside
003294	CA-RIV-003294	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003295	CA-RIV-003295	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003296	CA-RIV-003296	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003297	CA-RIV-003297	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003298	CA-RIV-003298	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003299	CA-RIV-003299	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003300	CA-RIV-003300	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003301	CA-RIV-003301	Prehistoric	Milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003302	CA-RIV-003302	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003303	CA-RIV-003303	Prehistoric	Bedrock milling feature	1987 (K. Swope and B. Neiditch)	Unknown	Outside
003325	CA-RIV-003325	Prehistoric	Bedrock milling feature	1987 (C.E. Drover)	Unknown	Outside

Table 2. Previously Recorded Cultural Resources within 0.5-Mile of Proposed Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Proposed Project Site
003326	CA-RIV-003326	Prehistoric	Bedrock milling feature	1987 (C.E. Drover)	Unknown	Outside
003327	CA-RIV-003327	Prehistoric	Bedrock milling feature	1987 (C.E. Drover)	Unknown	Outside
003328	CA-RIV-003328	Prehistoric	Milling feature	1987 (C.E. Drover)	Unknown	Outside
003329	CA-RIV-003329	Prehistoric	Bedrock milling feature	1987 (C.E. Drover)	Unknown	Outside
003380	CA-RIV-003380	Prehistoric	Bedrock milling feature	1987 (L. Gorenflo)	Unknown	Outside
003381	CA-RIV-003381	Prehistoric	Bedrock milling feature	1988 (L. Gorenflo)	Unknown	Outside
003382	CA-RIV-003382	Prehistoric	Milling feature	1989 (L. Gorenflo)	Unknown	Outside
003383	CA-RIV-003383	Prehistoric	Bedrock milling feature	1990 (L. Gorenflo); 2014 (D. Ballester)	Unknown	Outside
005414	CA-RIV-005414	Prehistoric	Bedrock milling feature	1994 (B. Giacomini)	Unknown	Outside
005415	CA-RIV-005415	Prehistoric	Bedrock milling feature	1995 (B. Giacomini)	Unknown	Outside
005447	CA-RIV-005447	Prehistoric	Milling feature	1996 (B. Giacomini)	Unknown	Outside
005453	CA-RIV-005453	Historic	Trash scatter consisting of purple glass fragments.	1997 (B. Giacomini)	Unknown	Outside
007782	CA-RIV-005823	Prehistoric	Bedrock milling feature	1996 (C. Schultze)	Unknown	Outside
014873	CA-RIV-007928	Prehistoric	Bedrock milling feature	2005 (Cotterman, Cary D.)	Unknown	Outside
015935		Historic	Trash dump with modern debris	2007 (Tsunoda, Koji)	Unknown	Outside
024849	CA-RIV-012318	Prehistoric	Bedrock milling feature	2016 (Nina Gallardo and Sal Boites)	Unknown	Outside

Table 2. Previously Recorded Cultural Resources within 0.5-Mile of Proposed Project Site

Primary (P-33-)	Trinomial	Age	Description	Authors and Year	NRHP Eligibility	Proximity to Proposed Project Site
024859	CA-RIV-012321	Historic	Trash scatter consisting of metal objects, glass and ceramic fragments; there is evidence of the glass being melted.	2016 (Daniel Ballester, John Goodman, and Cynthia Morales)	Unknown	Outside
024860	CA-RIV-012322	Historic	Concrete foundations from since removed antenna towers, most likely associated with March Airforce Base.	2016 (Daniel Ballester and Ben Kerridge)	Unknown	Outside
026411	CA-RIV-012424	Prehistoric	Bedrock milling feature	2016 (Daniel Ballester and Todd Perry)	Does not appear eligible; no official code given	Outside
026626		Prehistoric	Isolated chert flake	2016 (Daniel Ballester)	Unknown	Outside
026627	CA-RIV-012532	Prehistoric	Low density lithic scatter	2016 (Todd Perry and Michael Hogan)	Does not appear eligible; no official code given	Outside
026664	CA-RIV-012563	Prehistoric	Bedrock milling feature	2017 (Nina Gallardo)	Does not appear eligible; no official code given	Outside
028029	CA-RIV-012652	Prehistoric	Bedrock milling feature	2017 (Ben Kerridge); 2017 (Sal Z. Boites)	Does not appear eligible; no official code given	Outside

P-33-003285/CA-RIV-3285H

P-33-003285/CA-RIV-3285H is a historic-era site, measuring approximately 1000 meters north to south by 1000 meters east to west (3280 by 3280 ft) at an elevation of 1700' amsl, overlaps the western section of the proposed project site. CA-RIV-3285H is documented as the previous location of Camp Haan; a World War II-era military camp

consisting of Anti-aircraft Replacement Training Center, Base Prisoner of War Camp, Army Service Forces Depot, and US Disciplinary Barracks. The site was originally formally recorded in 1987 by Swope and Neiditch, who describe the site as mostly demolished with a few remaining features. Features include structural remains of the original barracks, holding cells, concrete foundations, tent platforms, rectangular structural rock formations, paved roads, subsurface cisterns, and a trash dump consisting of solder-top cans, glass, and ceramics. It is interpreted to have been operational during the early to mid-1940s. CA-RIV-3285H was again formally recorded in 1990 by Budinger, who notes that the area has been bulldozed leaving "only foundations and associated cement pads and piers." An update was provided by Moreno (2007), who explains that during a survey conducted in 2007, only foundational remains were present in the southern portion of the site and the site has been highly disturbed due to bulldozing efforts.

Review of Historical Maps and Aerial Photographs

Dudek consulted historical maps and aerial photographs to understand development of the proposed Project site and surrounding properties. Topographic maps are available for the years 1902, 1905, 1911, 1927, 1939, 1942, 1955, 1960, 1962, 1969, 1974, 1980, 1984, 2012, 2015, and 2018 (NETR 2021a). Historic aerials are available for the years 1948, 1966, 1967, 1978, 1994, 2002, 2005, 2009, 2010, 2012, 2014, and 2016 (NETR 2021b).

The first USGS topographic map showing the proposed Project site dates to 1901 and shows the proposed Project site as undeveloped. The following topographic maps, 1905, 1911, 1927, 1939, and 1942 show no significant change to the proposed Project site. The topographic map from 1955 depicts the proposed Project site as the Ben Clark Public Safety Training Center on March Air Force Base, with 11th Street intersecting west to east and Dalla Avenue intersecting north to south. The 1960 topographic map no longer shows any of the Ben Clark Public Safety Training Center, instead showing the proposed Project site as undeveloped. However, the following topographic map from 1962 is consistent with the 1955 map, showing the proposed Project site as the Ben Clark Public Safety Training Center. The remainder of the topographic maps show no significant changes to the proposed Project site.

The first aerial photograph showing the proposed Project site dates to 1948 and shows the proposed Project site developed with a series of structures throughout and 11th Street intersecting east to west and Dalla Avenue intersecting north to south. The 1966 aerial no longer shows any structures, instead the proposed Project site is shown void of structures and cleared of vegetation. The following aerial photographs, 1967 and 1978, show no significant change within the proposed Project site. The aerial from 1994 no longer shows the southern half of Dalla Avenue, instead there is a cleared path parallel to 11th Street just south of it. The following aerial photographs, 2002 and 2005, show no significant change to the proposed Project site until 2009. The 2009 historic aerial photograph depicts a series of structures in the northern half of the proposed Project site, and four structures and a parking lot in the southwestern quadrant of the proposed Project site. The aerial from 2010 no longer shows the four structures in the southwestern quadrant. The 2012 aerial photograph shows a series of structures in the southeastern section of the proposed Project site, just south of 11th Street. The aerial from 2014 shows the dirt lot just south of 11th Street, between the previous location of the four structures and the series of structures to the east, being used as a parking lot. The remaining aerial photograph shows no significant change to the proposed Project site or surrounding areas.

The proposed Project site has been subjected to considerable ground disturbance from at least the 1940s up to the 2010s.

Geotechnical Report Review

Dudek reviewed a geotechnical report for the proposed Project to better understand the geomorphology of the proposed Project site. The geotechnical report, *Geotechnical Investigation, Geologic Hazards Evaluation, and Infiltration Testing RCCD Ben Clark Training Center Phase I: Education Center, 16791 Davis Avenue, Riverside, California* (Inland Foundation Engineering, Inc. 2020), was prepared for the Riverside Community College District in March 2020. The report documents the results of subsurface testing, laboratory testing, and data analysis. Subsurface testing consisted of six machine-augered borings drilled to a depth of 40 feet and located within the southwestern portion of the proposed Project site. One boring encountered 2 feet of fill soils; this boring was located just south of 11th Street in the central portion of the proposed Project site (See B-2). The boring parallel with B-2 to the west, encountered a thin layer of gravel on the surface (See B-4). The report concludes that the area of study contains as much as 3.5 feet of disturbed soils consisting of native soils and artificial fill (intermixed); however, the only documented artificial fill was encountered at a maximum depth of 2 feet. The report does not provide further details regarding artificial fill or native soils. The results of these borings are documented in Table 3 below.

Table 3. Inland Foundation Engineering, Inc. Boring Log Summary

Boring Number	0 – 10 feet		10 – 20 feet	20 – 30 feet	30 - 40 feet
B-1	0-2 feet: olive brown silty clayey sand; medium dense (artificial fill)		2-15.5 feet: olive highly to moderately weathered granite; very dense	Boring terminated at 15.5 feet	
B-2	0-2 feet: olive brown silty sand (artificial fill)	2-3.5 feet: olive brown silty clayey sand; medium dense	3.5-23 feet: olive moderately to slightly weathered granite; very dense	Boring terminated at 23 feet	
B-3	0-3 feet: olive brown silty sand; loose to medium dense (artificial fill)		3-21 feet: olive moderately to slightly weathered granite; very dense	Boring terminated at 21 feet	
B-4	2 inches of artificial gravel fill on surface 0-3.5 feet: olive brown silty clayey sand; medium dense (artificial fill)		3.5-40.5 feet: olive to light grey highly to slightly weathered granite; very dense		
B-5	0-1 foot: olive brown silty clayey sand, loose (artificial fill)	1-2.5 feet: red brown clayey sand; loose	2.5-15 feet: olive highly to moderately weathered; very dense	Boring terminated at 15 feet	
B-6	0-1 foot: olive brown silty clayey sand, loose (artificial fill)	1-3 feet: dark brown clayey sand; loose	3-15 feet: olive highly to moderately weathered granite; very dense	Boring terminated at 15 feet	

NAHC SLF Results

Dudek contacted the NAHC on December 2, 2020, to request a review of the SLF. The NAHC replied via email on December 9, 2020, stating that the SLF search was completed with negative results.

Survey

An intensive pedestrian cultural survey of the proposed Project site was conducted on January 8, 2021. Survey observations indicate that the entirety of the proposed Project site has been disturbed by grading activities. No evidence of the historic period resource, P-33-003285/CA-RIV-3285H, was encountered and no unknown historic period or prehistoric cultural resources were observed as a result of the survey.

Results Summary

No cultural resources were identified within the proposed Project site as a result of the NAHC SLF search; however, the CHRIS records search identified one historic-period resource overlapping the current proposed Project site. Resource P-33-003285/CA-RIV-3285H is associated with the former Camp Haan, a World War II-era military camp consisting of Anti-aircraft Replacement Training Center, Base Prisoner of War Camp, Army Service Forces Depot, and US Disciplinary Barracks. The intensive-level pedestrian survey did not identify any evidence of P-33-003285/CA-RIV-3285H nor any unknown historic period or prehistoric cultural resources. Further, a review of historical maps and aerial images indicates that the proposed Project site has been subjected to considerable ground disturbance from at least the 1940s up to the 2010s. A review of a geotechnical report prepared for the proposed Project site determined that artificial fill intermixed with native soils (disturbed soils) were identified up to 3.5 feet below the existing ground surface as a result of the six subsurface exploratory boring investigations. Given that the maximum depth of disturbance associated with the proposed Project site is 5 feet, the potential to encounter intact subsurface archaeological deposits is low.

References

Dotter, Kara. 2017. HABS Written Documentation for Camp Haan, Riverside County, California, Ben Clark Training Center. Prepared for County of Riverside Economic Development Agency.

Giacinto, Adam, Ross Owen, Jessica Colston, Ted Roberts, and Micah Hale. 2020. *Cultural Resources Inventory Report for the BCTC Hazardous Fuel Reduction Project, Riverside County, California.* Prepared for, and on file with, Riverside County Fire and CAL FIRE.

McCarthy, Daniel 1986. *An Archaeological Assessment of the West March Housing Development, March Air Force Base, Riverside County, California.* Prepared for Civil Engineering, March AFB, CA, by the Archaeological Research Unit of the University of California, Riverside.

McKenna, Jeanette A. 2001. *Cultural Resources Review of Previous Studies at the Ben Clark Public Safety Training Center at March Air Force Base, Riverside County, California.* Prepared by McKenna et al., Whittier, CA.

NETR (Nationwide Environmental Title Research LLC). 2021a. Historical Topographical Maps of Riverside: 1902, 1905, 1911, 1927, 1939, 1942, 1955, 1960, 1962, 1969, 1974, 1980, 1984, 2012, 2015, and 2018. Accessed January 2021. https://www.historicaerials.com/viewer.

NETR. 2021b. Historical Aerial Photographs of Riverside: 1948, 1966, 1967, 1978, 1994, 2002, 2005, 2009, 2010, 2012, 2014, and 2016. Accessed January 2021. https://www.historicaerials.com/viewer.

P-33-003285 Site Record. On File at the Eastern Information Center, University of California, Riverside. Accessed January 2021.

Robert D. Niehaus Inc. 1988. *Photographic Record of the Remains of Camp Haan on the Western Portion of March Air Force Base, Riverside, California.* Prepared for HQ SAC/DEP, Offutt AFB, NE and 22 CSG/DEEV, March AFB, CA, under Contract NO. F25600-88-D0002, Task Order No. 8001, Project No. 43.1, by Robert D. Niehaus, Inc., Santa Barbara, CA.

Schroth, Adella B. 1998. *Review of Traditional Cultural Properties and Ethnography of the March Joint Powers Authority Planning Area.* Prepared for March Joint Powers Authority, Moreno Valley, California, by LSA Associates, Inc., Riverside, California.

Swope, Karen K. 1987. *Final Report on an Archaeological Assessment of 970+ Acres of Land Located on March Air Force Base, Riverside County, California.* Prepared for the 22nd Civil Engineering Division, March Air Force Base, CA by the Archaeological Research Unit of the University of California, Riverside.

Urban Futures Inc. 1996. *DRAFT Environmental Impact Report for the March Air Force Base Redevelopment Project.* Prepared for March Joint Powers Redevelopment Agency, March Air Force Base, CA, by Urban Futures, Inc., Orange, CA.

Wessel, Terri Caruso. 1995. *Historic Building Inventory and Evaluation, March Air Force Base, Riverside County, California.* Prepared for U.S. Department of the Air Force, Air Force Center for Environmental Excellence, Brooks Air Force Base, Texas, by William Manley Consulting, San Diego, California, and Earth Tech, Colton, California.

INLAND FOUNDATION ENGINEERING, INC.
Consulting Geotechnical Engineers and Geologists
www.inlandfoundation.com

February 27, 2020
Revised: March 4, 2020
Project No. R351-011

Attention: Bart Doering, Facilities Development Director
RIVERSIDE COMMUNITY COLLEGE DISTRICT
Facilities Planning and Development
3801 Market Street, Riverside, California 92501

Re: Geotechnical Investigation, Geologic Hazards Evaluation, and Infiltration Testing
RCCD Ben Clark Training Center
Phase I: Education Center
16791 Davis Avenue, Riverside, California

Dear Mr. Doering:

We are pleased to submit this geologic hazards evaluation and geotechnical investigation report conducted for the referenced project.

It is our opinion that the proposed development is feasible from a geological and geotechnical engineering standpoint. Our report includes design recommendations along with the field and laboratory data. We have also included recommendations for site grading.

We appreciate the opportunity of being of service to you on this project. If there are any questions, please contact our office.

Respectfully,
INLAND FOUNDATION ENGINEERING, INC.

Daniel R. Lind, CEG
Principal Geologist

Allen D. Evans, GE
Principal

DRL:ADE:es
Distribution: Addressee (3)

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

This report presents the findings of the geotechnical investigation and geologic hazards evaluation conducted for the proposed classroom and administration building to be located at the Ben Clark Training Center at 16791 Davis Avenue in Riverside, California. The following reference was provided for our use during this study.

- Conceptual Site Plan, Ben Clark Training Center, Phase 1, dated August 28, 2019.

Additional references used during this study are listed in the *References* section of this report.

SCOPE OF SERVICE

The purpose of this study was to conduct a geologic hazards evaluation and to provide geotechnical parameters for design and construction of the proposed project. Our scope of service included:

- *Review of the general geologic and subsurface conditions at the project site.*
- *Evaluation of the engineering and geologic data collected for the project site.*
- *Preparation of this report with geotechnical engineering conclusions and recommendations for design and construction.*

The tasks performed to achieve these objectives included:

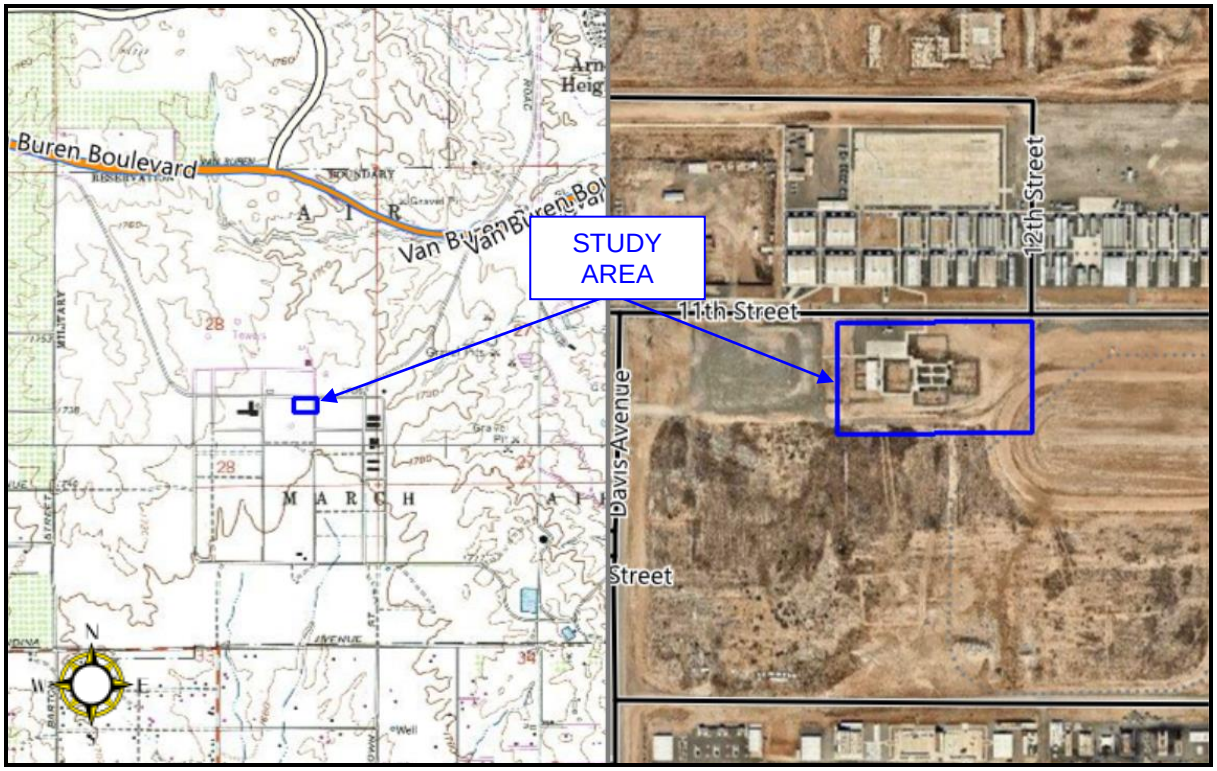
- *Review of available geologic data pertinent to the site.*
- *Photogeologic analysis of stereo pairs of aerial photographs.*
- *Field reconnaissance of the site and surrounding area by an engineering geologist to ascertain the existence of unstable or adverse geologic conditions.*
- *Geoseismic analysis and computation of 2019 California Building Code (CBC) seismic parameters.*
- *Subsurface sampling and laboratory testing.*
- *Infiltration testing.*
- *Analysis of the data collected and the preparation of this report with our geotechnical conclusions and recommendations.*

Evaluation of hazardous waste was not within the scope of services provided.

SITE AND PROJECT DESCRIPTION

The site is located in the southeasterly portion of Section 28, Township 3 South, Range 4 West, S.B.B.&M. The location of the project site is shown on Figure 1 below.

FIGURE 1: USGS Topographic Map, Riverside East 7.5' Quadrangle and Satellite Imagery

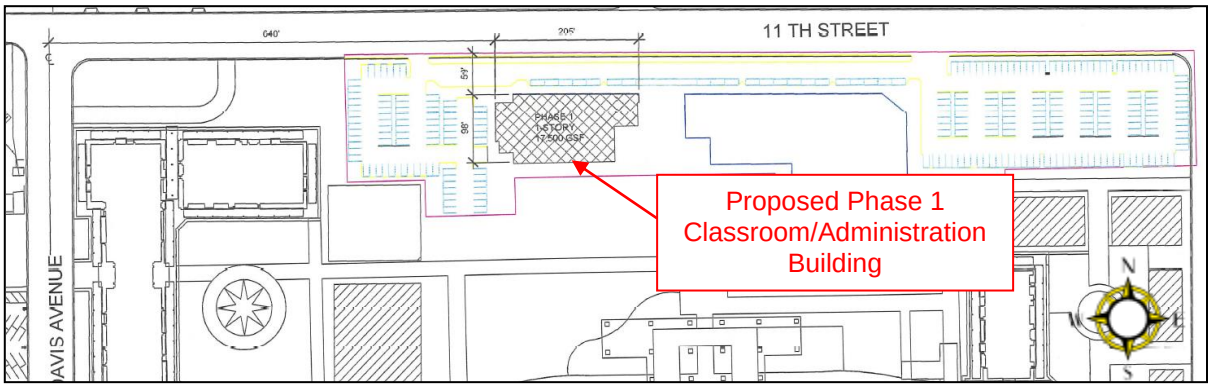


We understand the proposed Phase 1 construction will consist of a 17,500 max. gross square feet one-story classroom and administration building. We understand that the building will be Type V construction. The proposed development will include driveways, parking, and exterior covered and uncovered walkways.

Grading for the proposed improvements is expected to consist of cuts and fills of less than two feet. This is exclusive of the remedial over-excavation recommended in this report.

Figure 2 below is a portion of the provided conceptual site plan showing the approximate location of the proposed classroom and administration building.

FIGURE 2: Facilities Location Map



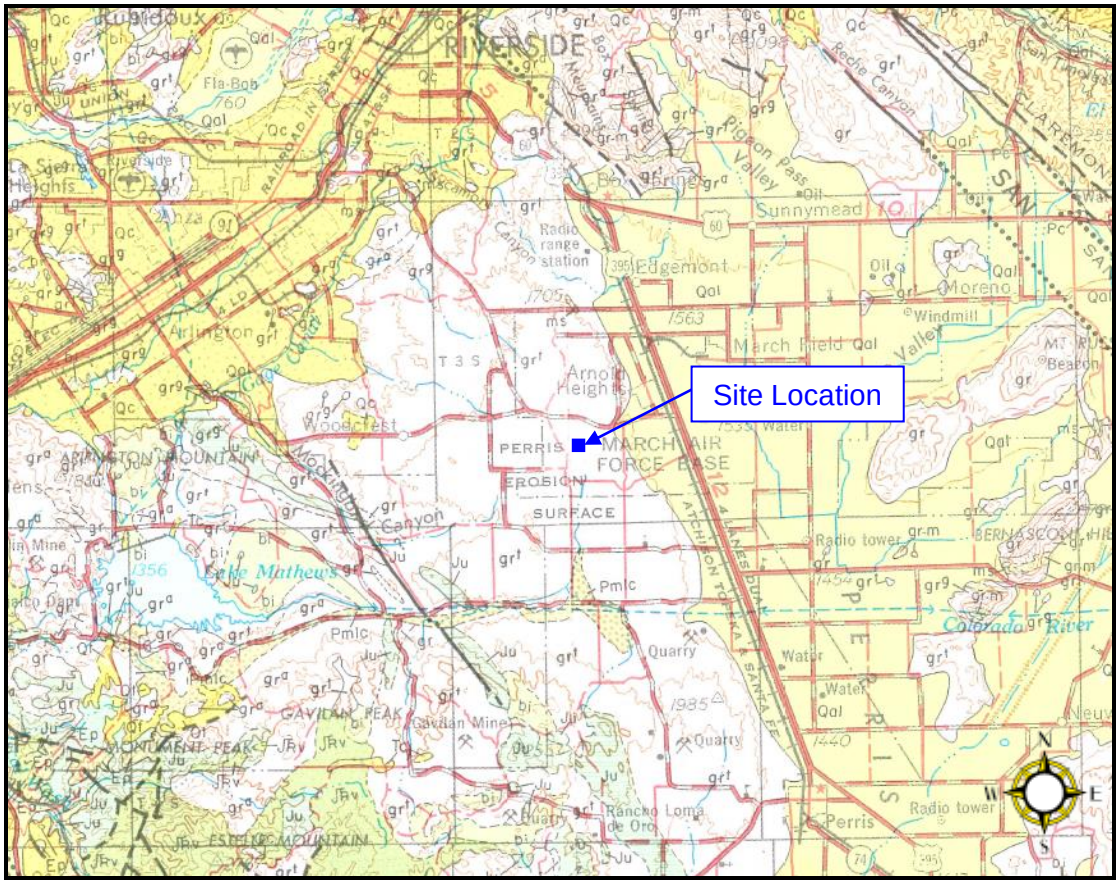
The site is currently vacant. The site is bounded on the north by 11th Street, west by a gravel parking lot area, and vacant undeveloped land to the south. Remnants of previous structures, courtyard area, and a concrete sidewalk are present on the site. A portion of an oval dirt running track is present on the east side of the site. The topography on the project site is generally planar with a slight gradient to the southwest. Vegetation consists of a light growth of seasonal grasses and weeds near the southwestern portion of the site.

GEOLOGIC SETTING

Regional Geology: The subject site is situated within the northern portion of a natural geomorphic province in southwestern California known as the Peninsular Ranges, which is characterized by steep, elongated ranges and valleys that trend northwesterly. This geomorphic province encompasses an area that extends 125 miles, from the Transverse Ranges and the Los Angeles Basin, south to the Mexican border, and beyond another 795 miles to the tip of Baja California (Norris & Webb, 1990; Harden, 1998). This province is believed to have originated as a thick accumulation of predominantly marine sedimentary and volcanic rocks during the late Paleozoic and early Mesozoic. Following this accumulation, in mid-Cretaceous time, the province underwent a pronounced episode of mountain building. The accumulated rocks were then complexly metamorphosed and intruded by igneous rocks, known locally as the Southern California Batholith. A period of erosion followed the mountain building, and during the late Cretaceous and Cenozoic time, sedimentary and subordinate volcanic rocks were deposited upon the eroded surfaces of the batholithic and pre-batholithic rocks.

Figure 3 below shows a portion of the CDMG Geologic Map of California, Santa Ana Sheet, (Scale 1:250,000), Southern California (Rogers, 1966) depicting the approximate location of the project site.

FIGURE 3: CDMG, 1966, Geologic Map of California, Santa Ana Sheet, Scale 1:250,000.

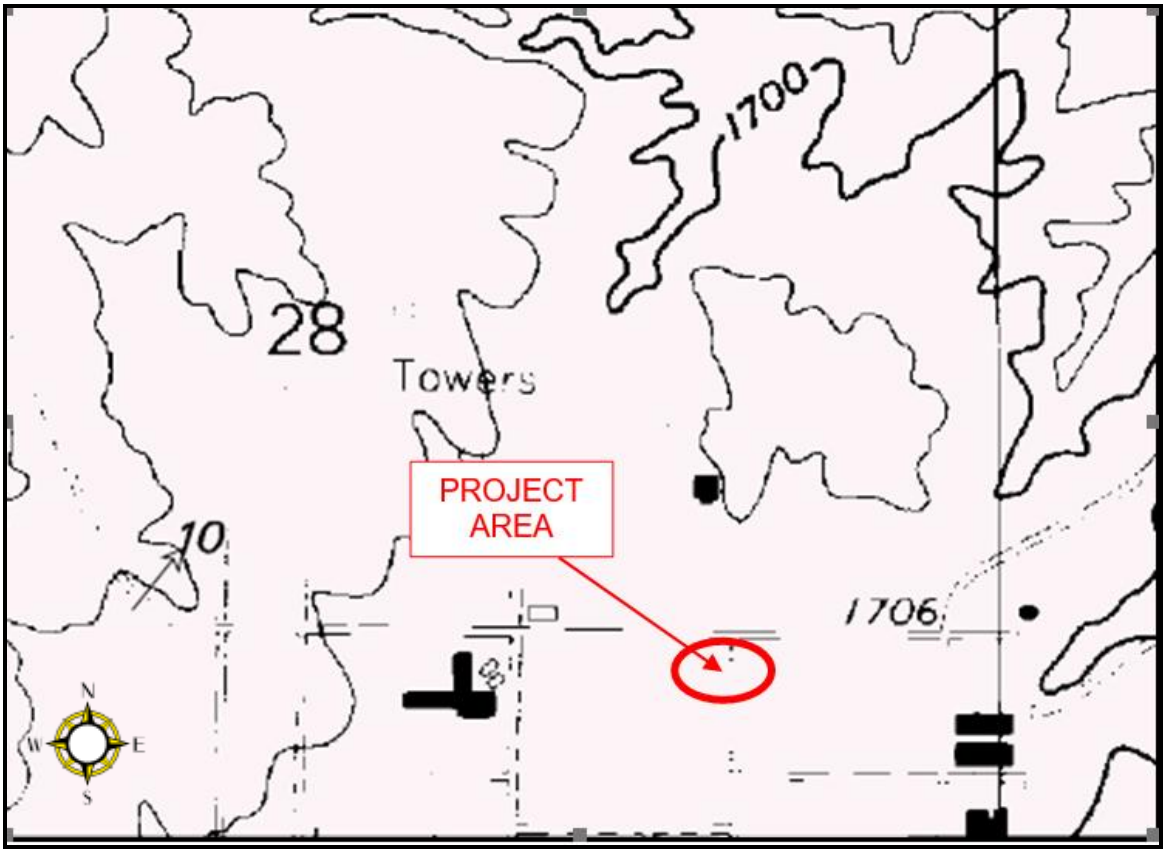


Local Geology: More specifically, the site is situated within the central portion of the Perris Block, an eroded mass of Cretaceous and older crystalline rock. Thin sedimentary and volcanic units mantle the bedrock in a few places with alluvial deposits filling in the lower valley areas. The Perris Block is a structurally stable, internally unfaulted mass of crustal rocks bounded on the west by the Elsinore-Chino fault zones, on the east by the San Jacinto fault zone, and on the north by the Cucamonga fault zone (Woodford, et al., 1971). On the south, the Perris Block is bounded by a series of sedimentary basins that lie between Temecula and Anza (Morton and Matti, 1989).

The site is located on the Perris Erosional Surface (general elevation range of 1,600 to 1,800 feet) and is underlain by biotite-hornblende tonalite of the Valle Verde pluton. The Perris Erosional Surface consists of crystalline igneous and metamorphic bedrock. In most places this tonalite has a northwest oriented crude to well-developed planar fabric produced by oriented biotite and hornblende (U.S. Dept. of Air Force, 1996).

Figure 4 below shows a portion of the USGS Preliminary Geologic Map of the Riverside East 7.5' Quadrangle, Riverside County, California (Morton & Cox, 2001) depicting the mapped geologic units in the vicinity of the subject property:

FIGURE 4: USGS Preliminary Geologic Map of the Riverside East 7.5' Quadrangle (Morton & Cox, 2001)



Kvt

Val Verde tonalite—Gray-weathering, relatively homogeneous, massive- to well-foliated, medium- to coarse-grained, hypautomorphic-granular biotite-hornblende tonalite; principal rock type of Val Verde pluton.

Materials encountered within all exploratory borings on February 5, 2020 predominantly consisted of highly to moderately weathered granitic bedrock (tonalite) to the depths drilled, 15 to 40 feet below the existing ground surface. The surface of the site is covered with up to 3.5 feet of native soil and artificial fill, generally consisting of silty clayey sand (SC-SM), silty sand (SM) and clayey sand (SC).

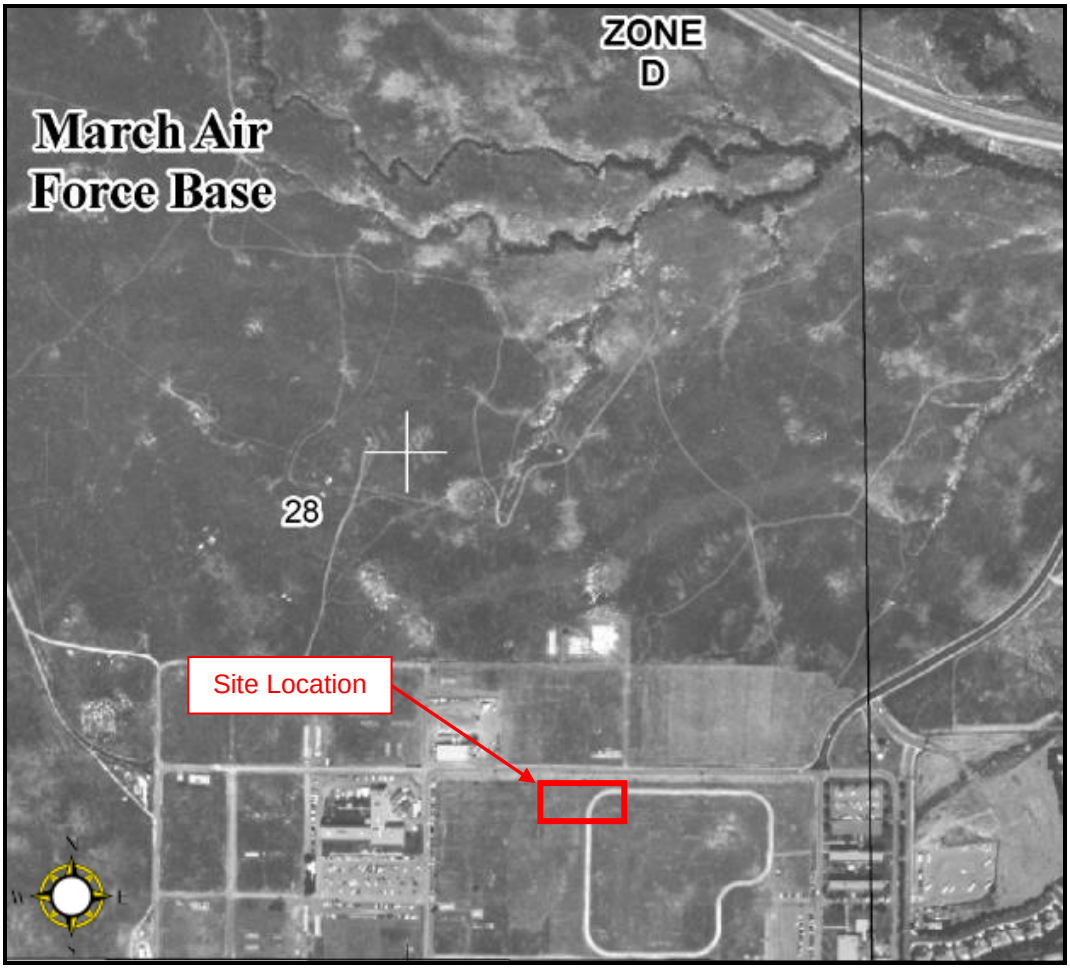
Groundwater: The site is located along the western fringe of the Perris Valley hydrologic sub-area of the Santa Ana hydrologic basin in Riverside County, California. The site is underlain by granitic rock (tonalite) that is not typically considered a water-bearing portion of the groundwater basin. Groundwater was encountered within our exploratory boring B-04 (drilled February 5, 2020) at a depth of approximately 25 feet

below the existing ground surface. Groundwater is considered to occur in limited quantities in the shallow weathered bedrock zone and possibly in fractures and joint systems within the bedrock (USAF, 1990).

Based on the encountered groundwater levels and groundwater data reviewed, we estimate a high groundwater level at the site of 15 feet beneath the existing ground surface.

Surface Water: A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) website (FEMA, 2020) indicates that the site is located within FIRM Map No. 06065C0745G, dated August 28, 2008. This map indicates that the project site is located in an area designated as "Zone D" described as "Areas in which flood hazards are undetermined, but possible". Figure 5 below shows a portion of the referenced FIRM Map.

FIGURE 5: FEMA Map No. 06065C0745G, FEMA, 2008



ZONE D Areas in which flood hazards are undetermined, but possible.

Faulting: There are at least 38 major late Quaternary active/potentially active faults that are within 100 kilometers of the site. Of these, there are no faults known to traverse the site, nor is there any photogeologic or surficial geomorphic evidence suggestive of faulting. In addition, the site is not located within a State of California

"Alquist-Priolo Earthquake Fault Zone" for fault rupture hazard (CGS, 2020). Current mapping by the Riverside County Land Information System indicates that the site does not lie within a mapped County fault zone.

The nearest known active fault is the San Jacinto Fault (San Jacinto Valley Segment) located approximately 15.5 kilometers to the northeast of the project site. The San Jacinto Fault (San Jacinto Valley Segment, USGS, 2008) is a right-lateral, strike-slip fault, approximately 43 kilometers in length, with an estimated maximum moment magnitude (M_w) earthquake of 7.0 and an associated slip-rate of 18 mm/year.

As tabulated by Blake (2000) and based on our review of the USGS 2008 National Seismic Hazard Maps - Source Parameters (USGS, 2008), the major faults influencing the site, distances and maximum earthquake magnitudes are presented in Table 1.

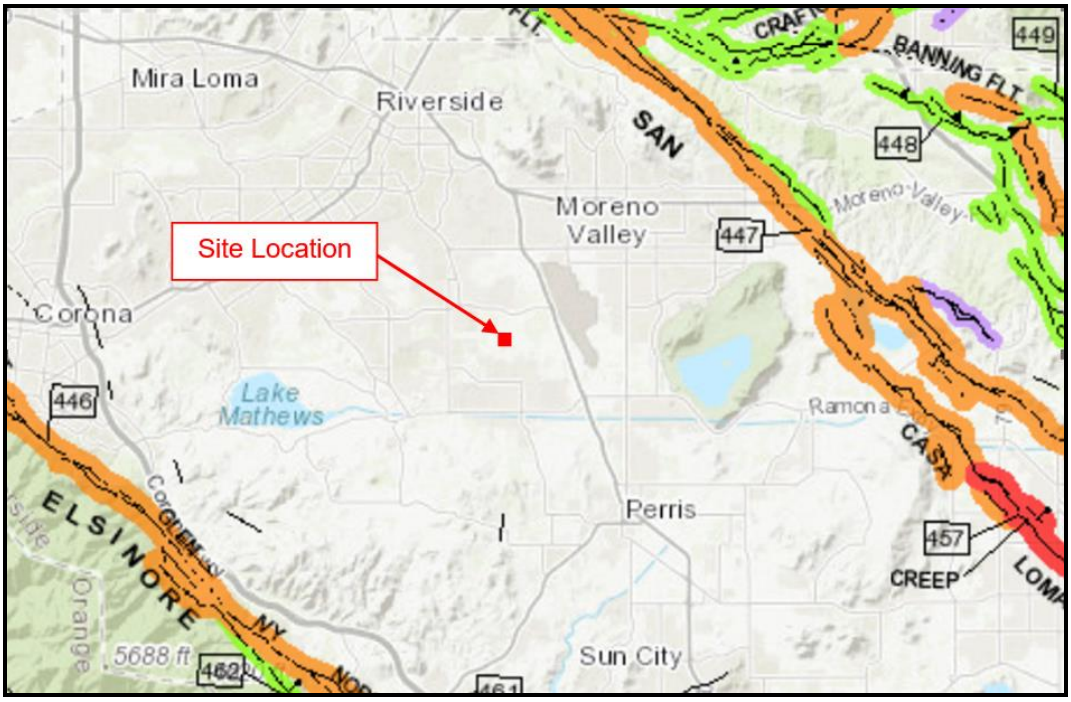
TABLE 1: Fault Zone, Distances and Maximum Earthquake Magnitudes

Fault Zone	Approximate Distance (Km)	Earthquake Magnitude (M_w)
San Jacinto - San Jacinto Valley	15.5	7.0
San Jacinto - San Bernardino	20.3	7.0
Elsinore - Glen Ivy	21.0	6.8
Elsinore - Chino-Central Ave. (Elsinore)	26.5	6.8

Our review of other applicable references (listed) did not reveal any mapped faults or fault zones in the near vicinity of the subject property.

Figure 6 is a portion of the CGS 2010 Fault Activity Map of California showing the location of the site and mapped earthquake fault zones in the vicinity of the site.

FIGURE 6: 2010 Fault Activity Map of California, CGS, 2010



Fault along which historic (last 200 years) displacement has occurred.

Holocene fault displacement (during past 11,700 years) without historic record.

Late Quaternary fault displacement (during past 700,000 years).

Quaternary fault (age undifferentiated).

Pre-Quaternary fault (older that 1.6 million years) or fault without recognized Quaternary displacement.

Our review of the potential for surface fault rupture included an examination of one non-stereo and ten stereo pairs of vertical black and white and color aerial photographs dating from 1948 to 2018 (see References for a listing). The photogeologic analysis did not reveal observed indicators suggestive of active fault-related features. This included the lack of photolineations and/or no consistent tonal variations observed across the site, or trending toward the site. Our review indicates that no documented active faults are known to traverse toward the subject site, based on published literature, and no surficial indications or geomorphic features were observed within the aerial photographs or field reconnaissance that are suggestive of active faulting.

Ground rupture is generally considered most likely to occur along pre-existing faults. Based on our review of published geologic maps, aerial photograph review, and site reconnaissance, the potential for ground rupture at the site is considered to be low.

Geologic Hazard Zones (Liquefaction & Landsliding): The site does not lie within a State or County mapped landslide hazard area. A review of the Riverside County RCIT GIS map (RCIT, 2020) for this area indicates that the site does not lie within mapped Riverside County Liquefaction Potential area.

Historic Seismic Activity: We performed an historical seismicity search, based on the USGS Earthquake Hazards Program earthquake catalog, accessed through the USGS Earthquake Hazards Program earthquake catalog web application (USGS, 2020). Table 2 and the following discussion summarize the known historic seismic events (≥M4.0) that have been estimated and/or recorded from 1932 to February 2020, within a 100 kilometer (62 mile) radius of the site.

TABLE 2: Historic Seismic Events; 1932-2020 (100 Kilometer Radius)

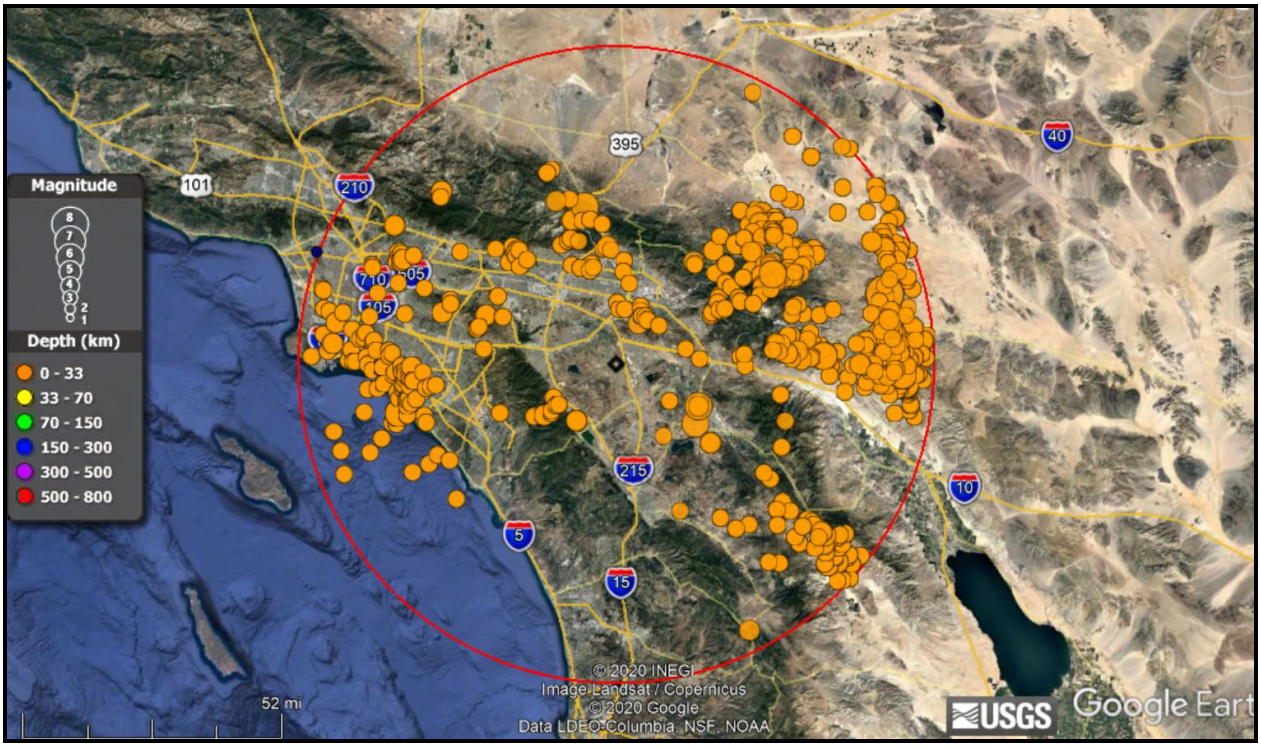
Richter Magnitude	No. of Events
4.0 - 4.9	421
5.0 - 5.9	43
6.0 - 6.9	5
7.0 - 7.9	1
8.0+	0

A summary of the historic earthquake data is as follows:

- The nearest recorded significant historic earthquake epicenter (≥M5.0) was approximately 23.75 miles southeast of the site (September 23, 1963, M5.3).
- The largest recorded historical earthquake was the M7.6 (M_w 7.3) Landers event, located approximately 55 miles to the northeast (June 28, 1992).
- The nearest estimated significant earthquake epicenter (pre-1932) was located approximately 20 miles to the southeast, being a M6.8 event (April 21, 1918).
- The largest estimated historical earthquake magnitude (pre-1932) within a 62 mile radius is the M6.8 event of April 21, 1918 located approximately 20 miles to the southeast.

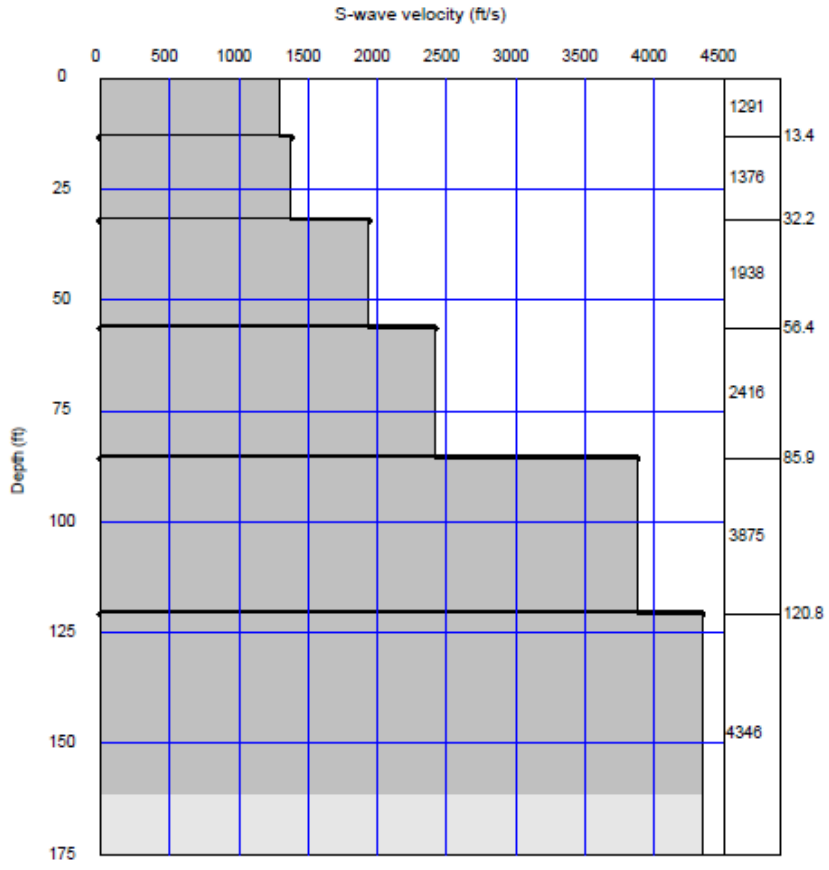
An earthquake epicenter map (USGS, 2020), showing plotted earthquakes with magnitudes greater than M4.0 within a 100 kilometer radius of the site is shown on Figure 7 for reference purposes. This map was prepared using the ANSS Comprehensive Earthquake Catalog (USGS, 2020) of instrumentally recorded events from 1932 to February 2020, overlain on Google Earth® imagery (2020).

FIGURE 7: Earthquake Epicenter Map showing events of M4.0+ within a 100 kilometer radius



Seismic Parameters: The site coordinates (WGS 84) are 33.8768°N / -117.3000°W. The site is underlain by weathered granitic bedrock with less than approximately four feet of soil mantling the bedrock. A geophysical seismic shear-wave survey was conducted for this study by our subconsultant, Terra Geosciences, for the purposes of evaluating the Site Classification for this project. The results of the shear-wave survey indicate a shear wave velocity of 1,910 feet per second, corresponding to a Site Class C. Figure 8 below is the graphical representation of the shear-wave survey conducted for this site.

FIGURE 8: Shear Wave Velocity Model



SHEAR-WAVE VELOCITY MODEL: Average Vs 100ft = 1,910.2 ft/sec

Site Classification (CBC-2019 1613A.2.2 & ASCE 7-16 Ch. 20)- "C" (Very Dense Soil & Soft Rock)

Client: Inland Foundation Engineering, Inc.

Project Name: RCCD Ben Clark Training Center: Education Center / IFE Project No. R351-011

Survey Line End Coordinates: 33.87664, -117.30013 / 33.87689, -117.29969

Date: 1/25/20

TG Project No. 203365-1

TERRA GEOSCIENCES
P.O. Box 1090
Loma Linda, CA 92354

PROFESSIONAL GEOPHYSICIST
DONN C. SCHWARTZKOPF
No. 1002
STATE OF CALIFORNIA

On the basis of the Site Classification and subsurface conditions, a site-specific ground motion analysis is not required for this project. The web application U.S. Design Maps (OSHPD, 2020), was used to evaluate the seismic parameters for this project. Table 3 below summarizes the 2019 California Building Code (CBC) seismic design criteria, which is based on ASCE 7-16.

Table 3: 2019 CBC Seismic Design Parameters

Seismic Parameter	Value
S_s - MCE_R Ground Motion for 0.2-sec Period	1.5 g
S_1 - MCE_R Ground Motion for 1-sec Period	0.572 g
F_a - Site Amplification Factor at 0.2-sec Period	1.2
F_v - Site Amplification Factor at 1.0-sec Period	1.428
SM_S - Site-Modified Spectral Acceleration Value	1.8 g
SM_1 - Site-Modified Spectral Acceleration Value	0.817 g
SD_S - Numeric Seismic Design Value at 0.2-sec period	1.2 g
SD_1 - Numeric Seismic Design Value at 1.2-sec period	0.545
PGA - MCE_g Peak Ground Acceleration	0.5
F_{PGA} - Site Amplification Factor at PGA	1.2
PGA_M - Site Modified Peak Ground Acceleration	0.6
T_L - Long-Period Transition Period (s)	8
SsRT - Probabilistic Risk-Targeted Ground Motion (0.2s)	1.552
SsUH - Factored Uniform-Hazard Spectral Acceleration (2% probability of exceedance in 50 years)	1.654
SsD - Factored Deterministic Acceleration Value (0.2s)	1.5
S1RT - Probabilistic Risk-Targeted Ground Motion (1.0s)	0.572
S1UH - Factored Uniform-Hazard Spectral Acceleration (2% probability of exceedance in 50 years)	0.624
S1D - Factored Deterministic Acceleration Value (1.0s)	0.6
PGA_d - Factored Deterministic Acceleration Value (1.0-sec)	0.5
CR_S - Coefficient of Risk (0.2-sec)	0.939
CR_1 - Coefficient of Risk (1.0-sec)	0.916
Site Class	C

Secondary Seismic Hazards: The primary geologic hazard affecting the project is that of ground shaking. Secondary permanent or transient seismic hazards generally associated with severe ground shaking during an earthquake include, but are not necessarily limited to; ground rupture, liquefaction, seiches or tsunamis, landsliding, rockfalls, and seismically-induced settlement. These are discussed below:

Ground Rupture - Ground rupture is generally considered most likely to occur along pre-existing faults. Since no known faults are believed to traverse the site, the probability of ground rupture is considered very low.

Liquefaction: In general, liquefaction is a phenomenon that occurs where there is a loss of strength or stiffness in the soil that can result in the settlement of buildings, ground failure, or other hazards. The main factors contributing to this phe-

nomenon are: 1) cohesionless, granular soils with relatively low density (usually of Holocene age); 2) shallow groundwater (generally less than 50 feet); and 3) moderate to high seismic ground shaking.

Based on the presence of shallow granitic bedrock below the site, the potential for liquefaction is not significant.

Seiches/Tsunamis: A seiche is a standing wave in an enclosed or partially enclosed body of water. In order for a seiche to form, the body of water needs to be at least partially bounded, allowing the formation of the standing wave. Tsunamis are very large ocean waves that are caused by an underwater earthquake or volcanic eruption, often causing extreme destruction when they strike land.

There are no bodies of water on or adjacent to the project site. Based on the distance to large, open bodies of water and the elevation of the site with respect to sea level, the potential for seiches/tsunamis does not present a hazard to this project.

Landsliding - Due to the low-lying relief of the site and adjacent areas, landsliding due to seismic shaking is considered nil.

Rockfalls - Since no large rock outcrops are present at or adjacent to the site, the possibility of rockfalls during seismic shaking is nil.

Seismically-Induced Settlement: Seismically-induced settlement generally occurs within areas of loose granular soil and consists of both liquefaction settlement below groundwater and dry-sand settlement above groundwater. Based on the presence of shallow granitic bedrock below the site, the potential for seismically induced settlement is nil.

Debris Flows: Debris flows are composed of a slurry-like mass of liquefied debris (including boulders) that moves downhill under the force of gravity. Such slurries are dense enough to support very large particles but not solid enough to resist flowing downhill. Debris flows are most common in steep mountain canyons when a mass of mud and debris becomes saturated during a heavy rainstorm and suddenly begins to flow down the canyons (Prothero & Schwab, 1996). Based on the location of the site and the relatively planar topography of the property up-gradient of the site, the hazard of debris flow is low.

Flooding (Water Storage Facility Failure): A review of the State of California California Department of Water Resources, Division of Safety of Dams, 2020, California Dam Breach Inundation Maps, indicates that the subject site is not located within the limits of a dam inundation area. This includes the inundation limits of the Mockingbird Canyon and Lake Perris dams.

Erosion: No indication of wind or water surface erosion was observed on the site at the time of our study. The hazard of erosion is considered low.

Other Geologic Hazards: There are other geologic hazards not necessarily associated with seismic activity that occur statewide. These hazards include methane gas, hydrogen-sulfide gas, tar seeps, Radon-222 Gas, regional subsidence, and naturally occurring asbestos. Of these hazards, there are none that appear to impact the site.

ENGINEERING GEOLOGY REVIEW CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

1. Earth Materials

As mapped, the site is underlain by biotite-hornblende tonalite of the Valle Verde pluton (map symbol Kvt). Materials encountered within our exploratory borings on February 5, 2020 predominantly consisted of highly- to moderately weathered granitic bedrock (tonalite) to the depths drilled, 15 to 40 feet below the existing ground surface. The surface of the site is covered with up to 3.5 feet of native soil and artificial fill, generally consisting of silty clayey sand (SC-SM), silty sand (SM) and clayey sand (SC).

2. Faulting

Ground rupture is generally considered most likely to occur along pre-existing faults. Since no known faults are believed to traverse the site, the probability of ground rupture is considered very low. The nearest known active fault is the San Jacinto Fault (San Jacinto Valley Segment) located approximately 15.5 kilometers to the northeast of the project site.

3. Seismicity

The primary geologic hazard that exists at the site is that of ground shaking. Several factors determine the severity of ground shaking at a given location, such as size of earthquake, length of fault rupture (if any), depth of hypocenter, type of faulting (dip slip/strike slip), directional attenuation, amplification, earth materials, and others. Due to the location of the site with respect to regional faulting and the recorded historical seismic activity, moderate to severe ground shaking should be anticipated during the life of the proposed project.

4. Groundwater

Groundwater was encountered within our exploratory boring B-04 (drilled February 5, 2020) at a depth of approximately 25 feet below the existing ground surface. Groundwater is considered to occur in limited quantities in the shallow weathered bedrock zone and possibly in fractures and joint systems within the bedrock. Based on the encountered groundwater levels and groundwater data reviewed, we estimate a high groundwater level at the site of 15 feet beneath the existing ground surface.

5. Secondary Seismic Hazards

Based on our study and review of available literature, no permanent or transient secondary seismic hazards are expected to affect the subject property.

***Recommendations*:**

1. For seismic design purposes, we considered a cascading effect of rupture along the entire length of the San Jacinto Fault Zone (six main segments collectively). This type of cascading rupture has an associated Maximum Moment Magnitude (Mw) of 7.8 (Peterson, et al, 2014).

2. All structures should be designed to at least meet the current California Building Code provisions in the latest CBC edition (2019); however, it should be noted that the building code is described as a minimum design condition and is often the maximum level to which structures are designed. Structures that are built to minimum code requirements are designed to remain standing after an earthquake in order for occupants to safely evacuate, but then may have to ultimately be demolished (Larson and Slosson, 1992). It is the responsibility of both the property owner and project structural engineer to determine the risk factors with respect to using CBC minimum design values for the facility.

SUBSURFACE CONDITIONS

The proposed classroom and administration building site is underlain by highly to moderately weathered granitic bedrock (tonalite) to a depth of at least 40 feet, the maximum depth drilled for this investigation. The weathered bedrock is mantled with as much as 3.5 feet of native soil and artificial fill. Approximately two inches of gravel are present on the ground surface at the location of boring B-04.

Laboratory testing of bedrock drilling spoils indicates that the weathered bedrock degrades into sand with silty clay (SW-SC) when disturbed. The surficial soil mantle generally consists of silty clayey sand (SC-SM), silty sand (SM) and clayey sand (SC).

Although not encountered in our borings, cobble and boulder size particles may be present in the weathered bedrock that will not become known until project excavation. Such materials, if encountered, may required screening prior to placement as compacted fill.

The granitic bedrock encountered in our borings is generally slightly moist and very dense. The overlying soil mantle is generally slightly moist to moist and loose to medium dense.

Analytical testing indicates that sulfate concentrations are very low. In accordance with ACI 318, Table 4.2.1, the soil is classified as Class S0 with respect to sulfate exposure. Chloride concentrations are 330 to 360 parts per million and indicate that the soil is generally not corrosive with respect to ferrous metal. It is, however, at levels high enough to be of concern with respect to corrosion of reinforcing steel. The soil is slightly acidic with an average pH value of slightly less than 7.0 Tested saturated resistivity values of 2,800 and 7,200 ohm-cm were obtained, indicating the soil is moderately corrosive to buried ferrous metal. Inland Foundation Engineering, Inc. does not practice corrosion engineering. We recommend that a qualified corrosion engineer be consulted for additional guidance.

Groundwater was encountered within exploratory boring B-04 at a depth of approximately 25 feet. The estimated historical high groundwater level is 15 feet below the existing ground surface.

CONCLUSIONS AND RECOMMENDATIONS

On the basis of our field and laboratory exploration and testing, construction of the proposed classroom and administration building is feasible from a geotechnical engineering standpoint. The primary issues requiring mitigation are undocumented artificial fill soil and variable density conditions to a depth of approximately 3.5 feet within the building pad and parking areas. This soil is not suitable for support of foundations or pavement in its existing condition.

To mitigate the potential for settlement, we recommend that the building pad and pavement areas be over-excavated and recompacted. These and other geotechnical engineering recommendations for project design and construction are presented below.

Foundation Design: The proposed classroom and administration building may be supported by shallow continuous and isolated spread footings designed with an allowable bearing pressure of 2,100 pounds per square foot. Footings should have a minimum width of 12 inches and be founded a minimum depth of 12 inches below the lowest adjacent grade. The allowable bearing pressure may be increased by 1,400 psf for each additional foot of depth and by 600 psf for each additional foot of width, to a maximum allowable bearing pressure of 4,200 psf. The allowable bearing capacity may also be increased by ⅓ for short-term transient wind and seismic loads. All footings should be supported by a minimum thickness of compacted fill of at least 12 inches.

Static settlement of foundations properly designed and constructed as recommended herein is expected to be less than one inch total. Potential seismically-induced settlement of existing site soil is estimated to be negligible. The total differential settlement between foundations of similar size and load is expected to be less than one inch vertical in 40 feet horizontal.

The on-site soil has a very low expansion potential. Expansive soil design criteria are not necessary for foundations and concrete slabs-on-grade.

Lateral Resistance: Resistance to lateral loads will be provided by a combination of friction acting at the base of the slab or foundation and passive earth pressure. A coefficient of friction of 0.50 between soil and concrete may be used with dead load forces only. A passive earth pressure of 250 psf/ft, may be used for the sides of footings poured against recompacted or dense native material. These values may be increased by 33 percent for lateral loads of short

duration, such as those caused by wind or seismic forces. Passive earth pressure should be ignored within the upper one foot, except where confined as beneath a floor slab, for example.

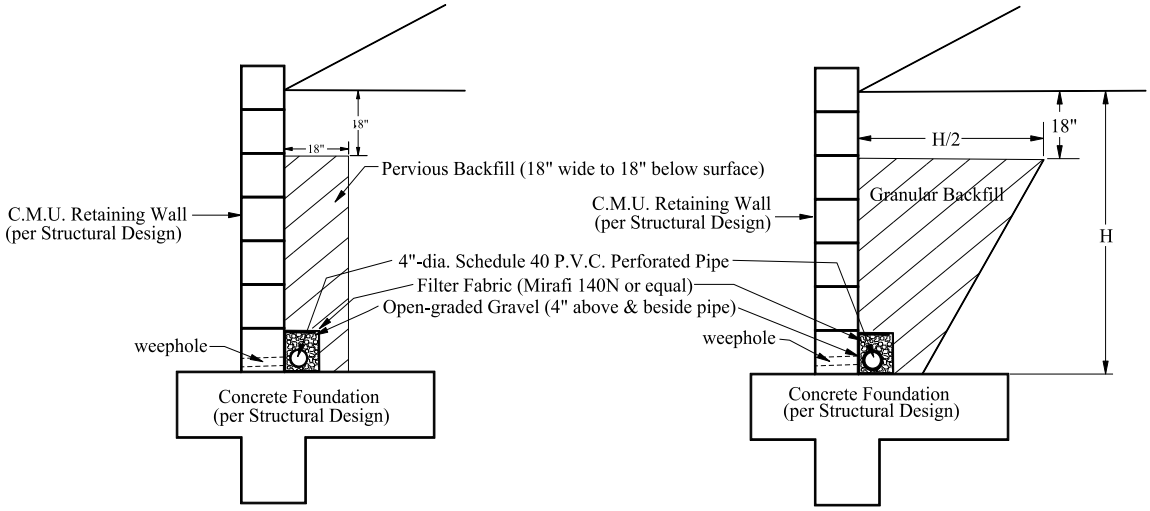
Excavation Stability: All excavations should be configured per with the requirements of CalOSHA. We recommend that the site soils be classified as Type C, per CalOSHA criteria. The classification of the soil and the shoring and/or slope configuration should be the responsibility of the contractor on the basis of the excavation depth and the soil encountered. The contractor should have a "competent person" on-site for the purpose of assuring safety within and about all construction excavations.

Retaining Walls: Retaining walls may be necessary during construction and/or landscaping. For on-site soils, the retaining walls should be designed for an active earth pressure equivalent to that exerted by a fluid weighing not less than 37 psf/ft.

For walls that are restrained, an "at-rest" lateral equivalent fluid pressure of 55 psf/ft is recommended, with the resultant applied at mid-height of the wall.

Any applicable construction and seismic surcharges should be added to the above pressures.

RETAINING WALL - TYPICAL PROFILE



Native Backfill

Imported Granular Backfill

At least 12 inches of granular material should be used in the backfill behind the walls and water pressure should not be permitted to build up behind retaining walls. The upper 12 to 18 inches of the backfill should consist of soil having a low permeability (less than 10^{-6} cm/sec). All backfill should be non-expansive. A subdrain should be constructed along the base of the backfill. Typical recommended retaining wall backfill and drainage details are shown in the detail above.

Concrete Slabs-on-Grade: All concrete slabs-on-grade should have a minimum thickness of four inches. During final grading and prior to the placement of concrete, all surfaces to receive concrete slabs-on-grade should be compacted to maintain a minimum compacted fill thickness of 12 inches.

Load bearing slabs may be designed using a modulus of subgrade reaction not exceeding 125 pounds per square inch per inch.

Slabs that are designed and constructed per the provisions of the American Concrete Institute (ACI) as a minimum will perform much better and will be more pleasing in appearance. Shrinkage of concrete should be anticipated. This will result in cracks in all concrete slabs-on-grade. Shrinkage cracks may be directed to saw-cut "control joints" spaced on the basis of slab thickness and reinforcement. ACI typically recommends control joint spacing in unreinforced concrete at maximum intervals equal to the slab thickness times 24. A level subgrade is also an important element in achieving some “control” in the locations of shrinkage cracks. Control joints should be cut immediately following the finishing process and prior to the placement of the curing cover or membrane. Control joints that are cut on the day following the concrete placement are generally ineffective. The placement of reinforcing steel will help in reducing crack width and propagation as-well-as providing for an increase in the control joint spacing. The use of welded wire mesh has typically been observed to be of limited value due to difficulties and lack of care in maintaining the level of the steel in the concrete during placement. The addition of water to the mix to enhance placement and workability frequently results in an excessive water-cement ratio that weakens the concrete, increases drying times and results in more cracking due to concrete shrinkage during the initial cure.

Slabs to receive moisture sensitive floor coverings should be provided with a moisture vapor retarder. Moisture vapor retarders should be designed and constructed in accordance with the manufacturer’s recommendations and in

accordance with ACI 302.2R, which addresses below-slab vapor retarders/barriers. Vapor retarders should comply with ASTM E1745 and have a nominal thickness of 15 mils.

If concrete is to be placed on a dry absorptive subgrade in hot and dry weather, the subgrade should be dampened but not to a point that there is freestanding water prior to placement. The formwork and reinforcement should also be dampened.

Preliminary Pavement Design: Recommended structural pavement sections are shown below in Table 4. The recommended sections are based on an estimated R-value of 20, current Caltrans design procedures and the traffic index (T.I.) values shown.

TABLE 4: Preliminary AC Pavement Designs

Service	Asphalt Concrete Thickness (ft.)	Base Course Thickness (ft.)
Light traffic (autos, parking areas, T.I. = 5.0)	0.20	0.65
Heavy traffic (trucks, driveways, bus lanes, T.I. =7.0)	0.30	1.0

At the completion of rough grading, additional samples of the actual pavement subgrade soil should be obtained for R-value testing to confirm that the recommended pavement sections are appropriate.

Infiltration: Infiltration testing was performed at the three locations shown on Figure A-5. The testing procedures and test results are described in Appendix C. Table 5 below provides a summary of the test data with values for I_c. Note that the values shown do not include safety factors.

Table 5: Percolation Test Data and Infiltration Rates

Percolation Test No.	Percolation Rate (Min./Inch)	Depth Below Existing Ground Surface (In.)	Infiltration Rate (I_c) (In./Hr.)
P-01	20.0	96	0.24
P-02	9.2	96	0.53
P-03	8.6	98	0.53

General Site Grading: All grading should be performed per the applicable provisions of the 2019 California Building Code. The following recommendations have been developed on the basis of our field and laboratory testing:

1. **Clearing and Grubbing:** All building, slab and pavement areas and all surfaces to receive compacted fill should be cleared of existing loose soil, artificial fill, vegetation, debris, and other unsuitable materials. All remnants of former structures and pavements, all organic matter and any other unsuitable material should be removed and disposed of outside the project area. Based on the conditions encountered in our borings, excavation to depths of approximately three to four feet will be necessary to remove loose native and undocumented fill soil over most of the site.

   Abandoned underground utility lines should be traced out and completely removed from the site. Each end of the abandoned utility line should be securely capped at the entrance and exit to the site to prevent any water from entering the site. Soil loosened due to the removal of structures or large vegetation should be removed and replaced as controlled compacted fill.

2. **Preparation of Surfaces to Receive Compacted Fill:** All surfaces to receive compacted fill should be subjected to compaction testing prior to processing. Testing should indicate a relative compaction of at least 85 percent within the unprocessed native soils. If undocumented fill, loose soil, roots or other deleterious materials are encountered or if the relative compaction fails to meet the acceptance criterion, additional over-excavation should be performed until satisfactory conditions are encountered. Upon approval, surfaces to receive fill should be scarified, brought to near optimum moisture content, and compacted to a minimum of 90 percent relative compaction.

3. **Placement of Compacted Fill:** Fill materials consisting of on-site soil or approved imported granular soil, should be spread in shallow lifts and compacted at near optimum moisture content to a minimum of 90 percent relative compaction.

   Although not encountered in our borings, cobble and boulder size particles may be present in the weathered bedrock that will not

become known until project excavation. Such materials, if encountered, may require screening prior to placement as compacted fill. Compacted fill should not contain any particles larger than 12 inches.

4. **Preparation of Building Area:** The proposed classroom and administration building should be underlain entirely by a uniform fill mat. The fill mat should extend below the deepest footing to a depth of at least 12 inches, or to the depth necessary to remove all existing fill and loose native soil in the building area. The fill mat should extend horizontally beyond the edge of exterior footings for a distance of at least five (5) feet.

5. **Preparation of Slab and Paving Areas:** During final grading and immediately prior to placement of concrete or aggregate base, all surfaces to receive asphalt concrete paving or concrete slabs-on-grade should be processed and tested to assure compaction for a depth of at least of 12 inches. This may be accomplished by a combination of overexcavation, scarification and recompaction of the surface, and replacement of the excavated material as controlled compacted fill. Compaction of the slab areas should be to a minimum of 90 percent relative compaction. Compaction within the proposed pavement areas should be to a minimum of 95 percent relative compaction for both the subgrade and base course.

6. **Utility Trench Backfill:** Utility trench backfill consisting on-site soil should be placed by mechanical compaction to a minimum of 90 percent relative compaction. This is with the exception of the upper 12 inches under pavement areas where the minimum relative compaction should be 95 percent. Jetting of the native soils is not recommended.

7. **Testing and Observation:** During grading, tests and observations should be performed by the project geotechnical engineer or his/her representative to verify that the grading is being performed per the project specifications. Field density testing should be performed per the current ASTM D1556 or ASTM D6938 test methods. The minimum acceptable degree of compaction should be 90 percent of the maximum dry density as obtained by the ASTM D1557 test

method except where superseded by more stringent requirements, such as beneath pavement or in deep fills. Where testing indicates insufficient density, additional compactive effort should be applied until retesting indicates satisfactory compaction.

GENERAL

The findings and recommendations presented in this report are based upon an interpolation of the soil conditions between boring locations. Should conditions be encountered during grading that appears to be different than those indicated by this report, this office should be notified.

We recommend that a pre-job conference be held on the site prior to the initiation of site grading. The purpose of this meeting will be to assure a complete understanding of the recommendations presented in this report as they apply to the actual grading performed.

This report was prepared for Riverside Community College District for their use in the design of the the proposed new classroom and administration building at the Ben Clark Training Center. This report may only be used by Riverside Community College District for this purpose. The use of this report by parties or for other purposes is not authorized without written permission by Inland Foundation Engineering, Inc. Inland Foundation Engineering, Inc. will not be liable for any projects connected with the unauthorized use of this report.

The recommendations of this report are considered to be preliminary. The final design parameters may only be determined or confirmed at the completion of site grading on the basis of observations made during the site grading operation. To this extent, this report is not considered to be complete until the completion of both the design process and the site preparation.

REFERENCES

ASCE/SEI, 2017, ASCE Standard 7-16, Minimum Design Loads for Buildings and Other Structures.

Blake, T.F. 1989-2000a, EQSEARCH, A Computer Program for the Estimation of Peak Horizontal Acceleration from Southern California Historical Earthquake Catalog, Version 3.00b.

Blake, T.F. 1998-2000, UBCSEIS, A Computer Program for the Estimation of Uniform Building Code Coefficients Using 3-D Fault Sources, Version 1.03.

California Building Standards Commission, 2019, California Building Code (CBC), California Code of Regulations, Title 24, Part 2, Volume 2.

California Department of Water Resources, Division of Safety of Dams, 2020, California Dam Breach Inundation Maps, https://fmds.water.ca.gov/maps/damim/

California Division of Mines & Geology (C.D.M.G.), 2000, Digital Images of Official Maps of Alquist-Priolo Earthquake Fault Zones of California, Southern Region, DMG CD 2000-003.

California Geological Survey (CGS), 2007, "Guidelines to Geologic/Seismic Reports," Note No. 42, Interim Revision 2007.

California Geological Survey (CGS), 2008, Guidelines for Evaluating and Mitigating Seismic Hazards in California, CGS Special Publication 117A.

California Geological Survey (CGS), 2002, “California Geomorphic Provinces”, Note 36.
California Geological Survey (CGS), 2013, Checklist for the Review of Engineering.

California Geological Survey (CGS), 2020, California Official Tsunami Inundation Maps, California Department of Conservation, https://www.conservation.ca.gov/cgs/tsunami/maps.

Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings, Note 48, November 2019.

California Geological Survey (CGS), 2010, 2010 Fault Activity Map of California, Geologic Map No. 6.

California Institute of Technology, Southern California Earthquake Data Center, 2013, Significant Earthquakes and Faults, San Jacinto Fault Zone: http://scedc.caltech.edu/significant/sanjacinto1899.html

Coduto, Donald, 2001, Foundation Design: Principles and Practice, Second Edition, Prentice Hall.

Dudley, Paul H., 1936, Physiographic History of a Portion of the Perris Block, Southern California, from "Journal of Geology," 1936, Volume 44, pp. 358-378.

Federal Emergency Management Agency (2020), FEMA Flood Map Service Center, http://msc.fema.gov/portal

Harden, D.R., 1998, California Geology: Prentice Hall, Inc.

Hart, E.W. and Bryant W., 1997, "Fault Rupture Hazard Zones in California," California Division of Mines & Geology Special Publication 42.

Idriss, I.M. and Boulanger, R.W., 2008, “Soil Liquefaction During Earthquakes”, Earthquake Engineering Research Institute.

Ishihara, K., 1985, “Stability of Natural Deposits During Earthquakes”, 11th International Conference on Soil Mechanics and Foundation Engineering, pp. 321-376.

Jennings, C.W., 1992, Preliminary Fault Activity Map of California, Scale 1:750,000, C.D.M.G. Open File Report 92-03.

Jennings, C.W., 1994, Fault Activity Map of California and Adjacent Areas, C.D.M.G. Geologic Data Map No. 6, 1:750,000 scale.

Larson, R., and Slosson, J., 1992, The Role of Seismic Hazard Evaluation in Engineering Reports, *in* Engineering Geology Practice in Southern California, AEG Special Publication No. 4, pp. 191-194.

Morton, D.M. and Cox, B., 2001, Preliminary Geologic Map of the Riverside East 7.5’ Quadrangle, U.S.G.S. Open File Report 01-452.

Morton, D.M. and Matti, J.C., 1989, A Vanished late Pliocene to early Pleistocene alluvial-fan complex in the north Perris block, southern California. In Conglomerates in Basin Analysis: A symposium Dedicated to A.O. Woodford, Pacific Section S.E.P.M., Vol. 62, pp. 73-80.

Norris, R.M. and R.W. Webb, 1990, Geology of California (second edition).

Peterson, et al, 2014, Documentation for the 2014 update of the U.S. national seismic maps, U.S. Geological Survet Open File Report 2014-1091.

Prothero, D.R., & Schwab, F., 1996, Sedimentary Geology, an Introduction to Sedimentary Rocks and Stratigraphy.

Riverside County Land Information System GIS Maps, 2020.

Rodgers, T.H., 1966, Geologic Map of California, Santa Ana Sheet, Scale 1:250,000 (Second Printing 1973).

Toppozada, T.R., et al., 2000, Epicenters of and Areas Damaged by M≥4 California Earthquakes, Map Sheet 49, Scale 1"=25 Miles.

U.S. Department of the Air Force, 1996, Final Environmental Impact Statement, Volume 1, Disposal of Portions of March Air Force Base, California.

U.S. Department of the Air Force, 1990, Draft Environmental Impact Statement, Proposed Closure of Los Angeles AFB, California and Restoration of Space Systems Division.

U.S.G.S., 2020, Earthquake Hazards Program Earthquake Catalog, https://earthquake.usgs.gov/earthquakes/search/

Woodford, A., Shelton, J., Doehring, D., and Morton, R., 1971, Pliocene-Pleistocene History of the Perris Block, Southern California, Geological Society of America Bulletin, V. 82, pp. 3421-3448, 18 Figures, December, 1971.

Ziony, J.I., and Yerkes, R.F., 1985, Evaluating Earthquake and Surface Faulting Potential, in Evaluating Earthquake Hazards in the Los Angeles Region, U.S.G.S. Professional Paper 1360.

AERIAL PHOTOGRAPHS UTILIZED

Riverside County Flood Control District, 1948, Photo Nos. 1-33 and 1-34, Scale 1"= 2,600', January 14, 1948.

Riverside County Flood Control District, 1962, Photo Nos. 1-140, 1-141, and 1-142, Scale 1" = 2,000', January 28, 1962.

Riverside County Flood Control District, 1974, Photo Nos. 305 and 306, Scale 1" = 2,000', May 24, 1974.

Riverside County Flood Control District, 1980, Photo Nos. 241 and 242, Scale 1" = 2,000', February 1, 1980.

Riverside County Flood Control District, 1984, Photo Nos. 1337 and 1338, Scale 1" = 2,000', February 7, 1984.

Riverside County Flood Control District, 1990, Photo Nos. 6-26 and 6-27, Scale 1" = 2,000', January 23, 1990.

Riverside County Flood Control District, 1995, Photo Nos. 6-23 and 6-24, Scale 1" = 1,600', January 30, 1995.

Riverside County Flood Control District, 2000, Photo Nos. 6-23, 6-24, and 6-25, Scale 1" = 1,600', March 11, 2000.

Riverside County Flood Control District, 2005, Photo Nos. 6-23 and 6-24, Scale 1" = 1,600', April 14, 2005.

Riverside County Flood Control District, 2010, Photo Nos. 6-23 and 6-24, Scale 1" = 1,600', March 14, 2010.

Terrain Navigator, Orthophoto Map, Riverside East SE, CA, USGS Ref. Code 33117-H3-TF-012, dated 2018.

APPENDIX A – Field Exploration

APPENDIX A

FIELD EXPLORATION

For our field exploration, six exploratory borings were excavated by means of a truck mounted rotary auger rig at the approximate locations shown on Figure No. A-9. Logs of the materials encountered were made on the site by a staff geologist. The boring logs are shown on Figures A-3 through A-8.

Representative relatively undisturbed samples were obtained within our borings by driving a thin-walled steel penetration sampler with successive 30-inch drops of a 140-pound hammer. The number of blows required to achieve each six inches of penetration were recorded on our boring logs and used for estimating the relative consistency of the soil. Two different samplers were used. The first sampler used was a Standard Penetration Test sampler for which published correlations relating the number of hammer blows to the strength of the soil are available. The second sampler type was a modified California split barrel sampler with 2.41 inch diameter brass sample rings. Samples were placed in moisture sealed containers and transported to our laboratory for further observations and testing.

Representative bulk samples were obtained and returned to our laboratory for further testing and observations. The results of this testing are discussed and presented in Appendix B.

UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487)

PRIMARY DIVISIONS			GROUP SYMBOLS		SECONDARY DIVISIONS
COARSE GRAINED SOILS – MORE THAN HALF OF MATERIALS IS LARGER THAN #200 SIEVE SIZE	GRAVELS – MORE THAN HALF OF COARSE FRACTION IS LARGER THAN #4 SIEVE	CLEAN GRAVELS (LESS THAN) 5% FINES	GW		WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP		POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVEL WITH FINES	GM		SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
			GC		CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SANDS – MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN #4 SIEVE	CLEAN SANDS (LESS THAN) 5% FINES	SW		WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SP		POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES	SM		SILTY SANDS, SAND-SILT MIXTURES
			SC		CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS – MORE THAN HALF OF MATERIALS IS SMALLER THAN #200 SIEVE SIZE	SILTS AND CLAYS – LIQUID LIMIT IS LESS THAN 50		ML		INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL		ORGANIC SILTS AND ORGANIC SILT-CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS – LIQUID LIMIT IS GREATER THAN 50		MH		INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDS OR SILTS, ELASTIC SILTS
			CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH		ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
	HIGHLY ORGANIC SOILS		PT		PEAT, MUCK AND OTHER HIGHLY ORGANIC SOILS
TYPICAL FORMATIONAL MATERIALS	SANDSTONES		SS		
	SILTSTONES		SH		
	CLAYSTONES		CS		
	LIMESTONES		LS		
	SHALE		SL		

CONSISTENCY CRITERIA BASES ON FIELD TESTS

RELATIVE DENSITY – COARSE – GRAIN SOIL

RELATIVE DENSITY	SPT * (# BLOWS/FT)	RELATIVE DENSITY (%)
VERY LOOSE	<4	0-15
LOOSE	4-10	15-35
MEDIUM DENSE	10-30	35-65
DENSE	30-50	65-85
VERY DENSE	>50	85-100

CONSISTENCY – FINE-GRAIN SOIL

		TORVANE	POCKET ** PENETROMETER
CONSISTENCY	SPT* (# BLOWS/FT)	UNDRAINED SHEAR STRENGTH (tsf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)
Very Soft	<2	<0.13	<0.25
Soft	2-4	0.13-0.25	0.25-0.5
Medium Stiff	4-8	0.25-0.5	0.5-1.0
Stiff	8-15	0.5-1.0	1.0-2.0
Very Stiff	15-30	1.0-2.0	2.0-4.0
Hard	>30	>2.0	>4.0

* NUMBER OF BLOWS OF 140 POUND HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1 3/8 INCH I.D.) SPLIT BARREL SAMPLER (ASTM -1586 STANDARD PENETRATION TEST)

** UNCONFINED COMPRESSIVE STRENGTH IN TONS/SQ.FT. READ FROM POCKET PENETROMETER

MOISTURE CONTENT

DESCRIPTION	FIELD TEST
DRY	Absence of moisture, dusty, dry to the touch
MOIST	Damp but no visible water
WET	Visible free water, usually soil is below water table

CEMENTATION

DESCRIPTION	FIELD TEST
Weakly	Crumbled or breaks with handling or slight finger pressure
Moderately	Crumbles or breaks with considerable finger pressure
Strongly	Will not crumble or break with finger pressure

LOG OF BORING B-01

DRILLING RIG	**Mobile B-61**	DATE DRILLED	**2/5/20**	HAMMER TYPE	**Auto-Trip**
DRILLING METHOD	**Rotary Auger**			HAMMER WEIGHT	**140-lb.**
LOGGED BY	**FWC**			HAMMER DROP	**30-inches**
GROUND ELEVATION	**+/-**			BORING DIAMETER	**8-inches**

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
0	SC-SM		**SILTY, CLAYEY SAND,** fine- to medium, olive-brown, moist, medium dense.						
			GRANITE, highly to moderately weathered, olive. - Degrades to SAND with SILTY CLAY when disturbed, slightly moist, very dense -		X	SS	28 50	5	121
5					X	SS	15 50	3	123
	SW-SC				X	SS	50 50	2	120
10					X	SS	50	2	122
15					X	SS	50		
			End of boring at 15.5 feet. No groundwater encountered. Backfilled with native soils.						

This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.

Inland Foundation Engineering, Inc.

CLIENT	**Riverside Community College District**
PROJECT NAME	**Ben Clark Training Center**
PROJECT LOCATION	**16791 Davis Avenue** **Riverside, CA**
PROJECT NUMBER	**R351-011**

FIGURE NO. A-3

LOG OF BORING B-02

DRILLING RIG	**Mobile B-61**	DATE DRILLED	**2/5/20**	HAMMER TYPE	**Auto-Trip**
DRILLING METHOD	**Rotary Auger**			HAMMER WEIGHT	**140-lb.**
LOGGED BY	**FWC**			HAMMER DROP	**30-inches**
GROUND ELEVATION	**+/-**			BORING DIAMETER	**8-inches**

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
0	SM		**ARTIFICIAL FILL,** SILTY SAND, with trace clay, fine- to medium, olive-brown, moist, medium dense.						
						AU			
	SC-SM		**SILTY, CLAYEY SAND,** fine- to medium, olive-brown, moist, medium dense.			SS	8 10	8	126
5			**GRANITE,** moderately to slightly weathered, olive. - Degrades to SAND with SILTY CLAY when disturbed, slightly moist to moist, very dense -			SS	50	4	112
						SS	38 50	3	124
10						SS	50	4	113
	SW-SC								
15						SS	50	4	117
20			- mottled -			SPT	18 50	7	
			End of boring at 23 feet. Auger refusal. No groundwater encountered. Mottling encountered at 20 feet. Backfilled with native soils.						

Inland Foundation Engineering, Inc.

CLIENT	**Riverside Community College District**
PROJECT NAME	**Ben Clark Training Center**
PROJECT LOCATION	**16791 Davis Avenue** **Riverside, CA**
PROJECT NUMBER	**R351-011**

FIGURE NO. A-4

IFE BORING - GINT STD US LAB.GDT - 2/27/20 13:05 - P:\R351\R351-011 BEN CLARK\GINT.GPJ

LOG OF BORING B-03

DRILLING RIG	**Mobile B-61**	DATE DRILLED	**2/5/20**	HAMMER TYPE	**Auto-Trip**
DRILLING METHOD	**Rotary Auger**			HAMMER WEIGHT	**140-lb.**
LOGGED BY	**FWC**			HAMMER DROP	**30-inches**
GROUND ELEVATION	**+/-**			BORING DIAMETER	**8-inches**

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
0			This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.						
	SM		**SILTY SAND,** with trace clay, very fine- to fine, olive-brown, moist, loose to medium dense.			AU			
			GRANITE, moderately to slightly weathered, olive.			SS	11	6	117
			- Degrades to SAND with SILTY CLAY when disturbed, slightly moist, very dense -			AU	14		
5						SS	50	4	108
						SS	50	2	117
10	SW-SC					SS	50	2	114
15						SS	50	3	115
20						SPT	50	2	
			End of boring at 21 feet. Auger refusal. No groundwater or mottling encountered. Backfilled with native soils.						

Inland Foundation Engineering, Inc.

CLIENT	**Riverside Community College District**
PROJECT NAME	**Ben Clark Training Center**
PROJECT LOCATION	**16791 Davis Avenue, Riverside, CA**
PROJECT NUMBER	**R351-011**

FIGURE NO. A-5

LOG OF BORING B-04

DRILLING RIG	**Mobile B-61**	DATE DRILLED	**2/5/20**	HAMMER TYPE	**Auto-Trip**
DRILLING METHOD	**Rotary Auger**			HAMMER WEIGHT	**140-lb.**
LOGGED BY	**FWC**			HAMMER DROP	**30-inches**
GROUND ELEVATION	**+/-**			BORING DIAMETER	**8-inches**

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
0	GW		**ARTIFICIAL FILL,** GRAVEL (2 inches)			AU			
	SC-SM		**SILTY, CLAYEY SAND,** fine- to medium, olive-brown, slightly moist, medium dense.			SS	9	8	128
						AU	10		
5			**GRANITE,** highly to slightly weathered, olive.			SS	18	9	125
			- Degrades to SAND with SILTY CLAY when disturbed, slightly moist to wet, very dense -				50		
						SS	50	1094	10
10									
						SS	50	2	115
15									
						SS	50	2	118
20	SW-SC		- light gray, highly weathered, mottled -			SPT	50	4	
25		▽				SPT	50	6	
30						SPT	50	14	
35						SPT	50	13	
40						SPT	50		
			End of boring at 40.5 feet. Auger refusal. Groundwater encountered at 25 feet. Mottling encountered at 20 feet. Backfilled with native soils.						

Inland Foundation Engineering, Inc.

CLIENT	**Riverside Community College District**
PROJECT NAME	**Ben Clark Training Center**
PROJECT LOCATION	**16791 Davis Avenue**
	Riverside, CA
PROJECT NUMBER	**R351-011**

FIGURE NO. A-6

LOG OF BORING B-05

DRILLING RIG	**Mobile B-61**	DATE DRILLED	**2/5/20**	HAMMER TYPE	**Auto-Trip**
DRILLING METHOD	**Rotary Auger**			HAMMER WEIGHT	**140-lb.**
LOGGED BY	**FWC**			HAMMER DROP	**30-inches**
GROUND ELEVATION	**+/-**			BORING DIAMETER	**8-inches**

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
0	SC-SM		**SILTY, CLAYEY SAND,** very fine- to fine, olive-brown, moist, loose.			AU			
						AU			
	SC		**CLAYEY SAND,** very fine- to fine, red-brown, moist, loose.			SS	2 4	9	123
			GRANITE, highly to moderately weathered, olive. - Degrades to SAND with SILTY CLAY when disturbed, slightly moist to moist, very dense -			AU			
5						SS	50	4	120
						SS	50	8	116
	SW-SC								
10									
15			End of boring at 15 feet. No groundwater or mottling encountered. Backfilled with native soils.						

Inland Foundation Engineering, Inc.

CLIENT	**Riverside Community College District**
PROJECT NAME	**Ben Clark Training Center**
PROJECT LOCATION	**16791 Davis Avenue** **Riverside, CA**
PROJECT NUMBER	**R351-011**

FIGURE NO. A-7

IFE BORING - GINT STD US LAB.GDT - 2/27/20 13:05 - P:\R351\R351-011 BEN CLARK\GINT.GPJ

LOG OF BORING B-06

DRILLING RIG	**Mobile B-61**	DATE DRILLED	**2/5/20**	HAMMER TYPE	**Auto-Trip**
DRILLING METHOD	**Rotary Auger**			HAMMER WEIGHT	**140-lb.**
LOGGED BY	**FWC**			HAMMER DROP	**30-inches**
GROUND ELEVATION	**+/-**			BORING DIAMETER	**8-inches**

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	SUMMARY OF SUBSURFACE CONDITIONS	BULK SAMPLE	DRIVE SAMPLE	SAMPLE TYPE	BLOW COUNTS /6"	MOISTURE (%)	DRY UNIT WT. (pcf)
0	SC-SM		**SILTY, CLAYEY SAND,** very fine- to fine, olive-brown, moist, loose.						
	SC		**CLAYEY SAND,** very fine- to fine, dark brown, very moist, loose.		X	SS	3 3	12	118
5			**GRANITE,** highly to moderately weathered, olive. - Degrades to SAND with SILTY CLAY when disturbed, slightly moist to moist, very dense -		X	SS	18 50	7	125
	SW-SC				X	SS	18 50	5	123
10									
15			End of boring at 15 feet. No groundwater or mottling encountered. Backfilled with native soils.						

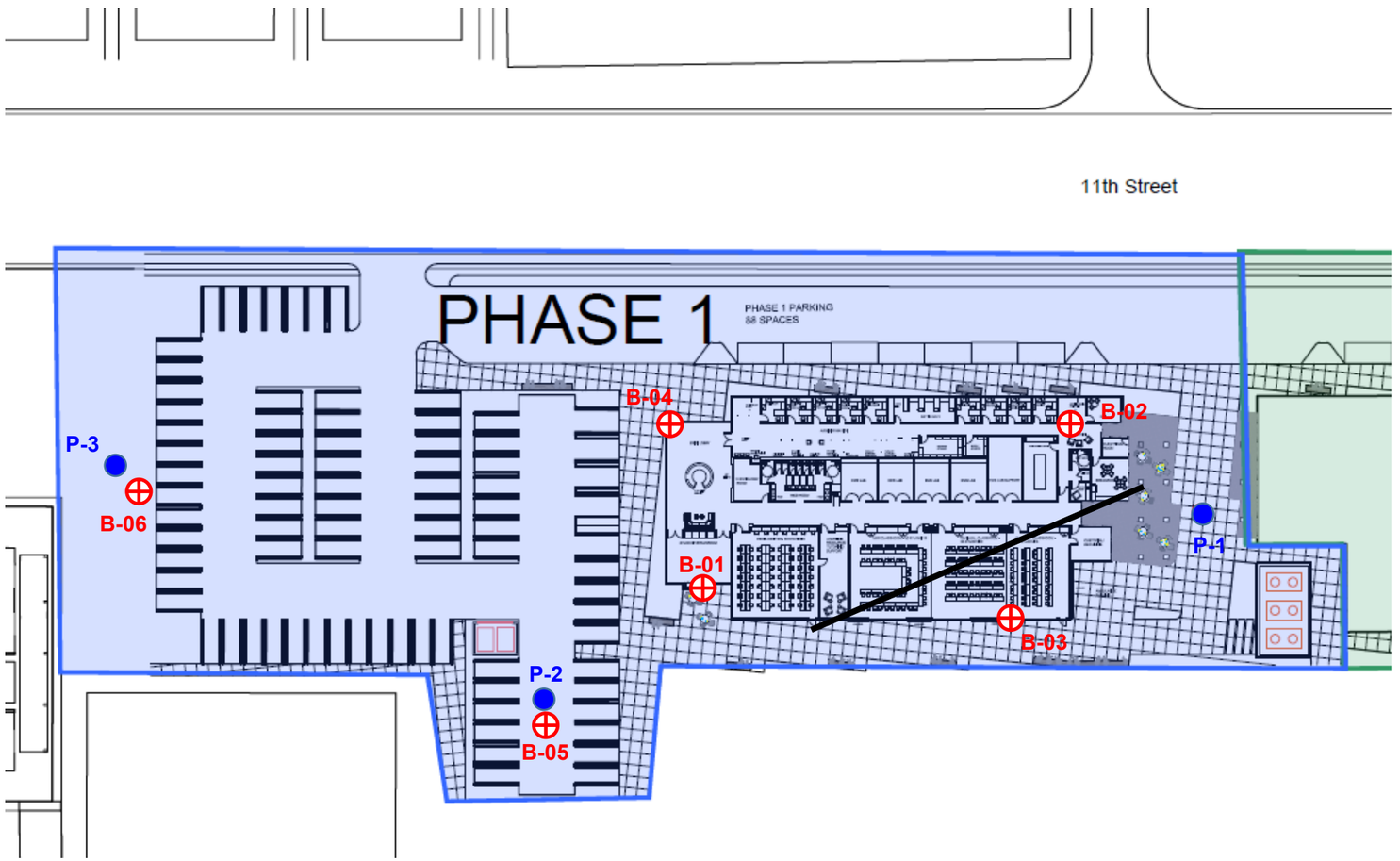
This summary applies only at the location of the boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered and is representative of interpretations made during drilling. Contrasting data derived from laboratory analysis may not be reflected in these representations.

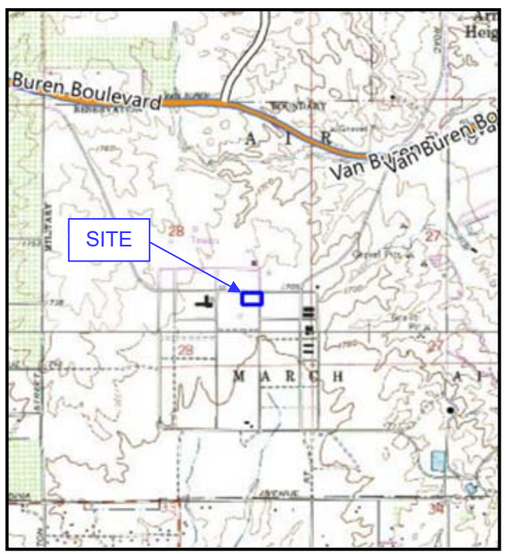
Inland Foundation Engineering, Inc.

CLIENT	**Riverside Community College District**
PROJECT NAME	**Ben Clark Training Center**
PROJECT LOCATION	**16791 Davis Avenue** **Riverside, CA**
PROJECT NUMBER	**R351-011**

FIGURE NO. A-8

SITE PLAN





Vicinity Map

⊕ **Approximate Location of Exploratory Boring**

● **Approximate Location of Infiltration Test**

Approximate Location of Shear Wave Survey

INLAND FOUNDATION ENGINEERING, INC.
Consulting Geotechnical Engineers and Geologists
www.inlandfoundation.com
(951) 654-1555

A-9	Geotechnical Investigation RCCD Ben Clark Training Center: Education Center	
	Drawn By: DRL	Project No. R351-011
	Scale: 1” = 60’ ±	Date: Feb. 2020

APPENDIX B –
Laboratory Testing

APPENDIX B

LABORATORY TESTING

Representative soil samples obtained from our borings were returned to our laboratory for additional observation and testing. Descriptions of the tests performed are provided below.

Unit Weight and Moisture Content: Ring samples were weighed and measured to evaluate their unit weight. A small portion of each sample was then tested for moisture content. The testing was performed per ASTM D2937 and D2216. The results of the testing are shown on the boring logs (Figure Nos. A-3 through A-8).

Sieve Analysis: Three soil samples were selected for sieve analysis testing in accordance with ASTM D6913. These tests provide information for classifying the soil in accordance with the Unified Classification System. This classification system categorizes the soil into groups having similar engineering characteristics. The results of this testing are shown on Figure No. B-3.

Plastic Index: Three samples were selected for plastic index testing in accordance with ASTM D4318. These tests provide information regarding soil plasticity and are also used for developing classifications for the soil in accordance with the Unified Classification System. The results are shown on Figure No. B-3.

Direct Shear Strength: One sample was selected for direct shear strength testing in accordance with ASTM D3080. This testing measures the shear strength of the soil under various normal pressures and is used to develop parameters for foundation bearing capacity and lateral earth pressure. Test results are shown on Figure No. B-4.

Analytical Testing: Two samples were selected to evaluate the concentration of soluble sulfates and chlorides, pH level, and resistivity of the soil. The test results are shown in the following table.

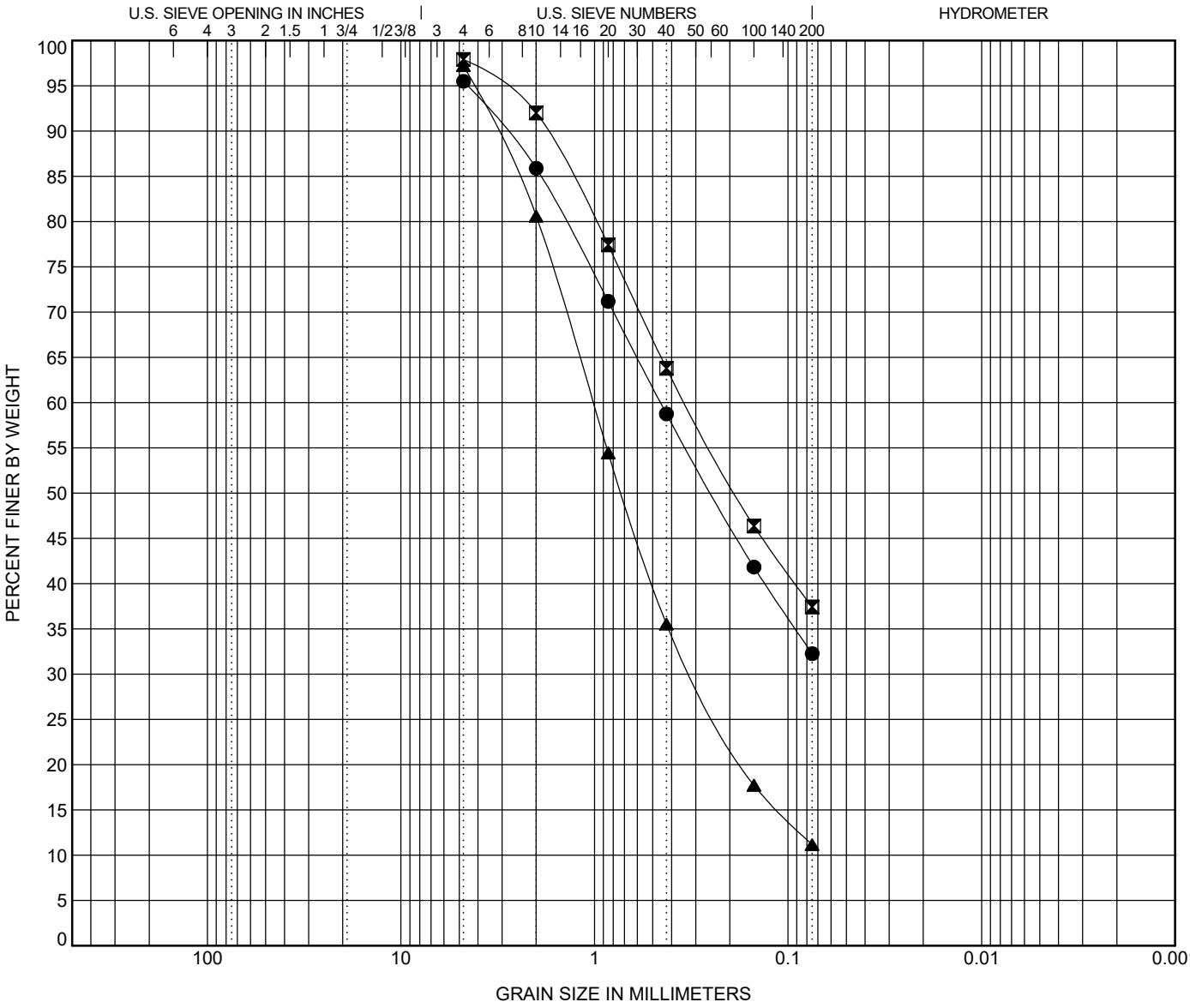
Sample Location	Sample Depth (ft.)	Water-Soluble Sulfates (%)	Chlorides (ppm)	Minimum Resistivity (ohm-cm)	pH
B-03	0.0 – 3.0	<0.001	360	2,800	7.1
B-04	3.5 - 40.5	<0.001	330	7,200	6.8

Expansion Index: One sample was selected for expansion index testing in accordance with ASTM D4829. This test provides information regarding the expansive characteristics of soil under standardized test conditions. The test results are shown in the following table.

Sample Location	Sample Depth (ft)	Initial Dry Density (pcf)	Initial Moisture Content (%)	Expansion Index	Expansion Class
B-03	0.0 – 3.0	118.3	8.0	6	Very Low

GENERAL

All laboratory testing has been conducted in conformance with the applicable ASTM test methods by personnel trained and supervised in conformance with our QA/QC policy. Our test data only relates to the specific soils tested. Soil conditions typically vary and any significant variations should be reported to our laboratory for review and possible testing. The data presented in this report are for the use of Riverside Community College District only and may not be reproduced or used by others without written approval of Inland Foundation Engineering, Inc.



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	B-02	1.8	SILTY, CLAYEY SAND(SC-SM)	25	19	6		
⊠	B-03	0.0	SILTY SAND(SM)	22	19	3		
▲	B-04	3.5	WELL-GRADED SAND with SILTY CLAY(SW-SC)	28	22	6	1.40	15.37

	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-02	1.8	4.75	0.456				63.2	32.3	
⊠	B-03	0.0	4.75	0.339				60.5	37.4	
▲	B-04	3.5	4.75	1.019	0.308			86.1	11.2	

GRADATION CURVES (ASTM D422, ASTM D4318)

Inland Foundation Engineering, Inc.

FIGURE NO. B-3

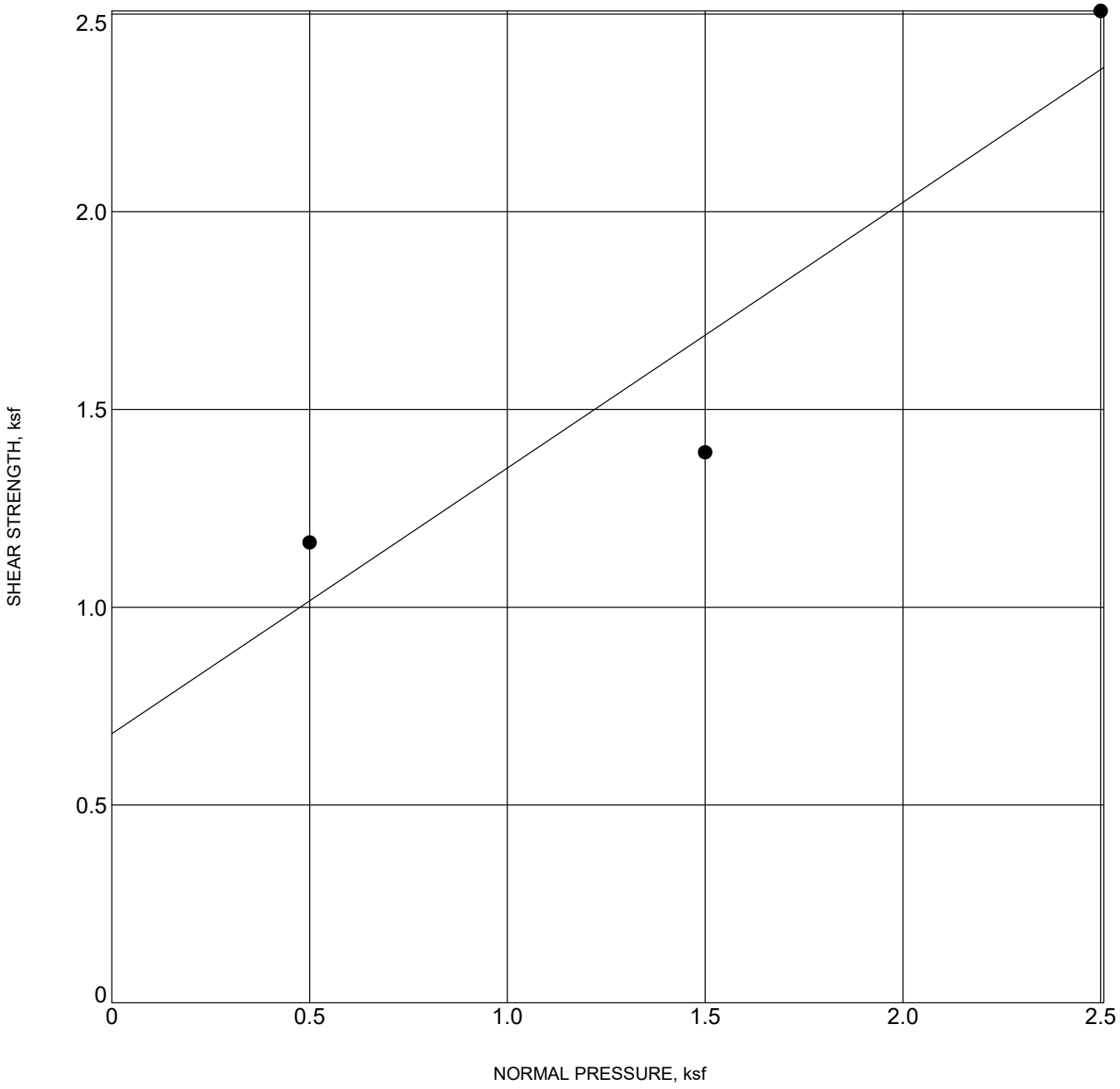
CLIENT Riverside Community College District

PROJECT NAME Ben Clark Training Center

PROJECT NUMBER R351-011

PROJECT LOCATION 16791 Davis Avenue, Riverside, CA

IFE SIEVE ANALYSIS - GINT STD US LAB.GDT - 2/27/20 13:08 - P:\R351\R351-011 BEN CLARK\GINT.GPJ



BOREHOLE	DEPTH	Classification	γ_d	MC%	c	ϕ		
B-02	**2.5**	**SILTY, CLAYEY SAND (SC-SM)**	**118**	**10**	**0.7**	**34**	Residual	●
							Peak	

DIRECT SHEAR TEST (ASTM D3080)

FIGURE NO. B-4

Inland Foundation Engineering, Inc.

CLIENT Riverside Community College District

PROJECT NUMBER R351-011

PROJECT NAME Ben Clark Training Center

PROJECT LOCATION 16791 Davis Avenue
Riverside, CA

IFE DIRECT SHEAR PEAK AND RES - GINT STD US LAB.GDT - 2/27/20 13:09 - P:\R351\R351-011 BEN CLARK\GINT.GPJ

APPENDIX C –
Infiltration Testing

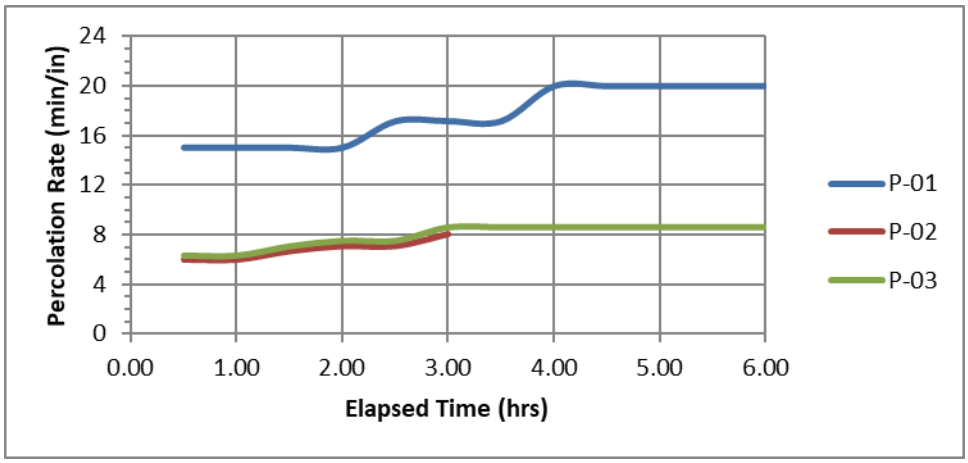
APPENDIX C

INFILTRATION TESTING

Infiltration testing was conducted in general accordance with Appendix A - Infiltration Testing of Riverside County - Low Impact Development BMP Handbook. We performed shallow percolation testing per the Riverside County Department of Environmental Health test procedure. A staff geologist conducted the actual percolation testing with equipment and procedures outlined in the Riverside County Technical Guidance Manual.

Three percolation tests were performed at the locations shown on Figure No. A-9. The tests were performed at depths of approximately 96 and 98 inches below the existing ground surface. The test holes were excavated approximately eight (8) inches in diameter. Per the specified percolation test procedure, the test holes were filled with water to a depth of at least five (5) times the radius of the test holes. A two-inch thick layer of gravel was placed in the bottom of each test hole. In this case, the test holes were excavated and filled to a depth of at least 20 inches above the top of the gravel.

The test holes were presoaked prior to actual testing. The measured percolation rates ranged from 8.8 to 20.0 minutes per inch.



Percolation test rates were converted to infiltration rates (I_c) using the Porchet method and the following equation:

$$I_c = \Delta H60r/\Delta t(r+2H_{avg})$$

Where:

r = Test Hole Radius (in.)
H_{avg} = Average Height of Water during Test Interval (in.)
ΔH = Change in Water Height during Test Interval (in.), and
Δt = Time Interval (in.)

The corresponding calculated infiltration rates (I_c) ranged from 0.24 to 0.53 inches per hour. These values exclude factors of safety. The table below provides a summary of the test data with values for (I_c):

Percolation Test No.	Percolation Rate (Min./Inch)	Depth Below Existing Ground Surface (In.)	Infiltration Rate (I_c) (In./Hr.)
P-01	20.0	96	0.24
P-02	9.2	96	0.53
P-03	8.6	98	0.53

APPENDIX A

Field Noise Measurement Data Sheets

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT BEN CLARK TRAINING CENTER PROJECT # 13140
SITE ID
SITE ADDRESS OBSERVER(S) PETE VITAR
START DATE 1/6/21 END DATE
START TIME END TIME

METEOROLOGICAL CONDITIONS
TEMP 68 F HUMIDITY 20 % R.H. WIND (CALM) LIGHT MODERATE
WINDSPD MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM P-3 TYPE 1 2 SERIAL # 136927646
CALIBRATOR BSWA CA 114 SERIAL # 490251
CALIBRATION CHECK PRE-TEST dBA SPL POST-TEST dBA SPL WINDSCRN YES

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

	REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(ST1)	1-16	10:34	10:49							

COMMENTS
READING TAKEN IN FRONT OF 16888 BUNDY AVE (RESIDENTIAL/DORMS; SOME OFFICES)
PRIMARY NOISE SOURCE IS LIGHT TRAFFIC ON BUNDY AVE. DISTANT NOISE FROM HVAC UNITS FOR DORMS LOCATED APX 150' AWAY FROM METER;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR EOP: APX 25' TO C/L ON BUNDY AVE
TRAFFIC COUNT DURATION: 15 MIN SPEED ___ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	19									
MED TRKS	0									
HVY TRKS	2									
BUSES	0									
MOTRCLS	0									

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS / YELLING) DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: 10:49 - FIRE TRUCK IDLING IN FRONT OF METER, USING AIR BRAKES;

DESCRIPTION / SKETCH
TERRAIN HARD SOFT (MIXED) FLAT OTHER:
PHOTOS 9786; 9787; 9788; 9789; 9790; 9791; 9792
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: BEN CLARK TRAINING CENTER — PROJECT #: 13140
SITE ID:
SITE ADDRESS: — OBSERVER(S): PETE VITAR
START DATE: 1/6/21 — END DATE:
START TIME: — END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 70 F — HUMIDITY: 20 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH — DIR. N NE E SE S SW W NW — VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM P-3 — TYPE 1 2 — SERIAL #: 136927646
CALIBRATOR: BSWA CA 114 — SERIAL #: 490151
CALIBRATION CHECK — PRE-TEST: ____ dBA SPL — POST-TEST: ____ dBA SPL — WINDSCRN: YES

SETTINGS: (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(ST2) 17-32	11:03	11:18							

COMMENTS
READING TAKEN IN FRONT OF 16958 BUNDY AVE (RESIDENTIAL/DORMS); PRIMARY NOISE SOURCE IS DISTANT CONSTRUCTION NOISE [redacted] INTERMITTENT POWER SAW AUDIBLE);

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT — DIST. TO RDWY C/L OR EOP: ADJ 45' to C/L on BUNDY AVE
TRAFFIC COUNT DURATION: 15 MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	1			
	MED TRKS	0			
	HVY TRKS	0			
	BUSES	0			
	MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

___ MIN

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS / YELLING) DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: DISTANT NOISE OF FIRE DEPT. TRAINING CLASS;

DESCRIPTION / SKETCH
TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 9794; 9795; 9796; 9797; 9798; 9799, 9800
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: BEN CLARK TRAINING CENTER — PROJECT #: 13140
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 1/6/21 — END DATE:
START TIME: — END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 69 F — HUMIDITY: 20 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 5 MPH — DIR. N NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) — OVRCAST PRTLY CLDY FOG — RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM P-3 — TYPE 1 2 — SERIAL #: 136927646
CALIBRATOR: BSWA CA 114 — SERIAL #: 490151
CALIBRATION CHECK — PRE-TEST: ____ dBA SPL — POST-TEST: ____ dBA SPL — WINDSCRN: YES

SETTINGS: (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(S13) 33-48	11:43	11:58							

COMMENTS: READNL TAKEN AT SE CORNER OF FOULOIS AVE & RYAN ST, IN FRONT OF 2065 FOULOIS AVE (RESIDENTIAL)

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT — DIST. TO RDWY C/L OR EOP: APX 12' TO EOP ON FOULOIS AVE
TRAFFIC COUNT DURATION: 15 MIN — SPEED

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	1			
	MED TRKS	0			
	HVY TRKS	0			
	BUSES	0			
	MOTRCLS	1			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: (1) PROPELLER PLANE FLYOVER AT 11:47AM;

DESCRIPTION / SKETCH
TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 9802; 9803; 9804; 9805; 9806; 9807
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: BEN CLARK TRAINING CENTER — PROJECT #: 13140
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 1/6/21 — END DATE:
START TIME: — END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 73 F — HUMIDITY: 15 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 3 MPH — DIR. N NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) — OVRCAST — PRTLY CLDY — FOG — RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM P-3 — TYPE 1 2 — SERIAL #: 136927646
CALIBRATOR: BSWA CA 114 — SERIAL #: 490151
CALIBRATION CHECK — PRE-TEST: ____ dBA SPL — POST-TEST: ____ dBA SPL — WINDSCRN: YES

SETTINGS: (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(ST 4) 49-64	12:17	12:32							

COMMENTS: READING TAKEN ALONG 11TH ST, AT NW CORNR. WITH DALIA ALE; PRIMARY NOISE SOURCE IS TRAFFIC ON 11TH ST; IN FRONT OF MODULAR TRAILER OFFICES

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT — DIST. TO RDWY C/L OR EOP: APX 60' TO C/L ON 11TH ST

TRAFFIC COUNT DURATION: 15 MIN — SPEED ____ MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	20			
	MED TRKS	0			
	HVY TRKS	0			
	BUSES	0			
	MOTRCLS	1			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS / YELLING) DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: OCCASIONAL DISTANT SOUND OF VEHICLE BACK-UP ALARMS;

DESCRIPTION / SKETCH
TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 9809; 9810; 9811; 9812;
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: BEN CLARK TRAINING CENTER — PROJECT #: 13140
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 1/6/21 — END DATE:
START TIME: — END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 73 F — HUMIDITY: 15 % R.H. — WIND: CALM (LIGHT) MODERATE
WINDSPD: 3 MPH — DIR. N NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) — OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM P-3 — TYPE 1 2 — SERIAL # 136927646
CALIBRATOR: BSWA CA 114 — SERIAL # 490151
CALIBRATION CHECK — PRE-TEST ____ dBA SPL — POST-TEST ____ dBA SPL — WINDSCRN YES

SETTINGS: (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(STS) 65-80	12:34	12:54							

COMMENTS: READING TAKEN AT SW CORNER OF 12TH ST & DAVIS AVE; PRIMARY NOISE SOURCE IS DISTANT TRAFFIC FROM 11TH ST TO THE SOUTH;

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: DIRT & GRAVEL — DIST. TO RDWY C/L OR EOP:

TRAFFIC COUNT DURATION: 15 MIN — SPEED ____ MIN — SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS									
MED TRKS									
HVY TRKS									
BUSES									
MOTRCLS									

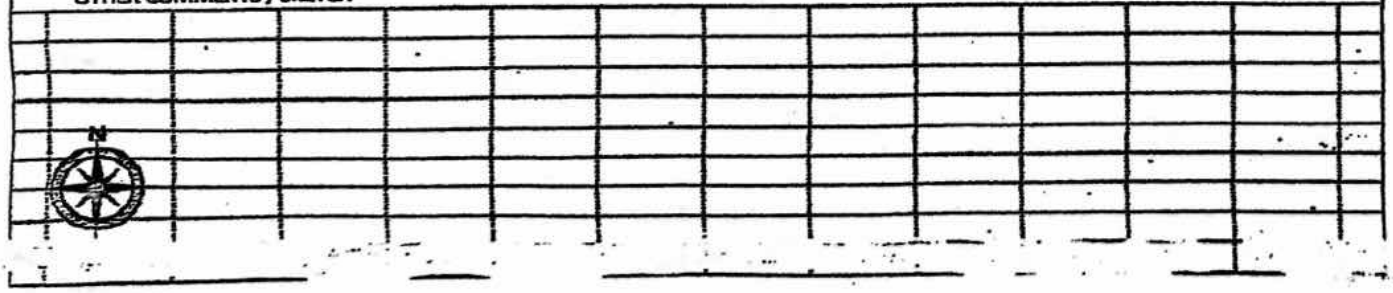
IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: OCCASIONAL DISTANT SOUND OF VEHICLE BACK-UP ALARMS;

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 9814; 9815; 9816; 9817
OTHER COMMENTS / SKETCH



APPENDIX B

Traffic Noise Modeling
Input and Output

Dudek					**23 February 2021**							
David O					**TNM 2.5**							
INPUT: ROADWAYS							**Average pavement type shall be used unless**					
PROJECT/CONTRACT:	**13140**						**a State highway agency substantiates the use**					
RUN:	**BCTC Existing**						**of a different type with the approval of FHWA**					
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**		
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**	
	ft			ft	ft	ft		mph	%			
11 St - West of Bundy Ave	25.0	point11	11	61.3	1,991.6	100.00				Average		
		point8	8	1,686.7	1,984.5	100.00						
11 St - East of Bundy Ave	25.0	point13	13	1,742.2	1,986.6	100.00				Average		
		point2	2	1,977.5	1,982.2	100.00						
Bundy Ave South of 11th St	25.0	point14	14	1,718.3	1,966.6	100.00				Average		
		point6	6	1,708.4	786.3	100.00						
Bundy Ave North of 11th St	50.0	point1	1	2,185.2	2,507.8	100.00				Average		
		point3	3	1,800.3	2,216.9	100.00				Average		
		point4	4	1,739.0	2,133.7	100.00				Average		
		point15	15	1,719.3	2,057.2	100.00				Average		
		point16	16	1,718.4	1,992.8	100.00						

Dudek
David O

23 February 2
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Percentages

PROJECT/CONTRACT: 13140
RUN: BCTC Existing

Roadway	Points		Segment										
Name	Name	No.	Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
11 St - West of Bundy Ave	point11	11	86	97	20	2	20	1	20	0	0	0	0
	point8	8											
11 St - East of Bundy Ave	point13	13	53	97	20	2	20	1	20	0	0	0	0
	point2	2											
Bundy Ave South of 11th St	point14	14	86	97	20	2	20	1	20	0	0	0	0
	point6	6											
Bundy Ave North of 11th St	point1	1	165	97	20	2	20	1	20	0	0	0	0
	point3	3	165	97	20	2	20	1	20	0	0	0	0
	point4	4	165	97	20	2	20	1	20	0	0	0	0
	point15	15	165	97	20	2	20	1	20	0	0	0	0
	point16	16											

Dudek
David O

23 February 2021
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 13140
RUN: BCTC Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	2,128.4	1,208.5	100.00	5.00	0.00	66	10.0	8.0	Y
Receiver2	2	1	1,736.8	954.7	100.00	5.00	0.00	66	10.0	8.0	Y

Dudek
David O

23 February 2021
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 13140
RUN: BCTC Existing

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	1,736.7	1,659.3	100.00	30.00	0.00	0	0		
									point3	3	1,736.7	1,619.4	100.00	30.00	0.00	0	0		
									point4	4	1,957.2	1,614.2	100.00	30.00	0.00	0	0		
									point5	5	1,953.7	1,654.1	100.00	30.00	0.00	0	0		
									point6	6	1,736.7	1,659.3	100.00	30.00					
Barrier1-2-2	W	0.00	99.99	0.00				0.00	point27	27	1,778.4	1,279.1	100.00	25.00	0.00	0	0		
									point13	13	1,781.8	1,161.0	100.00	25.00	0.00	0	0		
									point14	14	1,886.0	1,159.3	100.00	25.00	0.00	0	0		
									point15	15	1,886.0	1,185.3	100.00	25.00	0.00	0	0		
									point16	16	1,901.6	1,188.8	100.00	25.00	0.00	0	0		
									point17	17	1,903.4	1,166.2	100.00	25.00	0.00	0	0		
									point18	18	1,932.9	1,173.2	100.00	25.00	0.00	0	0		
									point19	19	1,929.4	1,240.9	100.00	25.00	0.00	0	0		
									point20	20	1,941.6	1,240.9	100.00	25.00	0.00	0	0		
									point21	21	1,939.8	1,287.8	100.00	25.00	0.00	0	0		
									point22	22	1,906.8	1,287.8	100.00	25.00	0.00	0	0		
									point23	23	1,905.1	1,247.8	100.00	25.00	0.00	0	0		
									point24	24	1,886.0	1,246.1	100.00	25.00	0.00	0	0		
									point25	25	1,886.0	1,280.8	100.00	25.00	0.00	0	0		
									point2	2	1,781.8	1,279.1	100.00	25.00					
Barrier1-2-2	W	0.00	99.99	0.00				0.00	point29	29	1,736.7	1,527.4	100.00	30.00	0.00	0	0		
									point8	8	1,735.0	1,490.9	100.00	30.00	0.00	0	0		
									point9	9	1,957.2	1,484.0	100.00	30.00	0.00	0	0		
									point10	10	1,955.4	1,522.2	100.00	30.00	0.00	0	0		
									point11	11	1,738.4	1,527.4	100.00	30.00					

Dudek
David O
23 February 2021
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 13140
RUN: BCTC Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	30.0	66	30.0	10	----	30.0	0.0	8	-8.0
Receiver2	2	1	0.0	52.0	66	52.0	10	----	52.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	2	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**23 February 2021**							
David O					**TNM 2.5**							
INPUT: ROADWAYS							**Average pavement type shall be used unless**					
PROJECT/CONTRACT:	**13140**						**a State highway agency substantiates the use**					
RUN:	**BCTC Existing plus Project**						**of a different type with the approval of FHWA**					
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**		
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**	
	ft			ft	ft	ft		mph	%			
11 St - West of Bundy Ave	25.0	point11	11	61.3	1,991.6	100.00				Average		
		point8	8	1,686.7	1,984.5	100.00						
11 St - East of Bundy Ave	25.0	point13	13	1,742.2	1,986.6	100.00				Average		
		point2	2	1,977.5	1,982.2	100.00						
Bundy Ave South of 11th St	25.0	point14	14	1,718.3	1,966.6	100.00				Average		
		point6	6	1,708.4	786.3	100.00						
Bundy Ave North of 11th St	50.0	point1	1	2,185.2	2,507.8	100.00				Average		
		point3	3	1,800.3	2,216.9	100.00				Average		
		point4	4	1,739.0	2,133.7	100.00				Average		
		point15	15	1,719.3	2,057.2	100.00				Average		
		point16	16	1,718.4	1,992.8	100.00						

Dudek
David O

23 February 2
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Percentages

PROJECT/CONTRACT: 13140
RUN: BCTC Existing plus Project

Roadway	Points		Segment											
Name	Name	No.	Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
11 St - West of Bundy Ave	point11	11	186	97	20	2	20	1	20	0	0	0	0
	point8	8											
11 St - East of Bundy Ave	point13	13	53	97	20	2	20	1	20	0	0	0	0
	point2	2											
Bundy Ave South of 11th St	point14	14	86	97	20	2	20	1	20	0	0	0	0
	point6	6											
Bundy Ave North of 11th St	point1	1	265	97	20	2	20	1	20	0	0	0	0
	point3	3	265	97	20	2	20	1	20	0	0	0	0
	point4	4	265	97	20	2	20	1	20	0	0	0	0
	point15	15	265	97	20	2	20	1	20	0	0	0	0
	point16	16											

Dudek
David O

23 February 2021
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 13140
RUN: BCTC Existing plus Project

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	2,128.4	1,208.5	100.00	5.00	0.00	66	10.0	8.0	Y
Receiver2	2	1	1,736.8	954.7	100.00	5.00	0.00	66	10.0	8.0	Y

Dudek
David O

23 February 2021
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 13140
RUN: BCTC Existing plus Project

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	1,736.7	1,659.3	100.00	30.00	0.00	0	0		
									point3	3	1,736.7	1,619.4	100.00	30.00	0.00	0	0		
									point4	4	1,957.2	1,614.2	100.00	30.00	0.00	0	0		
									point5	5	1,953.7	1,654.1	100.00	30.00	0.00	0	0		
									point6	6	1,736.7	1,659.3	100.00	30.00					
Barrier1-2-2	W	0.00	99.99	0.00				0.00	point27	27	1,778.4	1,279.1	100.00	25.00	0.00	0	0		
									point13	13	1,781.8	1,161.0	100.00	25.00	0.00	0	0		
									point14	14	1,886.0	1,159.3	100.00	25.00	0.00	0	0		
									point15	15	1,886.0	1,185.3	100.00	25.00	0.00	0	0		
									point16	16	1,901.6	1,188.8	100.00	25.00	0.00	0	0		
									point17	17	1,903.4	1,166.2	100.00	25.00	0.00	0	0		
									point18	18	1,932.9	1,173.2	100.00	25.00	0.00	0	0		
									point19	19	1,929.4	1,240.9	100.00	25.00	0.00	0	0		
									point20	20	1,941.6	1,240.9	100.00	25.00	0.00	0	0		
									point21	21	1,939.8	1,287.8	100.00	25.00	0.00	0	0		
									point22	22	1,906.8	1,287.8	100.00	25.00	0.00	0	0		
									point23	23	1,905.1	1,247.8	100.00	25.00	0.00	0	0		
									point24	24	1,886.0	1,246.1	100.00	25.00	0.00	0	0		
									point25	25	1,886.0	1,280.8	100.00	25.00	0.00	0	0		
									point2	2	1,781.8	1,279.1	100.00	25.00					
Barrier1-2-2	W	0.00	99.99	0.00				0.00	point29	29	1,736.7	1,527.4	100.00	30.00	0.00	0	0		
									point8	8	1,735.0	1,490.9	100.00	30.00	0.00	0	0		
									point9	9	1,957.2	1,484.0	100.00	30.00	0.00	0	0		
									point10	10	1,955.4	1,522.2	100.00	30.00	0.00	0	0		
									point11	11	1,738.4	1,527.4	100.00	30.00					

Dudek
David O
23 February 2021
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 13140
RUN: BCTC Existing plus Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	30.8	66	30.8	10	----	30.8	0.0	8	-8.0
Receiver2	2	1	0.0	52.0	66	52.0	10	----	52.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	2	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

APPENDIX C

Construction Noise Modeling Input and Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA = 80
allowable hours over which Leq is to be averaged (example: 8 for County of San Diego, FTA guidance) = 8

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Demolition	Concrete Saw	1	20	90		1335	61.5	8	480	54
	Dozer	2	40	82		1335	53.5	8	480	53
	Excavator	3	40	81		1335	52.5	8	480	53
							Total for Demolition Phase:			**58.3**
Site Preparation	Front End Loader	4	40	79		1025	52.8	8	480	55
	Dozer	3	40	82		1025	55.8	8	480	57
							Total for Site Preparation Phase:			**58.8**
Grading	Excavator	1	40	81		1025	54.8	8	480	51
	Dozer	1	40	82		1025	55.8	8	480	52
	Front End Loader	3	40	79		1025	52.8	8	480	54
	Grader	1	40	85		1025	58.8	8	480	55
							Total for Grading Phase:			**59.0**
Building Construction	Generator	1	50	72		1155	44.7	8	480	42
	Crane	1	16	81		1155	53.7	7	420	45
	Gradall	3	40	83		1155	55.7	8	480	57
	Backhoe	3	40	78		1155	50.7	7	420	51
	Welder / Torch	1	40	73		1155	45.7	8	480	42
							Total for Building Construction Phase:			**58.0**
Paving	Concrete Mixer Truck	2	40	79		1110	52.1	6	360	50
	Paver	1	50	77		1110	50.1	8	480	47
	Roller	2	20	80		1110	53.1	6	360	48
	Backhoe	1	40	78		1110	51.1	8	480	47
	Dump Truck	2	40	76		1110	49.1	6	360	47
							Total for Paving Phase:			**54.9**
Architectural Coating	Compressor (air)	1	40	78		1155	50.7	6	360	45
							Total for Architectural Coating Phase:			**45.5**

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA = 80
allowable hours over which Leq is to be averaged (example: 8 for County of San Diego, FTA guidance) = 8

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Demolition	Concrete Saw	1	20	90		620	68.1	8	480	61
	Dozer	2	40	82		620	60.1	8	480	59
	Excavator	3	40	81		620	59.1	8	480	60
							Total for Demolition Phase:			**64.9**
Site Preparation	Front End Loader	4	40	79		620	57.1	8	480	59
	Dozer	3	40	82		620	60.1	8	480	61
							Total for Site Preparation Phase:			**63.1**
Grading	Excavator	1	40	81		620	59.1	8	480	55
	Dozer	1	40	82		620	60.1	8	480	56
	Front End Loader	3	40	79		620	57.1	8	480	58
	Grader	1	40	85		620	63.1	8	480	59
							Total for Grading Phase:			**63.4**
Building Construction	Generator	1	50	72		1075	45.4	8	480	42
	Crane	1	16	81		1075	54.4	7	420	46
	Gradall	3	40	83		1075	56.4	8	480	57
	Backhoe	3	40	78		1075	51.4	7	420	52
	Welder / Torch	1	40	73		1075	46.4	8	480	42
							Total for Building Construction Phase:			**58.7**
Paving	Concrete Mixer Truck	2	40	79		710	56.0	6	360	54
	Paver	1	50	77		710	54.0	8	480	51
	Roller	2	20	80		710	57.0	6	360	52
	Backhoe	1	40	78		710	55.0	8	480	51
	Dump Truck	2	40	76		710	53.0	6	360	51
							Total for Paving Phase:			**58.8**
Architectural Coating	Compressor (air)	1	40	78		1075	51.4	6	360	46
							Total for Architectural Coating Phase:			**46.1**

APPENDIX D

Mechanical Noise Data

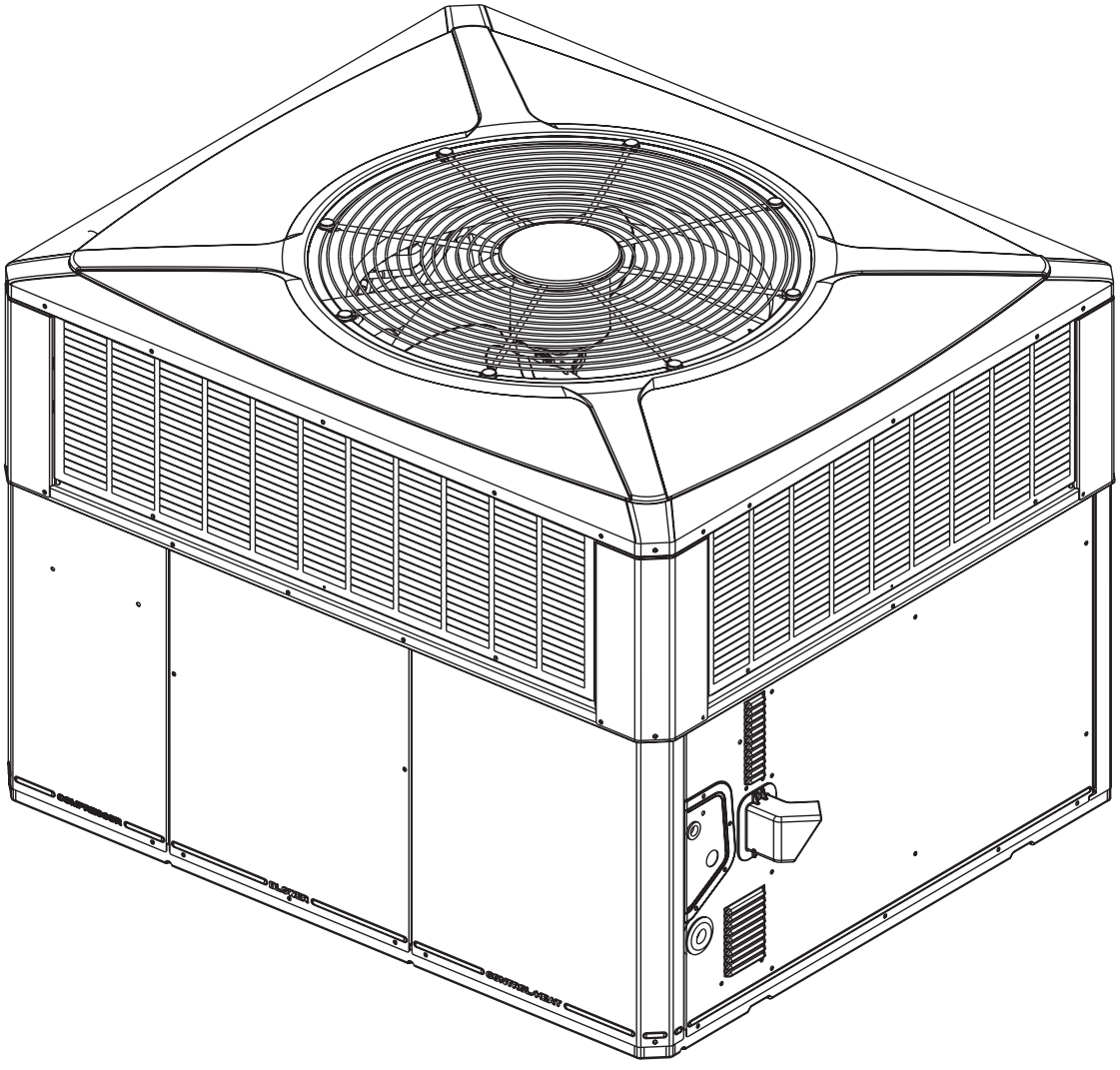
TRANE®

22-1799-17

Product Data

4DCY4024 through 4DCY4060

Single Packaged Convertible Dual Fuel
14 SEER
2 - 5 Ton, 40 - 120 MBTU
R-410A



Pub. No. 22-1799-17

General Data

MODEL	4DCY4024A1064B	4DCY4030A1075B	4DCY4036C1075A
RATED Volts/PH/Hz	208-230/1/60	208-230/1/60	208-230/1/60
Performance Cooling BTUH①	23600	30000	37000
Indoor Airflow (CFM)	760	880	1150
Power Input (KW)	2.162	2.15	3.11
EER/SEER(BTU/Watt-Hr.)⑤	12/14.0	12.0 / 14.25	12.0 / 14.0
Sound Power Rating [dB(A)]⑦	68	71	69
HP Heating Performance			
(High Temp.)BTUH / COP	22400 / 3.7	28000 / 3.9	33200 / 3.6
Power Input (KW)	1.77	2.15	2.7
(Low Temp.) BTUH / COP	11600 / 2.38	15400 / 2.48	22400 / 2.4
Power Input (KW)	1.24	1.81	2.5
HSPF (BTU / Watt-Hr.)	8.0	8.0	8.0
Gas Heating Performance②			
(High) Input BTUH	64000	75000	75000
Capacity BTUH	51500	60500	60500
Temp. Rise — Min/Max (°F)	35 / 65	30 / 60	30 / 60
(Low) Input BTUH	48000	56250	56250
Capacity BTUH	41200	48400	48400
AFUE	79	79.5	79.5
Type of Gas ③	NATURAL	NATURAL/LP	NATURAL
Gas Pipe Size (in.)	1/2	1/2	1/2
POWER CONN.—V/PH/HZ	208-230/1/60	208-230/1/60	208-230/1/60
Min. Brch. Cir. Ampacity④	16.1	19.1	26.2
Fuse Size — Max. (amps)	25	30	40
Fuse Size — Recmd. (amps)	25	30	40
COMPRESSOR	RECIPROCATING	RECIPROCATING	SCROLL
Volts/Ph/Hz	208-230/1/60	200-230/1/60	208-230/1/60
R.L. Amps — L.R. Amps	8.3 / 57.8	11.1 / 63	16.7 / 79
OUTDOOR COIL — TYPE	SPINE-FIN	SPINE-FIN	SPINE-FIN
Rows/F.P.I.	2 / 24	2 / 24	2 / 24
Face Area (sq.ft.)	13.32	13.32	15.49
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
INDOOR COIL — TYPE	PLATE FIN	PLATE FIN	PLATE FIN
Rows/F.P.I.	3 / 15	4 / 15	4 / 15
Face Area (sq.ft.)	3.54	3.54	3.54
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
Drain Conn. Size (in.)	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT
OUTDOOR FAN — TYPE	PROPELLER	PROPELLER	PROPELLER
Dia. (in.)	23.4	23.4	23.4
Drive/No. Speeds	DIRECT / 1	DIRECT / 1	DIRECT / 1
CFM @ 0.0 in. w.g. ⑦	2590	3250	3310
Motor — HP/R.P.M.	1/12 / 810	1/6 / 830	1/5 / 830
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps/L.R. Amps	0.54 / 0.95	1.0 / 1.7	1.1 / 1.9
INDOOR FAN — TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Dia x Width (in.)	10 X 10	10 X 10	10 X 10
Drive/No. Speeds	DIRECT / VARIABLE	DIRECT / VARIABLE	DIRECT / VARIABLE
CFM @ 0.0 in. w.g.⑤	SEE FAN PERFORMANCE TABLE	SEE FAN PERFORMANCE TABLE	SEE FAN PERFORMANCE TABLE
Motor — HP/R.P.M.	1/2 / VARIABLE	1/2 / VARIABLE	1/2 / VARIABLE
Volts/Ph/Hz	200-230/1/60	208-230/1/60	200-230/1/60
F.L. Amps/L.R. Amps	4.3 / 4.3	4.3 / 4.3	4.3 / 4.3
COMBUSTION FAN — TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Drive/No. Speeds	DIRECT / 2	DIRECT / 2	DIRECT / 2
Motor — HP/R.P.M. (High/Low)	1/45 / 2800/1500	1/45 / 2800/1500	1/45 / 2800/1500
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
FLA	0.34	0.34	0.34
FILTER / FURNISHED	NO	NO	NO
Type Recommended	THROWAWAY	THROWAWAY	THROWAWAY
Recmd. Face Area (sq. ft.)⑥	4	4	4
REFRIGERANT / Charge (lbs.)	R410A / 6.5	R410A / 6.56	R410A / 7.5
DIMENSIONS	H X W X L	H X W X L	H X W X L
Crated (in.)	45.86 / 44.5 / 52.03	45.86 / 44.5 / 52.03	47.86 / 44.5 / 52.03
WEIGHT / Shipping / Net (lbs.)	481 / 385	481 / 385	488 / 392

① Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.

② All models are U L Listed. Ratings shown are for elevations up to 2000 ft. For higher elevations reduce ratings at a rate of 4% per 1000 ft. elevation.

③ Convertible to LPG.

④ This value is approximate. For more precise value, see Unit Nameplate.

⑤ Based on U.S. Government Standard Tests.

⑥ Filters must be installed in return air stream. Square footages listed are based on 300 f.p.m. face velocity. If permanent filters are used size per manufacturer's recommendation with a clean resistance of 0.05" W.C.

⑦ Sound Power values are not adjusted for AHRI 270-95 tonal corrections.

⑧ Standard Air — Dry Coil — Outdoor.

General Data

MODEL	4DCY4036B3075A	4DCY4042A1096B	4DCY4048B1096B
RATED Volts/PH/Hz	208-230/3/60	208-230/1/60	208-230/1/60
Performance Cooling BTUH①	36000	42000	47500
Indoor Airflow (CFM)	1185	1370	1470
Power Input (KW)	3.28	3.27	3.96
EER/SEER(BTU/Watt-Hr.)⑤	11.4 / 14.0	12.0 / 14.25	12.0 / 14.0
Sound Power Rating [dB(A)]⑦	69	74	73
HP Heating Performance			
(High Temp.)BTUH / COP	32400 / 3.5	39500 / 3.6	45000 / 3.5
Power Input (KW)	2.7	3.27	3.77
(Low Temp.) BTUH / COP	20600 / 2.36	23600 / 2.26	26800 / 2.3
Power Input (KW)	2.6	3.06	3.44
HSPF (BTU / Watt-Hr.)	8.0	8.0	8.0
Gas Heating Performance②			
(High) Input BTUH	75000	96000	96000
Capacity BTUH	60500	77500	77500
Temp. Rise — Min/Max (°F)	30 / 60	30 / 60	30 / 60
(Low) Input BTUH	56250	72000	72000
Capacity BTUH	48400	62000	62000
AFUE	80.0	80	80
Type of Gas ③	NATURAL	NATURAL/LP	NATURAL
Gas Pipe Size (in.)	1/2	1/2	1/2
POWER CONN.—V/PH/HZ	208-230/3/60	208-230/1/60	208-230/1/60
Min. Brch. Cir. Ampacity④	18.5	31.5	33.9
Fuse Size — Max. (amps)	25	50	50
Fuse Size — Recmd. (amps)	25	50	50
COMPRESSOR	SCROLL	SCROLL	SCROLL
Volts/Ph/Hz	208-230/3/60	208-230/1/60	208-230/1/60
R.L. Amps — L.R. Amps	10.4 / 73	18.6 / 105	20.5 / 109
OUTDOOR COIL — TYPE	SPINE-FIN	SPINE-FIN	SPINE-FIN
Rows/F.P.I.	2 / 24	2 / 24	2 / 24
Face Area (sq.ft.)	15.49	18.01	18.01
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
INDOOR COIL — TYPE	PLATE FIN	PLATE FIN	PLATE FIN
Rows/F.P.I.	4 / 15	3 / 15	3 / 15
Face Area (sq.ft.)	3.54	5	5.0
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
Drain Conn. Size (in.)	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT
OUTDOOR FAN — TYPE	PROPELLER	PROPELLER	PROPELLER
Dia. (in.)	23.4	28.2	28.2
Drive/No. Speeds	DIRECT / 1	DIRECT / 1	DIRECT / 1
CFM @ 0.0 in. w.g. ⑦	3270	4440	4450
Motor — HP/R.P.M.	1/5 / 830	1/4 / 825	1/4 / 825
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps/L.R. Amps	1.1 / 1.9	1.5 / 3.4	1.4 / 3.5
INDOOR FAN — TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Dia x Width (in.)	10 X 10	11 X 10	11 X 10
Drive/No. Speeds	DIRECT / VARIABLE	DIRECT / VARIABLE	DIRECT / VARIABLE
CFM @ 0.0 in. w.g.⑤	SEE FAN PERFORMANCE TABLE	SEE FAN PERFORMANCE TABLE	SEE FAN PERFORMANCE TABLE
Motor — HP/R.P.M.	1/2 / VARIABLE	3/4 / VARIABLE	3/4 / VARIABLE
Volts/Ph/Hz	200-230/1/60	208-230/1/60	200-230/1/60
F.L. Amps/L.R. Amps	4.3 / 4.3	6.8 / 6.8	6.8 / 6.8
COMBUSTION FAN — TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Drive/No. Speeds	DIRECT / 2	DIRECT / 2	DIRECT / 2
Motor — HP/R.P.M. (High/Low)	1/45 / 2800/1500	1/45 / 2800/1500	1/45 / 2800/1500
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
FLA	0.34	0.34	0.34
FILTER / FURNISHED	NO	NO	NO
Type Recommended	THROWAWAY	THROWAWAY	THROWAWAY
Recmd. Face Area (sq. ft.)⑥	4	5.3	5.3
REFRIGERANT / Charge (lbs.)	R410A / 7.4	R410A / 7.25	R410A / 7.75
DIMENSIONS	H X W X L	H X W X L	H X W X L
Crated (in.)	47.86 / 44.5 / 52.03	47.86 / 47.4 / 61.75	47.86 / 47.4 / 61.75
WEIGHT / Shipping / Net (lbs.)	488 / 392	653 / 525	653 / 525

① Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.

② All models are U L Listed. Ratings shown are for elevations up to 2000 ft. For higher elevations reduce ratings at a rate of 4% per 1000 ft. elevation.

③ Convertible to LPG.

④ This value is approximate. For more precise value, see Unit Nameplate.

⑤ Based on U.S. Government Standard Tests.

⑥ Filters must be installed in return air stream. Square footages listed are based on 300 f.p.m. face velocity. If permanent filters are used size per manufacturer's recommendation with a clean resistance of 0.05" W.C.

⑦ Sound Power values are not adjusted for AHRI 270-95 tonal corrections.

⑧ Standard Air — Dry Coil — Outdoor.

General Data

MODEL	4DCY4048A3096C	4DCY4060B1120C	4DCY4060A3120C
RATED Volts/PH/Hz	208-230/3/60	208-230/1/60	208-230/3/60
Performance Cooling BTUH①	47000	58000	57500
Indoor Airflow (CFM)	1470	1785	1745
Power Input (KW)	4.03	4.83	5.48
EER/SEER(BTU/Watt-Hr.)⑤	10.65 / 14.0	12.0 / 14.0	11.5 / 14.0
Sound Power Rating [dB(A)]⑦	73	76	76
HP Heating Performance			
(High Temp.)BTUH / COP	42500 / 3.5	55000 / 3.6	54500 / 3.5
Power Input (KW)	3.56	4.48	4.56
(Low Temp.) BTUH / COP	26800 / 2.3	35400 / 2.4	36400 / 2.48
Power Input (KW)	3.44	4.30	4.29
HSPF (BTU / Watt-Hr.)	8.0	8.0	8.0
Gas Heating Performance②			
(High) Input BTUH	96000	120000	120000
Capacity BTUH	77500	96000	96000
Temp. Rise — Min/Max (°F)	30 / 60	30 / 60	30 / 60
(Low) Input BTUH	72000	90000	90000
Capacity BTUH	62000	77500	77500
AFUE	80	80.0	80.0
Type of Gas ③	NATURAL	NATURAL	NATURAL
Gas Pipe Size (in.)	1/2	1/2	1/2
POWER CONN.—V/PH/HZ	208-230/3/60	208-230/1/60	208-230/3/60
Min. Brch. Cir. Ampacity④	25.3	39.9	28.6
Fuse Size — Max. (amps)	35	60	45
Fuse Size — Recmd. (amps)	35	60	45
COMPRESSOR	SCROLL	SCROLL	SCROLL
Volts/Ph/Hz	208-230/3/60	208-230/1/60	208-230/3/60
R.L. Amps — L.R. Amps	13.7 / 83.1	25 / 134	16.0 / 110
OUTDOOR COIL — TYPE	SPINE-FIN	SPINE-FIN	SPINE-FIN
Rows/F.P.I.	2 / 24	2 / 24	2 / 24
Face Area (sq.ft.)	18.01	23.07	23.57
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
INDOOR COIL — TYPE	PLATE FIN	PLATE FIN	PLATE FIN
Rows/F.P.I.	3 / 15	4 / 15	4 / 15
Face Area (sq.ft.)	5.0	5.0	5.0
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
Drain Conn. Size (in.)	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT
OUTDOOR FAN — TYPE	PROPELLER	PROPELLER	PROPELLER
Dia. (in.)	28.2	28.2	28.2
Drive/No. Speeds	DIRECT / 1	DIRECT / 1	DIRECT / 1
CFM @ 0.0 in. w.g. ⑦	4450	5710	
Motor — HP/R.P.M.	1/4 / 825	1/3 / 830	1/3 / 830
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps/L.R. Amps	1.4 / 3.5	1.7 / 3.5	1.7 / 3.5
INDOOR FAN — TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Dia x Width (in.)	11 X 10	11 X 10	11 X 10
Drive/No. Speeds	DIRECT / VARIABLE	DIRECT / VARIABLE	DIRECT / VARIABLE
CFM @ 0.0 in. w.g.⑤	SEE FAN PERFORMANCE TABLE	SEE FAN PERFORMANCE TABLE	SEE FAN PERFORMANCE TABLE
Motor — HP/R.P.M.	3/4 / VARIABLE	1 / VARIABLE	1 / VARIABLE
Volts/Ph/Hz	200-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps/L.R. Amps	6.8 / 6.8	6.9 / 6.9	6.9 / 6.9
COMBUSTION FAN — TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Drive/No. Speeds	DIRECT / 2	DIRECT / 2	DIRECT / 2
Motor — HP/R.P.M. (High/Low)	1/45 / 2800/1500	1/45 / 2800/1500	1/45 / 2800/1500
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
FLA	0.34	0.34	0.34
FILTER / FURNISHED	NO	NO	NO
Type Recommended	THROWAWAY	THROWAWAY	THROWAWAY
Recmd. Face Area (sq. ft.)⑥	5.3	6.7	6.7
REFRIGERANT / Charge (lbs.)	R410A / 7.75	R410A / 11.94	R410A / 10.125
DIMENSIONS	H X W X L	H X W X L	H X W X L
Crated (in.)	47.86 / 47.4 / 61.75	51.86 / 47.4 / 61.75	51.86 / 47.4 / 61.75
WEIGHT / Shipping / Net (lbs.)	653 / 525	676 / 548	676 / 548

① Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.

② All models are U L Listed. Ratings shown are for elevations up to 2000 ft. For higher elevations reduce ratings at a rate of 4% per 1000 ft. elevation.

③ Convertible to LPG.

④ This value is approximate. For more precise value, see Unit Nameplate.

⑤ Based on U.S. Government Standard Tests.

⑥ Filters must be installed in return air stream. Square footages listed are based on 300 f.p.m. face velocity. If permanent filters are used size per manufacturer's recommendation with a clean resistance of 0.05" W.C.

⑦ Sound Power values are not adjusted for AHRI 270-95 tonal corrections.

⑧ Standard Air — Dry Coil — Outdoor.

TECHNICAL GUIDE

R-410A
ZE/ZF/ZR/XN/XP SERIES
3 - 6 TON
60 Hertz

Description

YORK® ZE/ZF/ZR/XN/XP Series units are convertible single package high efficiency rooftops with a common roof curb for the 3, 4, 5 and 6 Ton sizes (ZE, ZR, XN, XP not available in 6 Ton). Although the units are primarily designed for curb mounting on a roof, they can also be slab-mounted at ground level or set on steel beams above a finished roof.

All ZE/ZF/ZR/XN/XP Series units are self-contained and assembled on rigid full perimeter base rails allowing for overhead rigging. Every unit is completely charged, wired, piped and tested at the factory to provide a quick and easy field installation.

All models (including those with an economizer) are convertible between bottom and horizontal duct connections.

ZE/ZF/ZR Series units are available in the following configurations: cooling only, cooling with electric heat, and cooling with one or two stage gas heat. Electric heaters are available as factory-installed option or field installed accessory.

XN/XP Series units are available in the following configurations: cooling and heating only and cooling and heating with electric heat.

Tested in accordance with:

DESIGN CERTIFIED

C SA US

CERTIFIED

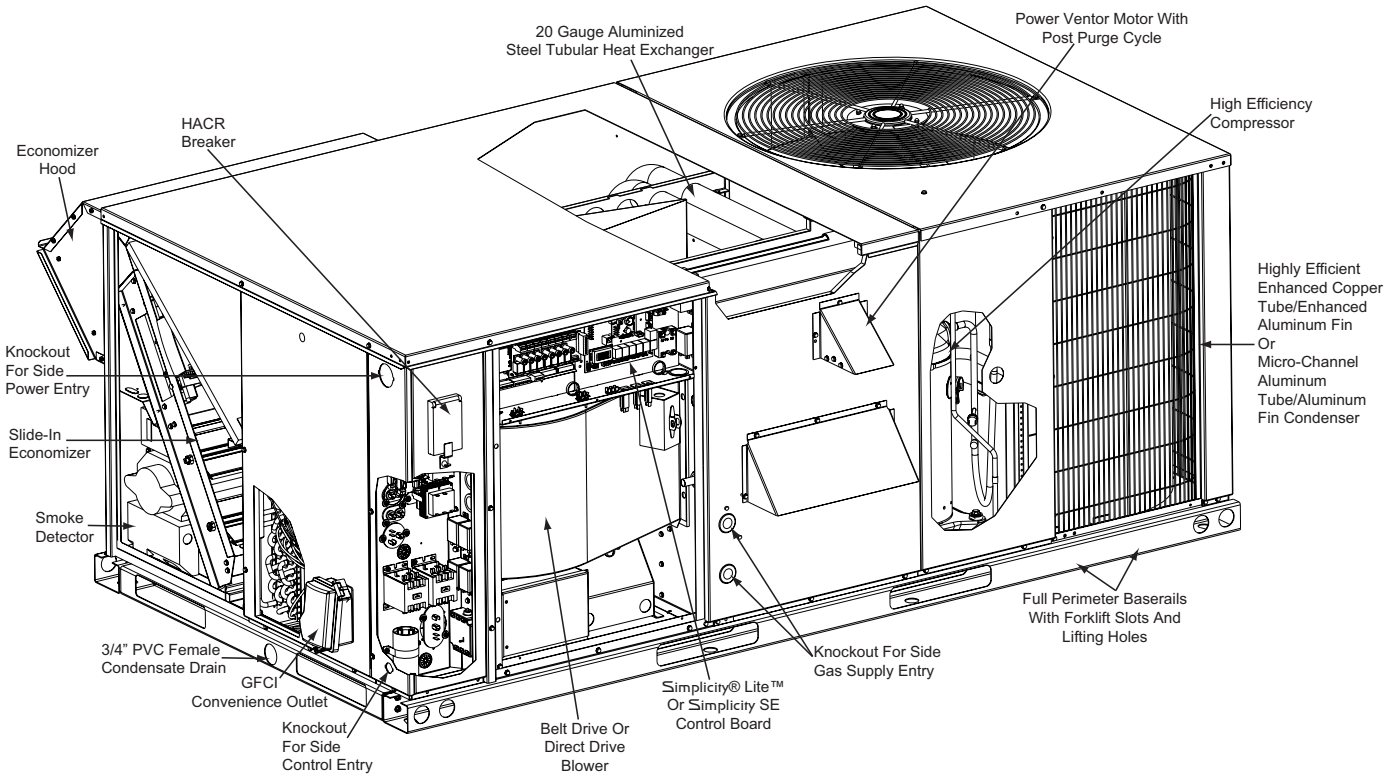
AHRI CERTIFIED www.ahridirectory.org Unitary Small AC AHRI Standard 210/240

AHRI CERTIFIED www.ahridirectory.org Unitary Small HP AHRI Standard 210/240

Table of Contents

Component Location

Gas/Electric



Sound Performance

ZF/ZR/XP Indoor Sound Power Levels

Size (Tons)	CFM	ESP (IWG)	Blower		Sound Power, dB (10^{-12}) Watts							
					Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)						
			RPM	BHP		63	125	250	500	1000	2000	4000	8000
036 (3.0)	1200	0.2	630	0.41	63	82	77	59	50	43	42	40	45
048 (4.0)	1600	0.2	791	0.54	72	95	84	58	54	46	44	45	44
060 (5.0)	2000	0.2	840	0.67	62	84	71	58	53	50	49	49	49
072 (6.0)	2200	0.3	920	1.45	76	61	71	68	67	72	66	61	54

1. These values have been accessed using a model of sound propagation from a point source into the hemispheric/free field. The dBA values provided are to be used for reference only. Calculation of dBA values cover matters of system design and the fan manufacture has no way of knowing the details of each system. This constitutes an exception to any specification or guarantee requiring a dBA value of sound data in any other form than sound power level ratings.

ZE/ZF/ZR Outdoor Sound Power Levels

Size (Tons)	Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
036 (3.0)	81	87.5	86.0	81.0	77.0	75.0	69.5	65.5	70.5
048 (4.0)	80	84.5	81.0	80.0	78.0	75.0	70.0	67.0	70.5
060 (5.0)	82	86.5	87.5	81.5	77.5	75.0	71.5	68.0	70.5
072 (6.0)	83	-	84.0	85.0	79.0	80.0	72.0	67.5	62.5

1. Rated in accordance with AHRI 270 standard.

XN/XP Outdoor Sound Power Levels

Size (Tons)	Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
036 (3.0)	76	83.5	84.5	76.5	72.0	68.0	66.0	60.0	56.0
048 (4.0)	80	85.0	83.0	81.0	77.5	75.5	71.5	67.5	61.5
060 (5.0)	80	86.0	84.0	81.0	77.0	75.5	71.0	66.5	60.5

1. Rated in accordance with AHRI 270 standard.

TECHNICAL GUIDE
R-410A
ZF SERIES
6.5 - 12.5 TON
60 Hertz

ZF 6.5 THROUGH 10 TON

ZF12.5 TON

Description

ASHRAE 90.1 COMPLIANT

YORK® Predator® units are convertible single packages with a common footprint cabinet and common roof curb for all 6.5 through 12.5 ton models. All units have two compressors with independent refrigeration circuits to provide 2 stages of cooling. The units were designed for light commercial applications and can be easily installed on a roof curb, slab, or frame.

All Predator® units are self-contained and assembled on rigid full perimeter base rails allowing for 3-way forklift access and overhead rigging. Every unit is completely charged, wired, piped, and tested at the factory to provide a quick and easy field installation.

Predator® units in all tonnage sizes are convertible between side airflow and down airflow, with corresponding economizer if economizer option is desired.

Predator® units are available in the following configurations: cooling only, cooling with electric heat, and cooling with gas heat. Electric heaters are available as factory-installed options or field-installed accessories.

All units provide constant supply air volume. A variable air volume (VAV) option, which features a variable frequency drive (VFD), is available on 6.5 through 12.5 ton models.

SMART EQUIPMENT

Tested in accordance with:

DESIGN CERTIFIED

C SA US

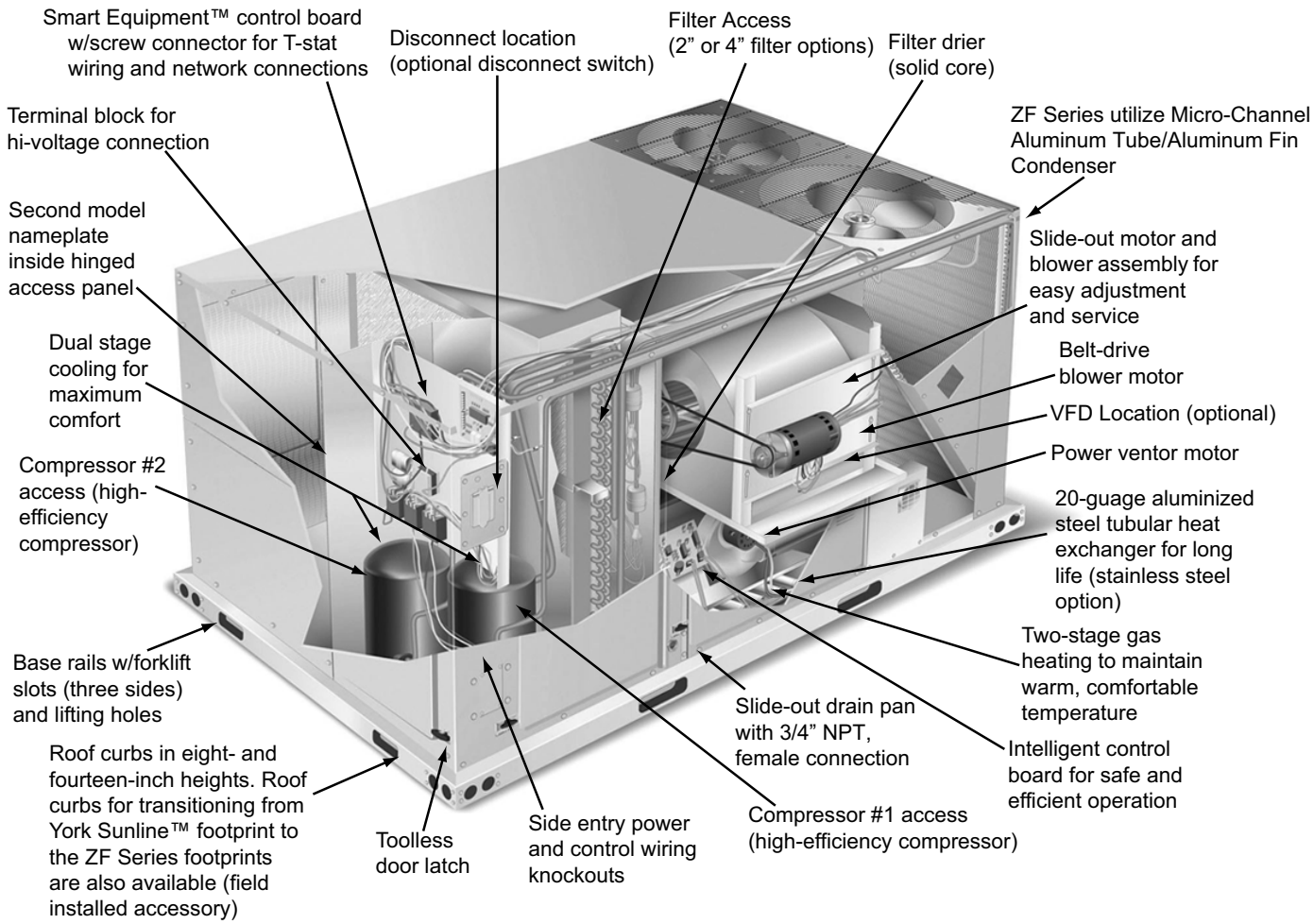
AHRI CERTIFIED
www.ahridirectory.org
Unitary Large AC
AHRI Standard 340/360

CERTIFIED

Table of Contents

Component Location

Cooling With Gas Heat



Electric Heat Multipliers

Voltage		kW Capacity Multipliers[1]
Nominal	Applied	
240	208	0.75
	230	0.92
480	460	0.92
600	575	0.92

1. Electric heaters are rated at nominal voltage. Use this table to determine the electric heat capacity for heaters applied at lower voltages.

Sound Performance

Indoor Sound Power Levels

Size (Tons)	Model	CFM	ESP (IWG)	Blower		Sound Power, dB (10^{-12}) Watts								
						Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)							
				RPM	BHP		63	125	250	500	1000	2000	4000	8000
078 (6.5)	ZF	2600	0.6	812	1.14	74	71	73	73	71	69	65	65	60
090 (7.5)	ZF	3000	0.6	854	1.47	77	74	76	76	74	72	68	68	63
102 (8.5)	ZF	3400	0.6	872	1.65	80	77	79	79	77	75	71	71	66
120 (10)	ZF	4000	0.6	959	2.29	83	80	82	82	80	78	74	74	69
150 (12.5)	ZF	5000	0.6	1132	3.74	87	84	86	86	84	82	78	78	73

1. These values have been accessed using a model of sound propagation from a point source into the hemispheric/free field. The dBA values provided are to be used for reference only. Calculation of dBA values cover matters of system design and the fan manufacture has no way of knowing the details of each system. This constitutes an exception to any specification or guarantee requiring a dBA value of sound data in any other form than sound power level ratings.

Outdoor Sound Power Levels

ZF078-150

Size (Tons)	Model	Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)							
			63	125	250	500	1000	2000	4000	8000
078 (6.5)	ZF	84	86.0	87.5	86.0	82.5	79.0	73.5	68.5	62.0
090 (7.5)	ZF	89	89.5	92.0	89.0	87.5	84.0	78.5	73.5	66.5
102 (8.5)	ZF	91	91.5	93.5	92.5	89.0	85.5	80.5	76.0	71.0
120 (10)	ZF	92	99.5	94.5	92.0	90.0	87.0	81.0	76.0	70.0
150 (12.5)	ZF	88	91.0	92.5	90.0	85.0	81.5	77.0	73.0	66.5

1. Rated in accordance with AHRI 270 standard.

DRAFT

Transportation Impact Analysis
School of Public Safety at Ben Clark Training Center
Riverside County

Prepared for:

Riverside Community College District
3801 Market Street
Riverside, California 92501
Contact: Bart Doering, Facilities Development Director

Prepared by:

DUDEK
27372 Calle Arroyo
San Juan Capistrano, California 92501
Contact: Dennis Pascua
Transportation Services Manager

APRIL 2021

Printed on 30% post-consumer recycled material.

Table of Contents

APPENDICES

FIGURES

TABLES

1 Introduction

1.1 Purpose and Scope of the TIA

The purpose of this Traffic Impact Analysis (TIA) is to identify traffic impacts associated with the proposed School of Public Safety at Ben Clark Training Center (BCTC) (proposed project or project), a junior/community college development in Riverside County (County). This TIA has been prepared per the Recommended Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (WRCOG 2020) provided in a Staff Report dated February 13, 2020 by Western Riverside Council of Governments (WRCOG) to address the requirements of Senate Bill (SB) 743 as well as the guidelines associated with level of service (LOS) assessment for general plan consistency. WRCOG also administers the Transportation Uniform Mitigation Fees (TUMF) which is a regional fee program that mitigates the impact of new growth in western Riverside County. In addition, this TIA complies with the Riverside County Circulation Element requirements and with the Congestion Management Program (CMP) for the Riverside County Transportation Commission (RCTC). The project could also potentially affect the circulation system within the jurisdiction of the March Joint Powers Authority (March JPA) and is prepared per the March JPA Traffic Impact Study Preparation Guide (March JPA 2020).

The objectives of this TIA are to:

- Document existing roadway, pedestrian, bicycle, transit and traffic conditions, including intersection levels of service in the study area;
- Estimate trip generation, distribution, and assignment characteristics for the proposed project;
- Provide a Vehicle Miles Traveled (VMT) analysis per SB 743, the updated California Environmental Quality Act (CEQA) Guidelines, and the WRCOG guidelines;
- Document future short-range (Opening Year 2024) intersection levels of service in the study area per traffic volumes derived from adding growth to existing traffic volumes;
- Analyze the traffic impacts that would occur as a result of buildout of the proposed project under the Existing and Opening Year 2024 conditions;
- Describe the significance of the potential impacts under the Existing and Opening Year 2024 conditions;
- Identify CEQA-required mitigation measures for significant transportation impacts and/or other improvements needed to meet LOS standards (if any); and,
- Provide findings and recommendations based on the traffic analysis of the proposed project.

Based on the WRCOG and March JPA guidelines, the TIA study area was determined to include all major intersections (intersections of collector, or higher, streets) where the project would add more than 50 peak hour project trips.

Figure 1 shows the project location and study area intersections. As shown in Figure 1, the study area is comprised of the following 4 intersections:

Intersections

1. Village West Drive/Van Buren Boulevard (Signalized; County/March JPA)
2. Village West Drive/Krameria Avenue (Signalized; County/March JPA)

3. Bundy Avenue/Krameria Avenue (Unsignalized; County/March JPA)
4. Bundy Avenue/11th Street (Unsignalized; County/March JPA)

1.2 Project Description and Location

As part of the proposed project, the Riverside Community College District, is proposing the construction of 54,135 square feet of educational land uses including a classroom and administration building and a law enforcement and emergency management response educational facility for the School of Public Safety. The proposed project site would be located in western Riverside County within the boundary of the BCTC and would provide two buildings for the School of Public Safety, an instructional department within the District's Moreno Valley College. The BCTC site is located entirely within the March JPA jurisdictional boundary.

The project would be built in two phases as funding becomes available. Phase I of the project would be constructed in the western portion of the project site and would involve the construction of an approximately 14,135 square-foot classroom and administration building. Phase II of the project would be constructed on the eastern portion of the project site and involves construction of an approximately 40,000 square-foot law enforcement and emergency management response educational facility. For the purposes of this TIA, the project is assumed to be fully constructed and operational in the year 2024.

Site access would be provided via three proposed driveways along 11th Street. Two of the proposed driveways would lead to passenger vehicle parking lots located on the eastern and western corner of the project site. The third proposed driveway would lead to a loading area behind the building proposed for Phase I. Phase I would include 84 parking spots (inclusive of 5 ADA parking spaces) located at the western corner of the project site. Phase II would include 125 parking spots located at the eastern corner of the project site. The project would include improvements to the frontages of the project site, including a new concrete walkway to provide pedestrian access from 11th Street to the proposed project. Figure 2 illustrates the conceptual site plan for the proposed project.

Figure 1 Project Location and Study Area

INTENTIONALLY LEFT BLANK

Figure 2 Project Site Plan

Intersections

1. Village West Drive/Van Buren Boulevard (Signalized; County/March JPA)
2. Village West Drive/Krameria Avenue (Signalized; County/March JPA)
3. Bundy Avenue/Krameria Avenue (Unsignalized; County/March JPA)
4. Bundy Avenue/11th Street (Unsignalized; County/March JPA)

1.2 Project Description and Location

As part of the proposed project, the Riverside Community College District, is proposing the construction of 54,135 square feet of educational land uses including a classroom and administration building and a law enforcement and emergency management response educational facility for the School of Public Safety. The proposed project site would be located in western Riverside County within the boundary of the BCTC and would provide two buildings for the School of Public Safety, an instructional department within the District's Moreno Valley College. The BCTC site is located entirely within the March JPA jurisdictional boundary.

The project would be built in two phases as funding becomes available. Phase I of the project would be constructed in the western portion of the project site and would involve the construction of an approximately 14,135 square-foot classroom and administration building. Phase II of the project would be constructed on the eastern portion of the project site and involves construction of an approximately 40,000 square-foot law enforcement and emergency management response educational facility. For the purposes of this TIA, the project is assumed to be fully constructed and operational in the year 2024.

Site access would be provided via three proposed driveways along 11th Street. Two of the proposed driveways would lead to passenger vehicle parking lots located on the eastern and western corner of the project site. The third proposed driveway would lead to a loading area behind the building proposed for Phase I. Phase I would include 84 parking spots (inclusive of 5 ADA parking spaces) located at the western corner of the project site. Phase II would include 125 parking spots located at the eastern corner of the project site. The project would include improvements to the frontages of the project site, including a new concrete walkway to provide pedestrian access from 11th Street to the proposed project. Figure 2 illustrates the conceptual site plan for the proposed project.

SOURCE: Bing Maps, Riverside County 2020, City of Riverside 2021, Google Maps

DUDEK

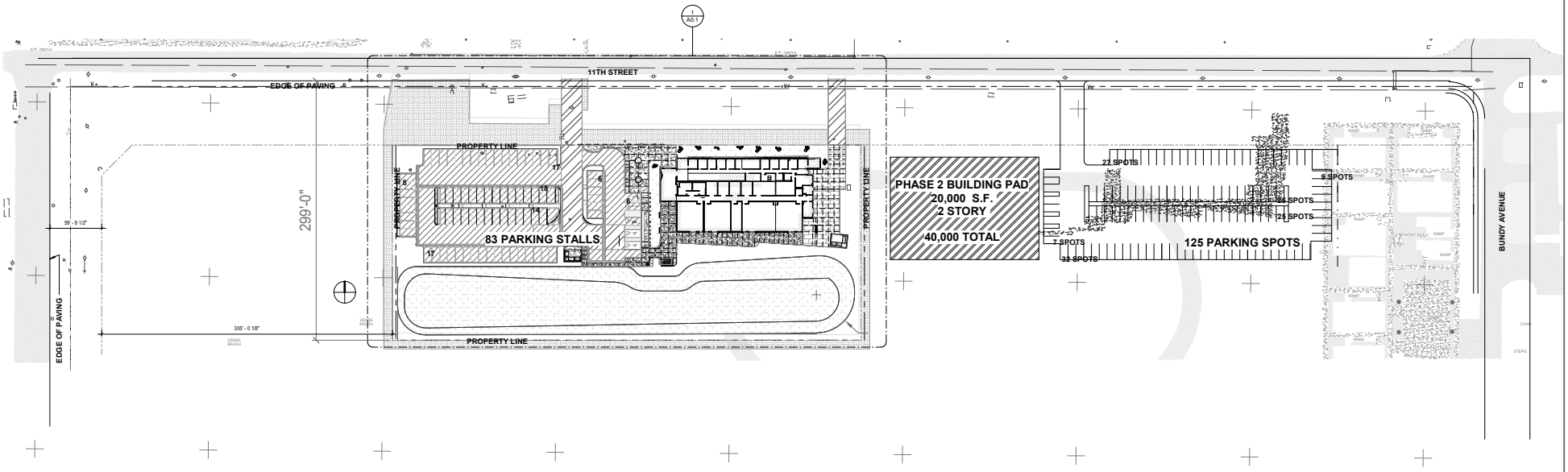
NOT TO SCALE

FIGURE 1

Project Location and Study Area

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK



SOURCE: SVA Architects 2020

DUDEK

FIGURE 2

Project Site Plan

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK

1.3 Analysis Methodology

1.3.1 Vehicle Miles Traveled (VMT) Analysis for CEQA

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which creates a process to change the way that transportation impacts are analyzed under California Environmental Quality Act (CEQA). SB 743 required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service (LOS) for evaluating transportation impacts. Under the new transportation guidelines, LOS, or vehicle delay, will no longer be considered an environmental impact under CEQA. OPR recommended Vehicle Miles Traveled (VMT) as the most appropriate measure of project transportation impacts for land use projects and land use plans. The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. The OPR Technical Advisory (OPR 2018) provides guidance and tools to properly carry out the principles within SB 743 and how to evaluate transportation impacts in CEQA.

Under these guidelines, VMT has been adopted as the most appropriate measure of transportation impacts under CEQA. The OPR's regulatory text indicates that a public agency may immediately commence implementation of the new transportation impact guidelines, and that the guidelines must be implemented statewide by July 1, 2020. The Updated CEQA Guidelines state that "*…generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts…*" and define VMT as "*…the amount and distance of automobile travel attributable to a project…*". It should be noted that "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT). Other relevant considerations may include the effects of the project on transit and non-motorized travel.

Since the project is located in unincorporated Riverside County, the analysis was conducted based on the WRCOG Recommended Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (WRCOG 2020). The guidance is generally based upon the OPR thresholds. Therefore, both the OPR Technical Advisory and WRCOG Guide were utilized within this analysis as the primary source of analysis of VMT and transportation-related impacts.

The details of applicable screening and VMT analysis methodology is provided in Section 4 of the TIA. The following steps have been used in screening the project's VMT assessment, consistent with WRCOG guidelines for SB 743 compliance:

- Screening Threshold for Small Projects (110 daily trips or less).
- Map Based Screening for Residential and Office Projects.
- Presumption of Less Than Significant Impact for Affordable Residential Development.
- Presumption of Less Than Significant Impact Near Transit Stations.
- Presumption of Less Than Significant Impact for Local Serving Retail and Other Uses.

If the project does not meet the applicable screening criteria, then further analysis is required.

1.3.2 Level of Service (LOS) for General Plan Consistency

In addition to a VMT analysis required under CEQA, a local agency may require a TIA to include a LOS analysis to identify infrastructure improvements required to provide acceptable operations, consistent with the acceptable LOS

in the local agency's General Plan. LOS is commonly used as a qualitative description of intersection operations and roadway segments and is based on the design capacity of the intersection configuration and roadway facility, compared to the volume of traffic using the facility.

The study area intersections are analyzed in the TIA for the following scenarios:

Existing Condition

The TIA includes a description of existing traffic conditions in the site vicinity, including intersection weekday AM and PM peak hour traffic volumes, and traffic operations. The existing condition is representative of the year 2021. It should be noted that the traffic counts from 2019 utilized in this analysis were previously utilized in a prior TIA for the Meridian South Campus prepared by Urban Crossroads (2020). The Meridian South Campus TIA was included as an appendix item for the Meridian South Campus Specific Plan and Village West Drive Extension Draft Subsequent EIR project, which has been fully certified and approved in 2021. That project is located directly north of the BCTC area and involves the expansion of several roadways as well as multiple new industrial and commercial structures. There is traffic count data available for the intersection of Bundy Avenue/11th Street, however based on field observations and the fact that the BCTC area is primarily accessed only by direct traffic (and therefore includes no traffic passing through proceeding to other destinations), it was determined that the level of traffic could be estimated by utilizing the traffic counts at the Bundy Avenue/Krameria Avenue intersection and the other movements at the Bundy Avenue/11th Street intersection, would therefore be estimated. Traffic counts were then adjusted and grown to the year 2021 using the same growth factor described for Opening Year 2024 conditions below.

Existing plus Project Condition

This condition includes analysis of traffic operations under existing conditions with project-related traffic, assuming full buildout of the project, added to the existing AM and PM peak hour intersection traffic volumes. The traffic impacts specific to the project under this condition were used as the basis for determining the project's direct impacts.

Opening Year 2024 Condition

This condition includes a description of traffic conditions and operations within a short-term horizon period (less than 5 years) where the proposed project is constructed and fully occupied. Opening Year 2024 traffic volumes were derived by applying a conservative 2% per year ambient growth rate, which matches the methodology used in the Meridian South Campus TIA, to existing traffic volumes, and adding traffic generated by approved and pending projects within two miles of the project site. These approved or pending projects are developments in the review process, but not fully approved; or, projects that have been approved, but not fully constructed or occupied.

Opening Year 2024 plus Project

This condition includes analysis of traffic operations under the Opening Year 2024 (described above) condition with project-related traffic added to the AM and PM peak hour traffic volumes. The traffic impacts specific to the project under this condition were used as the basis for determining the project's contribution to cumulative impacts.

1.3.2.1 Intersections

The Highway Capacity Manual, 6th Edition (HCM 6) methodology (Transportation Research Board 2016) was used to assess level of service for intersections within the study area per requirement of the respective jurisdiction.

The HCM intersection analysis methodology was used to analyze the operation of signalized and unsignalized study intersections. The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding control delay experienced per vehicle for unsignalized intersections. The Synchro 10 LOS software was used to determine intersection LOS. Synchro is consistent with the HCM 6 methodology. Table 1 shows the LOS values by delay ranges for unsignalized and signalized intersections under the HCM methodology.

Table 1. Levels of Service for Intersections and Roadway Segments using HCM Methodology

Level of Service	Unsignalized Intersections Control Delay(in seconds per vehicle)	Signalized Intersections Control Delay (in seconds per vehicle)
A	< 10.0	< 10.0
B	> 10.0 to < 15.0	> 10.0 to < 20.0
C	> 15.0 to < 25.0	> 20.0 to < 35.0
D	> 25.0 to < 35.0	> 35.0 to < 55.0
E	> 35.0 to < 50.0	> 55.0 to < 80.0
F	> 50.0	> 80.0

Source: HCM 6 (Transportation Research Board 2016).

1.3.2.3 General Plan Consistency and TIA Requirements

The LOS thresholds and impact criteria identified in WRCOG and March JPA Guidelines used to evaluate the project's potential impacts on intersection LOS, are described below.

March JPA

As identified in the March JPA Traffic Impact Study Preparation Guide (February, 2020), in order to maintain consistency with the General Plan, all intersections within the March JPA Planning Area shall operate at LOS D or better with limiting circumstances of LOS E to occur. LOS E may also be allowed to the extent that it would support transit-oriented development (TOD) and walkable communities. LOS E is also acceptable during peak hours at interchange ramp intersections where ramp metering occurs. The Project is not proposed to be a TOD and would not analyze any freeway ramps since the level of traffic would be fewer than 50 peak hour trips; as such, the minimum LOS utilized for the purposes of this analysis is LOS D.

A direct traffic impact will be designated as significant if both of the following conditions occur:

- Peak hour project traffic plus existing traffic causes a roadway segment or intersection to operate at LOS "E" or "F"; and
- Peak hour project traffic comprises 2% or more of the total peak hour traffic on the roadway segment or intersection for LOS "E" and 2% or more for LOS "F".

A cumulative traffic impact will be designated as significant if both of the following conditions occur:

- Peak hour project traffic plus existing peak hour traffic and peak hour traffic from other near-term and future projects causes a roadway segment or intersection to operate at LOS "E" or "F"; and
- Peak hour project traffic comprises 2% or more of total peak hour traffic on the roadway segment or intersection for LOS "E" and 2% or more for LOS "F".

WRCOG

As described in the WRCOG guidelines, in order to maintain consistency with the Riverside County General Plan, all intersections within the County should operate at LOS D or better, otherwise the LOS of an intersection or roadway would be considered deficient and inconsistent with LOS policy. When the pre-Project condition is at or better than LOS D (i.e., acceptable LOS), and project-generated traffic, as measured by 50 or more peak hour trips, causes deterioration below LOS D/LOS E (i.e., unacceptable LOS), a deficiency is deemed to occur. As such, the minimum LOS utilized for the purposes of this analysis is LOS D.

For study intersections within the County the following requirements apply for signalized intersections:

- Any signalized study intersection operating at an acceptable LOS D or better without project traffic in which the addition of project traffic causes the intersection to degrade to a LOS E or F shall identify improvements to improve operations to LOS D or better.
- Any signalized study intersection that is operating at LOS E or F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

For study intersections within the County the following requirements apply for unsignalized intersections:

- The addition of project related traffic causes the intersection to degrade from an acceptable LOS D or better to LOS E or F; OR
- The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at a LOS E or F; AND
- The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

Project Access, Safety and Other Analyses

An analysis of project access, safety, and traffic signal warrant analysis as applicable for any unsignalized intersections around the project and on adjacent streets is recommended per WRCOG and March JPA guidelines.

1.4 Improvements for Transportation Impacts

Per both the WRCOG and March JPA guidelines, at intersections where a project is forecast to have an impact, whether that be a direct project related impact or a cumulative impact, needed improvements must be identified to offset the projects' impacts. Locations at which unsignalized intersections are operating or forecast to operate at deficient levels of service with the proposed project shall be evaluated for traffic signal warrants based on the California Manual of Traffic Control Devices (CA MUTCD) for peak hour signal warrants unless data shows that other warrants could be applicable.

It is the project's responsibility to implement the needed improvements, unless otherwise noted, to the satisfaction of the County or March JPA, either through construction of the improvement(s), fair-share payment to the improvement(s), or payment of fees to programs, such as WRCOG's TUMF program which identifies fees and funded improvements. If improvements are included in a fee program, the cost of implementing the improvements could be credited against fees payable by the project. Improvements required in the TIA and subsequently listed in the conditions of approval shall be completed prior to occupancy.

2 Existing Conditions

This section describes existing conditions within the study area. Characteristics are provided for the existing roadway, transit, bike and pedestrian facilities, peak hour intersection traffic volumes and traffic operations.

2.1 Roadway System

Characteristics of the existing street system within the study area are described below.

Interstate 215 (I-215) is a north-south divided interstate freeway, and within the study area is generally 6 to 8 lanes and split off from I-15 near the City of Murrieta. It provides a parallel connection to I-15 to serve the communities of western Riverside County and San Bernardino County, before merging back with I-15 approximately 55 miles north. The posted speed limit is 65 miles per hour (MPH), and primary interchanges within the vicinity of the project site are located at Van Buren Boulevard.

Van Buren Boulevard is an east-west, generally 4 to 6 lane, divided roadway in the study area with left-turn pockets. Van Buren Boulevard is designated as an Urban Arterial roadway by the County of Riverside General Plan Circulation Element. Additionally, Van Buren Boulevard is designated as an Arterial Highway in the March JPA Transportation Element. Parking is not permitted along the roadway, and the posted speed limit ranges from 45 to 55 MPH within the study area.

Village West Drive is a north-south, 4-lane divided roadway, that narrows down to a 2-lane undivided roadway south of Krameria Avenue. Village West Drive is designated as a Secondary roadway by the County of Riverside General Plan Circulation Element. Additionally, Van Buren Boulevard is designated as a Secondary Highway north of Krameria Avenue, and as an Industrial Collector south of Krameria Avenue in the March JPA Transportation Element. Parking is not permitted along the roadway, and the posted speed limit ranges from 25 to 40 MPH within the study area. As part of the Meridian South Campus EIR project, Village West Drive is scheduled to be extended and paved fully to connect southward to Nandina Avenue.

Krameria Avenue is an east-west, 4-lane undivided roadway in the study area, with a two-way left-turn lane along the entire stretch of roadway. Krameria Avenue is undesignated in the County of Riverside General Plan Circulation Element and is designated as a Secondary Highway in the March JPA Transportation Element. Parking is not permitted along the roadway, and the posted speed limit is 35 MPH within the study area. As part of Meridian South Campus EIR project, Krameria Avenue is scheduled to be extended westward to connect to Barton Street.

Bundy Avenue is a north-south, 2-lane undivided roadway in the study area, with a two-way left-turn lane along the entire stretch of roadway. Bundy Avenue is undesignated in the County of Riverside General Plan Circulation Element and is designated as an Industrial Collector roadway in the March JPA Transportation Element. Parking is not permitted along the roadway, and the posted speed limit is 25 MPH within the study area. Bundy Avenue is the main entrance point as it is the most direct route for traffic to reach the BCTC area from regional roads such as I-215 and Van Buren Boulevard.

11th Street is an east-west, 2-lane undivided roadway in the study area that serves as the primary frontage of the proposed project, as well as the main access via two proposed driveways. 11th Street is undesignated in both the

County of Riverside General Plan Circulation Element and the March JPA Transportation Element. Parking is not permitted along the roadway, and the posted speed limit is 25 MPH within the study area. 11th Street does not possess adequate curbs, gutters, or pedestrian facilities.

2.2 Transit System

Currently, the project area is most directly served by the Riverside Transit Agency (RTA) which provides regional and local service to the County. The project site is also served by passenger rail and bus services. For wider regional service to the Los Angeles metropolitan area, the Southern California Regional Rail Authority (SCRRA) Metrolink commuter rail system has service near the study area

Metrolink

Metrolink is a commuter rail system that offers services in six counties, including San Diego, Orange, Riverside, San Bernardino, Los Angeles, and Ventura. Metrolink operates seven routes, which include the following:

- Antelope Valley Line in Los Angeles County
- Inland Empire-Orange County Line from San Diego, Orange, Riverside, and San Bernardino counties
- Orange County Line from Orange County to Los Angeles County
- Riverside County Line from Riverside, San Bernardino, and Los Angeles counties
- San Bernardino Line from Los Angeles County to San Bernardino County
- Ventura County Line from Los Angeles County to Ventura County
- 91/Perris Valley Line from Riverside, Orange, and Los Angeles counties

The project would be served by Metrolink's 91/Perris Valley Line which runs west to east from the Los Angeles Union Station to the Perris – South Station. The Moreno Valley/March Field Station, located approximately 2.5 miles northeast of the project site, would serve as the nearest Metrolink station serving the 91/Perris Valley Line, with weekday headways averaging 45 to 60 minutes.

RTA

Public transit bus services from RTA include routes serving the Riverside County area, as well as the City of Riverside. As shown in Figure 3, Transit and Bicycle Facilities, the RTA's Riverside-Perris Route 22 and Galleria-Perris Route 27 are the closest bus routes to the project site, with stops along Van Buren Boulevard, Orange Terrace Parkway, and Oleander Avenue respectively. The routes are located within 1 mile of the project site. A summary of each route is provided below.

The project would not relocate any existing bus stops and would not require any changes to existing or future routes as described below. The project would not require an increase in service frequency or additional routes to serve the project area. Therefore, development of the project would not conflict with the existing bus routes or bus stops.

Route 22

Route 22 operates between the downtown area of the City of Riverside and the Perris Station Transit Center with a peak weekday service frequency of 45 minutes. Route 22 primarily operates along Wood Road and Oleander

Avenue. The closest bus stop to the project site serving this route is located approximately 1 mile south of the project site, near Alexander Street/Oleander Avenue (RTA 2021a).

Route 27

Route 27 operates between the Galleria Mall at Tyler and the Perris Station Transit Center with a peak weekday service frequency of 60 minutes. Route 27 primarily operates along Orange Terrace Parkway and Van Buren Boulevard. The closest bus stop is approximately 1 mile north of the project site, near Orange Terrace Parkway/Van Buren Boulevard (RTA 2021b).

2.3 Pedestrian and Bicycle Facilities

Pedestrian Facilities

According to the Riverside County Regional Park and Open-Space District Comprehensive Trails Plan (Riverside County Regional Park and Open-Space District 2018), there are several long-distance community multi-use trails south of the BCTC that are designed to link rural communities within the County. The nearest community trail to the proposed project site is along Nandina Avenue, approximately 0.75 miles south of the project. The community trail connects to regional trails, south of Nandina Avenue along Alexander Street.

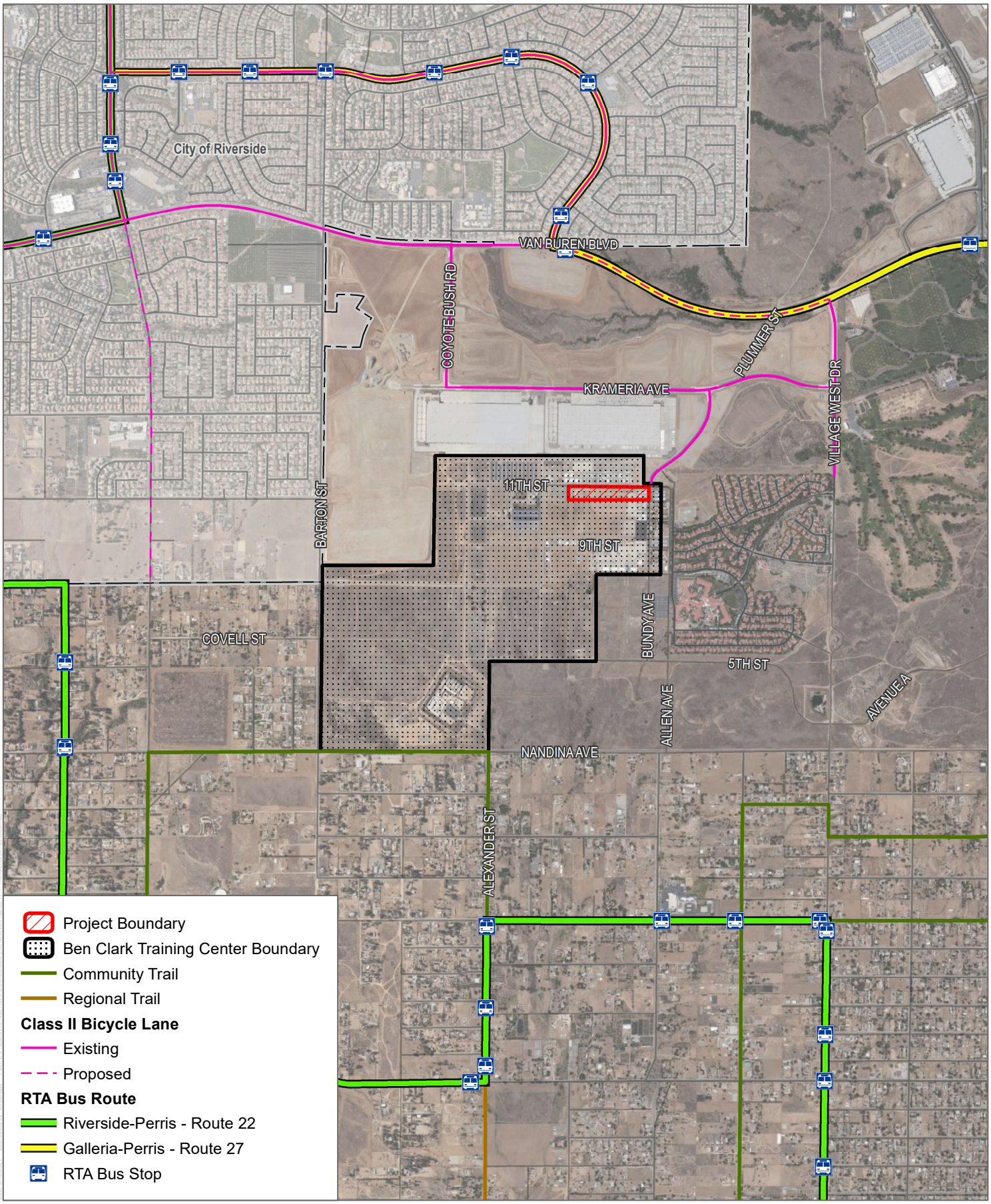
The roadway along the northern edge of the project site, 11th Street, is generally unimproved and does not have sidewalks or other pedestrian facilities. The project would include improvements to the frontages of the project site, including a new concrete walkway to provide pedestrian access from 11th Street to the proposed project.

Bicycle Facilities

Bicycle facilities are typically divided into several classifications that describe their efficacy. Class I (separated right-of-way) bicycle paths are completely separated from roadways and can be typically shared with pedestrians. Class II (painted) bicycle lanes are designed to be on-street and include a painted stripe to indicate the separation between bicyclists and motorists. Class III (signed) bicycle routes are designated to be on-street, however, they are provided on slower roadways that facilitate safe equal sharing of the roadway between bicyclists and motorists. Class IV (protected) bicycle lanes are separated from roadways and provide for exclusive use for bicyclists, including motorists, pedestrians, and other alternative transportation forms that are not permitted.

As shown in Figure 3, currently, there are existing Class II (painted) bicycle lanes along both sides of the road for Bundy Avenue, Krameria Avenue, Coyote Bush Road, portions of Village West Drive north of Lemay Drive, Van Buren Boulevard west of Orange Terrace Parkway, and Trautwein Road/Cole Avenue north of Van Buren Boulevard. Several proposed Class II bicycle lanes are proposed in the area, including along Van Buren Boulevard east of Orange Terrace Parkway, and Trautwein Road/Cole Avenue south of Van Buren Boulevard (City of Riverside, 2021).

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps, Riverside County 2020, City of Riverside 2021, RTA 2021

DUDEK

0 1,000 2,000 Feet

FIGURE 3

Transit and Bicycle Facilities

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK

3 Project Traffic

This section documents the trip generation, distribution, and assignment of project traffic in the study area.

3.1 Trip Generation

As described previously in Section 1.2 as part of the proposed project, the Riverside Community College District, is proposing the construction of 54,135 square feet of educational land uses in the BCTC area. Trip generation estimates were based on the project description and characteristics as well as the expected land uses associated with both phases of the project. Trip generation was estimated by using trip rates from the Institute of Transportation Engineers 10th Edition Trip Generation book (ITE 2017). Accordingly, AM and PM peak hour trip generation volumes were computed. Table 2 presents the trip generation estimates for the proposed project.

Trip generation rates, vehicle splits, and the resulting trip generation estimates for the project are summarized in Table 2.

Table 2. Project Trip Generation

Land Use	ITE Code	Size/Units	Daily	AM Peak Hour			PM Peak Hour		
				In	*Out*	*Total*	*In*	*Out*	*Total*
Trip Rates[1]									
Junior/ Community College	540	TSF	20.25	1.59	0.48	2.07	0.93	0.93	1.86
Trip Generation									
Proposed Ben Clark Training Center Project	540	54.135 TSF	1,096	86	26	112	50	50	100
Project Trip Generation			**1,096**	**86**	**26**	**112**	**50**	**50**	**100**

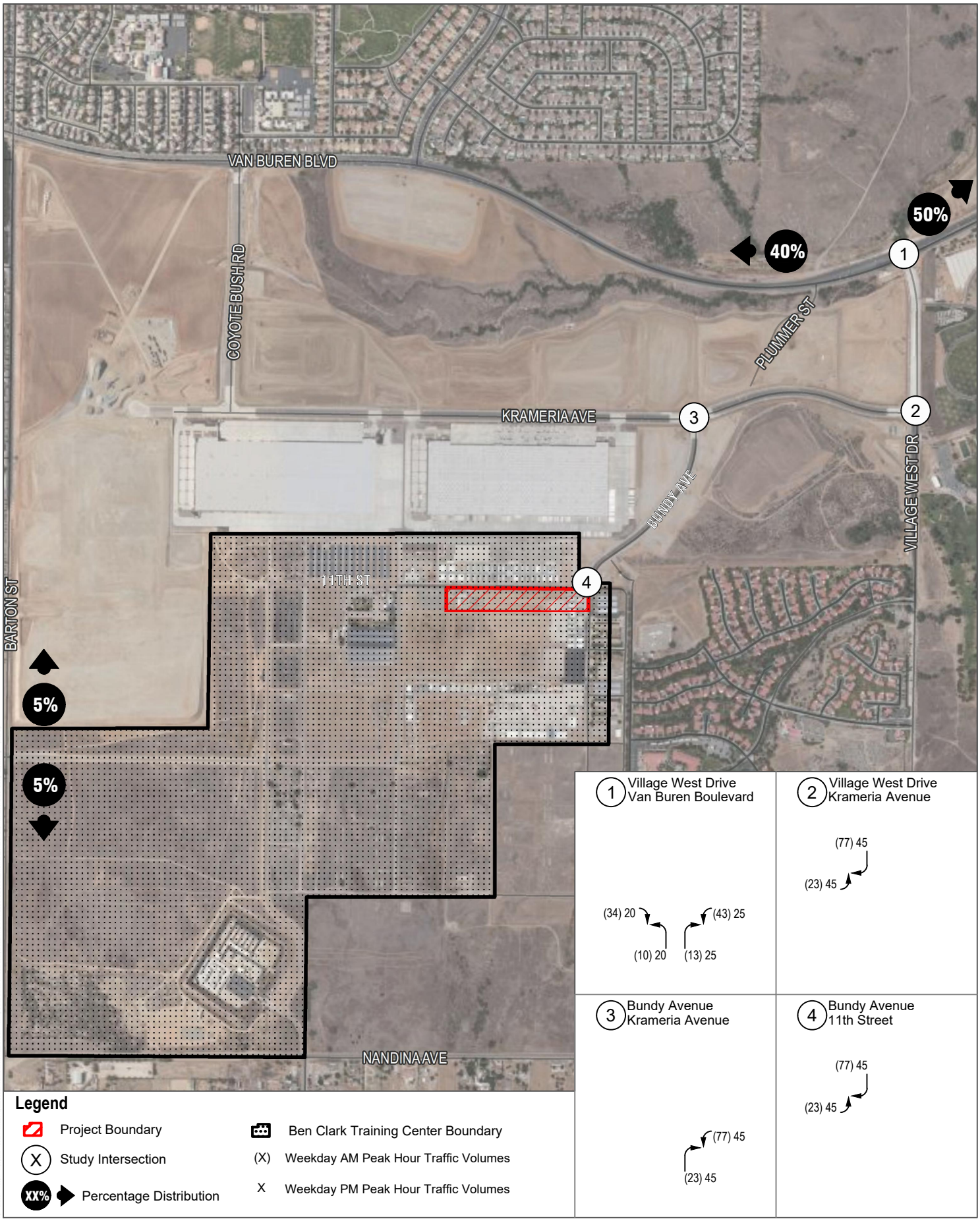
Notes: ITE = Institute of Transportation Engineers; TSF = thousand square feet

As shown in Table 2, the proposed project would generate approximately 1,096 daily trips, 112 AM peak hour trips (86 inbound and 26 outbound), and 100 PM peak hour trips (50 inbound and 50 outbound).

3.2 Trip Distribution and Assignment

Project trip distribution percentages are based on logical travel paths to and from the project site. Primary vehicular site access would be provided via Bundy Avenue, which connects to Krameria Avenue. From there, the nearest regional routes include Van Buren Boulevard and I-215, for which Village West Drive is the nearest connecting roadway. Therefore, it is expected that a majority of project traffic would enter the BCTC area from Village West Drive. It is possible for vehicles to enter the BCTC area from the unsignalized intersection of Barton Street/Mariposa Avenue, however for the most direct route and to assume a conservative distribution, all trips were distributed via Village West Drive. Project trips were assigned to the study area intersections by applying the above-referenced project trip generation estimates to the trip distribution percentages at each study area intersection. The project trip distribution and assignment are shown in Figure 4.

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps, Riverside County 2020, City of Riverside 2021

DUDEK

NOT TO SCALE

FIGURE 4

Project Trip Distribution & Assignment

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK

4 Vehicle Miles Traveled Analysis

4.1 Project Screening

As stated previously, the OPR Technical Advisory and WRCOG Guidelines were utilized within this analysis as the primary source of analysis of VMT and transportation-related impacts. As shown in the screening analysis below, the proposed project would be screened out using one of the criteria noted below and therefore would not require further VMT analysis. Both the WRCOG guidelines and the OPR Technical Advisory suggest that agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing. The following are the screening criteria:

- **Screening Threshold for Small Projects (110 daily trips or less).** Since the project generates more than 110 daily trips as shown in Table 2, this threshold cannot be considered.
- **Map Based Screening for Residential and Office Projects:** WRCOG possesses a screening tool for map-based screening, however the project does not fall into either residential or office project categories.
- **Presumption of Less Than Significant Impact for Affordable Residential Development:** The project is not a residential development and does not include affordable residential units.
- **Presumption of Less Than Significant Impact Near Transit Stations:** Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within 0.5 miles of an existing major transit stop1 or an existing stop along a high quality transit corridor2 would have a less-than-significant impact on VMT. This presumption would not apply, if the project:
  - Has a Floor Area Ratio (FAR) of less than 0.75
  - Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking)
  - Is inconsistent with the Southern California Association of Governments Regional Transportation Plan and/or
  - Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

  The project is not located within 0.5 miles of any bus routes or bus stop locations.
- **Presumption of Less Than Significant Impact for Local Serving Retail and Other Uses:** For development projects, if the project leads to a net increase in provision of locally-serving retail and public facility uses, transportation impacts from such uses can be presumed to be less than significant. Generally, local-serving retail and similar uses less than 50,000 square feet can be assumed to cause a less-than-significant transportation impact because by improving destination proximity, local-serving developments tend to shorten trips and therefore reduce VMT.
  - The project does not include any retail components, however according to the WRCOG guidelines, local serving projects by definition would decrease the number of trips or the distance those trips travel to access the development (and are VMT-reducing projects) include:
    - Local serving K–12 schools

[1] Public Resources Code Section 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.")

[2] Public Resources Code Section 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.")

- Local parks
- Day care centers
- Local serving gas stations
- Local serving banks
- Local serving hotels (e.g., non-destination hotels)
- Student housing projects
- Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS

Since the project would be a community college that would serve the local area, as well as the adjoining existing BCTC area and associated land uses, the project is not anticipated to increase VMT significantly. As the project is consistent with the SCAG RTP and/or SCS, the above screening criteria would apply to the project and it would be screened out from further VMT analysis. Therefore, a detailed VMT analysis is not required, and the project would not conflict or be inconsistent with CEQA Guidelines Section 150645.3(b).

5 Project Access and Circulation

5.1 Project Site Access and Internal Circulation

As shown in the project site plan (Figure 2), the proposed project would be accessible directly from 11th Street via two driveways which would lead to passenger vehicle parking lots located on the eastern and western corner of the of the project site. The third proposed driveway would lead to a loading area behind the building proposed for Phase I. The project would include improvements to the frontages of the project site, including a new concrete walkway to provide pedestrian access from 11th Street to the proposed project.

All site access driveways are assumed to be full access. Based on the layout of the proposed project, project vehicle traffic was evenly distributed to and from each of the two driveways. Due to the relatively low amount of traffic volumes observed within the study area along 11th Street and localized traffic within the BCTC area, it is not anticipated that the project driveways would create unnecessary delays for other traffic in the BCTC area or potentially create unsafe conditions for other motorists, pedestrians, or bicyclists.

On-site circulation would be facilitated at project driveways and would not be expected to cause excessive delays for vehicles entering or exiting the project site. Queuing as part of the project would be confined on-site and is not anticipated to impact other traffic along 11th Street. The project would be required to comply with all local, regional, state, and federal guidelines related to emergency access. Emergency vehicles would be able to access all buildings and driveways within the project site. The project site would be accessible to emergency responders during construction and operation of the project. Therefore, the project would not result in inadequate emergency access

5.2 Pedestrian and Bicycle Access

Pedestrian Facilities

As discussed in Section 2.3, 11th Street is currently a paved, two-lane roadway that does not possess curbs, gutters, and sidewalks along the roadway. The nearest pedestrian facility is the sidewalk at the Bundy Avenue/11th Street intersection, east of the project site. The project would include improvements to the frontages of the project site, including a new concrete walkway to provide pedestrian access from 11th Street to the proposed project. Development of the project would not conflict with any of the existing pedestrian facilities and would improve pedestrian access around the project site.

Bicycle Facilities

As discussed in Section 2.3 and shown in Figure 3, the nearest bicycle facility within the vicinity of the project site is a Class II bicycle lane located along Bundy Avenue, which further connects to Class II bicycle lanes along Krameria Avenue. Class II bicycle lanes are provided via Coyote Bush Road and along Village West Drive. There is a planned Class II bicycle lane to be provided along Van Buren Boulevard, west of Village West Drive that would connect to the existing Class II bicycle lanes that exist along Van Buren Boulevard, east of Orange Terrace Parkway.

5.3 Parking

As shown in Figure 2, Phase 1 of the project would be located on the western portion of the proposed project site and would include 84 parking spots (inclusive of 5 ADA parking spaces). Phase II of the proposed project would include 125 parking spots located at the eastern corner of the project site. Therefore, in summation both phases of the proposed project once constructed would provide 209 parking spots and would be parked according to the County's municipal code.

6 Existing Traffic Operations

The existing traffic controls and geometrics at the study area intersections is shown in Figure 5. This section details the existing traffic volumes and the existing intersection and roadway segment operations within the study area.

6.1 Traffic Volumes

As discussed in Section 1.3.2, existing weekday peak hour turning movement counts at the study intersections were collected in 2019 and previously utilized in a prior TIA for the Meridian South Campus project. Intersection volumes were adjusted to 2021 to reflect non-pandemic conditions with the addition of a 2% per year growth rate. This analysis focuses on the weekday daily, AM (7:00 a.m. to 9:00 a.m.) and the PM (4:00 p.m. to 6:00 p.m.) peak periods. The peak periods represent the highest volume of traffic for the adjacent street system. Traffic counts were also previously balanced to conserve flow between intersections that have different peak hours. Raw traffic count worksheets are provided in Appendix A. Existing weekday AM and PM peak hour volumes are summarized in Figure 6.

6.2 Intersection Operations

An intersection LOS analysis was prepared for the existing conditions using HCM 6 methodology via the Synchro LOS software as discussed in Section 1.3. Table 3 shows the results of the existing conditions analysis. LOS worksheets are provided in Appendix B.

As shown in the table, all of the study area intersections are currently operating at satisfactory levels of service (LOS D or better) under existing conditions.

Table 3. Existing Peak Hour Intersection Level of Service

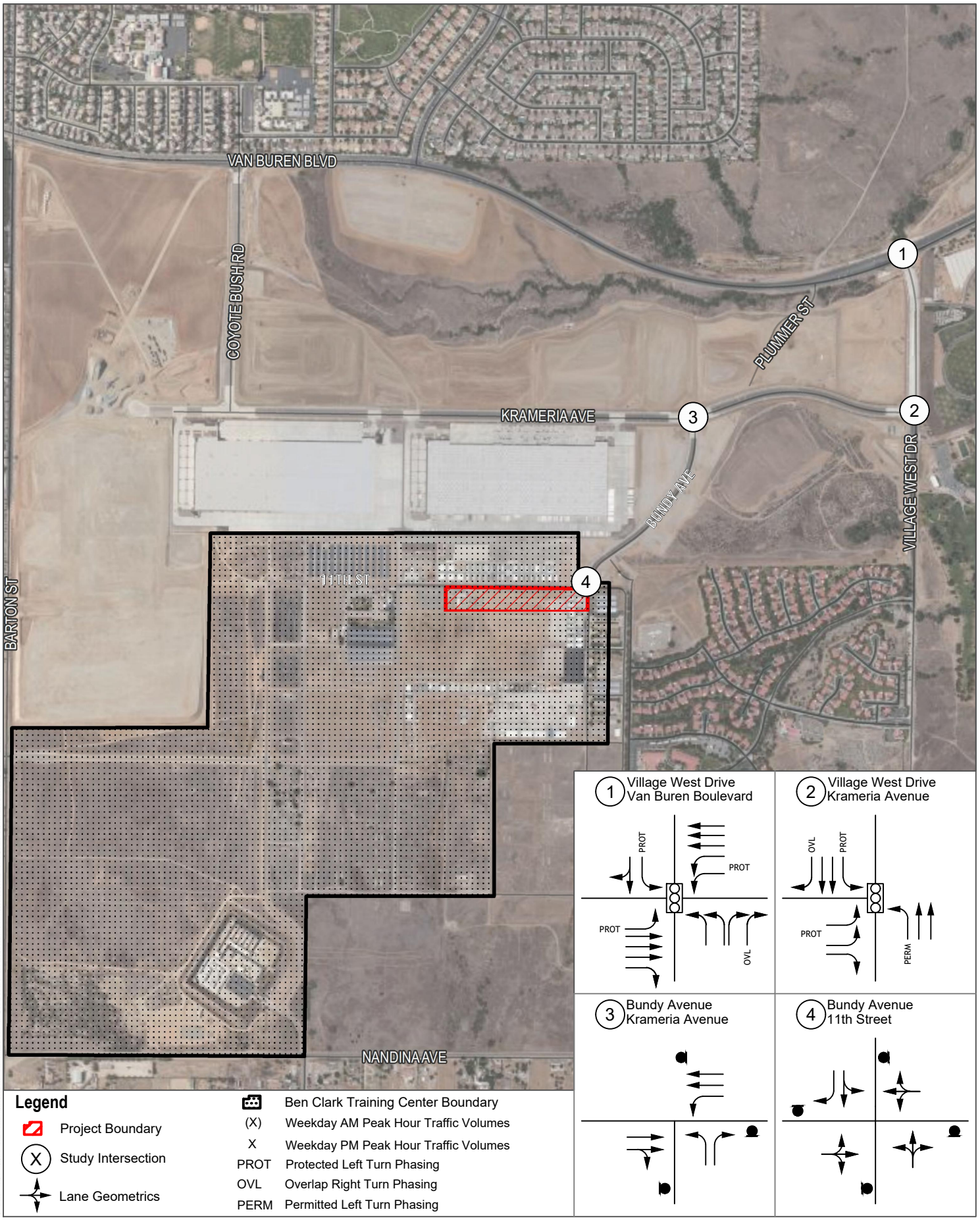
No.	Intersection	Jurisdiction	LOS Method	Existing			
				AM Peak		*PM Peak*	
				Delay[1]	*LOS[2]*	*Delay[1]*	*LOS[2]*
1	Village West Drive/ Van Buren Boulevard	County/March JPA	HCM	8.5	A	8.8	A
2	Village West Drive/ Krameria Avenue	County/March JPA	HCM	3.8	A	9.6	A
3	Bundy Avenue/ Krameria Avenue	County/March JPA	HCM (AWSC)	8.0	A	7.9	A
4	Bundy Avenue/ 11th Street	County/March JPA	HCM (AWSC)	7.7	A	7.6	A

Notes: HCM = Highway Capacity Manual; AWSC = All-Way Stop-Controlled

1 Delay in seconds per vehicle

2 Level of Service (LOS)

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps, Riverside County 2020, City of Riverside 2021

DUDEK

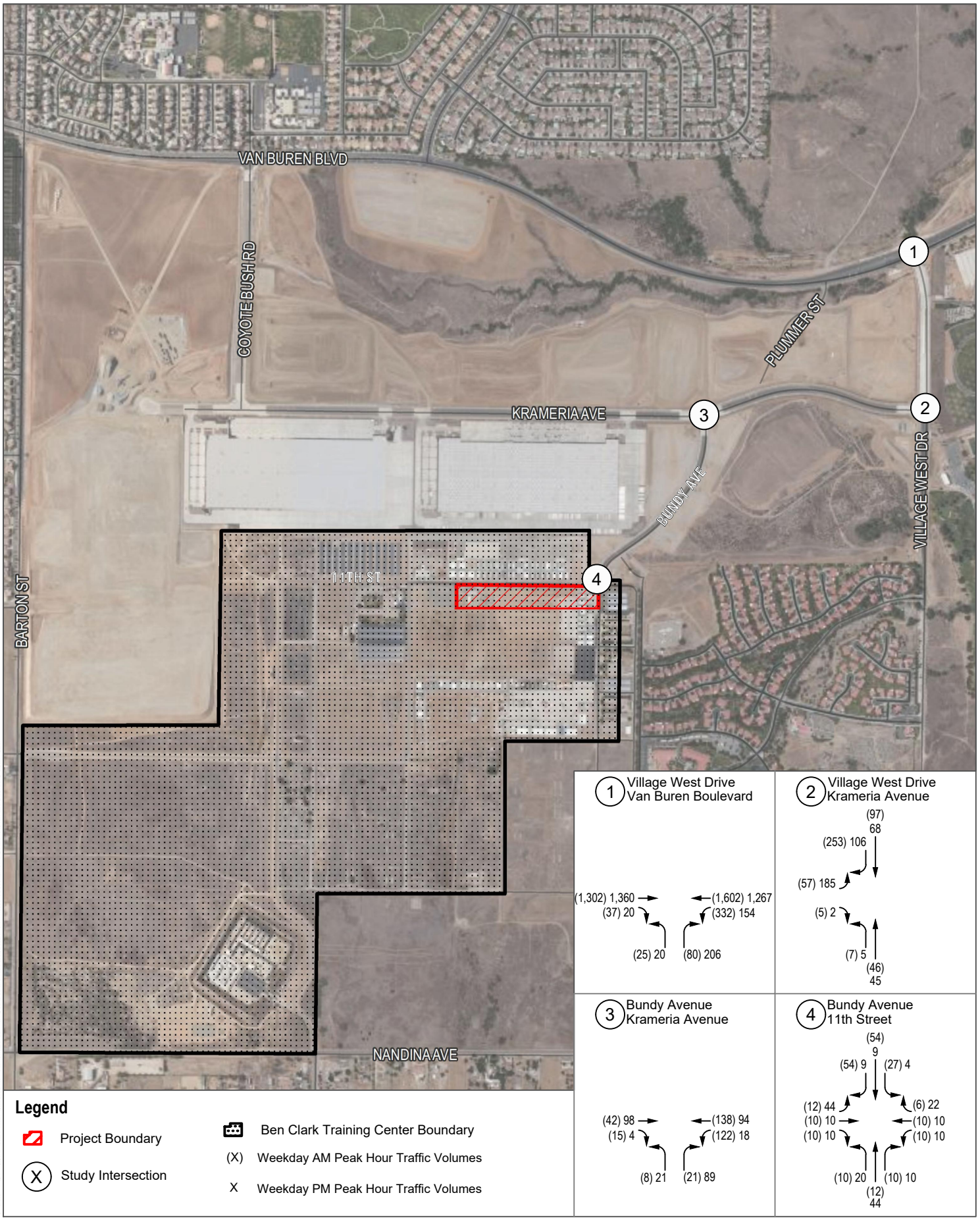
NOT TO SCALE

FIGURE 5

Existing Traffic Control and Geometrics

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps, Riverside County 2020, City of Riverside 2021

DUDEK

NOT TO SCALE

FIGURE 6

Existing Peak Hour Traffic Volumes

Ben Clark Training Center School of Public Safety

INTENTIIONALLY LEFT BLANK

6.3 Existing plus Project Traffic Operations

This section details the Existing plus Project traffic volumes and intersection operations within the study area.

6.3.1 Intersection Operations

The total project trip assignments shown in Figure 4 were added to the Existing peak hour traffic volumes shown in Figure 6 to derive the Existing plus Project peak hour traffic condition shown in Figure 7.

An intersection LOS analysis was prepared for the Existing plus Project condition using the HCM 6 methodology, and Table 4 summarizes the results of the Existing plus Project intersection analysis for the AM and PM peak hours. Detailed LOS calculation worksheets are included in Appendix B.

As shown in Table 4, all study area intersections are forecast to continue to operate with satisfactory LOS (LOS D or better) under Existing plus Project conditions during both peak hours.

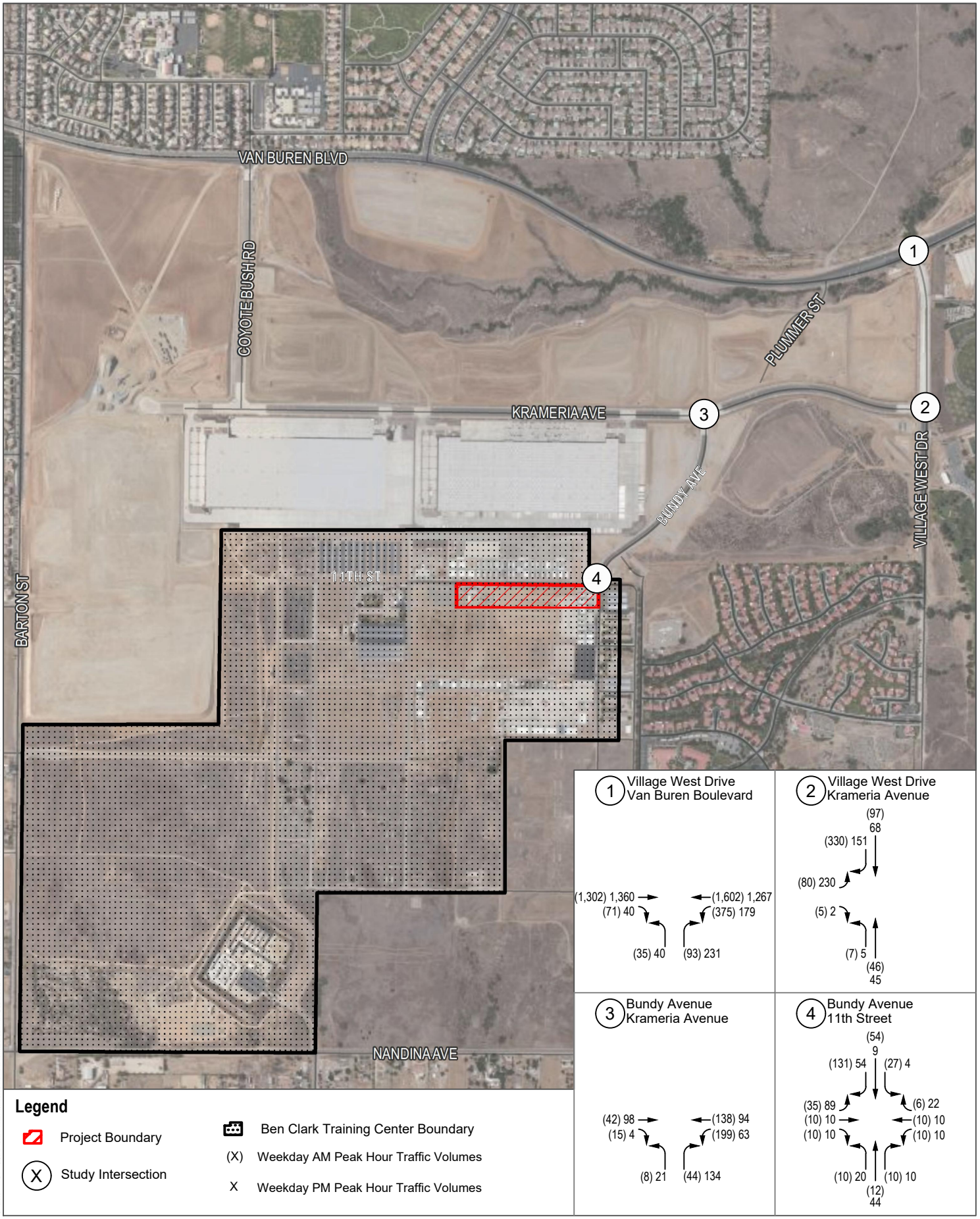
Table 4. Existing and Existing plus Project Peak Hour Intersection Level of Service

No.	Intersection	Jurisdiction	LOS Method	Existing				Existing plus Project				Change in Delay		Inconsistent with LOS Standards?	
				AM Peak		*PM Peak*		*AM Peak*		*PM Peak*					
				Delay[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]	*AM*	*PM*	*AM*	*PM*
1	Village West Drive/ Van Buren Boulevard	County/March JPA	HCM	8.5	A	8.8	A	9.1	A	9.5	A	0.6	0.7	No	No
2	Village West Drive/ Krameria Avenue	County/March JPA	HCM	3.8	A	9.6	A	4.3	A	9.7	A	0.5	0.1	No	No
3	Bundy Avenue/ Krameria Avenue	County/March JPA	HCM (AWSC)	8.0	A	7.9	A	9.0	A	8.4	A	1.0	0.5	No	No
4	Bundy Avenue/ 11th Street	County/March JPA	HCM (AWSC)	7.7	A	7.6	A	7.9	A	7.9	A	0.2	0.3	No	No

Notes: HCM = Highway Capacity Manual; AWSC = All-Way Stop-Controlled

1 Delay in seconds per vehicle

2 Level of Service (LOS)



SOURCE: Bing Maps, Riverside County 2020, City of Riverside 2021

DUDEK

NOT TO SCALE

FIGURE 7

Existing plus Project Peak Hour Traffic Volumes

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK

7 Opening Year 2024 Conditions

This section presents the results of a cumulative condition analysis that was conducted for a short-term horizon year of 2024, assuming the proposed project is constructed and fully occupied. Characteristics are provided for the peak hour traffic volumes and traffic operations.

7.1 Cumulative Projects and Traffic Volume Development

Cumulative projects are projects that are proposed and in the review process, but not yet fully approved; or, projects that have been approved, but not fully constructed or occupied. Based on a review of the cumulative projects near the project site, it was determined that the cumulative project list and analysis provided in the Meridian South Campus TIA would be sufficient to be utilized as it provides a recent and comprehensive analysis that has been approved by March JPA. Due to the restricted area in which the BCTC is located, it is not expected that there would be additional cumulative projects that would interact with the study area intersections. The Meridian South Campus project has the same opening year (2024) as the proposed project within this TIA; therefore in order to also account for the traffic associated with the Meridian South Campus project, the "Opening Year Cumulative (2024) With Proposed Project" traffic volumes within the TIA were utilized as the Opening Year 2024 baseline condition in this analysis. All relevant data pertaining to the Meridian South Campus project, including information regarding project trip generation, assignment, distribution, traffic volumes, and cumulative project information, is provided in Appendix C.

7.2 Roadway Improvements

A number of roadway improvements within the study area would be built in the year 2024, according to the approved analysis in the Meridian South Campus project TIA, including at study area intersections analyzed in this TIA. Due to the amount of traffic generated by the Meridian South Campus project, including roadway expansions and alterations as part of the project, the Meridian South Campus project possess several "project design features" for which the Meridian South Campus project would fund entirely, prior to a certificate of occupancy being issued in 2024. For the purposes of this analysis, roadway improvements that included signalization were not analyzed in this section in order to evaluate the proposed project's prospective impacts to the geometrics and intersection configurations that would exist as a result of the Meridian South Campus project. Therefore, the only change to the geometrics was the addition of a north leg to the Bundy Avenue/Krameria Avenue intersection, while intersection controls would remain as "all-way stop" controlled. Any additional roadway improvements required as a result of the analysis in this section would be compared against those already allocated as project design features in the Meridian South Campus TIA.

7.3 Intersection Operations

Unless otherwise stated in Section 7.2 above, the existing intersection configurations (shown in Figure 5) have been assumed to be preserved under the Opening Year (2024) conditions. Figure 8 illustrates the Opening Year 2024 (no project) traffic volumes for the peak hour conditions. An intersection LOS analysis was prepared for the Opening Year 2024 (no project) condition using the HCM 6 methodology. Table 5 summarizes the results of the Opening Year 2024 intersection analysis for the AM and PM peak hours. Detailed LOS calculation worksheets are included in Appendix B.

As shown in the table, most of the study area intersections are forecast to continue operating at satisfactory levels of service (LOS D or better) under Opening Year 2024 conditions, except for the intersection of Bundy Avenue/Krameria Avenue, which would be forecast to operate at LOS F in the PM peak hour (average delay of 53.1 seconds).

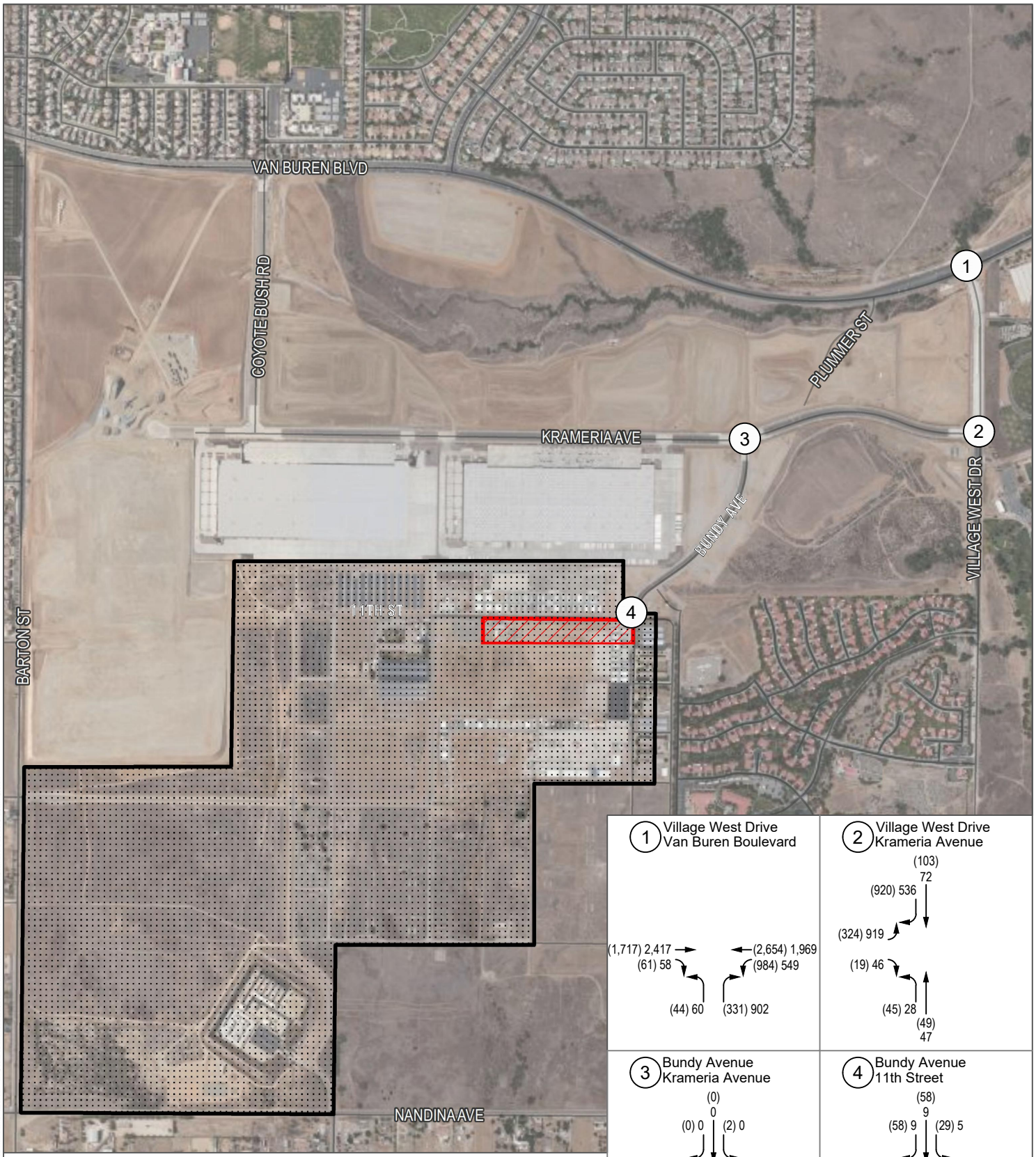
Table 5. Opening Year 2024 Peak Hour Intersection Level of Service

No.	Intersection	Jurisdiction	LOS Method	Opening Year 2024 Conditions			
				AM Peak		*PM Peak*	
				Delay[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]
1	Village West Drive/ Van Buren Boulevard	County/March JPA	HCM	33.3	C	45.9	D
2	Village West Drive/ Krameria Avenue	County/March JPA	HCM	13.5	B	9.8	A
3	Bundy Avenue/Krameria Avenue	County/March JPA	HCM (AWSC)	14.8	B	**53.1**	**F**
4	Bundy Avenue/11th Street	County/March JPA	HCM (AWSC)	7.7	A	7.6	A

Notes: HCM = Highway Capacity Manual; AWSC = All-Way Stop-Controlled

1 Delay in seconds per vehicle

2 Level of Service (LOS)



SOURCE: Bing Maps, Riverside County 2020, City of Riverside 2021

DUDEK

NOT TO SCALE

FIGURE 8

Opening Year 2024 Peak Hour Traffic Volumes

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK

7.4 Opening Year (2024) plus Project Traffic Operations

This section details the Opening Year (2024) plus Project traffic volumes and the intersection operations within the study area.

7.4.1 Intersection Operations

The total project trip assignments shown in Figure 4 were added to the Opening Year 2024 peak hour traffic volumes shown in Figure 8 to derive the Opening Year (2024) plus Project peak hour traffic volumes shown in Figure 9.

An intersection LOS analysis was prepared for the Opening Year (2024) plus Project condition using the HCM 6 methodology, and Table 6 summarizes the results of the Opening Year (2024) plus Project intersection analysis for the AM and PM peak hours. Detailed LOS calculation worksheets are included in Appendix B.

As shown in Table 6, all study area intersections are forecast to continue to operate with satisfactory LOS per the corresponding jurisdiction thresholds under Opening Year (2024) plus Project conditions during both peak hours, with exception of the Bundy Avenue/Krameria intersection in the PM peak hour. This intersection is forecast to operate at LOS F during the Opening Year (2024) conditions and Opening Year (2024) plus Project conditions, with an increase in average delay of 7.6 seconds with the project-added traffic.

Based on the WRCOG guidelines, an addition of 5.0 seconds of delay or more for intersections at LOS E or LOS F would be characterized as an operational deficiency and inconsistent with the general plan policies of member agencies of WRCOG, including the County. Since the proposed project increases the average delay by 7.6 seconds, this would constitute an operational deficiency and LOS inconsistency. Based on the March JPA guidelines, a cumulative traffic impact can occur when an intersection is operating at a deficient LOS (LOS E or LOS F) and the project traffic consists of 2% or more of total peak hour traffic at the intersection. In this case the proposed project contributes approximately 5.7% of total peak hour traffic. Therefore, per March JPA guidelines this would also constitute an operational deficiency and LOS inconsistency. A peak hour signal warrant was performed at this intersection and is provided in Appendix D. The warrant was met and further recommendations to improve the intersection to meet LOS consistency standards are provided in Section 8.

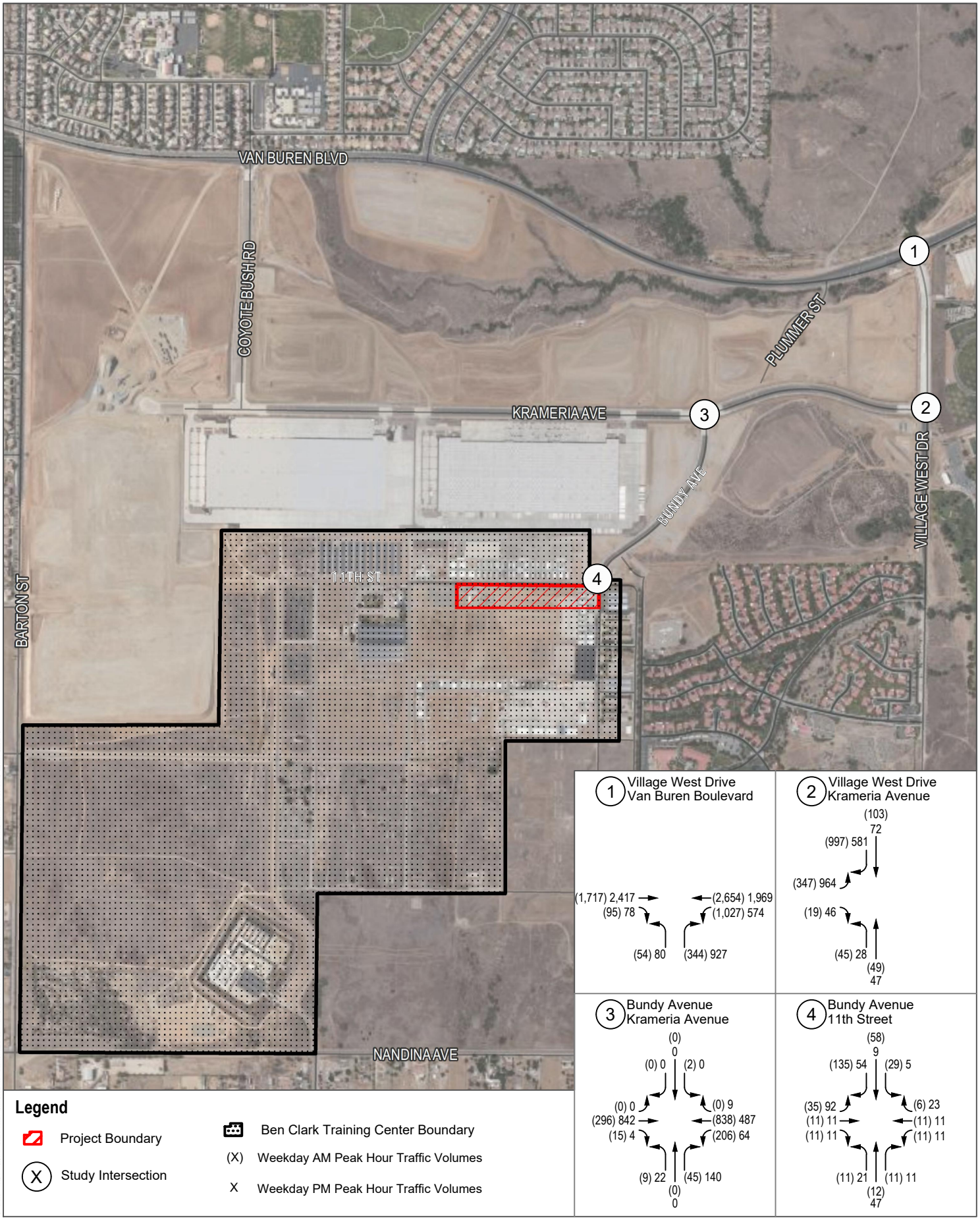
Table 6. Opening Year (2024) plus Project Peak Hour Intersection Level of Service

No.	Intersection	Jurisdiction	LOS Method	Opening Year 2024				Opening Year (2024) plus Project				Change in Delay		Inconsistent with LOS Standards?	
				AM Peak		*PM Peak*		*AM Peak*		*PM Peak*					
				Delay[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]	*AM*	*PM*	*AM*	*PM*
1	Village West Drive/Van Buren Boulevard	County/ March JPA	HCM	33.3	C	45.9	D	36.7	D	47.7	D	3.4	1.8	No	No
2	Village West Drive/Krameria Avenue	County/ March JPA	HCM	13.5	B	9.8	A	21.7	C	9.9	A	8.2	0.1	No	No
3	Bundy Avenue/Krameria Avenue	County/ March JPA	HCM (AWSC)	14.8	B	**53.1**	**F**	15.8	C	**60.7**	**F**	1.0	**7.6**	No	**Yes**
4	Bundy Avenue/11th Street	County/ March JPA	HCM (AWSC)	7.7	A	7.6	A	7.9	A	7.9	A	0.2	0.3	No	No

Notes: HCM = Highway Capacity Manual; AWSC = All-Way Stop-Controlled

1 Delay in seconds per vehicle

2 Level of Service (LOS)



SOURCE: Bing Maps, Riverside County 2020, City of Riverside 2021

DUDEK

NOT TO SCALE

FIGURE 9

Opening Year 2024 plus Project Peak Hour Traffic Volumes

Ben Clark Training Center School of Public Safety

INTENTIONALLY LEFT BLANK

8 Project Impacts, Mitigation Measures, and Level of Service Improvements

8.1 Project Impacts per CEQA

8.1.1 VMT Analysis

As shown in Section 4, the proposed project passes one of the screening criteria, (i.e., presumption of less than significant impact for local retail and other uses). Therefore, the proposed project can be presumed to have a less than significant VMT impact under Existing and Opening Year 2024 conditions. A project-level detailed VMT analysis would not be required.

8.1.2 Site Access Analysis

Project Site Access

As discussed in Section 5.1, project traffic would be evenly distributed between the two driveways along 11th Street. The expected delay and potential queue for vehicles entering any of the driveways of the proposed project site is expected to be minimal. Similarly, in terms of egress, vehicles would be expected to exit the project site and proceed eastward on 11th Street, before traveling northward on Bundy Avenue. Therefore, all expected vehicular delay or queue would be confined on-site and would be adequately contained within each parking lot. All driveways and frontage improvements would be designed to adhere to County roadway standards. The project would comply with all local, regional, state, and federal guidelines related to emergency access. Emergency vehicles would be able to access all buildings and driveways within the project site. The project site would be accessible to emergency responders during construction and operation of the project. Therefore, the project would not result in inadequate emergency access.

Pedestrian and Bicycle Access

As discussed in Section 5.2 and shown in Figure 3, the nearest bicycle facilities are provided along Bundy Avenue and Krameria Avenue. All pedestrian facilities within the project area would be unaffected by the proposed project. The proposed project would also improve its frontage with 11th Street and provide sidewalks, curbs, and gutters. Therefore, development of the project would not conflict with the existing pedestrian or bicycle facilities in the area and would improve pedestrian access around the project site.

8.2 Level of Service Findings

8.2.1 LOS Results

Based on the LOS analysis conducted for the study intersections and the WRCOG and March JPA significance thresholds, the proposed project would contribute to deficient LOS operational standards at the Bundy Avenue/Krameria Avenue intersection (#3) in the PM peak hour under the Opening Year (2024) plus Project conditions. The following section provides recommended improvements to meet LOS standards, identified for disclosure purposes only.

8.2.2 Improvement Measures

Intersection #3 – Bundy Avenue/Krameria Avenue

Although this intersection is already operating with deficient LOS during Opening Year 2024 baseline conditions, the addition of project traffic would be inconsistent with the LOS standards for WRCOG and March JPA. With the addition of project traffic, the average delay increases by 7.6 seconds at LOS F (which is more than the acceptable delay increase of 5.0 seconds or less) and the proportion of project traffic is 5.7% of total peak hour traffic (acceptable proportion of project traffic is 2%) during the PM peak hour, respectively.

However, as described previously, the Meridian South Campus EIR and TIA has been approved and design of the project includes installing a signal at the Bundy Avenue/Krameria intersection.

The following improvement is slated to be constructed by the year 2024:

Improvement 1 As part of the project design features as described in the certified Meridian South Campus project EIR and TIA, forecast to be built prior to the certificate of occupancy issued in 2024

- Signalization of the intersection.

If the Meridian South Campus project is delayed and the improvement is not built, then the traffic volumes added as part of the Opening Year 2024 analysis would not occur. Without the project being built in 2024, the project traffic volumes at the Bundy Avenue/Krameria Avenue intersection are expected to be similar to what was analyzed in the Existing and Existing plus Project scenarios since the remaining area is currently forecast only to be accessed by the existing uses in the BCTC area as well as the proposed project analyzed in this TIA. Therefore, a signal would not be warranted if the Meridian South Campus project is not built.

Table 7 shows the associated LOS and delay improvement that would occur with the signalization of the intersection, for the Opening Year (2024) plus Project scenario. Implementation of Improvement 1 would improve intersection operations to satisfactory conditions, consistent with all LOS standards.

Table 7. Peak Hour Intersection Level of Service with Improvement 1

No.	Intersection	Opening Year (2024) plus Project				Opening Year (2024) plus Project (w/Improvement 1)			
		AM Peak		*PM Peak*		*AM Peak*		*PM Peak*	
		Delay[1]	*LOS[2]*	*Delay[1]*	*LOS[2]*	*Delay[1]*	*LOS[2]*	*Delay[1]*	*LOS[2]*
3	Bundy Avenue/ Krameria Avenue	15.8	C	**60.7**	**F**	5.0	A	7.4	A

Notes:
1 Delay in seconds per vehicle
2 Level of Service (LOS)

9 References

City of Riverside. 2021. "City of Riverside Bike Lane Map." Accessed February 2021. https://cityofriverside.maps.arcgis.com/apps/Profile/index.html?appid=c691fc450bc241668cf17692ee92d3d0.

County of Riverside. 2015d. *Riverside County General Plan Circulation Element*. Revised July 7, 2020. https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch04_Circulation_072720v2.pdf.

ITE (Institute of Transportation Engineers). 2017. *Trip Generation Manual*. 10th ed.

Metrolink. 2019. "Southern California Passenger Rail System Map & Timetables." Accessed February 2021.

MJPA. 1998. *March JPA General Plan*. https://www.marchjpa.com/documents/docs_forms/general_plan_updt_011718.pdf.

MJPA. 2010. *Draft Vision 2030: March JPA General Plan*. March 2010.

OPR (California Governor's Office of Planning and Research). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. Accessed February 2021. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

RCTC (Riverside County Transportation Commission). 2019. *Long Range Transportation Study*. December 2019. Accessed February 2021. https://www.rctc.org/wp-content/uploads/2019/12/RCTC-Draft-LRTS-120119-GV22.pdf.

Riverside County Regional Park and Open-Space District. 2018. *Comprehensive Trails Plan*. Accessed February 2021. https://altago.com/wp-content/uploads/Riverside_County_Comprehensive_Trails_Plan.pdf.

RTA (Riverside Transit Authority). 2021a. "Downtown Riverside-Perris Station Transit Center Route 22 Route and Timetable." Accessed February 2021. https://www.riversidetransit.com/images/DOWNLOADS/ROUTES/022.pdf.

RTA. 2021b. "Galleria at Tyler-Perris Station Transit Center Route 27 Route and Timetable." Accessed February 2021. https://www.riversidetransit.com/images/DOWNLOADS/ROUTES/027.pdf.

SCAG (Southern California Association of Governments). 2012. *2012–2035 Regional Transportation Plan/Sustainable Communities Strategy*. Accessed February 11, 2021. http://rtpscs.scag.ca.gov/Pages/2012-2035-RTP-SCS.aspx.

Transportation Research Board. 2016. *Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis*.

WRCOG. 2020. Recommended Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.

INTENTIONALLY LEFT BLANK

Appendix A

Traffic Counts

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

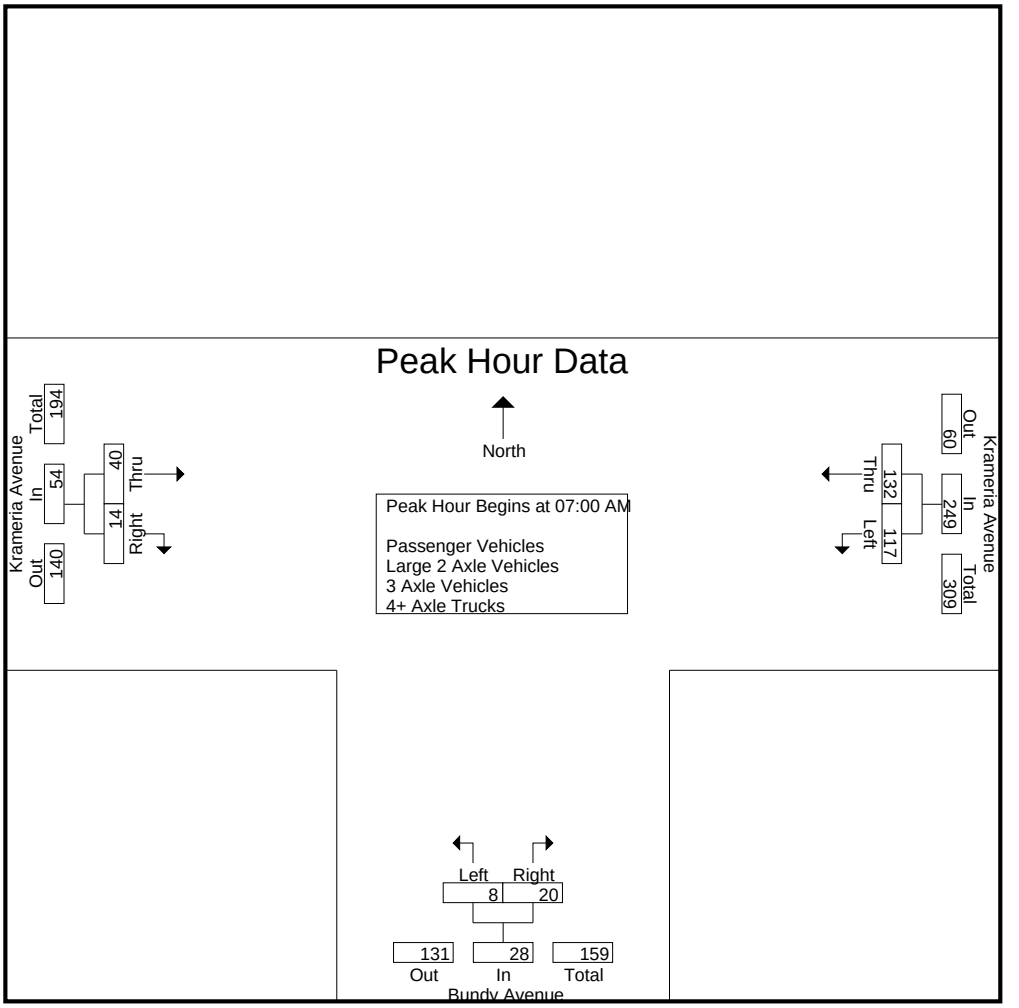
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	18	47	65	2	0	2	9	8	17	84
07:15 AM	26	54	80	1	1	2	10	2	12	94
07:30 AM	44	17	61	5	9	14	15	1	16	91
07:45 AM	29	14	43	0	10	10	6	3	9	62
Total	117	132	249	8	20	28	40	14	54	331
08:00 AM	11	14	25	4	7	11	16	4	20	56
08:15 AM	15	8	23	3	5	8	10	5	15	46
08:30 AM	17	7	24	0	12	12	8	5	13	49
08:45 AM	8	9	17	1	5	6	11	1	12	35
Total	51	38	89	8	29	37	45	15	60	186
Grand Total	168	170	338	16	49	65	85	29	114	517
Apprch %	49.7	50.3		24.6	75.4		74.6	25.4		
Total %	32.5	32.9	65.4	3.1	9.5	12.6	16.4	5.6	22.1	
Passenger Vehicles	167	155	322	16	46	62	31	29	60	444
% Passenger Vehicles	99.4	91.2	95.3	100	93.9	95.4	36.5	100	52.6	85.9
Large 2 Axle Vehicles	1	1	2	0	3	3	2	0	2	7
% Large 2 Axle Vehicles	0.6	0.6	0.6	0	6.1	4.6	2.4	0	1.8	1.4
3 Axle Vehicles	0	3	3	0	0	0	42	0	42	45
% 3 Axle Vehicles	0	1.8	0.9	0	0	0	49.4	0	36.8	8.7
4+ Axle Trucks	0	11	11	0	0	0	10	0	10	21
% 4+ Axle Trucks	0	6.5	3.3	0	0	0	11.8	0	8.8	4.1

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	18	47	65	2	0	2	9	**8**	**17**	84
07:15 AM	26	**54**	**80**	1	1	2	10	2	12	**94**
07:30 AM	**44**	17	61	**5**	9	**14**	**15**	1	16	91
07:45 AM	29	14	43	0	**10**	10	6	3	9	62
Total Volume	117	132	249	8	20	28	40	14	54	331
% App. Total	47	53		28.6	71.4		74.1	25.9		
PHF	.665	.611	.778	.400	.500	.500	.667	.438	.794	.880

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:30 AM			07:30 AM		
+0 mins.	18	47	65	**5**	9	**14**	15	1	16
+15 mins.	26	**54**	**80**	0	**10**	10	6	3	9
+30 mins.	**44**	17	61	4	7	11	**16**	4	**20**
+45 mins.	29	14	43	3	5	8	10	**5**	15
Total Volume	117	132	249	12	31	43	47	13	60
% App. Total	47	53		27.9	72.1		78.3	21.7	
PHF	.665	.611	.778	.600	.775	.768	.734	.650	.750

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles

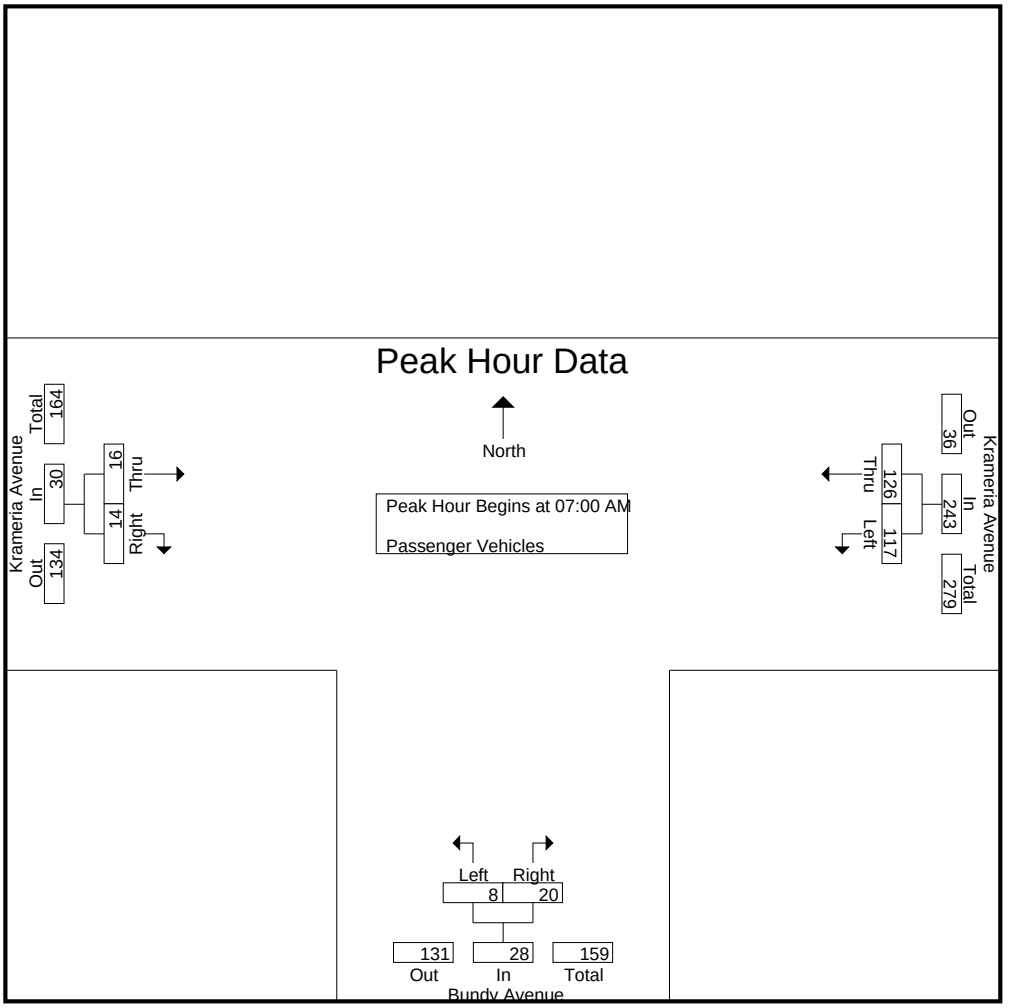
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	18	47	65	2	0	2	2	8	10	77
07:15 AM	26	50	76	1	1	2	8	2	10	88
07:30 AM	44	16	60	5	9	14	4	1	5	79
07:45 AM	29	13	42	0	10	10	2	3	5	57
Total	117	126	243	8	20	28	16	14	30	301
08:00 AM	10	10	20	4	7	11	5	4	9	40
08:15 AM	15	7	22	3	3	6	5	5	10	38
08:30 AM	17	6	23	0	11	11	0	5	5	39
08:45 AM	8	6	14	1	5	6	5	1	6	26
Total	50	29	79	8	26	34	15	15	30	143
Grand Total	167	155	322	16	46	62	31	29	60	444
Apprch %	51.9	48.1		25.8	74.2		51.7	48.3		
Total %	37.6	34.9	72.5	3.6	10.4	14	7	6.5	13.5	

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	18	47	65	2	0	2	2	**8**	**10**	77
07:15 AM	26	**50**	**76**	1	1	2	**8**	2	10	**88**
07:30 AM	**44**	16	60	**5**	9	**14**	4	1	5	79
07:45 AM	29	13	42	0	**10**	10	2	3	5	57
Total Volume	117	126	243	8	20	28	16	14	30	301
% App. Total	48.1	51.9		28.6	71.4		53.3	46.7		
PHF	.665	.630	.799	.400	.500	.500	.500	.438	.750	.855

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	18	47	65	2	0	2	2	**8**	**10**
+15 mins.	26	**50**	**76**	1	1	2	**8**	2	10
+30 mins.	**44**	16	60	**5**	9	**14**	4	1	5
+45 mins.	29	13	42	0	**10**	10	2	3	5
Total Volume	117	126	243	8	20	28	16	14	30
% App. Total	48.1	51.9		28.6	71.4		53.3	46.7	
PHF	.665	.630	.799	.400	.500	.500	.500	.438	.750

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Large 2 Axle Vehicles

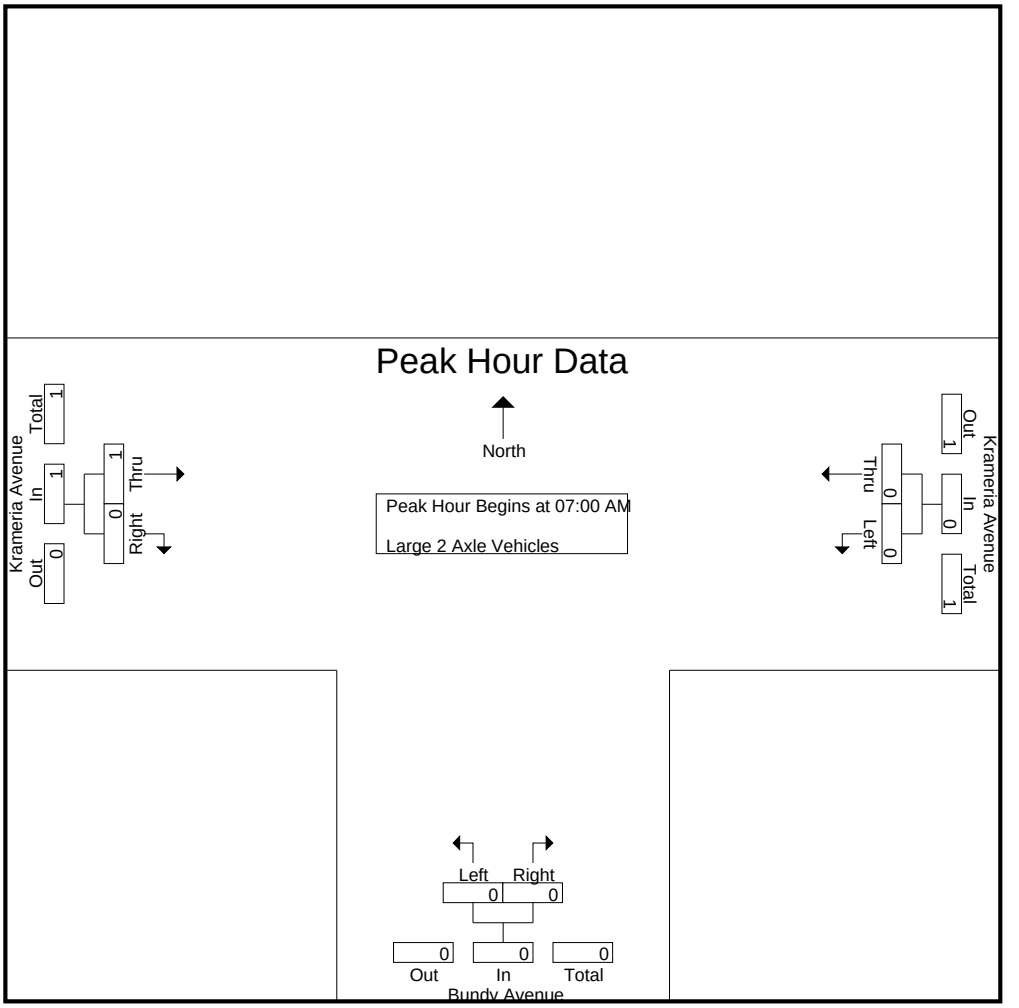
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	1	1
08:00 AM	1	1	2	0	0	0	0	0	0	2
08:15 AM	0	0	0	0	2	2	0	0	0	2
08:30 AM	0	0	0	0	1	1	1	0	1	2
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	1	1	2	0	3	3	1	0	1	6
Grand Total	1	1	2	0	3	3	2	0	2	7
Apprch %	50	50		0	100		100	0		
Total %	14.3	14.3	28.6	0	42.9	42.9	28.6	0	28.6	

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	**1**	0	**1**	**1**
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	0	1
% App. Total	0	0		0	0		100	0	
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 3 Axle Vehicles

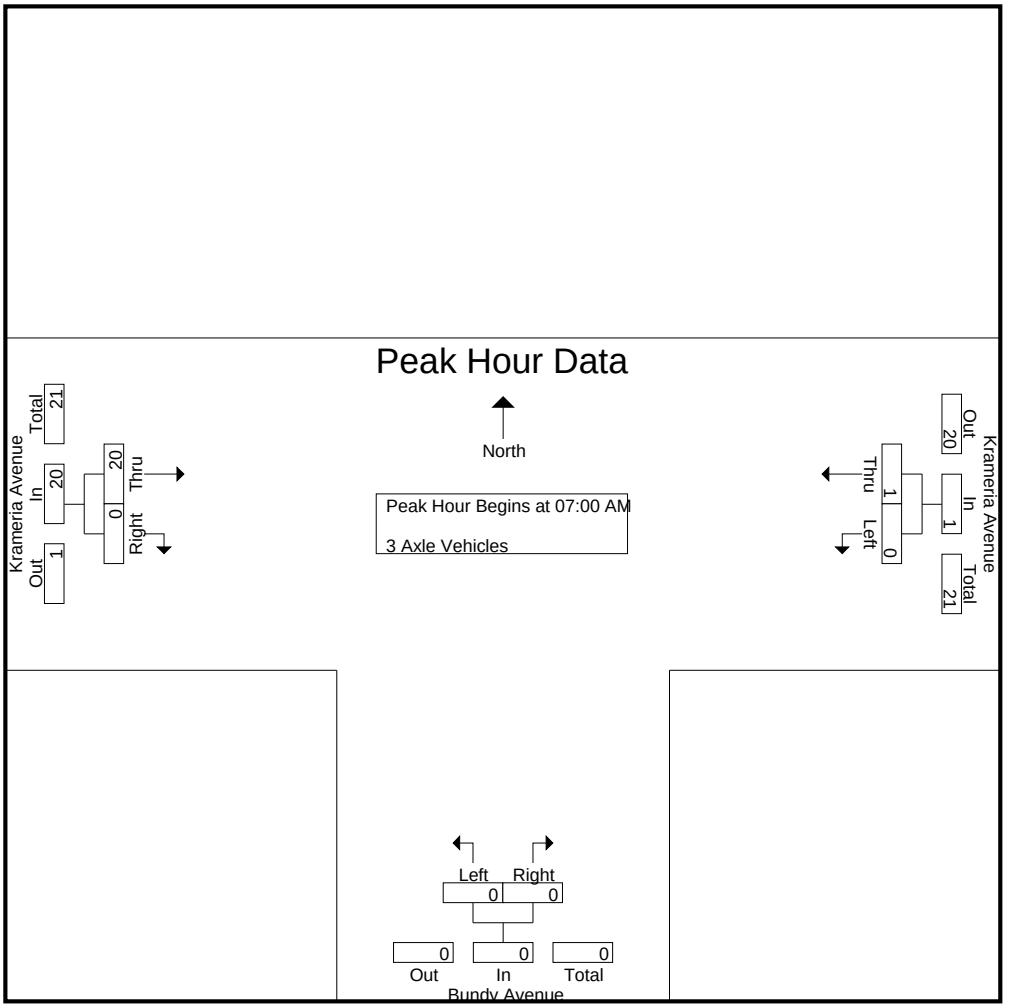
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	6	0	6	6
07:15 AM	0	0	0	0	0	0	2	0	2	2
07:30 AM	0	1	1	0	0	0	10	0	10	11
07:45 AM	0	0	0	0	0	0	2	0	2	2
Total	0	1	1	0	0	0	20	0	20	21
08:00 AM	0	1	1	0	0	0	10	0	10	11
08:15 AM	0	0	0	0	0	0	4	0	4	4
08:30 AM	0	0	0	0	0	0	5	0	5	5
08:45 AM	0	1	1	0	0	0	3	0	3	4
Total	0	2	2	0	0	0	22	0	22	24
Grand Total	0	3	3	0	0	0	42	0	42	45
Apprch %	0	100		0	0		100	0		
Total %	0	6.7	6.7	0	0	0	93.3	0	93.3	

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	6	0	6	6
07:15 AM	0	0	0	0	0	0	2	0	2	2
07:30 AM	0	**1**	**1**	0	0	0	**10**	0	**10**	**11**
07:45 AM	0	0	0	0	0	0	2	0	2	2
Total Volume	0	1	1	0	0	0	20	0	20	21
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500	.477

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	6	0	6
+15 mins.	0	0	0	0	0	0	2	0	2
+30 mins.	0	**1**	**1**	0	0	0	**10**	0	**10**
+45 mins.	0	0	0	0	0	0	2	0	2
Total Volume	0	1	1	0	0	0	20	0	20
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 4+ Axle Trucks

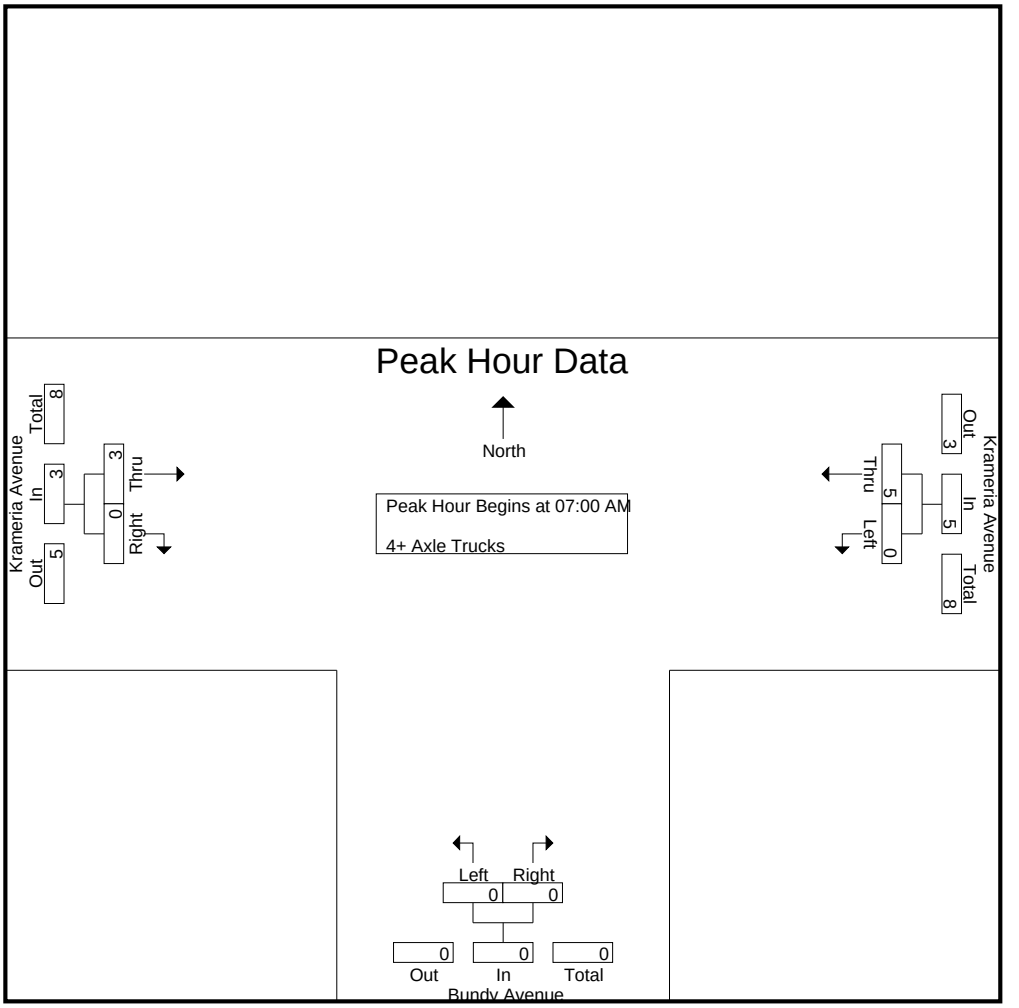
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	4	4	0	0	0	0	0	0	4
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	1	1	0	0	0	2	0	2	3
Total	0	5	5	0	0	0	3	0	3	8
08:00 AM	0	2	2	0	0	0	1	0	1	3
08:15 AM	0	1	1	0	0	0	1	0	1	2
08:30 AM	0	1	1	0	0	0	2	0	2	3
08:45 AM	0	2	2	0	0	0	3	0	3	5
Total	0	6	6	0	0	0	7	0	7	13
Grand Total	0	11	11	0	0	0	10	0	10	21
Apprch %	0	100		0	0		100	0		
Total %	0	52.4	52.4	0	0	0	47.6	0	47.6	

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	**4**	**4**	0	0	0	0	0	0	**4**
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	1	1	0	0	0	**2**	0	**2**	3
Total Volume	0	5	5	0	0	0	3	0	3	8
% App. Total	0	100		0	0		100	0		
PHF	.000	.313	.313	.000	.000	.000	.375	.000	.375	.500

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	**4**	**4**	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	1	0	1
+45 mins.	0	1	1	0	0	0	**2**	0	**2**
Total Volume	0	5	5	0	0	0	3	0	3
% App. Total	0	100		0	0		100	0	
PHF	.000	.313	.313	.000	.000	.000	.375	.000	.375

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

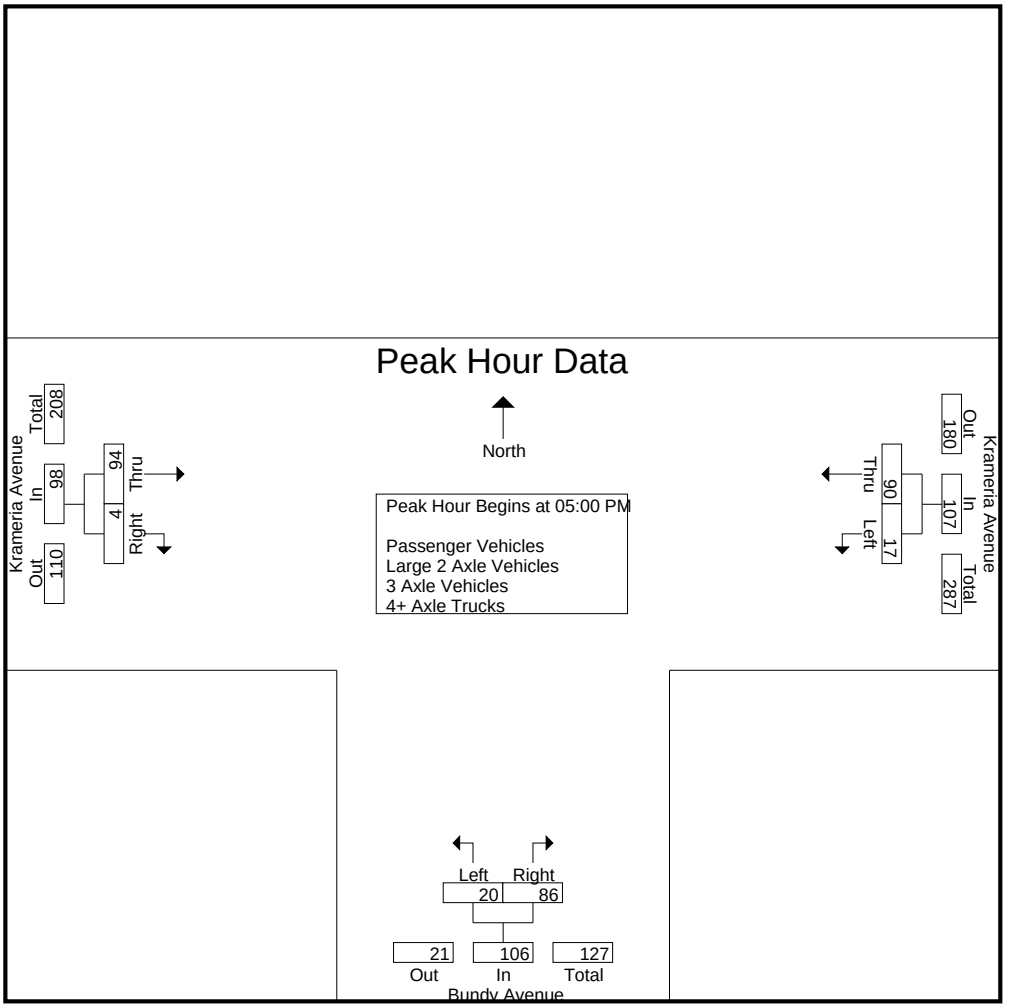
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	3	2	5	1	30	31	12	0	12	48
04:15 PM	2	8	10	7	47	54	7	0	7	71
04:30 PM	4	5	9	8	15	23	19	1	20	52
04:45 PM	2	2	4	5	21	26	8	1	9	39
Total	11	17	28	21	113	134	46	2	48	210
05:00 PM	4	14	18	5	26	31	8	0	8	57
05:15 PM	8	11	19	7	35	42	14	3	17	78
05:30 PM	3	21	24	4	15	19	45	0	45	88
05:45 PM	2	44	46	4	10	14	27	1	28	88
Total	17	90	107	20	86	106	94	4	98	311
Grand Total	28	107	135	41	199	240	140	6	146	521
Apprch %	20.7	79.3		17.1	82.9		95.9	4.1		
Total %	5.4	20.5	25.9	7.9	38.2	46.1	26.9	1.2	28	
Passenger Vehicles	26	98	124	39	197	236	129	6	135	495
% Passenger Vehicles	92.9	91.6	91.9	95.1	99	98.3	92.1	100	92.5	95
Large 2 Axle Vehicles	2	1	3	2	2	4	0	0	0	7
% Large 2 Axle Vehicles	7.1	0.9	2.2	4.9	1	1.7	0	0	0	1.3
3 Axle Vehicles	0	2	2	0	0	0	2	0	2	4
% 3 Axle Vehicles	0	1.9	1.5	0	0	0	1.4	0	1.4	0.8
4+ Axle Trucks	0	6	6	0	0	0	9	0	9	15
% 4+ Axle Trucks	0	5.6	4.4	0	0	0	6.4	0	6.2	2.9

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	4	14	18	5	26	31	8	0	8	57
05:15 PM	**8**	11	19	**7**	**35**	**42**	14	**3**	17	78
05:30 PM	3	21	24	4	15	19	**45**	0	**45**	**88**
05:45 PM	2	**44**	**46**	4	10	14	27	1	28	88
Total Volume	17	90	107	20	86	106	94	4	98	311
% App. Total	15.9	84.1		18.9	81.1		95.9	4.1		
PHF	.531	.511	.582	.714	.614	.631	.522	.333	.544	.884

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:00 PM			05:00 PM		
+0 mins.	4	14	18	1	30	31	8	0	8
+15 mins.	**8**	11	19	7	**47**	**54**	14	**3**	17
+30 mins.	3	21	24	**8**	15	23	**45**	0	**45**
+45 mins.	2	**44**	**46**	5	21	26	27	1	28
Total Volume	17	90	107	21	113	134	94	4	98
% App. Total	15.9	84.1		15.7	84.3		95.9	4.1	
PHF	.531	.511	.582	.656	.601	.620	.522	.333	.544

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles

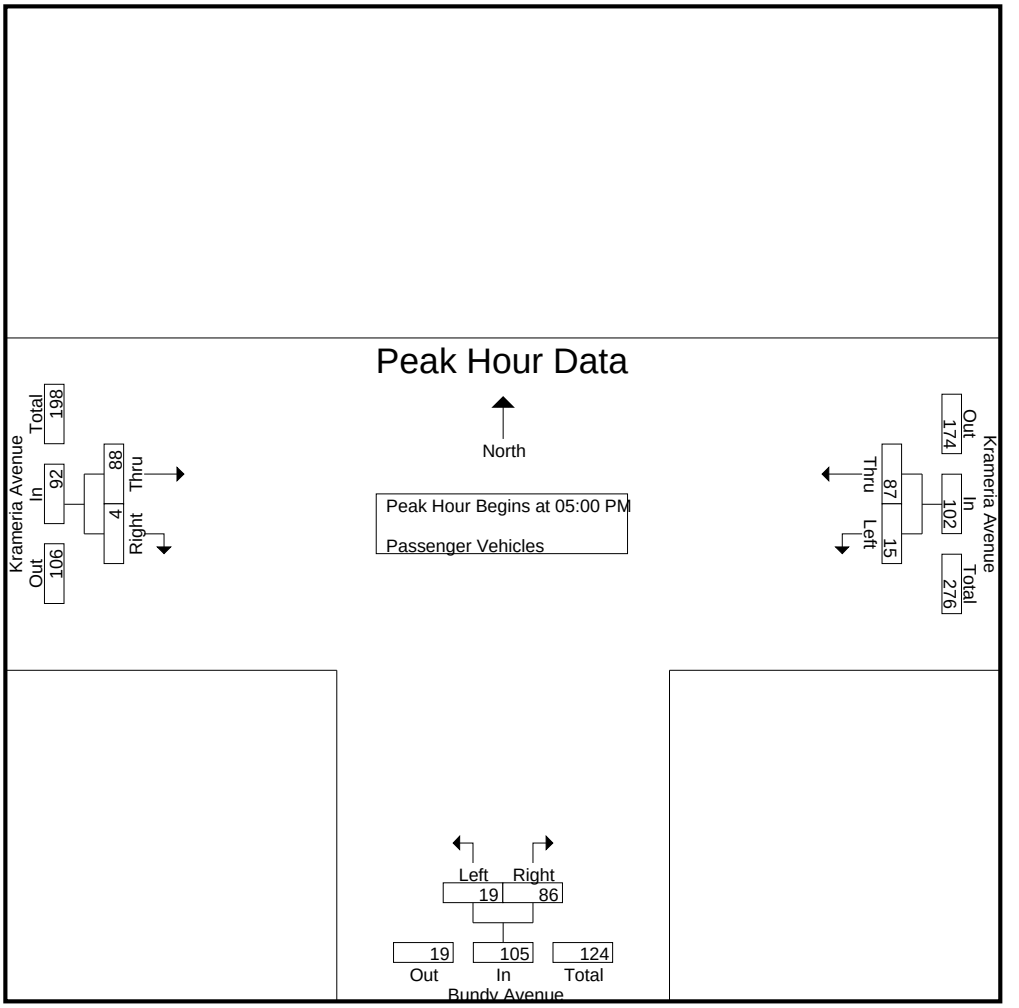
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	3	1	4	1	29	30	12	0	12	46
04:15 PM	2	3	5	7	46	53	6	0	6	64
04:30 PM	4	5	9	7	15	22	18	1	19	50
04:45 PM	2	2	4	5	21	26	5	1	6	36
Total	11	11	22	20	111	131	41	2	43	196
05:00 PM	4	14	18	4	26	30	7	0	7	55
05:15 PM	6	9	15	7	35	42	12	3	15	72
05:30 PM	3	20	23	4	15	19	45	0	45	87
05:45 PM	2	44	46	4	10	14	24	1	25	85
Total	15	87	102	19	86	105	88	4	92	299
Grand Total	26	98	124	39	197	236	129	6	135	495
Apprch %	21	79		16.5	83.5		95.6	4.4		
Total %	5.3	19.8	25.1	7.9	39.8	47.7	26.1	1.2	27.3	

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	4	14	18	4	26	30	7	0	7	55
05:15 PM	**6**	9	15	**7**	**35**	**42**	12	**3**	15	72
05:30 PM	3	20	23	4	15	19	**45**	0	**45**	**87**
05:45 PM	2	**44**	**46**	4	10	14	24	1	25	85
Total Volume	15	87	102	19	86	105	88	4	92	299
% App. Total	14.7	85.3		18.1	81.9		95.7	4.3		
PHF	.625	.494	.554	.679	.614	.625	.489	.333	.511	.859

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	4	14	18	4	26	30	7	0	7
+15 mins.	**6**	9	15	**7**	**35**	**42**	12	**3**	15
+30 mins.	3	20	23	4	15	19	**45**	0	**45**
+45 mins.	2	**44**	**46**	4	10	14	24	1	25
Total Volume	15	87	102	19	86	105	88	4	92
% App. Total	14.7	85.3		18.1	81.9		95.7	4.3	
PHF	.625	.494	.554	.679	.614	.625	.489	.333	.511

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Large 2 Axle Vehicles

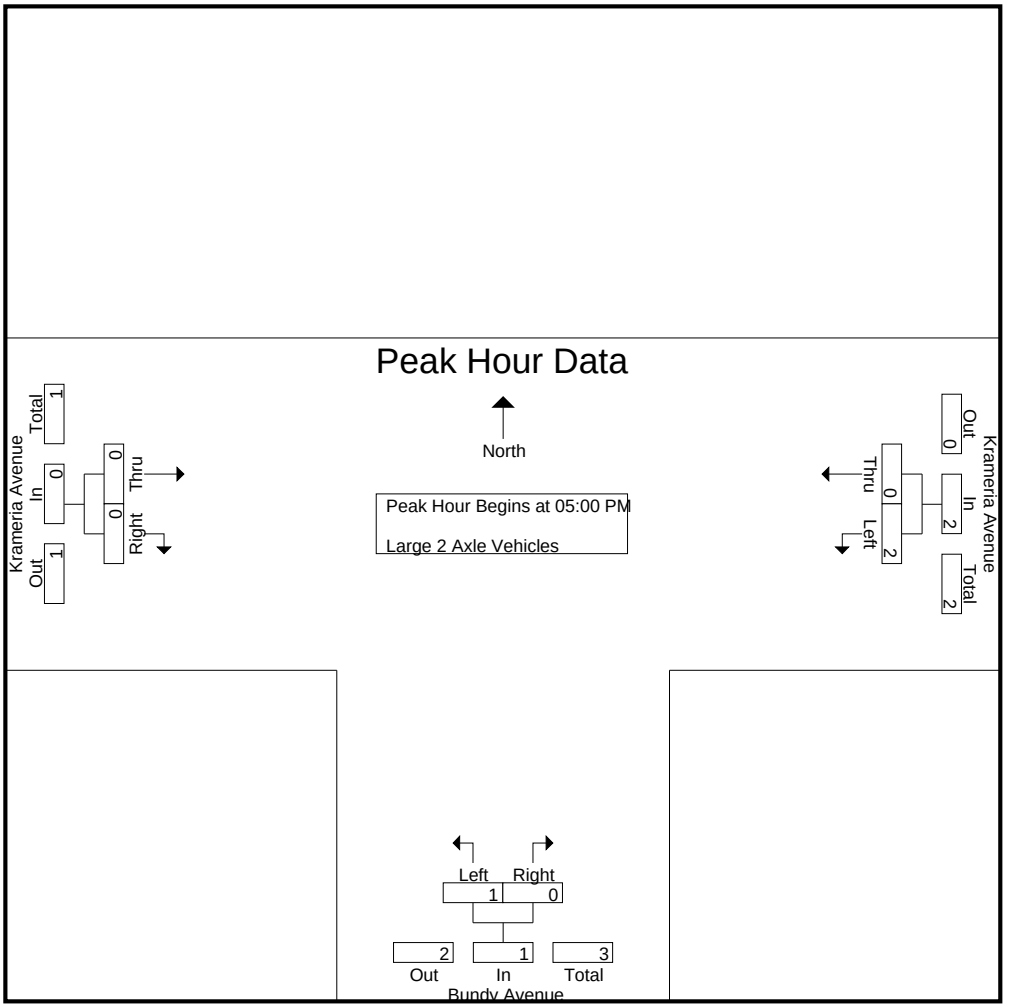
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	1	1	0	0	0	1
04:15 PM	0	1	1	0	1	1	0	0	0	2
04:30 PM	0	0	0	1	0	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	1	2	3	0	0	0	4
05:00 PM	0	0	0	1	0	1	0	0	0	1
05:15 PM	2	0	2	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	2	0	2	1	0	1	0	0	0	3
Grand Total	2	1	3	2	2	4	0	0	0	7
Apprch %	66.7	33.3		50	50		0	0		
Total %	28.6	14.3	42.9	28.6	28.6	57.1	0	0	0	

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	**1**	0	**1**	0	0	0	1
05:15 PM	**2**	0	**2**	0	0	0	0	0	0	**2**
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	2	0	2	1	0	1	0	0	0	3
% App. Total	100	0		100	0		0	0		
PHF	.250	.000	.250	.250	.000	.250	.000	.000	.000	.375

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	**1**	0	**1**	0	0	0
+15 mins.	**2**	0	**2**	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	2	0	2	1	0	1	0	0	0
% App. Total	100	0		100	0		0	0	
PHF	.250	.000	.250	.250	.000	.250	.000	.000	.000

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 3 Axle Vehicles

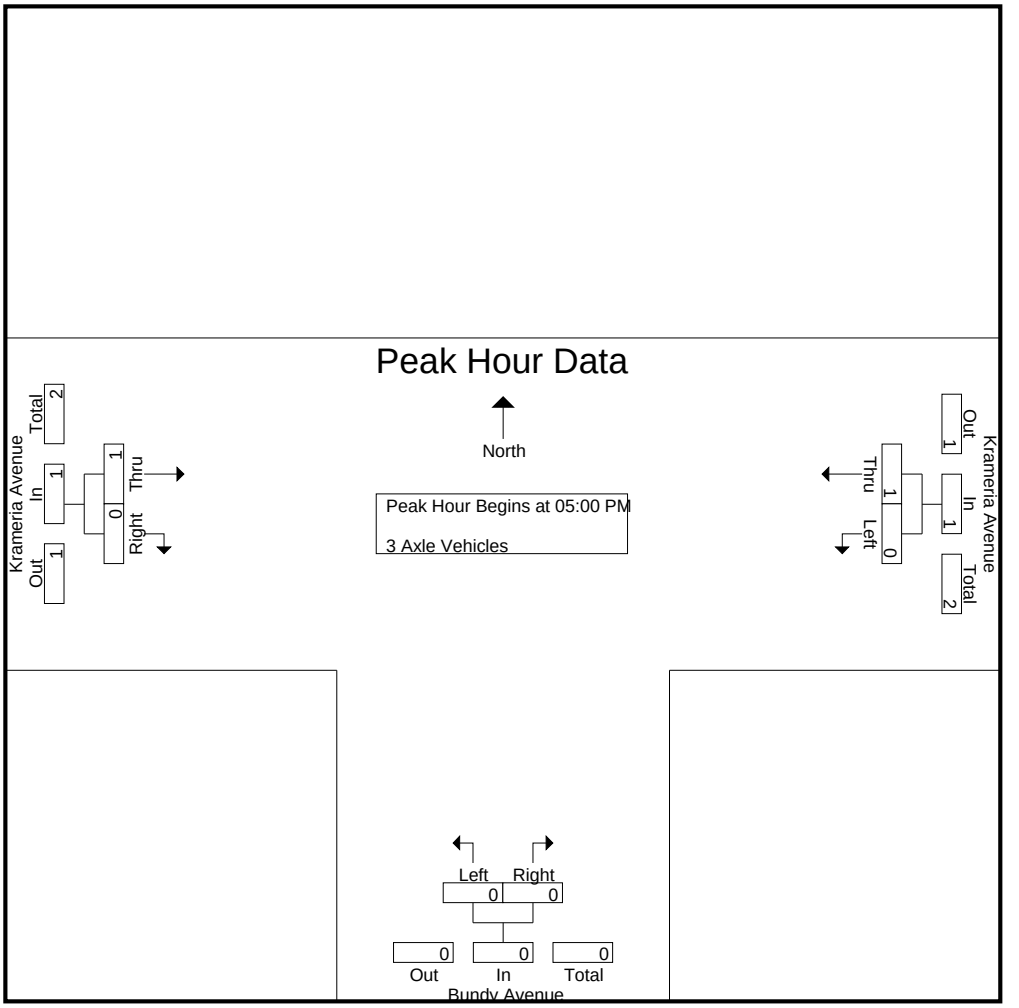
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	1	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	1	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	1	0	1	1
Total	0	1	1	0	0	0	1	0	1	2
Grand Total	0	2	2	0	0	0	2	0	2	4
Apprch %	0	100		0	0		100	0		
Total %	0	50	50	0	0	0	50	0	50	

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	**1**	**1**	0	0	0	0	0	0	**1**
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	**1**	0	**1**	1
Total Volume	0	1	1	0	0	0	1	0	1	2
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250	.500

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	**1**	**1**	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	**1**	0	**1**
Total Volume	0	1	1	0	0	0	1	0	1
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 4+ Axle Trucks

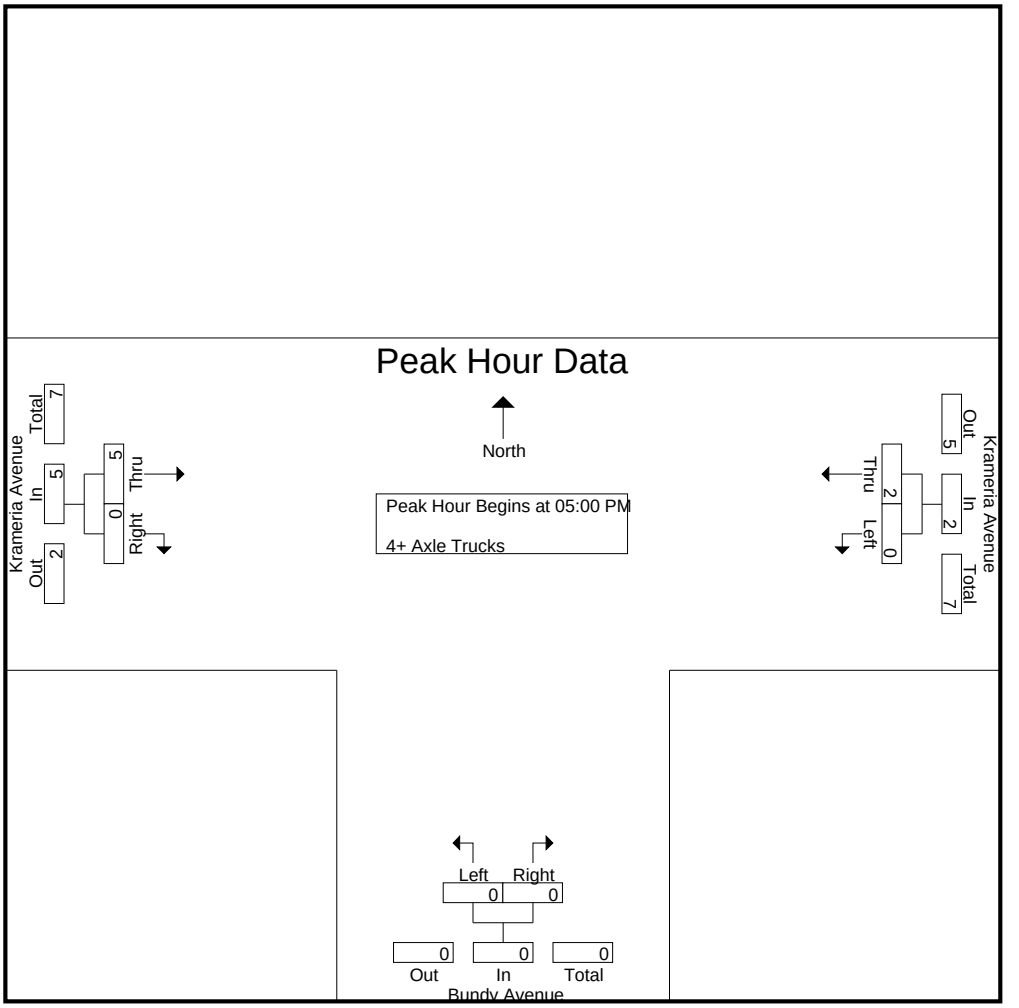
	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	4	4	0	0	0	1	0	1	5
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	3	0	3	3
Total	0	4	4	0	0	0	4	0	4	8
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	1	1	0	0	0	2	0	2	3
05:30 PM	0	1	1	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	2	0	2	2
Total	0	2	2	0	0	0	5	0	5	7
Grand Total	0	6	6	0	0	0	9	0	9	15
Apprch %	0	100		0	0		100	0		
Total %	0	40	40	0	0	0	60	0	60	

	Krameria Avenue Westbound			Bundy Avenue Northbound			Krameria Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	**1**	**1**	0	0	0	**2**	0	**2**	**3**
05:30 PM	0	1	1	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	2	0	2	2
Total Volume	0	2	2	0	0	0	5	0	5	7
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.625	.000	.625	.583

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue
Weather: Clear

File Name : 23_CRV_Bundy_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	**1**	**1**	0	0	0	**2**	0	**2**
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	2	0	2
Total Volume	0	2	2	0	0	0	5	0	5
% App. Total	0	100		0	0		100	0	
PHF	.000	.500	.500	.000	.000	.000	.625	.000	.625

Location: County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue

Date: 8/20/2019
Day: Tuesday

PEDESTRIANS

	North Leg Bundy Avenue	East Leg Krameria Avenue	South Leg Bundy Avenue	West Leg Krameria Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Bundy Avenue	East Leg Krameria Avenue	South Leg Bundy Avenue	West Leg Krameria Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Location: County of Riverside
N/S: Bundy Avenue
E/W: Krameria Avenue

Date: 8/20/2019
Day: Tuesday

BICYCLES

	Southbound Bundy Avenue			Westbound Krameria Avenue			Northbound Bundy Avenue			Eastbound Krameria Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	0	1

	Southbound Bundy Avenue			Westbound Krameria Avenue			Northbound Bundy Avenue			Eastbound Krameria Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

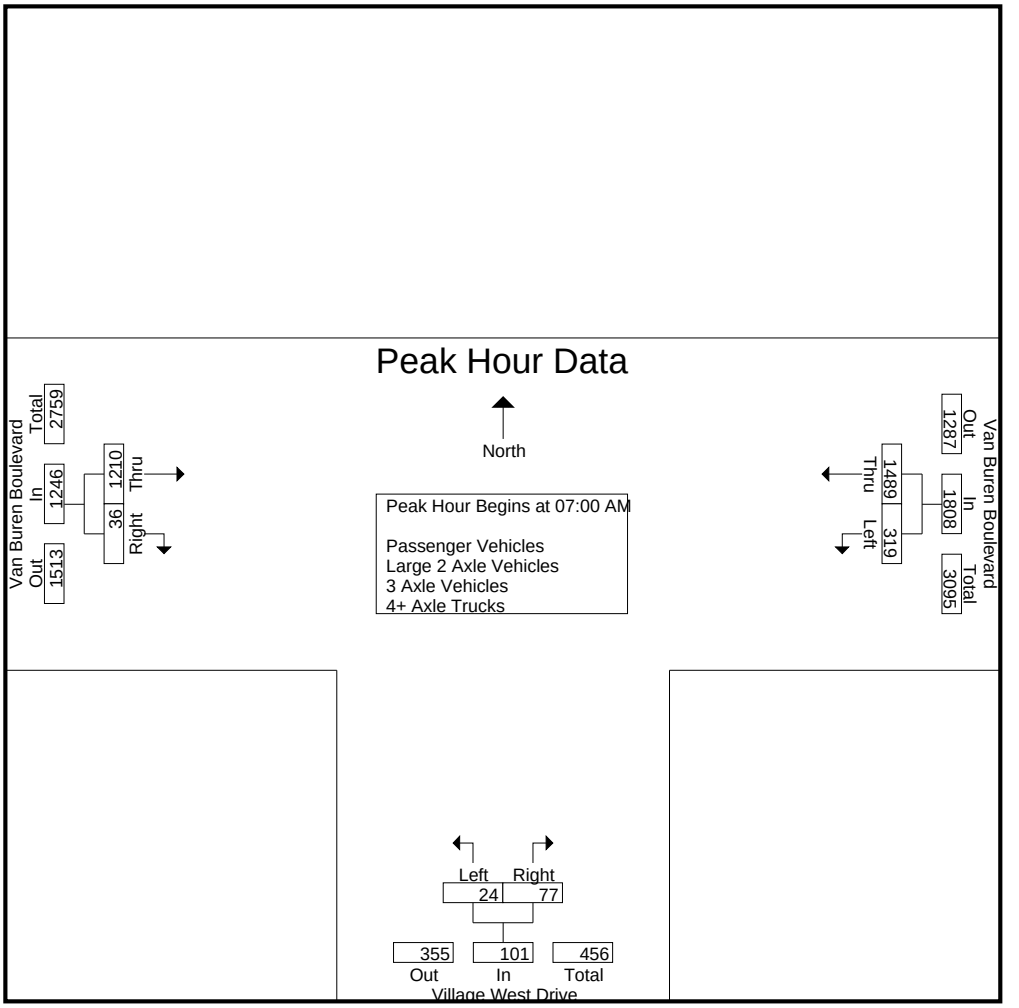
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	80	454	0	534	10	13	11	23	226	4	0	230	11	787	798
07:15 AM	101	401	0	502	3	17	12	20	305	10	1	315	13	837	850
07:30 AM	74	333	0	407	9	18	10	27	295	11	4	306	14	740	754
07:45 AM	64	301	0	365	2	29	19	31	384	11	1	395	20	791	811
Total	319	1489	0	1808	24	77	52	101	1210	36	6	1246	58	3155	3213
08:00 AM	34	262	0	296	8	20	11	28	284	7	1	291	12	615	627
08:15 AM	26	277	0	303	4	19	11	23	213	4	1	217	12	543	555
08:30 AM	27	264	0	291	12	19	14	31	178	5	0	183	14	505	519
08:45 AM	21	277	0	298	3	18	12	21	158	7	0	165	12	484	496
Total	108	1080	0	1188	27	76	48	103	833	23	2	856	50	2147	2197
Grand Total	427	2569	0	2996	51	153	100	204	2043	59	8	2102	108	5302	5410
Apprch %	14.3	85.7			25	75			97.2	2.8					
Total %	8.1	48.5		56.5	1	2.9		3.8	38.5	1.1		39.6	2	98	
Passenger Vehicles	410	2426		2836	24	116		223	1972	55		2034	0	0	5093
% Passenger Vehicles	96	94.4	0	94.7	47.1	75.8	83	73.4	96.5	93.2	87.5	96.4	0	0	94.1
Large 2 Axle Vehicles	3	84		87	2	10		16	51	2		53	0	0	156
% Large 2 Axle Vehicles	0.7	3.3	0	2.9	3.9	6.5	4	5.3	2.5	3.4	0	2.5	0	0	2.9
3 Axle Vehicles	3	25		28	25	20		55	8	2		11	0	0	94
% 3 Axle Vehicles	0.7	1	0	0.9	49	13.1	10	18.1	0.4	3.4	12.5	0.5	0	0	1.7
4+ Axle Trucks	11	34		45	0	7		10	12	0		12	0	0	67
% 4+ Axle Trucks	2.6	1.3	0	1.5	0	4.6	3	3.3	0.6	0	0	0.6	0	0	1.2

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	80	**454**	**534**	**10**	13	23	226	4	230	787
07:15 AM	**101**	401	502	3	17	20	305	10	315	**837**
07:30 AM	74	333	407	9	18	27	295	**11**	306	740
07:45 AM	64	301	365	2	**29**	**31**	**384**	11	**395**	791
Total Volume	319	1489	1808	24	77	101	1210	36	1246	3155
% App. Total	17.6	82.4		23.8	76.2		97.1	2.9		
PHF	.790	.820	.846	.600	.664	.815	.788	.818	.789	.942

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:45 AM			07:15 AM		
+0 mins.	80	**454**	**534**	2	**29**	**31**	305	10	315
+15 mins.	**101**	401	502	8	20	28	295	**11**	306
+30 mins.	74	333	407	4	19	23	**384**	11	**395**
+45 mins.	64	301	365	**12**	19	31	284	7	291
Total Volume	319	1489	1808	26	87	113	1268	39	1307
% App. Total	17.6	82.4		23	77		97	3	
PHF	.790	.820	.846	.542	.750	.911	.826	.886	.827

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles

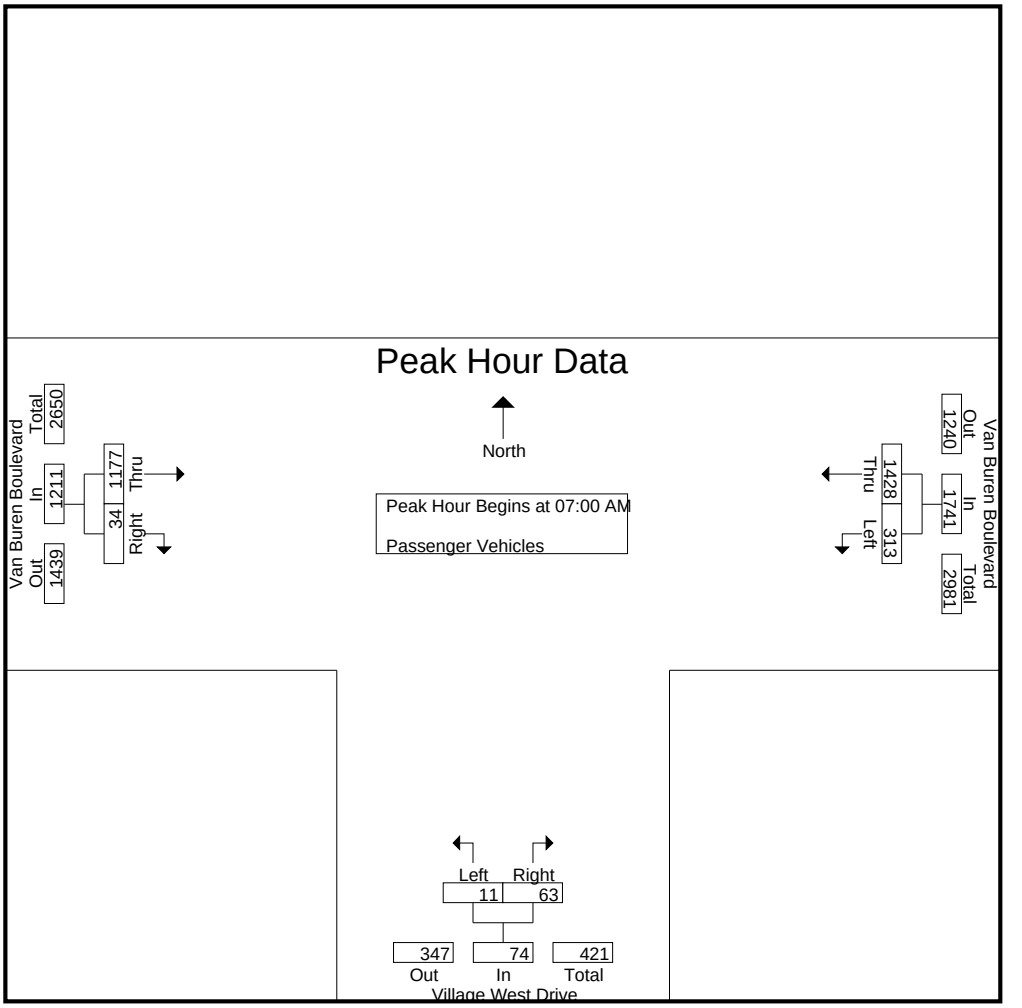
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	80	434	0	514	3	10	8	13	218	3	0	221	8	748	756
07:15 AM	97	395	0	492	3	15	12	18	297	10	1	307	13	817	830
07:30 AM	73	311	0	384	3	12	9	15	285	10	3	295	12	694	706
07:45 AM	63	288	0	351	2	26	17	28	377	11	1	388	18	767	785
Total	313	1428	0	1741	11	63	46	74	1177	34	5	1211	51	3026	3077
08:00 AM	28	242	0	270	1	13	7	14	273	7	1	280	8	564	572
08:15 AM	25	257	0	282	4	11	8	15	202	4	1	206	9	503	512
08:30 AM	25	242	0	267	8	12	10	20	171	4	0	175	10	462	472
08:45 AM	19	257	0	276	0	17	12	17	149	6	0	155	12	448	460
Total	97	998	0	1095	13	53	37	66	795	21	2	816	39	1977	2016
Grand Total	410	2426	0	2836	24	116	83	140	1972	55	7	2027	90	5003	5093
Apprch %	14.5	85.5			17.1	82.9			97.3	2.7					
Total %	8.2	48.5		56.7	0.5	2.3		2.8	39.4	1.1		40.5	1.8	98.2	

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	80	**434**	**514**	**3**	10	13	218	3	221	748
07:15 AM	**97**	395	492	3	15	18	297	10	307	**817**
07:30 AM	73	311	384	3	12	15	285	10	295	694
07:45 AM	63	288	351	2	**26**	**28**	**377**	**11**	**388**	767
Total Volume	313	1428	1741	11	63	74	1177	34	1211	3026
% App. Total	18	82		14.9	85.1		97.2	2.8		
PHF	.807	.823	.847	.917	.606	.661	.781	.773	.780	.926

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	80	**434**	**514**	**3**	10	13	218	3	221
+15 mins.	**97**	395	492	3	15	18	297	10	307
+30 mins.	73	311	384	3	12	15	285	10	295
+45 mins.	63	288	351	2	**26**	**28**	**377**	**11**	**388**
Total Volume	313	1428	1741	11	63	74	1177	34	1211
% App. Total	18	82		14.9	85.1		97.2	2.8	
PHF	.807	.823	.847	.917	.606	.661	.781	.773	.780

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Large 2 Axle Vehicles

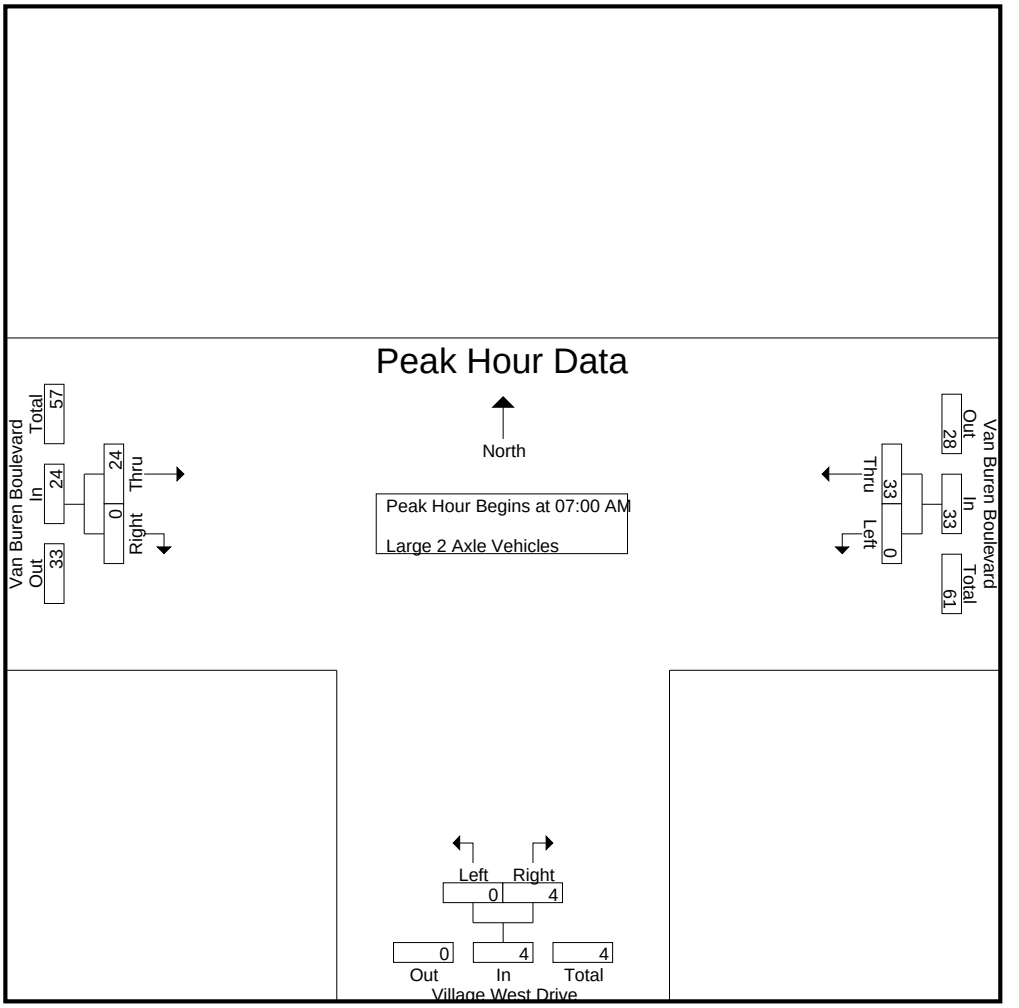
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	11	0	11	0	3	3	3	4	0	0	4	3	18	21
07:15 AM	0	5	0	5	0	1	0	1	7	0	0	7	0	13	13
07:30 AM	0	12	0	12	0	0	0	0	9	0	0	9	0	21	21
07:45 AM	0	5	0	5	0	0	0	0	4	0	0	4	0	9	9
Total	0	33	0	33	0	4	3	4	24	0	0	24	3	61	64
08:00 AM	3	13	0	16	0	1	1	1	8	0	0	8	1	25	26
08:15 AM	0	14	0	14	0	3	0	3	6	0	0	6	0	23	23
08:30 AM	0	13	0	13	1	1	0	2	6	1	0	7	0	22	22
08:45 AM	0	11	0	11	1	1	0	2	7	1	0	8	0	21	21
Total	3	51	0	54	2	6	1	8	27	2	0	29	1	91	92
Grand Total	3	84	0	87	2	10	4	12	51	2	0	53	4	152	156
Apprch %	3.4	96.6			16.7	83.3			96.2	3.8					
Total %	2	55.3		57.2	1.3	6.6		7.9	33.6	1.3		34.9	2.6	97.4	

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	11	11	0	**3**	**3**	4	0	4	18
07:15 AM	0	5	5	0	1	1	7	0	7	13
07:30 AM	0	**12**	**12**	0	0	0	**9**	0	**9**	**21**
07:45 AM	0	5	5	0	0	0	4	0	4	9
Total Volume	0	33	33	0	4	4	24	0	24	61
% App. Total	0	100		0	100		100	0		
PHF	.000	.688	.688	.000	.333	.333	.667	.000	.667	.726

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	11	11	0	**3**	**3**	4	0	4
+15 mins.	0	5	5	0	1	1	7	0	7
+30 mins.	0	**12**	**12**	0	0	0	**9**	0	**9**
+45 mins.	0	5	5	0	0	0	4	0	4
Total Volume	0	33	33	0	4	4	24	0	24
% App. Total	0	100		0	100		100	0	
PHF	.000	.688	.688	.000	.333	.333	.667	.000	.667

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 3 Axle Vehicles

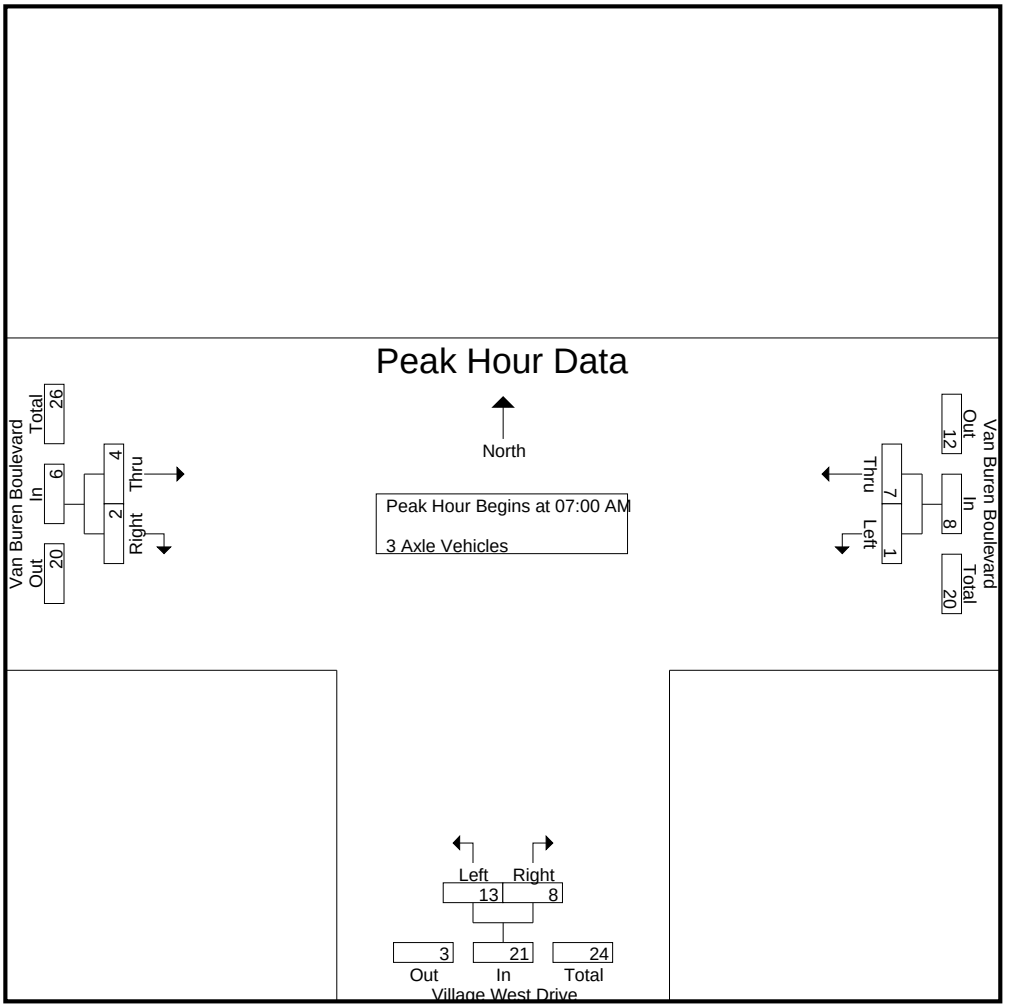
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	3	0	3	7	0	0	7	1	1	0	2	0	12	12
07:15 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	2	2
07:30 AM	1	0	0	1	6	5	1	11	0	1	1	1	2	13	15
07:45 AM	0	4	0	4	0	2	1	2	2	0	0	2	1	8	9
Total	1	7	0	8	13	8	2	21	4	2	1	6	3	35	38
08:00 AM	1	6	0	7	7	4	2	11	1	0	0	1	2	19	21
08:15 AM	0	2	0	2	0	4	3	4	3	0	0	3	3	9	12
08:30 AM	1	6	0	7	3	4	3	7	0	0	0	0	3	14	17
08:45 AM	0	4	0	4	2	0	0	2	0	0	0	0	0	6	6
Total	2	18	0	20	12	12	8	24	4	0	0	4	8	48	56
Grand Total	3	25	0	28	25	20	10	45	8	2	1	10	11	83	94
Apprch %	10.7	89.3			55.6	44.4			80	20					
Total %	3.6	30.1		33.7	30.1	24.1		54.2	9.6	2.4		12	11.7	88.3	

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	3	3	**7**	0	7	1	**1**	**2**	12
07:15 AM	0	0	0	0	1	1	1	0	1	2
07:30 AM	**1**	0	1	6	**5**	**11**	0	1	1	**13**
07:45 AM	0	**4**	**4**	0	2	2	**2**	0	2	8
Total Volume	1	7	8	13	8	21	4	2	6	35
% App. Total	12.5	87.5		61.9	38.1		66.7	33.3		
PHF	.250	.438	.500	.464	.400	.477	.500	.500	.750	.673

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	3	3	**7**	0	7	1	**1**	**2**
+15 mins.	0	0	0	0	1	1	1	0	1
+30 mins.	**1**	0	1	6	**5**	**11**	0	1	1
+45 mins.	0	**4**	**4**	0	2	2	**2**	0	2
Total Volume	1	7	8	13	8	21	4	2	6
% App. Total	12.5	87.5		61.9	38.1		66.7	33.3	
PHF	.250	.438	.500	.464	.400	.477	.500	.500	.750

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 4+ Axle Trucks

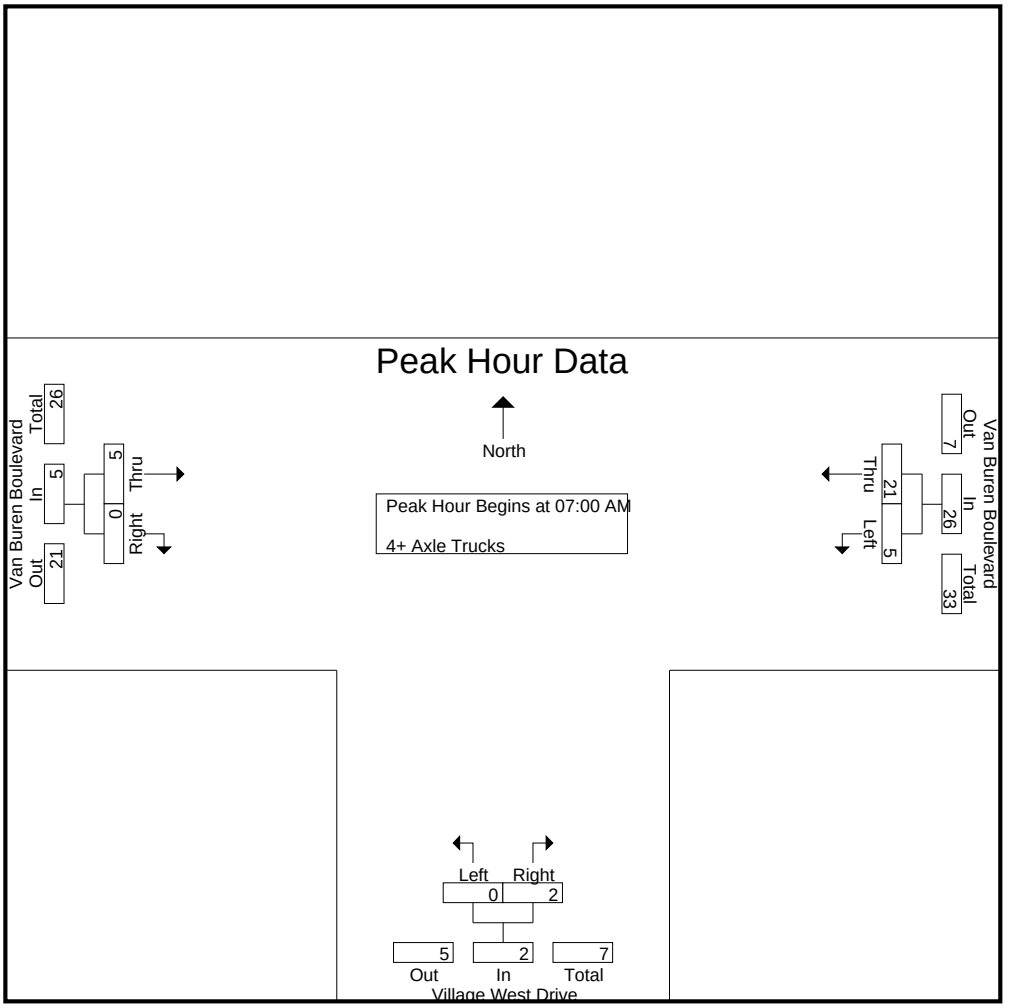
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	6	0	6	0	0	0	0	3	0	0	3	0	9	9
07:15 AM	4	1	0	5	0	0	0	0	0	0	0	0	0	5	5
07:30 AM	0	10	0	10	0	1	0	1	1	0	0	1	0	12	12
07:45 AM	1	4	0	5	0	1	1	1	1	0	0	1	1	7	8
Total	5	21	0	26	0	2	1	2	5	0	0	5	1	33	34
08:00 AM	2	1	0	3	0	2	1	2	2	0	0	2	1	7	8
08:15 AM	1	4	0	5	0	1	0	1	2	0	0	2	0	8	8
08:30 AM	1	3	0	4	0	2	1	2	1	0	0	1	1	7	8
08:45 AM	2	5	0	7	0	0	0	0	2	0	0	2	0	9	9
Total	6	13	0	19	0	5	2	5	7	0	0	7	2	31	33
Grand Total	11	34	0	45	0	7	3	7	12	0	0	12	3	64	67
Apprch %	24.4	75.6			0	100			100	0					
Total %	17.2	53.1		70.3	0	10.9		10.9	18.8	0		18.8	4.5	95.5	

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	6	6	0	0	0	**3**	0	**3**	9
07:15 AM	**4**	1	5	0	0	0	0	0	0	5
07:30 AM	0	**10**	**10**	0	**1**	**1**	1	0	1	**12**
07:45 AM	1	4	5	0	1	1	1	0	1	7
Total Volume	5	21	26	0	2	2	5	0	5	33
% App. Total	19.2	80.8		0	100		100	0		
PHF	.313	.525	.650	.000	.500	.500	.417	.000	.417	.688

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	6	6	0	0	0	**3**	0	**3**
+15 mins.	**4**	1	5	0	0	0	0	0	0
+30 mins.	0	**10**	**10**	0	**1**	**1**	1	0	1
+45 mins.	1	4	5	0	1	1	1	0	1
Total Volume	5	21	26	0	2	2	5	0	5
% App. Total	19.2	80.8		0	100		100	0	
PHF	.313	.525	.650	.000	.500	.500	.417	.000	.417

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

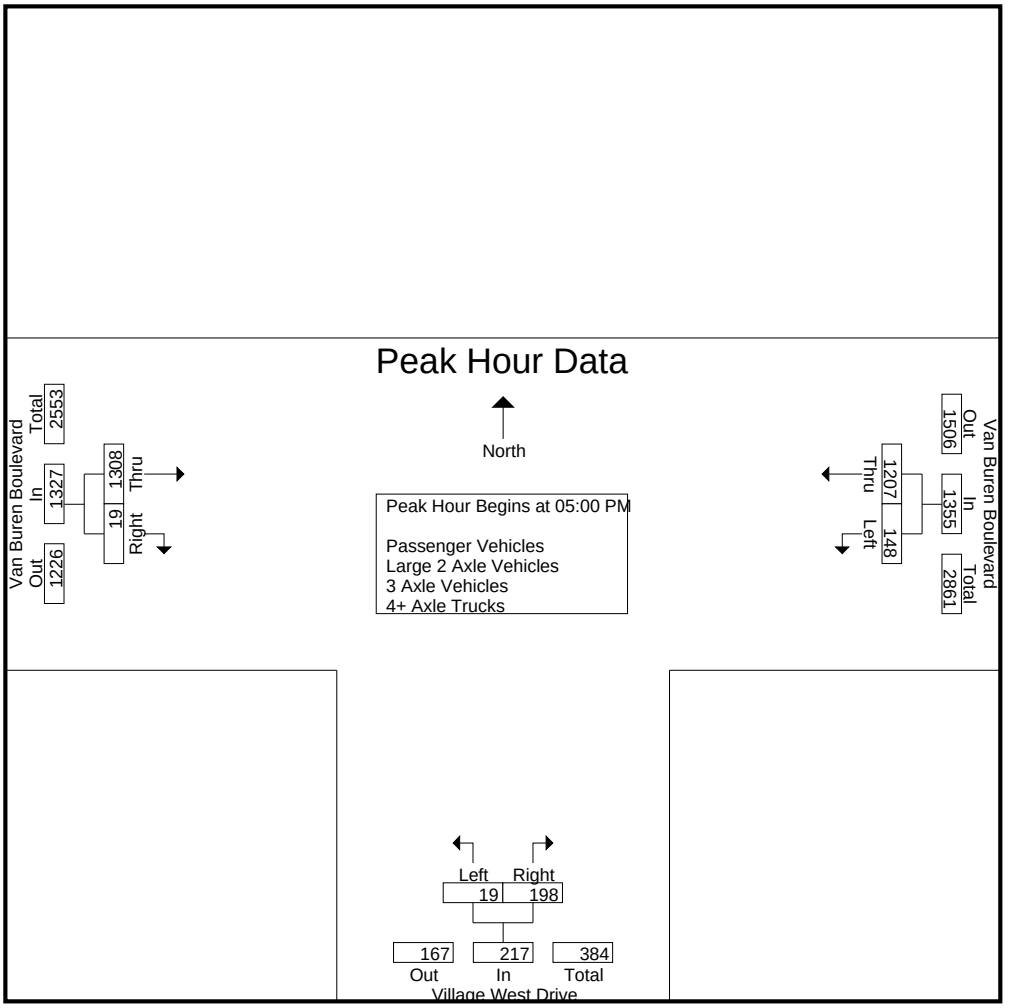
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	20	270	0	290	10	44	25	54	355	3	0	358	25	702	727
04:15 PM	25	269	0	294	9	63	38	72	311	7	0	318	38	684	722
04:30 PM	22	306	0	328	18	55	42	73	304	4	1	308	43	709	752
04:45 PM	20	300	0	320	6	39	22	45	289	1	1	290	23	655	678
Total	87	1145	0	1232	43	201	127	244	1259	15	2	1274	129	2750	2879
05:00 PM	27	284	0	311	7	42	31	49	315	3	0	318	31	678	709
05:15 PM	33	356	0	389	0	52	42	52	327	8	0	335	42	776	818
05:30 PM	30	278	0	308	6	66	30	72	352	4	0	356	30	736	766
05:45 PM	58	289	0	347	6	38	30	44	314	4	2	318	32	709	741
Total	148	1207	0	1355	19	198	133	217	1308	19	2	1327	135	2899	3034
Grand Total	235	2352	0	2587	62	399	260	461	2567	34	4	2601	264	5649	5913
Apprch %	9.1	90.9			13.4	86.6			98.7	1.3					
Total %	4.2	41.6		45.8	1.1	7.1		8.2	45.4	0.6		46	4.5	95.5	
Passenger Vehicles	223	2293		2516	61	388		706	2484	34		2522	0	0	5744
% Passenger Vehicles	94.9	97.5	0	97.3	98.4	97.2	98.8	97.9	96.8	100	100	96.8	0	0	97.1
Large 2 Axle Vehicles	4	43		47	1	2		5	64	0		64	0	0	116
% Large 2 Axle Vehicles	1.7	1.8	0	1.8	1.6	0.5	0.8	0.7	2.5	0	0	2.5	0	0	2
3 Axle Vehicles	2	2		4	0	1		1	3	0		3	0	0	8
% 3 Axle Vehicles	0.9	0.1	0	0.2	0	0.3	0	0.1	0.1	0	0	0.1	0	0	0.1
4+ Axle Trucks	6	14		20	0	8		9	16	0		16	0	0	45
% 4+ Axle Trucks	2.6	0.6	0	0.8	0	2	0.4	1.2	0.6	0	0	0.6	0	0	0.8

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	27	284	311	**7**	42	49	315	3	318	678
05:15 PM	33	**356**	**389**	0	52	52	327	**8**	335	**776**
05:30 PM	30	278	308	6	**66**	**72**	**352**	4	**356**	736
05:45 PM	**58**	289	347	6	38	44	314	4	318	709
Total Volume	148	1207	1355	19	198	217	1308	19	1327	2899
% App. Total	10.9	89.1		8.8	91.2		98.6	1.4		
PHF	.638	.848	.871	.679	.750	.753	.929	.594	.932	.934

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:00 PM			05:00 PM		
+0 mins.	27	284	311	10	44	54	315	3	318
+15 mins.	33	**356**	**389**	9	**63**	72	327	**8**	335
+30 mins.	30	278	308	**18**	55	**73**	**352**	4	**356**
+45 mins.	**58**	289	347	6	39	45	314	4	318
Total Volume	148	1207	1355	43	201	244	1308	19	1327
% App. Total	10.9	89.1		17.6	82.4		98.6	1.4	
PHF	.638	.848	.871	.597	.798	.836	.929	.594	.932

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles

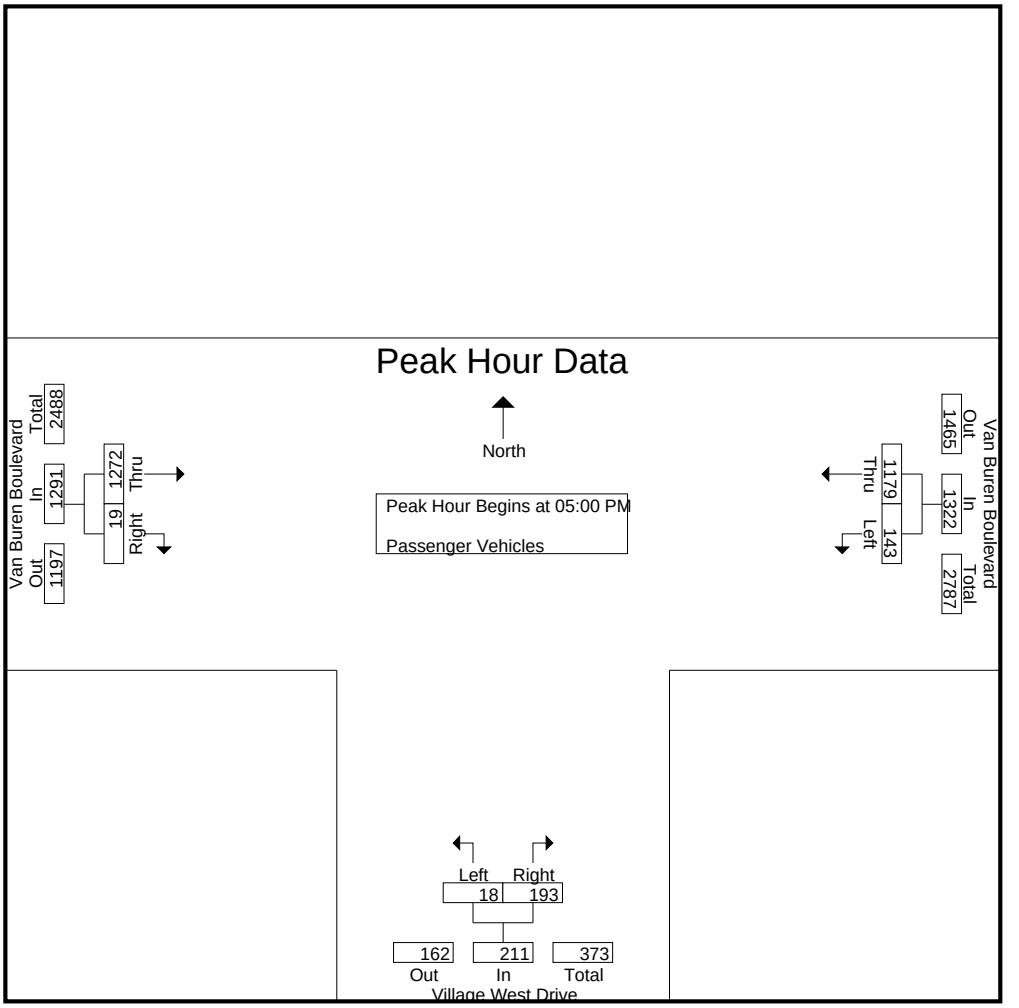
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	18	259	0	277	10	43	24	53	335	3	0	338	24	668	692
04:15 PM	20	263	0	283	9	61	37	70	301	7	0	308	37	661	698
04:30 PM	22	299	0	321	18	55	42	73	295	4	1	299	43	693	736
04:45 PM	20	293	0	313	6	36	22	42	281	1	1	282	23	637	660
Total	80	1114	0	1194	43	195	125	238	1212	15	2	1227	127	2659	2786
05:00 PM	26	275	0	301	7	40	31	47	299	3	0	302	31	650	681
05:15 PM	30	350	0	380	0	50	41	50	319	8	0	327	41	757	798
05:30 PM	29	270	0	299	6	66	30	72	345	4	0	349	30	720	750
05:45 PM	58	284	0	342	5	37	30	42	309	4	2	313	32	697	729
Total	143	1179	0	1322	18	193	132	211	1272	19	2	1291	134	2824	2958
Grand Total	223	2293	0	2516	61	388	257	449	2484	34	4	2518	261	5483	5744
Apprch %	8.9	91.1			13.6	86.4			98.6	1.4					
Total %	4.1	41.8		45.9	1.1	7.1		8.2	45.3	0.6		45.9	4.5	95.5	

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	26	275	301	**7**	40	47	299	3	302	650
05:15 PM	30	**350**	**380**	0	50	50	319	**8**	327	**757**
05:30 PM	29	270	299	6	**66**	**72**	**345**	4	**349**	720
05:45 PM	**58**	284	342	5	37	42	309	4	313	697
Total Volume	143	1179	1322	18	193	211	1272	19	1291	2824
% App. Total	10.8	89.2		8.5	91.5		98.5	1.5		
PHF	.616	.842	.870	.643	.731	.733	.922	.594	.925	.933

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	26	275	301	**7**	40	47	299	3	302
+15 mins.	30	**350**	**380**	0	50	50	319	**8**	327
+30 mins.	29	270	299	6	**66**	**72**	**345**	4	**349**
+45 mins.	**58**	284	342	5	37	42	309	4	313
Total Volume	143	1179	1322	18	193	211	1272	19	1291
% App. Total	10.8	89.2		8.5	91.5		98.5	1.5	
PHF	.616	.842	.870	.643	.731	.733	.922	.594	.925

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Large 2 Axle Vehicles

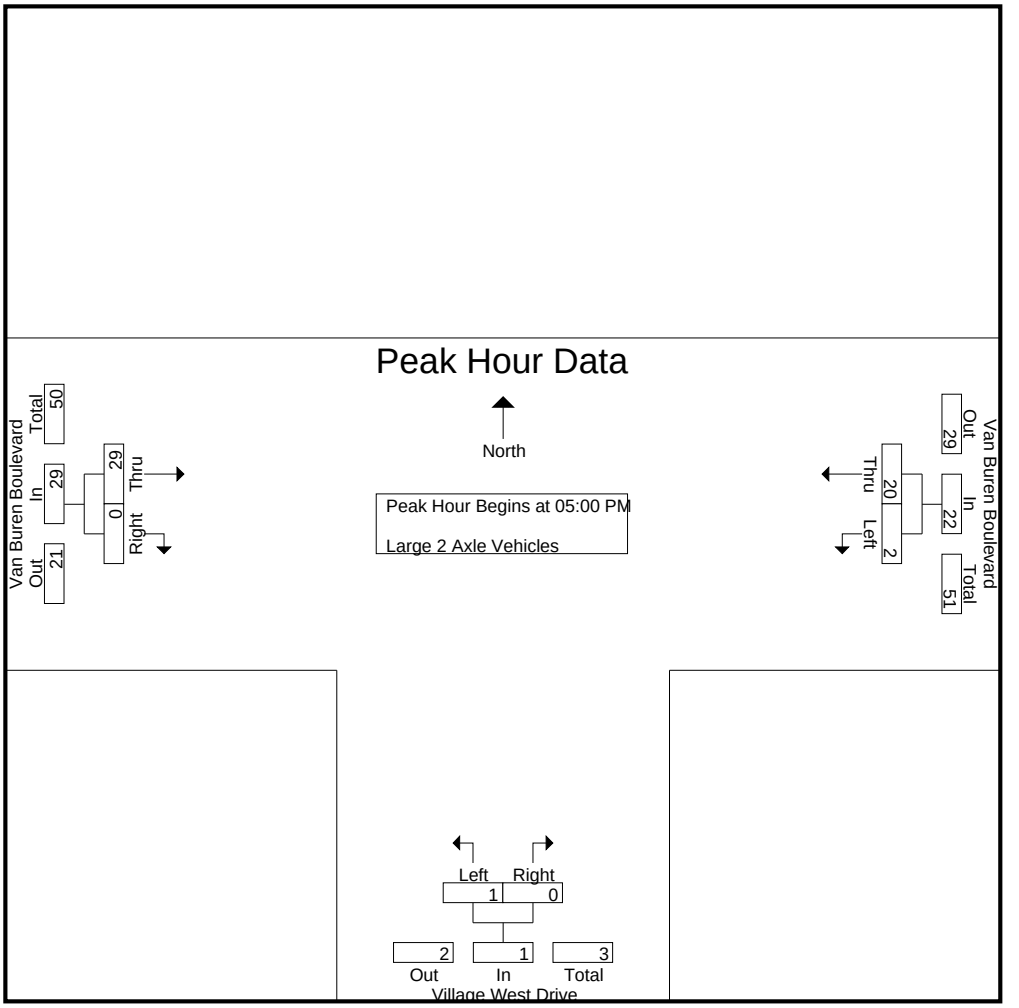
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	7	0	8	0	1	1	1	16	0	0	16	1	25	26
04:15 PM	1	5	0	6	0	1	1	1	6	0	0	6	1	13	14
04:30 PM	0	6	0	6	0	0	0	0	6	0	0	6	0	12	12
04:45 PM	0	5	0	5	0	0	0	0	7	0	0	7	0	12	12
Total	2	23	0	25	0	2	2	2	35	0	0	35	2	62	64
05:00 PM	0	5	0	5	0	0	0	0	12	0	0	12	0	17	17
05:15 PM	2	5	0	7	0	0	0	0	6	0	0	6	0	13	13
05:30 PM	0	7	0	7	0	0	0	0	7	0	0	7	0	14	14
05:45 PM	0	3	0	3	1	0	0	1	4	0	0	4	0	8	8
Total	2	20	0	22	1	0	0	1	29	0	0	29	0	52	52
Grand Total	4	43	0	47	1	2	2	3	64	0	0	64	2	114	116
Apprch %	8.5	91.5			33.3	66.7			100	0					
Total %	3.5	37.7		41.2	0.9	1.8		2.6	56.1	0		56.1	1.7	98.3	

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	5	5	0	0	0	**12**	0	**12**	**17**
05:15 PM	**2**	5	**7**	0	0	0	6	0	6	13
05:30 PM	0	**7**	7	0	0	0	7	0	7	14
05:45 PM	0	3	3	**1**	0	**1**	4	0	4	8
Total Volume	2	20	22	1	0	1	29	0	29	52
% App. Total	9.1	90.9		100	0		100	0		
PHF	.250	.714	.786	.250	.000	.250	.604	.000	.604	.765

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	5	5	0	0	0	**12**	0	**12**
+15 mins.	**2**	5	**7**	0	0	0	6	0	6
+30 mins.	0	**7**	7	0	0	0	7	0	7
+45 mins.	0	3	3	**1**	0	**1**	4	0	4
Total Volume	2	20	22	1	0	1	29	0	29
% App. Total	9.1	90.9		100	0		100	0	
PHF	.250	.714	.786	.250	.000	.250	.604	.000	.604

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 3 Axle Vehicles

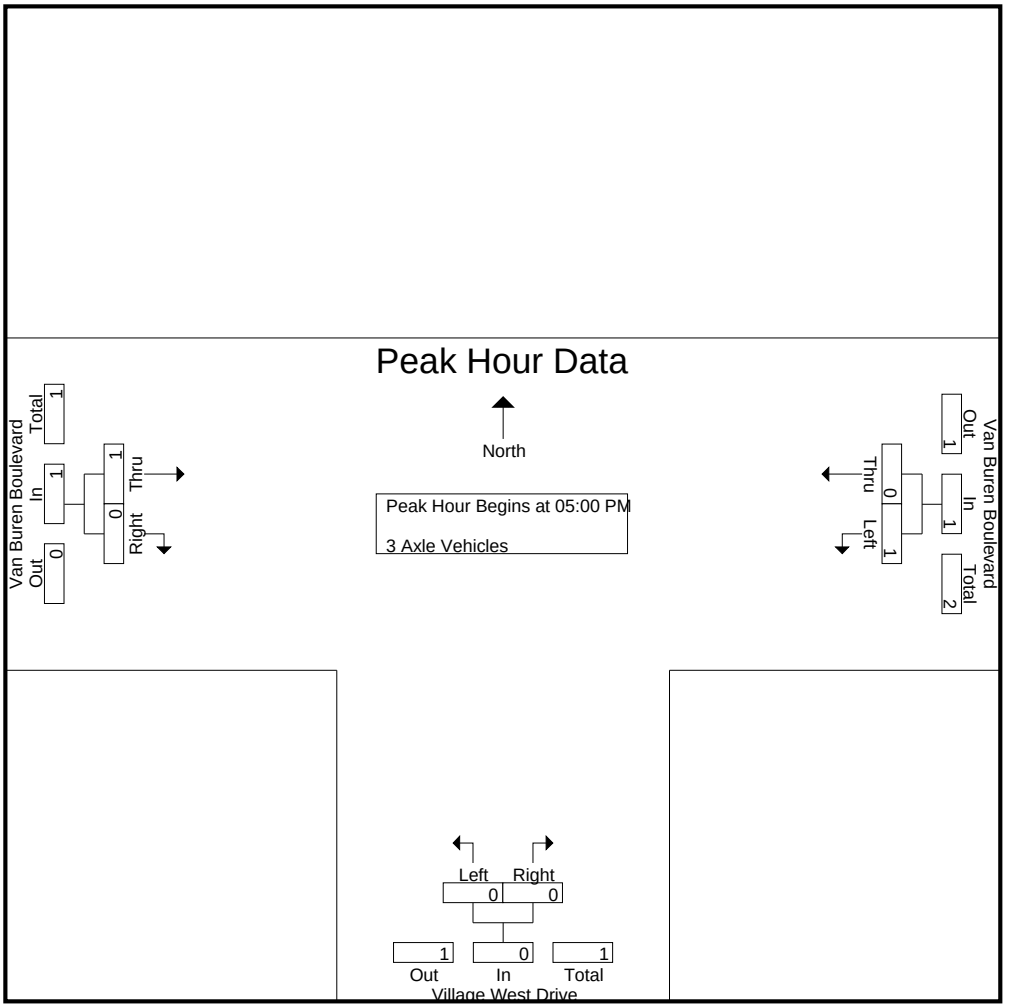
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	1	0	2	0	0	0	0	0	0	0	0	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	2	2
Total	1	2	0	3	0	1	0	1	2	0	0	2	0	6	6
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
05:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	1	0	0	1	0	2	2
Grand Total	2	2	0	4	0	1	0	1	3	0	0	3	0	8	8
Apprch %	50	50			0	100			100	0					
Total %	25	25		50	0	12.5		12.5	37.5	0		37.5	0	100	

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	**1**	0	**1**	**1**
05:15 PM	**1**	0	**1**	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	0	0	1	0	1	2
% App. Total	100	0		0	0		100	0		
PHF	.250	.000	.250	.000	.000	.000	.250	.000	.250	.500

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	**1**	0	**1**	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	0	0	1	0	1
% App. Total	100	0		0	0		100	0	
PHF	.250	.000	.250	.000	.000	.000	.250	.000	.250

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 4+ Axle Trucks

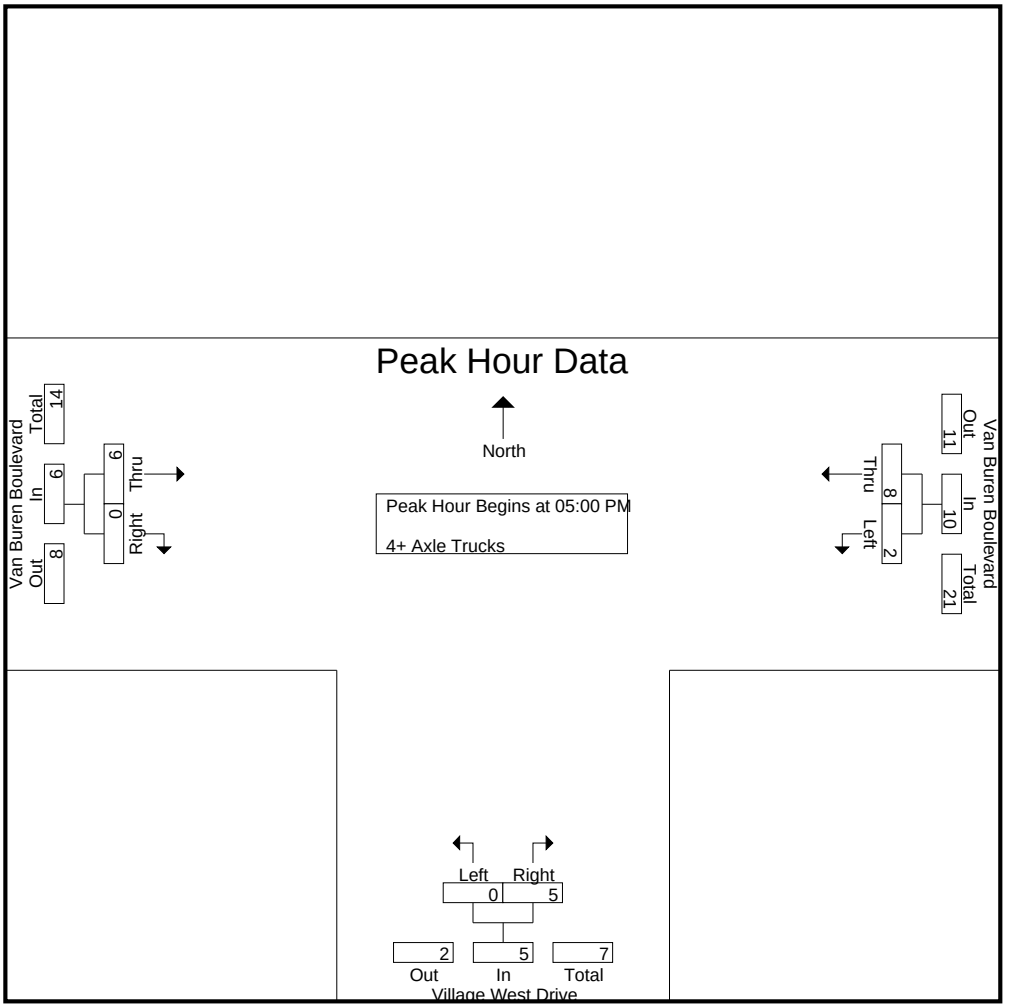
	Van Buren Boulevard Westbound				Village West Drive Northbound				Van Buren Boulevard Eastbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	3	0	3	0	0	0	0	4	0	0	4	0	7	7
04:15 PM	4	1	0	5	0	1	0	1	2	0	0	2	0	8	8
04:30 PM	0	1	0	1	0	0	0	0	3	0	0	3	0	4	4
04:45 PM	0	1	0	1	0	2	0	2	1	0	0	1	0	4	4
Total	4	6	0	10	0	3	0	3	10	0	0	10	0	23	23
05:00 PM	1	4	0	5	0	2	0	2	3	0	0	3	0	10	10
05:15 PM	0	1	0	1	0	2	1	2	2	0	0	2	1	5	6
05:30 PM	1	1	0	2	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	2	0	2	0	1	0	1	1	0	0	1	0	4	4
Total	2	8	0	10	0	5	1	5	6	0	0	6	1	21	22
Grand Total	6	14	0	20	0	8	1	8	16	0	0	16	1	44	45
Apprch %	30	70			0	100			100	0					
Total %	13.6	31.8		45.5	0	18.2		18.2	36.4	0		36.4	2.2	97.8	

	Van Buren Boulevard Westbound			Village West Drive Northbound			Van Buren Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	**1**	**4**	**5**	0	**2**	**2**	**3**	0	**3**	**10**
05:15 PM	0	1	1	0	2	2	2	0	2	5
05:30 PM	1	1	2	0	0	0	0	0	0	2
05:45 PM	0	2	2	0	1	1	1	0	1	4
Total Volume	2	8	10	0	5	5	6	0	6	21
% App. Total	20	80		0	100		100	0		
PHF	.500	.500	.500	.000	.625	.625	.500	.000	.500	.525

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard
Weather: Clear

File Name : 24_CRV_Village W_Van Buren PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	**1**	**4**	**5**	0	**2**	**2**	**3**	0	**3**
+15 mins.	0	1	1	0	2	2	2	0	2
+30 mins.	1	1	2	0	0	0	0	0	0
+45 mins.	0	2	2	0	1	1	1	0	1
Total Volume	2	8	10	0	5	5	6	0	6
% App. Total	20	80		0	100		100	0	
PHF	.500	.500	.500	.000	.625	.625	.500	.000	.500

Location: County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard

Date: 8/20/2019
Day: Tuesday

PEDESTRIANS

	North Leg Dead End	East Leg Van Buren Boulevard	South Leg Village West Drive	West Leg Van Buren Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Dead End	East Leg Van Buren Boulevard	South Leg Village West Drive	West Leg Van Buren Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Location: County of Riverside
N/S: Village West Drive
E/W: Van Buren Boulevard

Date: 8/20/2019
Day: Tuesday

BICYCLES

	Southbound Dead End			Westbound Van Buren Boulevard			Northbound Village West Drive			Eastbound Van Buren Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	2	0	0	0	3

	Southbound Dead End			Westbound Van Buren Boulevard			Northbound Village West Drive			Eastbound Van Buren Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	0	0	0	0	0	0	0	0	1

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

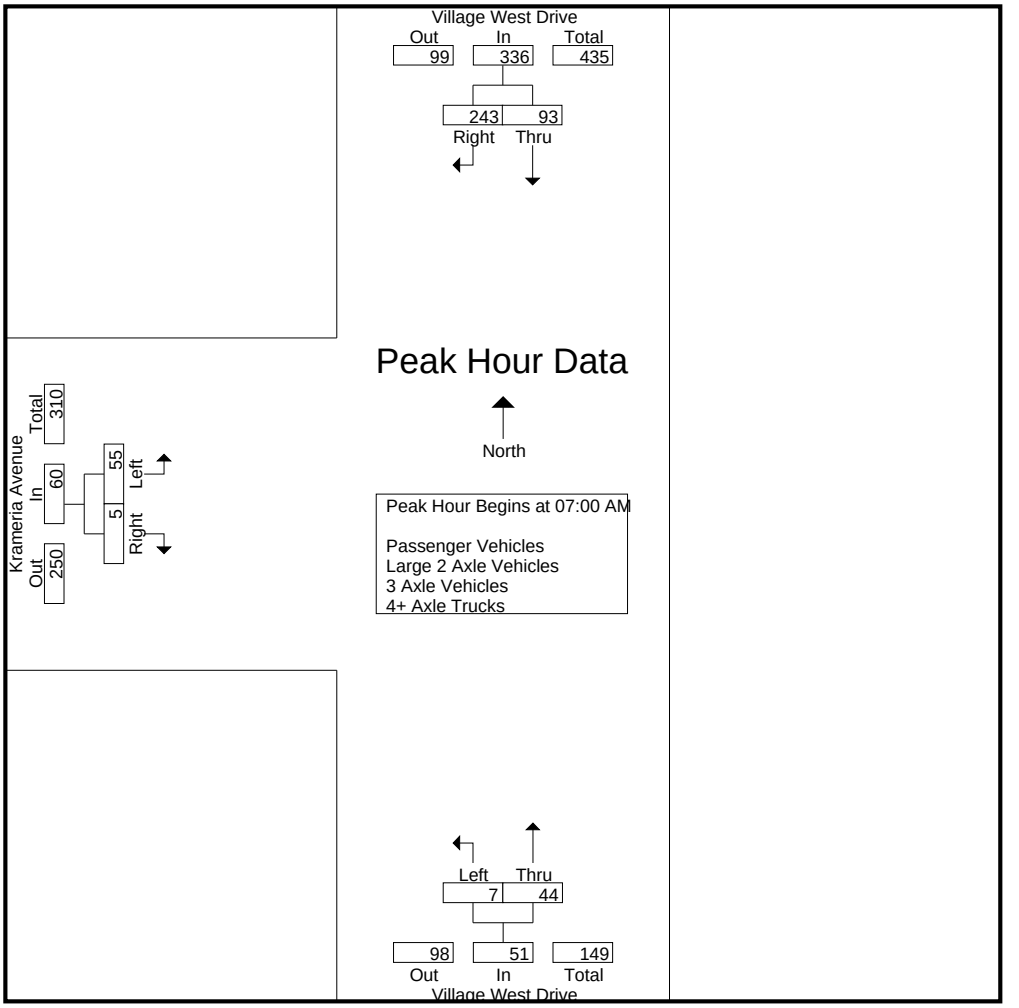
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	17	49	5	66	2	12	0	14	11	0	0	11	5	91	96
07:15 AM	25	95	17	120	2	13	0	15	7	2	2	9	19	144	163
07:30 AM	25	57	3	82	3	8	0	11	20	2	0	22	3	115	118
07:45 AM	26	42	1	68	0	11	0	11	17	1	1	18	2	97	99
Total	93	243	26	336	7	44	0	51	55	5	3	60	29	447	476
08:00 AM	18	24	8	42	2	6	0	8	22	0	0	22	8	72	80
08:15 AM	8	20	3	28	3	12	0	15	11	4	1	15	4	58	62
08:30 AM	8	20	6	28	1	9	0	10	19	1	0	20	6	58	64
08:45 AM	10	17	0	27	0	7	0	7	12	0	0	12	0	46	46
Total	44	81	17	125	6	34	0	40	64	5	1	69	18	234	252
Grand Total	137	324	43	461	13	78	0	91	119	10	4	129	47	681	728
Apprch %	29.7	70.3			14.3	85.7			92.2	7.8					
Total %	20.1	47.6		67.7	1.9	11.5		13.4	17.5	1.5		18.9	6.5	93.5	
Passenger Vehicles	133	310		482	13	74		87	68	9		80	0	0	649
% Passenger Vehicles	97.1	95.7	90.7	95.6	100	94.9	0	95.6	57.1	90	75	60.2	0	0	89.1
Large 2 Axle Vehicles	3	0		3	0	3		3	3	0		3	0	0	9
% Large 2 Axle Vehicles	2.2	0	0	0.6	0	3.8	0	3.3	2.5	0	0	2.3	0	0	1.2
3 Axle Vehicles	1	3		5	0	1		1	41	1		43	0	0	49
% 3 Axle Vehicles	0.7	0.9	2.3	1	0	1.3	0	1.1	34.5	10	25	32.3	0	0	6.7
4+ Axle Trucks	0	11		14	0	0		0	7	0		7	0	0	21
% 4+ Axle Trucks	0	3.4	7	2.8	0	0	0	0	5.9	0	0	5.3	0	0	2.9

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	17	49	66	2	12	14	11	0	11	91
07:15 AM	25	**95**	**120**	2	**13**	**15**	7	**2**	9	**144**
07:30 AM	25	57	82	**3**	8	11	**20**	2	**22**	115
07:45 AM	**26**	42	68	0	11	11	17	1	18	97
Total Volume	93	243	336	7	44	51	55	5	60	447
% App. Total	27.7	72.3		13.7	86.3		91.7	8.3		
PHF	.894	.639	.700	.583	.846	.850	.688	.625	.682	.776

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:30 AM		
+0 mins.	17	49	66	2	12	14	20	2	**22**
+15 mins.	25	**95**	**120**	2	**13**	**15**	17	1	18
+30 mins.	25	57	82	**3**	8	11	**22**	0	22
+45 mins.	**26**	42	68	0	11	11	11	**4**	15
Total Volume	93	243	336	7	44	51	70	7	77
% App. Total	27.7	72.3		13.7	86.3		90.9	9.1	
PHF	.894	.639	.700	.583	.846	.850	.795	.438	.875

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles

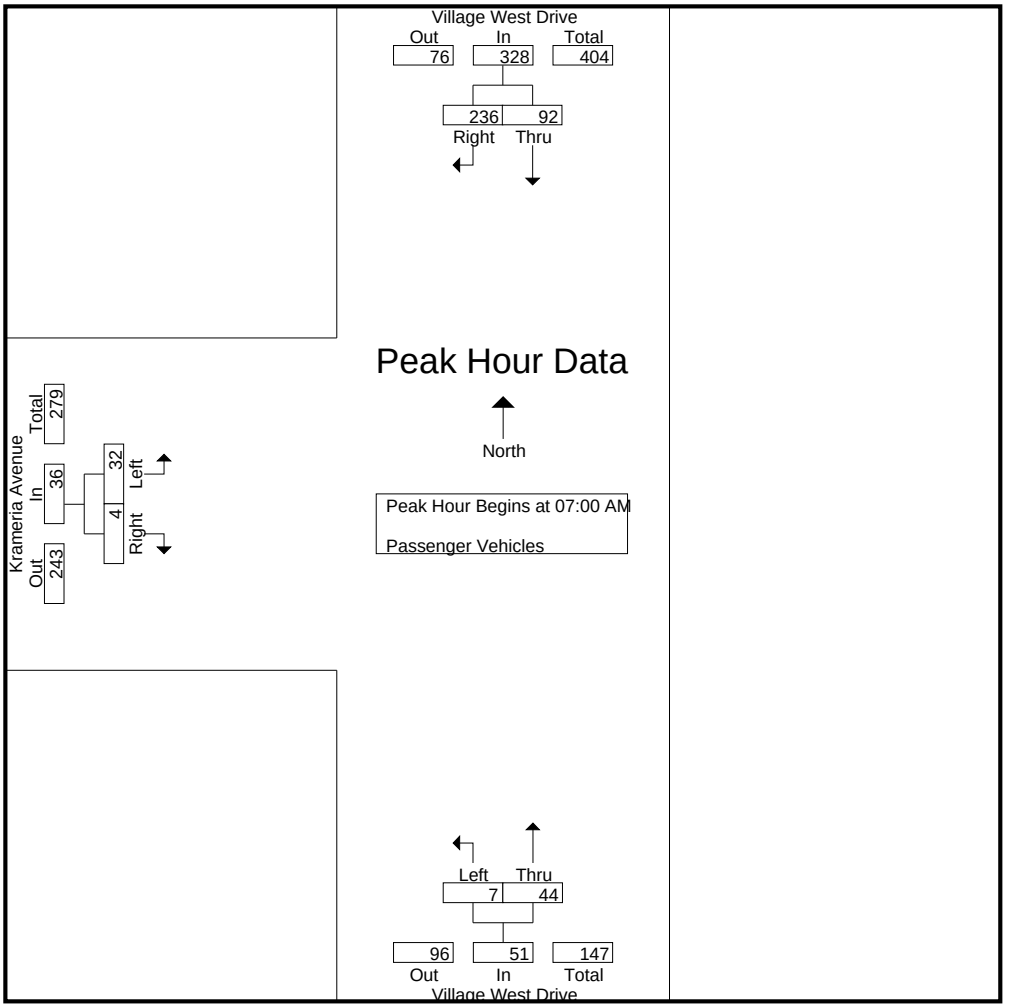
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	17	48	5	65	2	12	0	14	4	0	0	4	5	83	88
07:15 AM	25	91	17	116	2	13	0	15	5	1	1	6	18	137	155
07:30 AM	24	56	2	80	3	8	0	11	9	2	0	11	2	102	104
07:45 AM	26	41	1	67	0	11	0	11	14	1	1	15	2	93	95
Total	92	236	25	328	7	44	0	51	32	4	2	36	27	415	442
08:00 AM	17	21	6	38	2	5	0	7	10	0	0	10	6	55	61
08:15 AM	8	19	3	27	3	11	0	14	6	4	1	10	4	51	55
08:30 AM	7	19	5	26	1	7	0	8	11	1	0	12	5	46	51
08:45 AM	9	15	0	24	0	7	0	7	9	0	0	9	0	40	40
Total	41	74	14	115	6	30	0	36	36	5	1	41	15	192	207
Grand Total	133	310	39	443	13	74	0	87	68	9	3	77	42	607	649
Apprch %	30	70			14.9	85.1			88.3	11.7					
Total %	21.9	51.1		73	2.1	12.2		14.3	11.2	1.5		12.7	6.5	93.5	

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	17	48	65	2	12	14	4	0	4	83
07:15 AM	25	**91**	**116**	2	**13**	**15**	5	1	6	**137**
07:30 AM	24	56	80	**3**	8	11	9	**2**	11	102
07:45 AM	**26**	41	67	0	11	11	**14**	1	**15**	93
Total Volume	92	236	328	7	44	51	32	4	36	415
% App. Total	28	72		13.7	86.3		88.9	11.1		
PHF	.885	.648	.707	.583	.846	.850	.571	.500	.600	.757

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	17	48	65	2	12	14	4	0	4
+15 mins.	25	**91**	**116**	2	**13**	**15**	5	1	6
+30 mins.	24	56	80	**3**	8	11	9	**2**	11
+45 mins.	**26**	41	67	0	11	11	**14**	1	**15**
Total Volume	92	236	328	7	44	51	32	4	36
% App. Total	28	72		13.7	86.3		88.9	11.1	
PHF	.885	.648	.707	.583	.846	.850	.571	.500	.600

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Large 2 Axle Vehicles

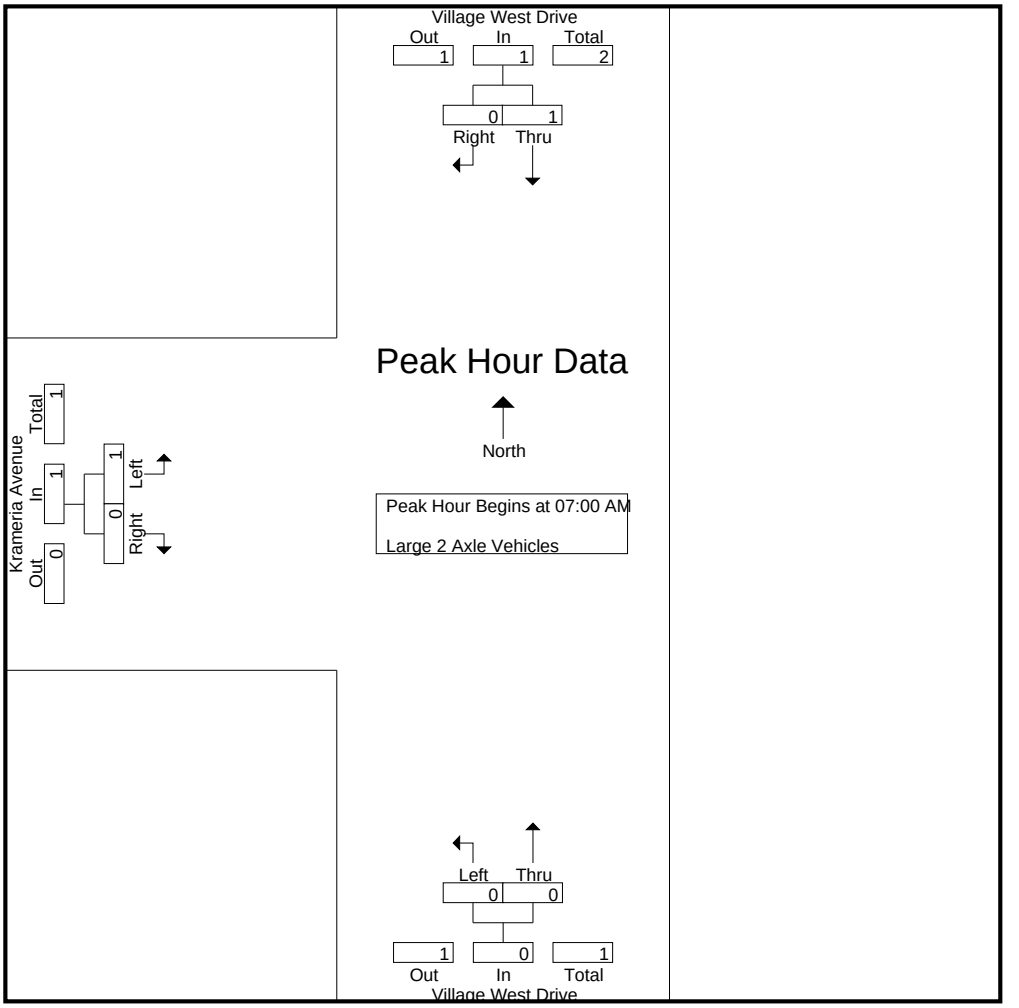
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	1	0	0	1	0	2	2
08:00 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	2	2
08:15 AM	0	0	0	0	0	1	0	1	2	0	0	2	0	3	3
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
Total	2	0	0	2	0	3	0	3	2	0	0	2	0	7	7
Grand Total	3	0	0	3	0	3	0	3	3	0	0	3	0	9	9
Apprch %	100	0			0	100			100	0					
Total %	33.3	0		33.3	0	33.3		33.3	33.3	0		33.3	0	100	

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	**1**	0	**1**	**1**
07:30 AM	**1**	0	**1**	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	0	0	1	0	1	2
% App. Total	100	0		0	0		100	0		
PHF	.250	.000	.250	.000	.000	.000	.250	.000	.250	.500

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	**1**	0	**1**
+30 mins.	**1**	0	**1**	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	0	0	1	0	1
% App. Total	100	0		0	0		100	0	
PHF	.250	.000	.250	.000	.000	.000	.250	.000	.250

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 3 Axle Vehicles

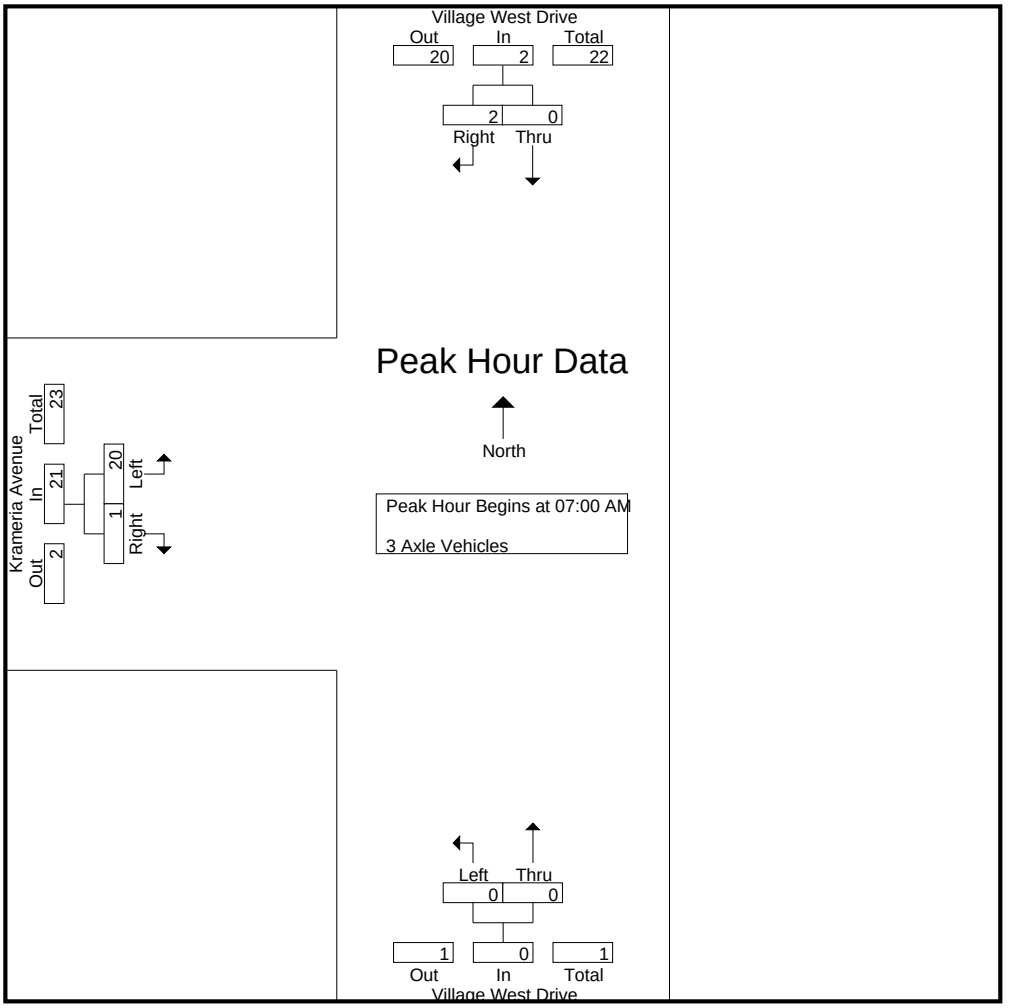
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	7	0	0	7	0	8	8
07:15 AM	0	0	0	0	0	0	0	0	1	1	1	2	1	2	3
07:30 AM	0	1	1	1	0	0	0	0	10	0	0	10	1	11	12
07:45 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
Total	0	2	1	2	0	0	0	0	20	1	1	21	2	23	25
08:00 AM	0	1	0	1	0	0	0	0	10	0	0	10	0	11	11
08:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
08:30 AM	1	0	0	1	0	1	0	1	6	0	0	6	0	8	8
08:45 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	3	3
Total	1	1	0	2	0	1	0	1	21	0	0	21	0	24	24
Grand Total	1	3	1	4	0	1	0	1	41	1	1	42	2	47	49
Apprch %	25	75			0	100			97.6	2.4					
Total %	2.1	6.4		8.5	0	2.1		2.1	87.2	2.1		89.4	4.1	95.9	

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	**1**	**1**	0	0	0	7	0	7	8
07:15 AM	0	0	0	0	0	0	1	**1**	2	2
07:30 AM	0	1	1	0	0	0	**10**	0	**10**	**11**
07:45 AM	0	0	0	0	0	0	2	0	2	2
Total Volume	0	2	2	0	0	0	20	1	21	23
% App. Total	0	100		0	0		95.2	4.8		
PHF	.000	.500	.500	.000	.000	.000	.500	.250	.525	.523

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	**1**	**1**	0	0	0	7	0	7
+15 mins.	0	0	0	0	0	0	1	**1**	2
+30 mins.	0	1	1	0	0	0	**10**	0	**10**
+45 mins.	0	0	0	0	0	0	2	0	2
Total Volume	0	2	2	0	0	0	20	1	21
% App. Total	0	100		0	0		95.2	4.8	
PHF	.000	.500	.500	.000	.000	.000	.500	.250	.525

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 4+ Axle Trucks

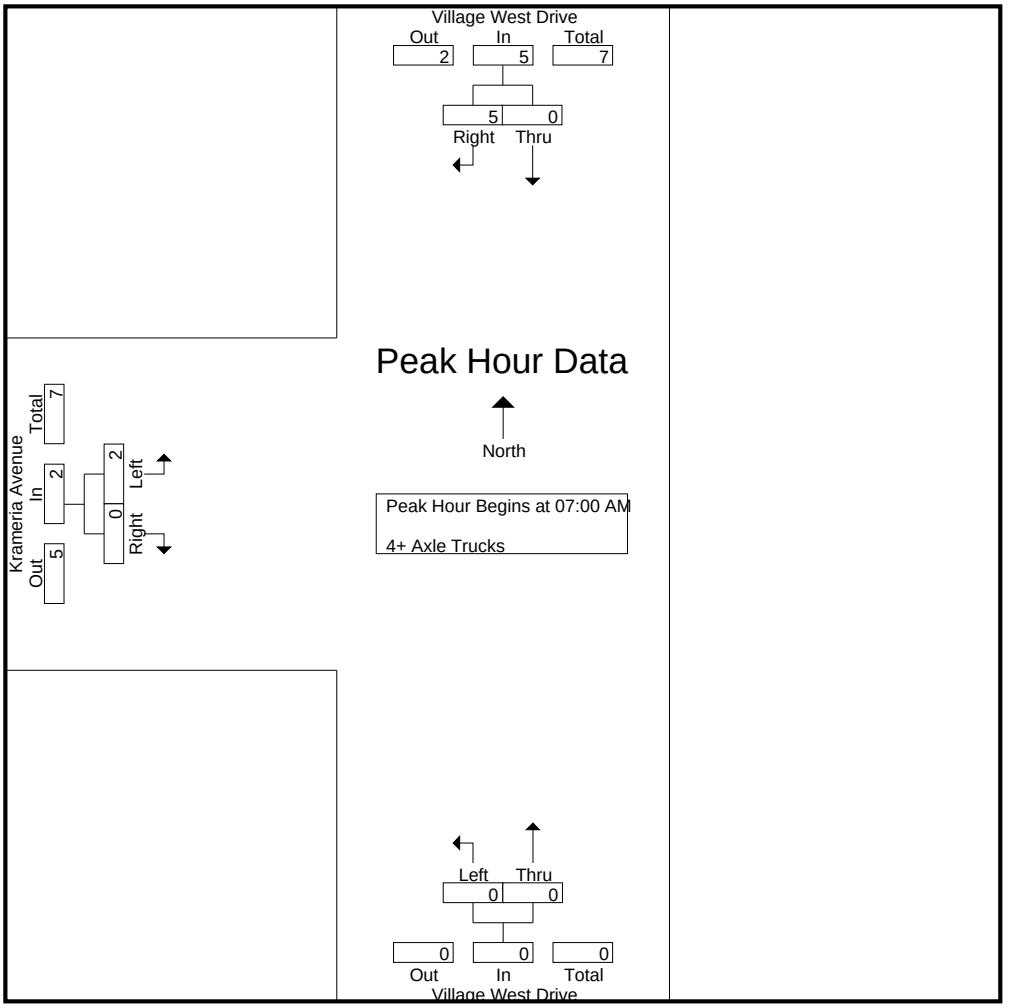
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	4	0	4	0	0	0	0	0	0	0	0	0	4	4
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
07:45 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	2	2
Total	0	5	0	5	0	0	0	0	2	0	0	2	0	7	7
08:00 AM	0	2	2	2	0	0	0	0	2	0	0	2	2	4	6
08:15 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	2	2
08:30 AM	0	1	1	1	0	0	0	0	2	0	0	2	1	3	4
08:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	2	2
Total	0	6	3	6	0	0	0	0	5	0	0	5	3	11	14
Grand Total	0	11	3	11	0	0	0	0	7	0	0	7	3	18	21
Apprch %	0	100			0	0			100	0					
Total %	0	61.1		61.1	0	0		0	38.9	0		38.9	14.3	85.7	

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	**4**	**4**	0	0	0	0	0	0	**4**
07:30 AM	0	0	0	0	0	0	**1**	0	**1**	1
07:45 AM	0	1	1	0	0	0	1	0	1	2
Total Volume	0	5	5	0	0	0	2	0	2	7
% App. Total	0	100		0	0		100	0		
PHF	.000	.313	.313	.000	.000	.000	.500	.000	.500	.438

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria AM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	**4**	**4**	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	**1**	0	**1**
+45 mins.	0	1	1	0	0	0	1	0	1
Total Volume	0	5	5	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.313	.313	.000	.000	.000	.500	.000	.500

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

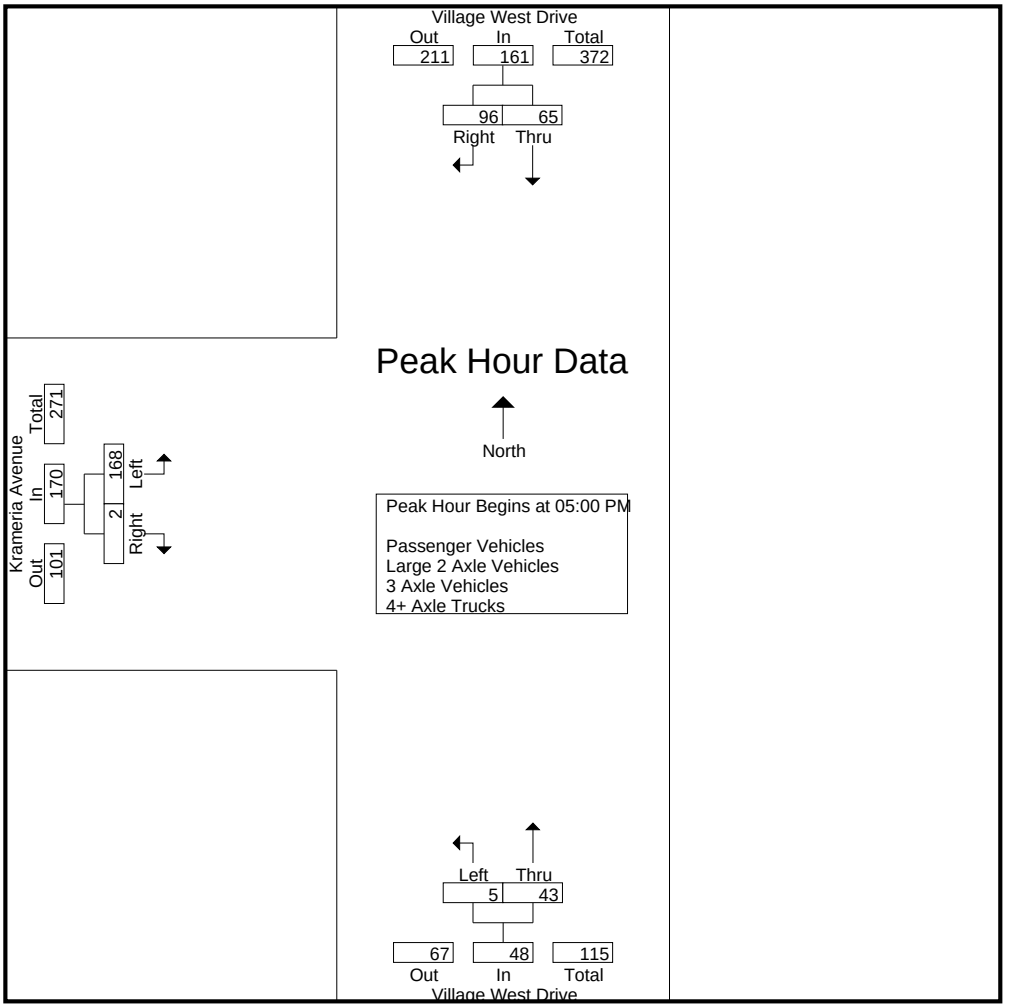
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	22	4	1	26	0	11	0	11	38	4	0	42	1	79	80
04:15 PM	22	10	2	32	1	25	0	26	49	3	2	52	4	110	114
04:30 PM	15	9	4	24	0	26	0	26	39	1	1	40	5	90	95
04:45 PM	15	4	0	19	0	18	0	18	25	2	0	27	0	64	64
Total	74	27	7	101	1	80	0	81	151	10	3	161	10	343	353
05:00 PM	16	15	10	31	2	13	0	15	31	0	0	31	10	77	87
05:15 PM	21	19	7	40	1	6	0	7	47	1	0	48	7	95	102
05:30 PM	9	24	10	33	0	8	0	8	60	1	0	61	10	102	112
05:45 PM	19	38	24	57	2	16	0	18	30	0	0	30	24	105	129
Total	65	96	51	161	5	43	0	48	168	2	0	170	51	379	430
Grand Total	139	123	58	262	6	123	0	129	319	12	3	331	61	722	783
Apprch %	53.1	46.9			4.7	95.3			96.4	3.6					
Total %	19.3	17		36.3	0.8	17		17.9	44.2	1.7		45.8	7.8	92.2	
Passenger Vehicles	138	113		307	6	122		128	308	12		323	0	0	758
% Passenger Vehicles	99.3	91.9	96.6	95.9	100	99.2	0	99.2	96.6	100	100	96.7	0	0	96.8
Large 2 Axle Vehicles	1	1		2	0	1		1	1	0		1	0	0	4
% Large 2 Axle Vehicles	0.7	0.8	0	0.6	0	0.8	0	0.8	0.3	0	0	0.3	0	0	0.5
3 Axle Vehicles	0	2		2	0	0		0	2	0		2	0	0	4
% 3 Axle Vehicles	0	1.6	0	0.6	0	0	0	0	0.6	0	0	0.6	0	0	0.5
4+ Axle Trucks	0	7		9	0	0		0	8	0		8	0	0	17
% 4+ Axle Trucks	0	5.7	3.4	2.8	0	0	0	0	2.5	0	0	2.4	0	0	2.2

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	16	15	31	**2**	13	15	31	0	31	77
05:15 PM	**21**	19	40	1	6	7	47	**1**	48	95
05:30 PM	9	24	33	0	8	8	**60**	1	**61**	102
05:45 PM	19	**38**	**57**	2	**16**	**18**	30	0	30	**105**
Total Volume	65	96	161	5	43	48	168	2	170	379
% App. Total	40.4	59.6		10.4	89.6		98.8	1.2		
PHF	.774	.632	.706	.625	.672	.667	.700	.500	.697	.902

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:15 PM			05:00 PM		
+0 mins.	16	15	31	1	25	**26**	31	0	31
+15 mins.	**21**	19	40	0	**26**	26	47	**1**	48
+30 mins.	9	24	33	0	18	18	**60**	1	**61**
+45 mins.	19	**38**	**57**	**2**	13	15	30	0	30
Total Volume	65	96	161	3	82	85	168	2	170
% App. Total	40.4	59.6		3.5	96.5		98.8	1.2	
PHF	.774	.632	.706	.375	.788	.817	.700	.500	.697

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Passenger Vehicles

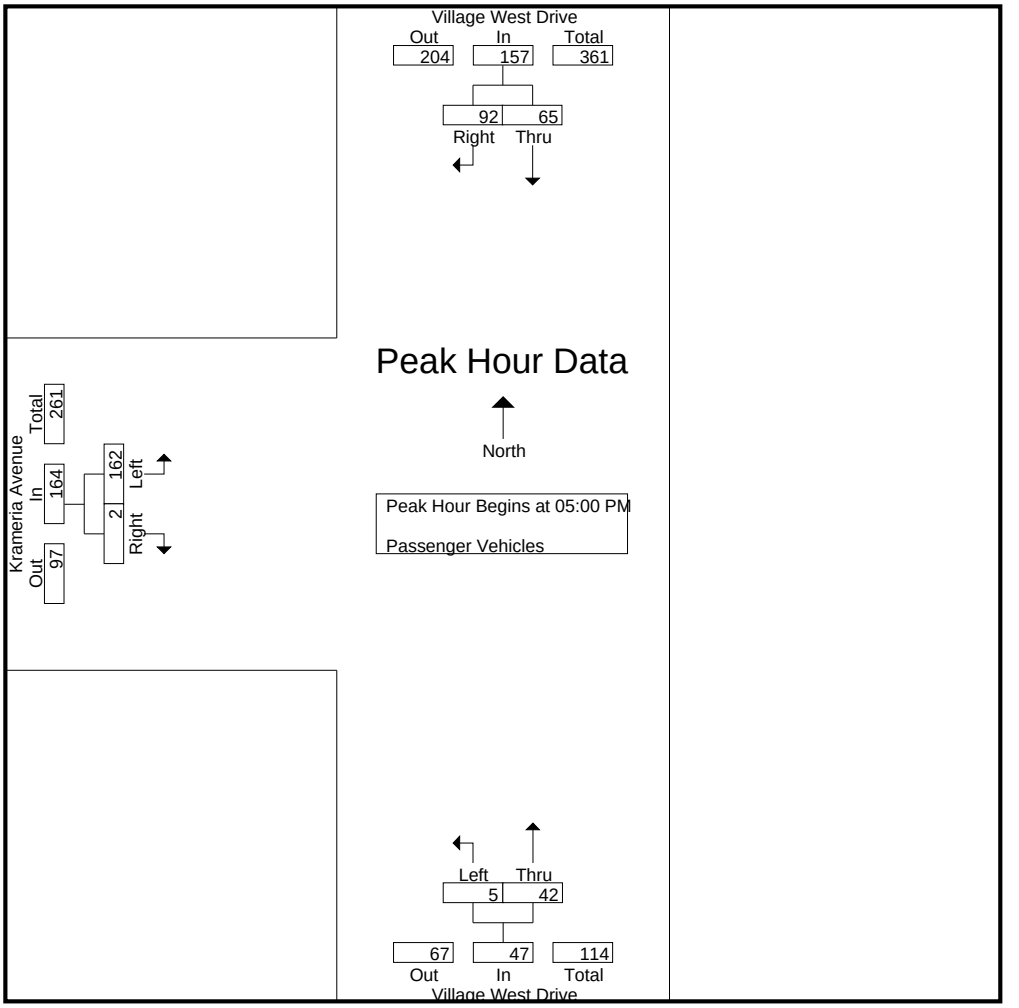
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	21	3	1	24	0	11	0	11	38	4	0	42	1	77	78
04:15 PM	22	5	1	27	1	25	0	26	47	3	2	50	3	103	106
04:30 PM	15	9	4	24	0	26	0	26	38	1	1	39	5	89	94
04:45 PM	15	4	0	19	0	18	0	18	23	2	0	25	0	62	62
Total	73	21	6	94	1	80	0	81	146	10	3	156	9	331	340
05:00 PM	16	15	10	31	2	13	0	15	29	0	0	29	10	75	85
05:15 PM	21	16	7	37	1	6	0	7	45	1	0	46	7	90	97
05:30 PM	9	23	9	32	0	8	0	8	60	1	0	61	9	101	110
05:45 PM	19	38	24	57	2	15	0	17	28	0	0	28	24	102	126
Total	65	92	50	157	5	42	0	47	162	2	0	164	50	368	418
Grand Total	138	113	56	251	6	122	0	128	308	12	3	320	59	699	758
Apprch %	55	45			4.7	95.3			96.2	3.8					
Total %	19.7	16.2		35.9	0.9	17.5		18.3	44.1	1.7		45.8	7.8	92.2	

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	16	15	31	**2**	13	15	29	0	29	75
05:15 PM	**21**	16	37	1	6	7	45	**1**	46	90
05:30 PM	9	23	32	0	8	8	**60**	1	**61**	101
05:45 PM	19	**38**	**57**	2	**15**	**17**	28	0	28	**102**
Total Volume	65	92	157	5	42	47	162	2	164	368
% App. Total	41.4	58.6		10.6	89.4		98.8	1.2		
PHF	.774	.605	.689	.625	.700	.691	.675	.500	.672	.902

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	16	15	31	**2**	13	15	29	0	29
+15 mins.	**21**	16	37	1	6	7	45	**1**	46
+30 mins.	9	23	32	0	8	8	**60**	1	**61**
+45 mins.	19	**38**	**57**	2	**15**	**17**	28	0	28
Total Volume	65	92	157	5	42	47	162	2	164
% App. Total	41.4	58.6		10.6	89.4		98.8	1.2	
PHF	.774	.605	.689	.625	.700	.691	.675	.500	.672

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- Large 2 Axle Vehicles

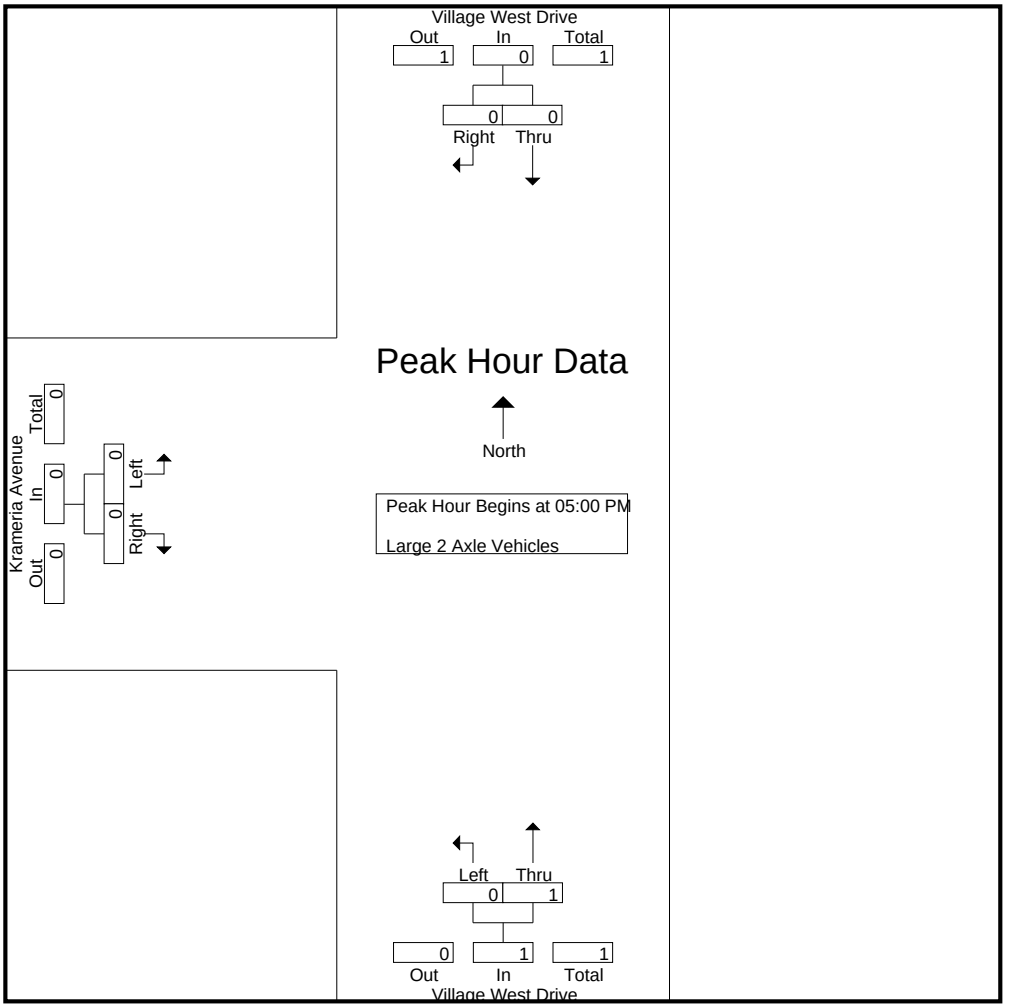
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	1	0	1	0	0	0	0	1	0	0	1	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	2	0	0	0	0	1	0	0	1	0	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1
Grand Total	1	1	0	2	0	1	0	1	1	0	0	1	0	4	4
Apprch %	50	50			0	100			100	0					
Total %	25	25		50	0	25		25	25	0		25	0	100	

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	**1**	**1**	0	0	0	**1**
Total Volume	0	0	0	0	1	1	0	0	0	1
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	**1**	**1**	0	0	0
Total Volume	0	0	0	0	1	1	0	0	0
% App. Total	0	0		0	100		0	0	
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 3 Axle Vehicles

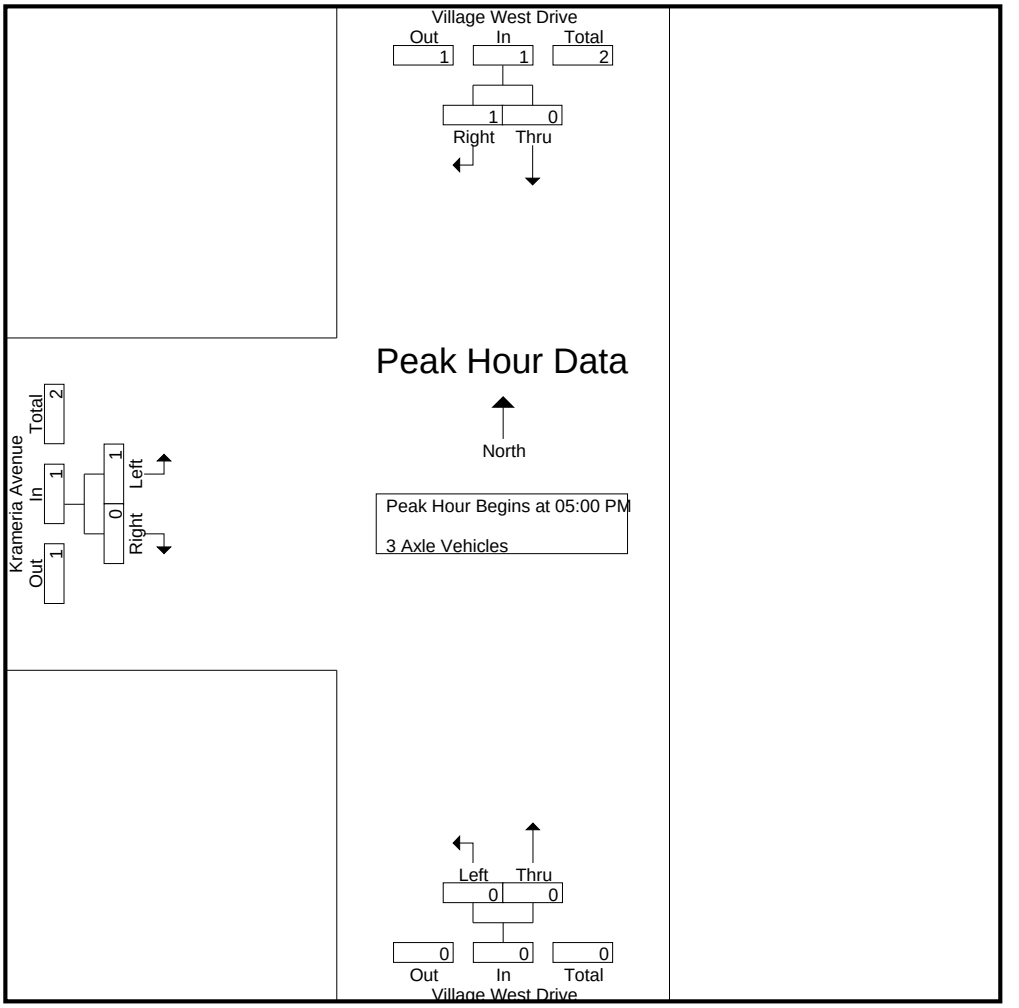
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	1	0	0	1	0	2	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
Total	0	1	0	1	0	0	0	0	1	0	0	1	0	2	2
Grand Total	0	2	0	2	0	0	0	0	2	0	0	2	0	4	4
Apprch %	0	100			0	0			100	0					
Total %	0	50		50	0	0		0	50	0		50	0	100	

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	**1**	**1**	0	0	0	0	0	0	**1**
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	**1**	0	**1**	1
Total Volume	0	1	1	0	0	0	1	0	1	2
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250	.500

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	**1**	**1**	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	**1**	0	**1**
Total Volume	0	1	1	0	0	0	1	0	1
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 1

Groups Printed- 4+ Axle Trucks

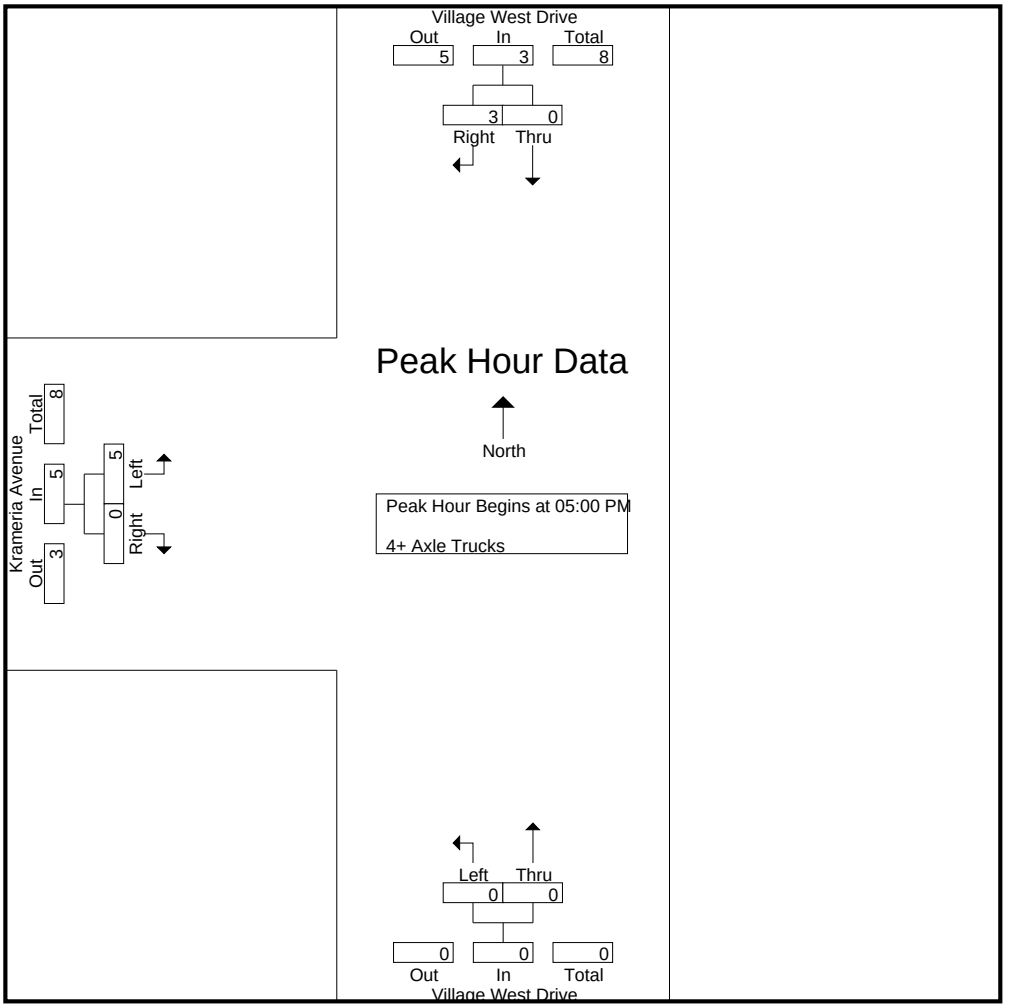
	Village West Drive Southbound				Village West Drive Northbound				Krameria Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	4	1	4	0	0	0	0	1	0	0	1	1	5	6
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
Total	0	4	1	4	0	0	0	0	3	0	0	3	1	7	8
05:00 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
05:15 PM	0	2	0	2	0	0	0	0	2	0	0	2	0	4	4
05:30 PM	0	1	1	1	0	0	0	0	0	0	0	0	1	1	2
05:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
Total	0	3	1	3	0	0	0	0	5	0	0	5	1	8	9
Grand Total	0	7	2	7	0	0	0	0	8	0	0	8	2	15	17
Apprch %	0	100			0	0			100	0					
Total %	0	46.7		46.7	0	0		0	53.3	0		53.3	11.8	88.2	

	Village West Drive Southbound			Village West Drive Northbound			Krameria Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	**2**	0	**2**	2
05:15 PM	0	**2**	**2**	0	0	0	2	0	2	**4**
05:30 PM	0	1	1	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	3	3	0	0	0	5	0	5	8
% App. Total	0	100		0	0		100	0		
PHF	.000	.375	.375	.000	.000	.000	.625	.000	.625	.500

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue
Weather: Clear

File Name : 25_CRV_Village W_Krameria PM
Site Code : 05119542
Start Date : 8/20/2019
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	**2**	0	**2**
+15 mins.	0	**2**	**2**	0	0	0	2	0	2
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	3	3	0	0	0	5	0	5
% App. Total	0	100		0	0		100	0	
PHF	.000	.375	.375	.000	.000	.000	.625	.000	.625

Location: County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue

Date: 8/20/2019
Day: Tuesday

PEDESTRIANS

	North Leg Village West Drive	East Leg Dead End	South Leg Village West Drive	West Leg Krameria Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Village West Drive	East Leg Dead End	South Leg Village West Drive	West Leg Krameria Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Location: County of Riverside
N/S: Village West Drive
E/W: Krameria Avenue

Date: 8/20/2019
Day: Tuesday

BICYCLES

	Southbound Village West Drive			Westbound Dead End			Northbound Village West Drive			Eastbound Krameria Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	1	0	1	2

	Southbound Village West Drive			Westbound Dead End			Northbound Village West Drive			Eastbound Krameria Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Appendix B

Intersection LOS Worksheets

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	0	1302	37	332	1602	25	80
Future Volume (veh/h)	0	1302	37	332	1602	25	80
Initial Q (Qb), veh		0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		1385	39	353	1704	27	85
Peak Hour Factor		0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %		2	2	2	2	2	2
Cap, veh/h		2370	736	531	3569	267	644
Arrive On Green		0.46	0.46	0.15	0.70	0.08	0.08
Sat Flow, veh/h		5274	1585	3456	5274	3456	2790
Grp Volume(v), veh/h		1385	39	353	1704	27	85
Grp Sat Flow(s),veh/h/ln		1702	1585	1728	1702	1728	1395
Q Serve(g_s), s		10.3	0.7	5.0	7.8	0.4	1.3
Cycle Q Clear(g_c), s		10.3	0.7	5.0	7.8	0.4	1.3
Prop In Lane			1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h		2370	736	531	3569	267	644
V/C Ratio(X)		0.58	0.05	0.66	0.48	0.10	0.13
Avail Cap(c_a), veh/h		5557	1725	1520	8217	1667	1774
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		10.2	7.6	20.7	3.5	22.2	15.8
Incr Delay (d2), s/veh		0.2	0.0	1.4	0.1	0.2	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		2.4	0.2	1.7	0.3	0.1	0.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh		10.4	7.7	22.1	3.6	22.4	15.9
LnGrp LOS		B	A	C	A	C	B
Approach Vol, veh/h		1424			2057	112	
Approach Delay, s/veh		10.4			6.8	17.5	
Approach LOS		B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.2	30.6				42.7	9.1
Change Period (Y+Rc), s	* 4.2	6.5				6.5	5.1
Max Green Setting (Gmax), s	* 23	56.4				83.4	25.0
Max Q Clear Time (g_c+I1), s	7.0	12.3				9.8	3.3
Green Ext Time (p_c), s	1.0	11.7				17.8	0.3

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	57	5	7	46	0	97	253
Future Volume (veh/h)	57	5	7	46	0	97	253
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	73	6	9	59		124	324
Peak Hour Factor	0.78	0.78	0.78	0.78		0.78	0.78
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	250	115	852	2583		2583	1267
Arrive On Green	0.07	0.07	0.73	0.73		0.73	0.73
Sat Flow, veh/h	3456	1585	942	3647		3647	1585
Grp Volume(v), veh/h	73	6	9	59		124	324
Grp Sat Flow(s),veh/h/ln	1728	1585	942	1777		1777	1585
Q Serve(g_s), s	0.8	0.1	0.1	0.2		0.4	2.1
Cycle Q Clear(g_c), s	0.8	0.1	0.5	0.2		0.4	2.1
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	250	115	852	2583		2583	1267
V/C Ratio(X)	0.29	0.05	0.01	0.02		0.05	0.26
Avail Cap(c_a), veh/h	1869	857	852	2583		2583	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	18.0	17.6	1.7	1.5		1.6	1.0
Incr Delay (d2), s/veh	0.6	0.2	0.0	0.0		0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.0		0.0	0.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	18.6	17.8	1.7	1.6		1.6	1.5
LnGrp LOS	B	B	A	A		A	A
Approach Vol, veh/h	79			68		448	
Approach Delay, s/veh	18.5			1.6		1.5	
Approach LOS	B			A		A	

Timer - Assigned Phs		2		4		6	
Phs Duration (G+Y+Rc), s		33.8		7.1		33.8	
Change Period (Y+Rc), s		4.1		4.1		4.1	
Max Green Setting (Gmax), s		29.7		22.1		29.7	
Max Q Clear Time (g_c+I1), s		2.5		2.8		4.1	
Green Ext Time (p_c), s		0.3		0.2		1.8	

Intersection Summary	
HCM 6th Ctrl Delay	3.8
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	42	15	122	138	8	21
Future Vol, veh/h	42	15	122	138	8	21
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	17	139	157	9	24
Number of Lanes	2	0	1	2	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	7.9	8.1	7.8
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	0%	100%	48%	0%	100%	100%
Vol Right, %	0%	100%	0%	52%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	8	21	28	29	122	69	69
LT Vol	8	0	0	0	122	0	0
Through Vol	0	0	28	14	0	69	69
RT Vol	0	21	0	15	0	0	0
Lane Flow Rate	9	24	32	33	139	78	78
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.015	0.031	0.045	0.044	0.2	0.102	0.064
Departure Headway (Hd)	5.891	4.691	5.147	4.785	5.183	4.683	2.947
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	611	767	699	752	685	757	1189
Service Time	3.597	2.397	2.852	2.489	2.968	2.467	0.731
HCM Lane V/C Ratio	0.015	0.031	0.046	0.044	0.203	0.103	0.066
HCM Control Delay	8.7	7.5	8.1	7.7	9.3	8	5.9
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.1	0.1	0.1	0.7	0.3	0.2

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	10	10	10	10	6	10	12	10	27	54	54
Future Vol, veh/h	12	10	10	10	10	6	10	12	10	27	54	54
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	11	11	11	11	7	11	14	11	31	61	61
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	7.5	7.5	7.4	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	31%	38%	38%	33%	0%
Vol Thru, %	38%	31%	38%	67%	0%
Vol Right, %	31%	31%	23%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	32	26	81	54
LT Vol	10	12	10	27	0
Through Vol	12	10	10	54	0
RT Vol	10	10	6	0	54
Lane Flow Rate	36	36	30	92	61
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.042	0.043	0.036	0.124	0.068
Departure Headway (Hd)	4.135	4.286	4.343	4.833	3.965
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	853	840	829	739	898
Service Time	2.221	2.287	2.344	2.581	1.712
HCM Lane V/C Ratio	0.042	0.043	0.036	0.124	0.068
HCM Control Delay	7.4	7.5	7.5	8.3	7
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1	0.4	0.2

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	0	1360	20	154	1267	20	206
Future Volume (veh/h)	0	1360	20	154	1267	20	206
Initial Q (Qb), veh		0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		1462	22	166	1362	22	222
Peak Hour Factor		0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %		2	2	2	2	2	2
Cap, veh/h		2491	773	303	3353	413	578
Arrive On Green		0.49	0.49	0.09	0.66	0.12	0.12
Sat Flow, veh/h		5274	1585	3456	5274	3456	2790
Grp Volume(v), veh/h		1462	22	166	1362	22	222
Grp Sat Flow(s),veh/h/ln		1702	1585	1728	1702	1728	1395
Q Serve(g_s), s		10.6	0.4	2.4	6.5	0.3	3.6
Cycle Q Clear(g_c), s		10.6	0.4	2.4	6.5	0.3	3.6
Prop In Lane			1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h		2491	773	303	3353	413	578
V/C Ratio(X)		0.59	0.03	0.55	0.41	0.05	0.38
Avail Cap(c_a), veh/h		5560	1726	1521	8221	1668	1591
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		9.5	6.9	22.6	4.2	20.2	17.7
Incr Delay (d2), s/veh		0.2	0.0	1.5	0.1	0.1	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		2.4	0.1	0.9	0.6	0.1	1.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh		9.7	6.9	24.2	4.2	20.3	18.1
LnGrp LOS		A	A	C	A	C	B
Approach Vol, veh/h		1484			1528	244	
Approach Delay, s/veh		9.7			6.4	18.3	
Approach LOS		A			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.7	31.8				40.5	11.3
Change Period (Y+Rc), s	* 4.2	6.5				6.5	5.1
Max Green Setting (Gmax), s	* 23	56.4				83.4	25.0
Max Q Clear Time (g_c+I1), s	4.4	12.6				8.5	5.6
Green Ext Time (p_c), s	0.4	12.6				11.8	0.8

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	185	2	5	45	0	68	106
Future Volume (veh/h)	185	2	5	45	0	68	106
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	206	2	6	50		76	118
Peak Hour Factor	0.90	0.90	0.90	0.90		0.90	0.90
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	372	171	993	2485		2485	1279
Arrive On Green	0.11	0.11	0.70	0.70		0.70	0.70
Sat Flow, veh/h	3456	1585	1189	3647		3647	1585
Grp Volume(v), veh/h	206	2	6	50		76	118
Grp Sat Flow(s),veh/h/ln	1728	1585	1189	1777		1777	1585
Q Serve(g_s), s	2.4	0.0	0.1	0.2		0.3	0.7
Cycle Q Clear(g_c), s	2.4	0.0	0.3	0.2		0.3	0.7
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	372	171	993	2485		2485	1279
V/C Ratio(X)	0.55	0.01	0.01	0.02		0.03	0.09
Avail Cap(c_a), veh/h	1798	825	993	2485		2485	1279
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	18.0	16.9	2.0	1.9		2.0	0.9
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0		0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.0		0.0	0.1
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	19.3	17.0	2.0	2.0		2.0	1.0
LnGrp LOS	B	B	A	A		A	A
Approach Vol, veh/h	208			56		194	
Approach Delay, s/veh	19.3			2.0		1.4	
Approach LOS	B			A		A	

Timer - Assigned Phs		2		4		6	
Phs Duration (G+Y+Rc), s		33.8		8.7		33.8	
Change Period (Y+Rc), s		4.1		4.1		4.1	
Max Green Setting (Gmax), s		29.7		22.1		29.7	
Max Q Clear Time (g_c+I1), s		2.3		4.4		2.7	
Green Ext Time (p_c), s		0.2		0.6		0.8	

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	98	4	18	94	21	89
Future Vol, veh/h	98	4	18	94	21	89
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	5	20	107	24	101
Number of Lanes	2	0	1	2	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	8.3	7.5	8
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	0%	100%	89%	0%	100%	100%
Vol Right, %	0%	100%	0%	11%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	21	89	65	37	18	47	47
LT Vol	21	0	0	0	18	0	0
Through Vol	0	0	65	33	0	47	47
RT Vol	0	89	0	4	0	0	0
Lane Flow Rate	24	101	74	42	20	53	53
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.037	0.125	0.105	0.058	0.032	0.076	0.05
Departure Headway (Hd)	5.639	4.439	5.093	5.017	5.606	5.104	3.363
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	636	808	705	715	640	703	1065
Service Time	3.362	2.161	2.816	2.74	3.326	2.824	1.083
HCM Lane V/C Ratio	0.038	0.125	0.105	0.059	0.031	0.075	0.05
HCM Control Delay	8.6	7.8	8.4	8.1	8.5	8.2	6.3
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.4	0.4	0.2	0.1	0.2	0.2

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	10	10	10	10	22	20	44	10	4	9	9
Future Vol, veh/h	44	10	10	10	10	22	20	44	10	4	9	9
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	11	11	11	11	25	23	50	11	5	10	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	7.7	7.2	7.8	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	27%	69%	24%	31%	0%
Vol Thru, %	59%	16%	24%	69%	0%
Vol Right, %	14%	16%	52%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	74	64	42	13	9
LT Vol	20	44	10	4	0
Through Vol	44	10	10	9	0
RT Vol	10	10	22	0	9
Lane Flow Rate	84	73	48	15	10
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.099	0.085	0.052	0.02	0.012
Departure Headway (Hd)	4.235	4.201	3.91	4.944	4.088
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	838	843	902	718	865
Service Time	2.303	2.275	1.994	2.719	1.862
HCM Lane V/C Ratio	0.1	0.087	0.053	0.021	0.012
HCM Control Delay	7.8	7.7	7.2	7.8	6.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.3	0.3	0.2	0.1	0

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	0	1302	71	375	1602	35	93
Future Volume (veh/h)	0	1302	71	375	1602	35	93
Initial Q (Qb), veh		0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		1385	76	399	1704	37	99
Peak Hour Factor		0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %		2	2	2	2	2	2
Cap, veh/h		2345	728	577	3595	279	691
Arrive On Green		0.46	0.46	0.17	0.70	0.08	0.08
Sat Flow, veh/h		5274	1585	3456	5274	3456	2790
Grp Volume(v), veh/h		1385	76	399	1704	37	99
Grp Sat Flow(s),veh/h/ln		1702	1585	1728	1702	1728	1395
Q Serve(g_s), s		10.8	1.5	5.9	8.0	0.5	1.5
Cycle Q Clear(g_c), s		10.8	1.5	5.9	8.0	0.5	1.5
Prop In Lane			1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h		2345	728	577	3595	279	691
V/C Ratio(X)		0.59	0.10	0.69	0.47	0.13	0.14
Avail Cap(c_a), veh/h		5343	1658	1462	7900	1603	1759
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		10.8	8.3	21.1	3.5	23.0	15.8
Incr Delay (d2), s/veh		0.2	0.1	1.5	0.1	0.2	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		2.6	0.3	2.0	0.4	0.2	0.4
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh		11.1	8.3	22.6	3.6	23.2	15.9
LnGrp LOS		B	A	C	A	C	B
Approach Vol, veh/h		1461			2103	136	
Approach Delay, s/veh		10.9			7.2	17.9	
Approach LOS		B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	13.2	31.3				44.5	9.4
Change Period (Y+Rc), s	* 4.2	6.5				6.5	5.1
Max Green Setting (Gmax), s	* 23	56.4				83.4	25.0
Max Q Clear Time (g_c+I1), s	7.9	12.8				10.0	3.5
Green Ext Time (p_c), s	1.2	11.9				17.7	0.4

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	80	5	7	46	0	97	330
Future Volume (veh/h)	80	5	7	46	0	97	330
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	103	6	9	59		124	423
Peak Hour Factor	0.78	0.78	0.78	0.78		0.78	0.78
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	298	137	781	2545		2545	1272
Arrive On Green	0.09	0.09	0.72	0.72		0.72	0.72
Sat Flow, veh/h	3456	1585	860	3647		3647	1585
Grp Volume(v), veh/h	103	6	9	59		124	423
Grp Sat Flow(s),veh/h/ln	1728	1585	860	1777		1777	1585
Q Serve(g_s), s	1.2	0.1	0.1	0.2		0.4	3.0
Cycle Q Clear(g_c), s	1.2	0.1	0.6	0.2		0.4	3.0
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	298	137	781	2545		2545	1272
V/C Ratio(X)	0.35	0.04	0.01	0.02		0.05	0.33
Avail Cap(c_a), veh/h	1841	845	781	2545		2545	1272
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	17.8	17.4	1.8	1.7		1.7	1.1
Incr Delay (d2), s/veh	0.7	0.1	0.0	0.0		0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.0		0.0	0.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	18.5	17.5	1.8	1.7		1.8	1.8
LnGrp LOS	B	B	A	A		A	A
Approach Vol, veh/h	109			68		547	
Approach Delay, s/veh	18.5			1.7		1.8	
Approach LOS	B			A		A	

Timer - Assigned Phs		2		4		6	
Phs Duration (G+Y+Rc), s		33.8		7.7		33.8	
Change Period (Y+Rc), s		4.1		4.1		4.1	
Max Green Setting (Gmax), s		29.7		22.1		29.7	
Max Q Clear Time (g_c+I1), s		2.6		3.2		5.0	
Green Ext Time (p_c), s		0.3		0.3		2.2	

Intersection Summary		
HCM 6th Ctrl Delay		4.3
HCM 6th LOS		A

Notes

User approved ignoring U-Turning movement.

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	42	15	199	138	8	44
Future Vol, veh/h	42	15	199	138	8	44
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	17	226	157	9	50
Number of Lanes	2	0	1	2	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	8.2	9.2	8.2
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	0%	100%	48%	0%	100%	100%
Vol Right, %	0%	100%	0%	52%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	8	44	28	29	199	69	69
LT Vol	8	0	0	0	199	0	0
Through Vol	0	0	28	14	0	69	69
RT Vol	0	44	0	15	0	0	0
Lane Flow Rate	9	50	32	33	226	78	78
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.015	0.068	0.048	0.046	0.335	0.105	0.068
Departure Headway (Hd)	6.132	4.931	5.405	5.042	5.34	4.839	3.101
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	585	727	664	711	676	743	1156
Service Time	3.859	2.659	3.128	2.765	3.056	2.555	0.817
HCM Lane V/C Ratio	0.015	0.069	0.048	0.046	0.334	0.105	0.067
HCM Control Delay	9	8	8.4	8	10.7	8.1	6
HCM Lane LOS	A	A	A	A	B	A	A
HCM 95th-tile Q	0	0.2	0.2	0.1	1.5	0.4	0.2

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	10	10	10	10	6	10	12	10	27	54	131
Future Vol, veh/h	35	10	10	10	10	6	10	12	10	27	54	131
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	11	11	11	11	7	11	14	11	31	61	149
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	8	7.7	7.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	31%	64%	38%	33%	0%
Vol Thru, %	38%	18%	38%	67%	0%
Vol Right, %	31%	18%	23%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	55	26	81	131
LT Vol	10	35	10	27	0
Through Vol	12	10	10	54	0
RT Vol	10	10	6	0	131
Lane Flow Rate	36	62	30	92	149
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.044	0.08	0.037	0.125	0.166
Departure Headway (Hd)	4.366	4.587	4.547	4.881	4.013
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	824	786	791	728	883
Service Time	2.374	2.589	2.552	2.657	1.788
HCM Lane V/C Ratio	0.044	0.079	0.038	0.126	0.169
HCM Control Delay	7.6	8	7.7	8.4	7.6
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.1	0.4	0.6

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	0	1360	40	179	1267	40	231
Future Volume (veh/h)	0	1360	40	179	1267	40	231
Initial Q (Qb), veh		0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		1462	43	192	1362	43	248
Peak Hour Factor		0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %		2	2	2	2	2	2
Cap, veh/h		2460	764	326	3341	448	625
Arrive On Green		0.48	0.48	0.09	0.65	0.13	0.13
Sat Flow, veh/h		5274	1585	3456	5274	3456	2790
Grp Volume(v), veh/h		1462	43	192	1362	43	248
Grp Sat Flow(s),veh/h/ln		1702	1585	1728	1702	1728	1395
Q Serve(g_s), s		11.2	0.8	2.9	6.8	0.6	4.1
Cycle Q Clear(g_c), s		11.2	0.8	2.9	6.8	0.6	4.1
Prop In Lane			1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h		2460	764	326	3341	448	625
V/C Ratio(X)		0.59	0.06	0.59	0.41	0.10	0.40
Avail Cap(c_a), veh/h		5359	1664	1466	7925	1608	1561
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		10.1	7.4	23.3	4.4	20.6	17.7
Incr Delay (d2), s/veh		0.2	0.0	1.7	0.1	0.1	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		2.6	0.2	1.0	0.7	0.2	1.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh		10.3	7.4	25.0	4.5	20.7	18.2
LnGrp LOS		B	A	C	A	C	B
Approach Vol, veh/h		1505			1554	291	
Approach Delay, s/veh		10.3			7.0	18.5	
Approach LOS		B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.3	32.4				41.7	12.1
Change Period (Y+Rc), s	* 4.2	6.5				6.5	5.1
Max Green Setting (Gmax), s	* 23	56.4				83.4	25.0
Max Q Clear Time (g_c+I1), s	4.9	13.2				8.8	6.1
Green Ext Time (p_c), s	0.5	12.7				11.8	1.0

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	230	2	5	45	0	68	151
Future Volume (veh/h)	230	2	5	45	0	68	151
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	256	2	6	50		76	168
Peak Hour Factor	0.90	0.90	0.90	0.90		0.90	0.90
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	440	202	935	2430		2430	1286
Arrive On Green	0.13	0.13	0.68	0.68		0.68	0.68
Sat Flow, veh/h	3456	1585	1136	3647		3647	1585
Grp Volume(v), veh/h	256	2	6	50		76	168
Grp Sat Flow(s),veh/h/ln	1728	1585	1136	1777		1777	1585
Q Serve(g_s), s	3.0	0.0	0.1	0.2		0.3	1.0
Cycle Q Clear(g_c), s	3.0	0.0	0.4	0.2		0.3	1.0
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	440	202	935	2430		2430	1286
V/C Ratio(X)	0.58	0.01	0.01	0.02		0.03	0.13
Avail Cap(c_a), veh/h	1758	807	935	2430		2430	1286
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	17.9	16.6	2.3	2.2		2.2	0.9
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.0		0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.0		0.0	0.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	19.1	16.6	2.3	2.2		2.2	1.1
LnGrp LOS	B	B	A	A		A	A
Approach Vol, veh/h	258			56		244	
Approach Delay, s/veh	19.1			2.2		1.4	
Approach LOS	B			A		A	

Timer - Assigned Phs		2		4		6	
Phs Duration (G+Y+Rc), s		33.8		9.6		33.8	
Change Period (Y+Rc), s		4.1		4.1		4.1	
Max Green Setting (Gmax), s		29.7		22.1		29.7	
Max Q Clear Time (g_c+I1), s		2.4		5.0		3.0	
Green Ext Time (p_c), s		0.2		0.8		0.9	

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	98	4	63	94	21	134
Future Vol, veh/h	98	4	63	94	21	134
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	5	72	107	24	152
Number of Lanes	2	0	1	2	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	3	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	3
HCM Control Delay	8.7	8.1	8.5
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3
Vol Left, %	100%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	0%	100%	89%	0%	100%	100%
Vol Right, %	0%	100%	0%	11%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	21	134	65	37	63	47	47
LT Vol	21	0	0	0	63	0	0
Through Vol	0	0	65	33	0	47	47
RT Vol	0	134	0	4	0	0	0
Lane Flow Rate	24	152	74	42	72	53	53
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.038	0.194	0.11	0.061	0.114	0.078	0.052
Departure Headway (Hd)	5.797	4.596	5.349	5.272	5.752	5.25	3.507
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	618	780	669	678	623	682	1017
Service Time	3.533	2.332	3.089	3.013	3.488	2.985	1.241
HCM Lane V/C Ratio	0.039	0.195	0.111	0.062	0.116	0.078	0.052
HCM Control Delay	8.8	8.4	8.8	8.4	9.2	8.4	6.4
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.7	0.4	0.2	0.4	0.3	0.2

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	10	10	10	10	22	20	44	10	4	9	54
Future Vol, veh/h	89	10	10	10	10	22	20	44	10	4	9	54
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	101	11	11	11	11	25	23	50	11	5	10	61
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	8.3	7.4	8	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	27%	82%	24%	31%	0%
Vol Thru, %	59%	9%	24%	69%	0%
Vol Right, %	14%	9%	52%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	74	109	42	13	54
LT Vol	20	89	10	4	0
Through Vol	44	10	10	9	0
RT Vol	10	10	22	0	54
Lane Flow Rate	84	124	48	15	61
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.105	0.153	0.055	0.021	0.073
Departure Headway (Hd)	4.488	4.459	4.172	5.155	4.298
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	801	808	861	697	836
Service Time	2.497	2.47	2.185	2.865	2.008
HCM Lane V/C Ratio	0.105	0.153	0.056	0.022	0.073
HCM Control Delay	8	8.3	7.4	8	7.3
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0.5	0.2	0.1	0.2

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	0	1717	61	984	2654	44	331
Future Volume (veh/h)	0	1717	61	984	2654	44	331
Initial Q (Qb), veh		0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1841	1781	1663	1811	1767	1500
Adj Flow Rate, veh/h		1866	66	1070	2885	48	360
Peak Hour Factor		0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %		4	8	16	6	9	27
Cap, veh/h		1791	538	1132	3778	417	1110
Arrive On Green		0.36	0.36	0.37	0.76	0.13	0.13
Sat Flow, veh/h		5191	1510	3072	5107	3264	2237
Grp Volume(v), veh/h		1866	66	1070	2885	48	360
Grp Sat Flow(s),veh/h/ln		1675	1510	1536	1648	1632	1119
Q Serve(g_s), s		38.2	3.2	36.2	35.4	1.4	10.4
Cycle Q Clear(g_c), s		38.2	3.2	36.2	35.4	1.4	10.4
Prop In Lane			1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h		1791	538	1132	3778	417	1110
V/C Ratio(X)		1.04	0.12	0.95	0.76	0.12	0.32
Avail Cap(c_a), veh/h		1791	538	1175	3848	761	1346
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		34.5	23.2	32.8	7.2	41.4	16.2
Incr Delay (d2), s/veh		33.0	0.1	14.8	0.9	0.1	0.2
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		19.5	1.1	14.4	7.3	0.6	2.5
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh		67.5	23.3	47.6	8.1	41.5	16.4
LnGrp LOS		F	C	D	A	D	B
Approach Vol, veh/h		1932			3955	408	
Approach Delay, s/veh		66.0			18.8	19.3	
Approach LOS		E			B	B	

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	43.7	44.7				88.4		18.8
Change Period (Y+Rc), s	* 4.2	6.5				6.5		5.1
Max Green Setting (Gmax), s	* 41	38.2				83.4		25.0
Max Q Clear Time (g_c+I1), s	38.2	40.2				37.4		12.4
Green Ext Time (p_c), s	1.3	0.0				36.6		1.3

Intersection Summary	
HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	324	19	45	49	0	103	920
Future Volume (veh/h)	324	19	45	49	0	103	920
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1441	1737	1781	1796		1841	1633
Adj Flow Rate, veh/h	352	21	49	53		112	1000
Peak Hour Factor	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	31	11	8	7		4	18
Cap, veh/h	539	298	461	2004		2054	1093
Arrive On Green	0.20	0.20	0.59	0.59		0.59	0.59
Sat Flow, veh/h	2662	1472	483	3503		3589	1384
Grp Volume(v), veh/h	352	21	49	53		112	1000
Grp Sat Flow(s),veh/h/ln	1331	1472	483	1706		1749	1384
Q Serve(g_s), s	4.7	0.5	1.9	0.3		0.5	21.3
Cycle Q Clear(g_c), s	4.7	0.5	2.4	0.3		0.5	21.3
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	539	298	461	2004		2054	1093
V/C Ratio(X)	0.65	0.07	0.11	0.03		0.05	0.91
Avail Cap(c_a), veh/h	1972	1091	461	2004		2054	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	14.3	12.6	3.9	3.4		3.4	3.1
Incr Delay (d2), s/veh	1.3	0.1	0.1	0.0		0.0	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.1	0.1	0.0		0.1	7.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	15.6	12.7	4.0	3.4		3.4	14.8
LnGrp LOS	B	B	A	A		A	B
Approach Vol, veh/h	373			102		1112	
Approach Delay, s/veh	15.5			3.7		13.7	
Approach LOS	B			A		B	

Timer - Assigned Phs		2		4		6	
Phs Duration (G+Y+Rc), s		27.0		12.0		27.0	
Change Period (Y+Rc), s		4.1		4.1		4.1	
Max Green Setting (Gmax), s		22.9		28.9		22.9	
Max Q Clear Time (g_c+I1), s		4.4		6.7		23.3	
Green Ext Time (p_c), s		0.7		1.3		0.0	

Intersection Summary		
HCM 6th Ctrl Delay	13.5	
HCM 6th LOS	B	

Notes

User approved ignoring U-Turning movement.

Intersection	
Intersection Delay, s/veh	14.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	296	15	129	838	0	9	0	22	2	0	0
Future Vol, veh/h	0	296	15	129	838	0	9	0	22	2	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	32	0	0	18	0	0	0	0	0	0	0
Mvmt Flow	0	322	16	140	911	0	10	0	24	2	0	0
Number of Lanes	1	2	0	1	2	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	13	15.5	10.3	11
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	0%	100%	0%	0%	100%
Vol Thru, %	0%	0%	100%	100%	87%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	13%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	22	0	197	114	129	419	419	2
LT Vol	9	0	0	0	0	129	0	0	2
Through Vol	0	0	0	197	99	0	419	419	0
RT Vol	0	22	0	0	15	0	0	0	0
Lane Flow Rate	10	24	0	214	124	140	455	455	2
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.022	0.046	0	0.413	0.216	0.232	0.728	0.474	0.005
Departure Headway (Hd)	8.168	6.953	6.394	6.94	6.302	5.952	5.757	3.743	8.276
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	440	517	0	521	573	597	619	943	434
Service Time	5.887	4.671	4.096	4.642	4.004	3.751	3.556	1.541	5.996
HCM Lane V/C Ratio	0.023	0.046	0	0.411	0.216	0.235	0.735	0.483	0.005
HCM Control Delay	11.1	10	9.1	14.4	10.7	10.6	22.6	10	11
HCM Lane LOS	B	A	N	B	B	B	C	A	B
HCM 95th-tile Q	0.1	0.1	0	2	0.8	0.9	6.2	2.6	0

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	11	11	11	11	6	11	12	11	29	58	58
Future Vol, veh/h	12	11	11	11	11	6	11	12	11	29	58	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	12	12	12	12	7	12	13	12	32	63	63
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	7.5	7.5	7.4	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	32%	35%	39%	33%	0%
Vol Thru, %	35%	32%	39%	67%	0%
Vol Right, %	32%	32%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	34	28	87	58
LT Vol	11	12	11	29	0
Through Vol	12	11	11	58	0
RT Vol	11	11	6	0	58
Lane Flow Rate	37	37	30	95	63
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.042	0.044	0.037	0.127	0.07
Departure Headway (Hd)	4.137	4.284	4.365	4.838	3.97
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	853	841	825	739	897
Service Time	2.225	2.285	2.366	2.585	1.716
HCM Lane V/C Ratio	0.043	0.044	0.036	0.129	0.07
HCM Control Delay	7.4	7.5	7.5	8.3	7
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1	0.4	0.2

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	0	2417	58	549	1969	60	902
Future Volume (veh/h)	0	2417	58	549	1969	60	902
Initial Q (Qb), veh		0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		2627	63	597	2140	65	980
Peak Hour Factor		0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %		2	2	2	2	2	2
Cap, veh/h		2485	771	599	3549	720	1065
Arrive On Green		0.49	0.49	0.17	0.69	0.21	0.21
Sat Flow, veh/h		5274	1585	3456	5274	3456	2790
Grp Volume(v), veh/h		2627	63	597	2140	65	980
Grp Sat Flow(s),veh/h/ln		1702	1585	1728	1702	1728	1395
Q Serve(g_s), s		58.4	2.5	20.7	26.4	1.8	25.0
Cycle Q Clear(g_c), s		58.4	2.5	20.7	26.4	1.8	25.0
Prop In Lane			1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h		2485	771	599	3549	720	1065
V/C Ratio(X)		1.06	0.08	1.00	0.60	0.09	0.92
Avail Cap(c_a), veh/h		2485	771	599	3549	720	1065
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		30.8	16.5	49.6	9.6	38.3	35.4
Incr Delay (d2), s/veh		35.4	0.0	35.9	0.3	0.1	12.6
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		29.3	0.9	11.5	7.7	0.8	14.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh		66.2	16.5	85.4	9.9	38.4	48.0
LnGrp LOS		F	B	F	A	D	D
Approach Vol, veh/h		2690			2737	1045	
Approach Delay, s/veh		65.1			26.4	47.4	
Approach LOS		E			C	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	25.0	64.9				89.9	30.1
Change Period (Y+Rc), s	* 4.2	6.5				6.5	5.1
Max Green Setting (Gmax), s	* 21	58.4				83.4	25.0
Max Q Clear Time (g_c+I1), s	22.7	60.4				28.4	27.0
Green Ext Time (p_c), s	0.0	0.0				25.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	45.9
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	919	46	28	47	0	72	536
Future Volume (veh/h)	919	46	28	47	0	72	536
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	999	50	30	51		78	583
Peak Hour Factor	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	1285	589	494	1638		1638	1320
Arrive On Green	0.37	0.37	0.46	0.46		0.46	0.46
Sat Flow, veh/h	3456	1585	774	3647		3647	1585
Grp Volume(v), veh/h	999	50	30	51		78	583
Grp Sat Flow(s),veh/h/ln	1728	1585	774	1777		1777	1585
Q Serve(g_s), s	12.5	1.0	1.1	0.4		0.6	4.8
Cycle Q Clear(g_c), s	12.5	1.0	1.7	0.4		0.6	4.8
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	1285	589	494	1638		1638	1320
V/C Ratio(X)	0.78	0.08	0.06	0.03		0.05	0.44
Avail Cap(c_a), veh/h	2058	944	494	1638		1638	1320
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	13.6	10.0	7.7	7.2		7.3	1.1
Incr Delay (d2), s/veh	1.0	0.1	0.2	0.0		0.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.3	0.2	0.1		0.2	4.1
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	14.7	10.0	8.0	7.3		7.3	2.2
LnGrp LOS	B	B	A	A		A	A
Approach Vol, veh/h	1049			81		661	
Approach Delay, s/veh	14.4			7.5		2.8	
Approach LOS	B			A		A	

Timer - Assigned Phs		2		4		6	
Phs Duration (G+Y+Rc), s		26.7		22.3		26.7	
Change Period (Y+Rc), s		4.1		4.1		4.1	
Max Green Setting (Gmax), s		22.6		29.2		22.6	
Max Q Clear Time (g_c+I1), s		3.7		14.5		6.8	
Green Ext Time (p_c), s		0.3		3.7		2.4	

Intersection Summary		
HCM 6th Ctrl Delay	9.8	
HCM 6th LOS	A	

Notes

User approved ignoring U-Turning movement.

Intersection	
Intersection Delay, s/veh	53.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	842	4	19	487	9	22	0	95	0	0	0
Future Vol, veh/h	0	842	4	19	487	9	22	0	95	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	13	0	12	16	0	5	0	0	0	0	0
Mvmt Flow	0	915	4	21	529	10	24	0	103	0	0	0
Number of Lanes	1	2	0	1	2	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	77.8	21.6	12.7	0
HCM LOS	F	C	B	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	100%	99%	0%	100%	95%	100%
Vol Right, %	0%	100%	0%	0%	1%	0%	0%	5%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	95	0	561	285	19	325	171	0
LT Vol	22	0	0	0	0	19	0	0	0
Through Vol	0	0	0	561	281	0	325	162	0
RT Vol	0	95	0	0	4	0	0	9	0
Lane Flow Rate	24	103	0	610	309	21	353	186	0
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.059	0.219	0	1.142	0.559	0.044	0.708	0.357	0
Departure Headway (Hd)	9.253	7.936	6.514	6.737	6.504	7.913	7.475	7.162	9.196
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	389	455	0	543	554	455	487	505	0
Service Time	6.953	5.636	4.249	4.472	4.239	5.613	5.175	4.862	6.896
HCM Lane V/C Ratio	0.062	0.226	0	1.123	0.558	0.046	0.725	0.368	0
HCM Control Delay	12.5	12.8	9.2	108.5	17.2	11	26.3	13.8	11.9
HCM Lane LOS	B	B	N	F	C	B	D	B	N
HCM 95th-tile Q	0.2	0.8	0	20.5	3.4	0.1	5.5	1.6	0

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	11	11	11	11	23	21	47	11	5	9	9
Future Vol, veh/h	47	11	11	11	11	23	21	47	11	5	9	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	12	12	12	12	25	23	51	12	5	10	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	7.7	7.2	7.8	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	27%	68%	24%	36%	0%
Vol Thru, %	59%	16%	24%	64%	0%
Vol Right, %	14%	16%	51%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	79	69	45	14	9
LT Vol	21	47	11	5	0
Through Vol	47	11	11	9	0
RT Vol	11	11	23	0	9
Lane Flow Rate	86	75	49	15	10
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.101	0.088	0.053	0.021	0.011
Departure Headway (Hd)	4.239	4.203	3.925	4.975	4.094
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	837	843	899	713	863
Service Time	2.307	2.277	2.009	2.753	1.871
HCM Lane V/C Ratio	0.103	0.089	0.055	0.021	0.012
HCM Control Delay	7.8	7.7	7.2	7.9	6.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.3	0.3	0.2	0.1	0

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	0	1717	95	1027	2654	54	344
Future Volume (veh/h)	0	1717	95	1027	2654	54	344
Initial Q (Qb), veh		0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1841	1781	1663	1811	1767	1500
Adj Flow Rate, veh/h		1866	103	1116	2885	59	374
Peak Hour Factor		0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %		4	8	16	6	9	27
Cap, veh/h		1758	528	1153	3775	426	1131
Arrive On Green		0.35	0.35	0.38	0.76	0.13	0.13
Sat Flow, veh/h		5191	1510	3072	5107	3264	2237
Grp Volume(v), veh/h		1866	103	1116	2885	59	374
Grp Sat Flow(s),veh/h/ln		1675	1510	1536	1648	1632	1119
Q Serve(g_s), s		38.2	5.2	38.9	36.2	1.7	10.8
Cycle Q Clear(g_c), s		38.2	5.2	38.9	36.2	1.7	10.8
Prop In Lane			1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h		1758	528	1153	3775	426	1131
V/C Ratio(X)		1.06	0.20	0.97	0.76	0.14	0.33
Avail Cap(c_a), veh/h		1758	528	1154	3776	747	1351
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		35.5	24.8	33.5	7.3	42.1	16.0
Incr Delay (d2), s/veh		39.9	0.2	19.3	1.0	0.1	0.2
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		20.7	1.8	16.2	7.7	0.7	2.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh		75.4	25.0	52.7	8.3	42.2	16.2
LnGrp LOS		F	C	D	A	D	B
Approach Vol, veh/h		1969			4001	433	
Approach Delay, s/veh		72.8			20.7	19.7	
Approach LOS		E			C	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	45.2	44.7				89.9	19.3
Change Period (Y+Rc), s	* 4.2	6.5				6.5	5.1
Max Green Setting (Gmax), s	* 41	38.2				83.4	25.0
Max Q Clear Time (g_c+I1), s	40.9	40.2				38.2	12.8
Green Ext Time (p_c), s	0.0	0.0				36.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	36.7
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	347	19	45	49	0	103	997
Future Volume (veh/h)	347	19	45	49	0	103	997
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1441	1737	1781	1796		1841	1633
Adj Flow Rate, veh/h	377	21	49	53		112	1084
Peak Hour Factor	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	31	11	8	7		4	18
Cap, veh/h	567	314	434	1978		2027	1097
Arrive On Green	0.21	0.21	0.58	0.58		0.58	0.58
Sat Flow, veh/h	2662	1472	446	3503		3589	1384
Grp Volume(v), veh/h	377	21	49	53		112	1084
Grp Sat Flow(s),veh/h/ln	1331	1472	446	1706		1749	1384
Q Serve(g_s), s	5.1	0.5	2.1	0.3		0.5	22.9
Cycle Q Clear(g_c), s	5.1	0.5	2.7	0.3		0.5	22.9
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	567	314	434	1978		2027	1097
V/C Ratio(X)	0.66	0.07	0.11	0.03		0.06	0.99
Avail Cap(c_a), veh/h	1946	1076	434	1978		2027	1097
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	14.3	12.4	4.2	3.5		3.6	3.2
Incr Delay (d2), s/veh	1.3	0.1	0.1	0.0		0.0	24.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.1	0.1	0.0		0.1	13.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	15.6	12.5	4.3	3.6		3.6	27.5
LnGrp LOS	B	B	A	A		A	C
Approach Vol, veh/h	398			102		1196	
Approach Delay, s/veh	15.4			3.9		25.2	
Approach LOS	B			A		C	

Timer - Assigned Phs		2		4		6	
Phs Duration (G+Y+Rc), s		27.0		12.5		27.0	
Change Period (Y+Rc), s		4.1		4.1		4.1	
Max Green Setting (Gmax), s		22.9		28.9		22.9	
Max Q Clear Time (g_c+I1), s		4.7		7.1		24.9	
Green Ext Time (p_c), s		0.8		1.4		0.0	

Intersection Summary		
HCM 6th Ctrl Delay		21.7
HCM 6th LOS		C

Notes

User approved ignoring U-Turning movement.

Intersection	
Intersection Delay, s/veh	15.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	296	15	206	838	0	9	0	45	2	0	0
Future Vol, veh/h	0	296	15	206	838	0	9	0	45	2	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	32	0	0	18	0	0	0	0	0	0	0
Mvmt Flow	0	322	16	224	911	0	10	0	49	2	0	0
Number of Lanes	1	2	0	1	2	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	13.8	16.7	10.8	11.4
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	0%	100%	0%	0%	100%
Vol Thru, %	0%	0%	100%	100%	87%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	13%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	45	0	197	114	206	419	419	2
LT Vol	9	0	0	0	0	206	0	0	2
Through Vol	0	0	0	197	99	0	419	419	0
RT Vol	0	45	0	0	15	0	0	0	0
Lane Flow Rate	10	49	0	214	124	224	455	455	2
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.023	0.097	0	0.429	0.225	0.383	0.755	0.5	0.005
Departure Headway (Hd)	8.358	7.141	6.647	7.193	6.554	6.165	5.97	3.952	8.558
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	428	501	0	502	549	584	606	911	418
Service Time	6.115	4.898	4.384	4.931	4.291	3.896	3.701	1.683	6.322
HCM Lane V/C Ratio	0.023	0.098	0	0.426	0.226	0.384	0.751	0.499	0.005
HCM Control Delay	11.3	10.7	9.4	15.3	11.2	12.7	24.8	10.6	11.4
HCM Lane LOS	B	B	N	C	B	B	C	B	B
HCM 95th-tile Q	0.1	0.3	0	2.1	0.9	1.8	6.8	2.9	0

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	11	11	11	11	6	11	12	11	29	58	135
Future Vol, veh/h	35	11	11	11	11	6	11	12	11	29	58	135
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	12	12	12	12	7	12	13	12	32	63	147
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	8	7.8	7.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	32%	61%	39%	33%	0%
Vol Thru, %	35%	19%	39%	67%	0%
Vol Right, %	32%	19%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	57	28	87	135
LT Vol	11	35	11	29	0
Through Vol	12	11	11	58	0
RT Vol	11	11	6	0	135
Lane Flow Rate	37	62	30	95	147
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.045	0.079	0.039	0.128	0.164
Departure Headway (Hd)	4.362	4.58	4.561	4.881	4.013
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	824	786	789	727	882
Service Time	2.373	2.583	2.566	2.66	1.791
HCM Lane V/C Ratio	0.045	0.079	0.038	0.131	0.167
HCM Control Delay	7.6	8	7.8	8.4	7.6
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.1	0.4	0.6

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	0	2417	78	574	1969	80	927
Future Volume (veh/h)	0	2417	78	574	1969	80	927
Initial Q (Qb), veh		0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		2627	85	624	2140	87	1008
Peak Hour Factor		0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %		2	2	2	2	2	2
Cap, veh/h		2485	771	599	3549	720	1065
Arrive On Green		0.49	0.49	0.17	0.69	0.21	0.21
Sat Flow, veh/h		5274	1585	3456	5274	3456	2790
Grp Volume(v), veh/h		2627	85	624	2140	87	1008
Grp Sat Flow(s),veh/h/ln		1702	1585	1728	1702	1728	1395
Q Serve(g_s), s		58.4	3.5	20.8	26.4	2.5	25.0
Cycle Q Clear(g_c), s		58.4	3.5	20.8	26.4	2.5	25.0
Prop In Lane			1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h		2485	771	599	3549	720	1065
V/C Ratio(X)		1.06	0.11	1.04	0.60	0.12	0.95
Avail Cap(c_a), veh/h		2485	771	599	3549	720	1065
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		30.8	16.7	49.6	9.6	38.6	35.9
Incr Delay (d2), s/veh		35.4	0.1	48.1	0.3	0.1	16.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		29.3	1.2	12.5	7.7	1.0	16.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh		66.2	16.8	97.7	9.9	38.6	52.3
LnGrp LOS		F	B	F	A	D	D
Approach Vol, veh/h		2712			2764	1095	
Approach Delay, s/veh		64.7			29.7	51.2	
Approach LOS		E			C	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	25.0	64.9				89.9	30.1
Change Period (Y+Rc), s	* 4.2	6.5				6.5	5.1
Max Green Setting (Gmax), s	* 21	58.4				83.4	25.0
Max Q Clear Time (g_c+I1), s	22.8	60.4				28.4	27.0
Green Ext Time (p_c), s	0.0	0.0				25.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	964	46	28	47	0	72	581
Future Volume (veh/h)	964	46	28	47	0	72	581
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	1048	50	30	51		78	632
Peak Hour Factor	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	1328	609	469	1605		1605	1325
Arrive On Green	0.38	0.38	0.45	0.45		0.45	0.45
Sat Flow, veh/h	3456	1585	739	3647		3647	1585
Grp Volume(v), veh/h	1048	50	30	51		78	632
Grp Sat Flow(s),veh/h/ln	1728	1585	739	1777		1777	1585
Q Serve(g_s), s	13.4	1.0	1.2	0.4		0.6	5.4
Cycle Q Clear(g_c), s	13.4	1.0	1.8	0.4		0.6	5.4
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	1328	609	469	1605		1605	1325
V/C Ratio(X)	0.79	0.08	0.06	0.03		0.05	0.48
Avail Cap(c_a), veh/h	2017	925	469	1605		1605	1325
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	13.6	9.8	8.2	7.6		7.7	1.1
Incr Delay (d2), s/veh	1.2	0.1	0.3	0.0		0.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.3	0.2	0.1		0.2	4.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	14.8	9.8	8.5	7.7		7.7	2.3
LnGrp LOS	B	A	A	A		A	A
Approach Vol, veh/h	1098			81		710	
Approach Delay, s/veh	14.6			8.0		2.9	
Approach LOS	B			A		A	

Timer - Assigned Phs		2		4		6	
Phs Duration (G+Y+Rc), s		26.7		23.3		26.7	
Change Period (Y+Rc), s		4.1		4.1		4.1	
Max Green Setting (Gmax), s		22.6		29.2		22.6	
Max Q Clear Time (g_c+I1), s		3.8		15.4		7.4	
Green Ext Time (p_c), s		0.3		3.8		2.6	

Intersection Summary		
HCM 6th Ctrl Delay		9.9
HCM 6th LOS		A

Notes

User approved ignoring U-Turning movement.

Intersection	
Intersection Delay, s/veh	60.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	842	4	64	487	9	22	0	140	0	0	0
Future Vol, veh/h	0	842	4	64	487	9	22	0	140	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	13	0	12	16	0	5	0	0	0	0	0
Mvmt Flow	0	915	4	70	529	10	24	0	152	0	0	0
Number of Lanes	1	2	0	1	2	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	94.7	22.6	14.6	0
HCM LOS	F	C	B	-

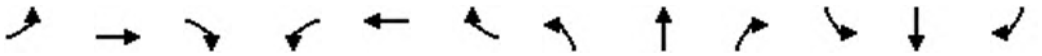
Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	100%	99%	0%	100%	95%	100%
Vol Right, %	0%	100%	0%	0%	1%	0%	0%	5%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	140	0	561	285	64	325	171	0
LT Vol	22	0	0	0	0	64	0	0	0
Through Vol	0	0	0	561	281	0	325	162	0
RT Vol	0	140	0	0	4	0	0	9	0
Lane Flow Rate	24	152	0	610	309	70	353	186	0
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.06	0.33	0	1.204	0.59	0.152	0.73	0.369	0
Departure Headway (Hd)	9.524	8.205	6.879	7.103	6.869	8.23	7.791	7.476	9.699
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	378	441	0	513	526	438	466	484	0
Service Time	7.224	5.905	4.623	4.847	4.613	5.93	5.491	5.176	7.399
HCM Lane V/C Ratio	0.063	0.345	0	1.189	0.587	0.16	0.758	0.384	0
HCM Control Delay	12.8	14.9	9.6	133.1	19.1	12.4	28.8	14.5	12.4
HCM Lane LOS	B	B	N	F	C	B	D	B	N
HCM 95th-tile Q	0.2	1.4	0	22.8	3.8	0.5	5.9	1.7	0

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	92	11	11	11	11	23	21	47	11	5	9	54
Future Vol, veh/h	92	11	11	11	11	23	21	47	11	5	9	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	100	12	12	12	12	25	23	51	12	5	10	59
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	8.3	7.4	8	7.4
HCM LOS	A	A	A	A

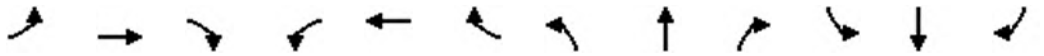
Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	27%	81%	24%	36%	0%
Vol Thru, %	59%	10%	24%	64%	0%
Vol Right, %	14%	10%	51%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	79	114	45	14	54
LT Vol	21	92	11	5	0
Through Vol	47	11	11	9	0
RT Vol	11	11	23	0	54
Lane Flow Rate	86	124	49	15	59
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.107	0.153	0.057	0.022	0.07
Departure Headway (Hd)	4.483	4.454	4.179	5.184	4.301
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	802	808	859	693	836
Service Time	2.496	2.467	2.194	2.896	2.013
HCM Lane V/C Ratio	0.107	0.153	0.057	0.022	0.071
HCM Control Delay	8	8.3	7.4	8	7.3
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0.5	0.2	0.1	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	296	15	206	838	0	9	0	45	2	0	0
Future Volume (veh/h)	0	296	15	206	838	0	9	0	45	2	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1426	1900	1900	1633	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	322	16	224	911	0	10	0	49	2	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	32	0	0	18	0	0	0	0	0	0	0
Cap, veh/h	240	1399	69	735	1653	0	491	0	269	434	0	0
Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00	0.17	0.00	0.17	0.17	0.00	0.00
Sat Flow, veh/h	622	2627	130	1059	3185	0	1440	0	1610	1162	0	0
Grp Volume(v), veh/h	0	165	173	224	911	0	10	0	49	2	0	0
Grp Sat Flow(s),veh/h/ln	622	1354	1402	1059	1552	0	1440	0	1610	1162	0	0
Q Serve(g_s), s	0.0	1.9	2.0	4.3	5.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.9	2.0	6.2	5.8	0.0	0.1	0.0	0.8	0.8	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	240	721	747	735	1653	0	491	0	269	434	0	0
V/C Ratio(X)	0.00	0.23	0.23	0.30	0.55	0.00	0.02	0.00	0.18	0.00	0.00	0.00
Avail Cap(c_a), veh/h	563	1424	1475	1284	3263	0	1188	0	1048	1101	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	3.7	3.7	5.4	4.6	0.0	10.5	0.0	10.7	11.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.2	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.4	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	3.9	3.9	5.6	4.9	0.0	10.5	0.0	11.0	11.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	A
Approach Vol, veh/h		338			1135			59			2	
Approach Delay, s/veh		3.9			5.1			10.9			11.1	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.5		20.5		9.5		20.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		19.5		31.5		19.5		31.5				
Max Q Clear Time (g_c+I1), s		2.8		4.0		2.8		8.2				
Green Ext Time (p_c), s		0.2		1.9		0.0		7.7				

Intersection Summary												
HCM 6th Ctrl Delay			5.0									
HCM 6th LOS			A									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	842	4	64	487	9	22	0	140	0	0	0
Future Volume (veh/h)	0	842	4	64	487	9	22	0	140	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1707	1900	1722	1663	1900	1826	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	915	4	70	529	10	24	0	152	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	13	0	12	16	0	5	0	0	0	0	0
Cap, veh/h	210	1553	7	359	1488	28	717	0	470	0	554	0
Arrive On Green	0.00	0.47	0.47	0.47	0.47	0.47	0.29	0.00	0.29	0.00	0.00	0.00
Sat Flow, veh/h	880	3312	14	560	3172	60	1739	0	1610	0	1900	0
Grp Volume(v), veh/h	0	448	471	70	263	276	24	0	152	0	0	0
Grp Sat Flow(s),veh/h/ln	880	1622	1705	560	1580	1652	1739	0	1610	0	1900	0
Q Serve(g_s), s	0.0	6.9	6.9	3.6	3.6	3.6	0.3	0.0	2.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.9	6.9	10.5	3.6	3.6	0.3	0.0	2.5	0.0	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.04	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	210	761	799	359	741	775	717	0	470	0	554	0
V/C Ratio(X)	0.00	0.59	0.59	0.19	0.36	0.36	0.03	0.00	0.32	0.00	0.00	0.00
Avail Cap(c_a), veh/h	565	1415	1487	585	1378	1441	1321	0	1029	0	1214	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.7	6.7	10.5	5.8	5.8	8.7	0.0	9.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.7	0.3	0.3	0.3	0.0	0.0	0.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	1.3	0.3	0.6	0.6	0.1	0.0	0.7	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.4	7.4	10.8	6.1	6.1	8.7	0.0	9.9	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		919			609			176			0	
Approach Delay, s/veh		7.4			6.6			9.7			0.0	
Approach LOS		A			A			A				
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.1		20.2		14.1		20.2				
Change Period (Y+Rc), s		4.1		4.1		4.1		4.1				
Max Green Setting (Gmax), s		21.9		29.9		21.9		29.9				
Max Q Clear Time (g_c+I1), s		4.5		8.9		0.0		12.5				
Green Ext Time (p_c), s		0.8		5.6		0.0		3.5				
Intersection Summary												
HCM 6th Ctrl Delay			7.4									
HCM 6th LOS			A									

Appendix C

Meridian South Campus TIA Data

Meridian South Campus

TRAFFIC IMPACT ANALYSIS

MARCH JOINT POWERS AUTHORITY (MARCH JPA)

PREPARED BY:

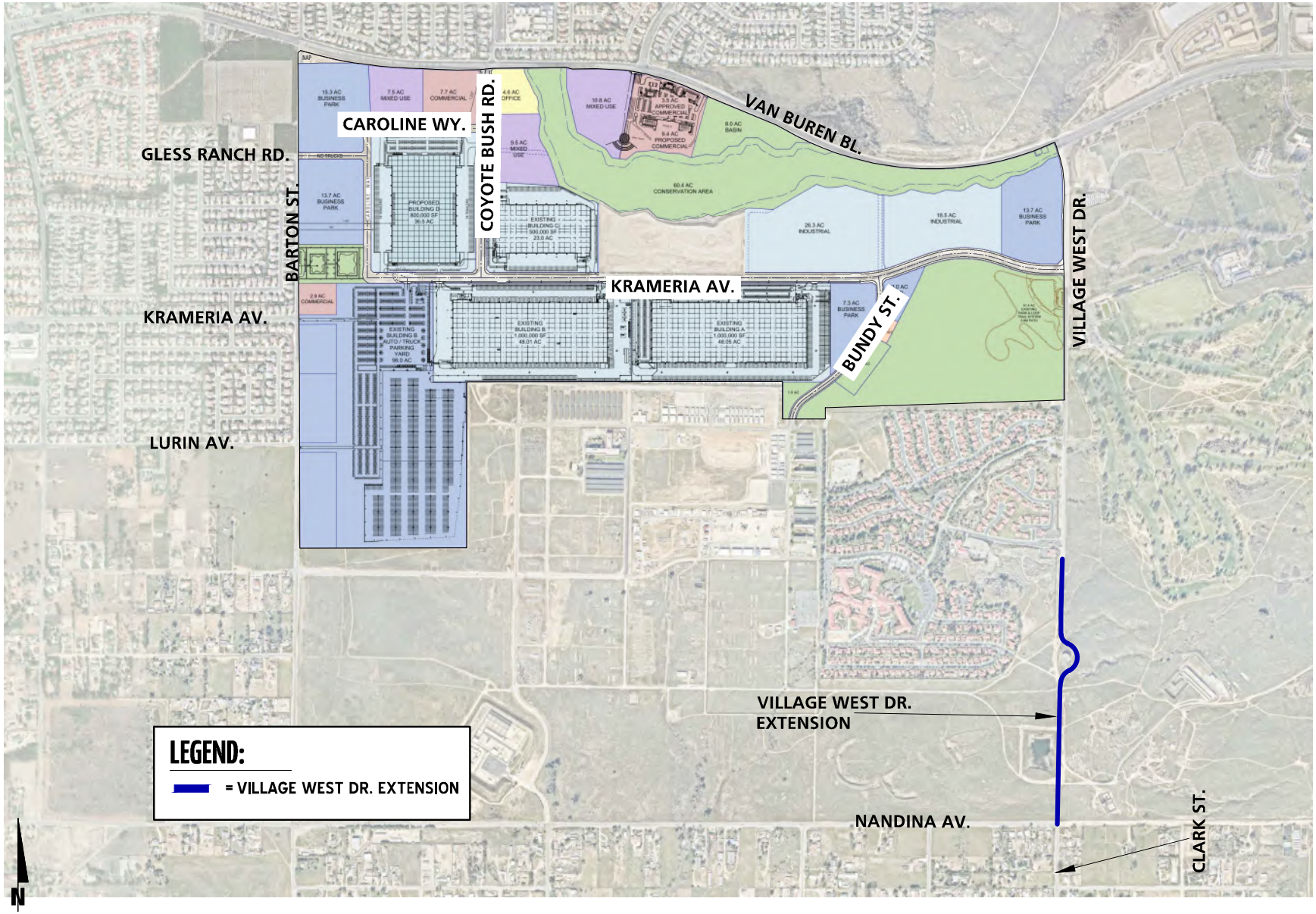
Aric Evatt, PTP
aevatt@urbanxroads.com
(949) 336-5978

Charlene So, PE
cso@urbanxroads.com
(949) 660-1994 x222

Connor Paquin, PE
cpaquin@urbanxroads.com
(949) 660-1994 x6635

APRIL 29, 2020

EXHIBIT 1-1: PRELIMINARY SITE PLAN



- I-215 Southbound, North of Alessandro Bl.
- I-215 Southbound, Off-Ramp at Alessandro Bl.
- I-215 Southbound, Loop-On at Alessandro Bl.
- I-215 Southbound, On-Ramp at Alessandro Bl.
- I-215 Northbound, South of Van Buren Bl.
- I-215 Northbound, Off-Ramp at Van Buren Bl.
- I-215 Northbound, On-Ramp at Van Buren Bl.
- I-215 Northbound, On-Ramp at Van Buren Bl.
- I-215 Northbound, Between Van Buren Bl. and Cactus Av.
- I-215 Northbound, Off-Ramp at Alessandro Bl.
- I-215 Northbound, On-Ramp at Alessandro Bl.
- I-215 Northbound, North of Alessandro Bl.

The Project is anticipated to have a cumulatively considerable impact to the identified freeway mainline segments and merge/diverge ramp junctions, however, no mitigation measures have been identified as no other improvements beyond those planned by the I-215 North Project have been evaluated. Neither Caltrans or the State have adopted a fee program that can ensure that locally contributed impact fees will be tied to improvements along the freeway mainline, and only Caltrans has the jurisdiction over mainline improvements. Because Caltrans has exclusive control over SHS improvements, ensuring that fair share contributions to mainline improvements are actually part of a program tied to implementation is within the jurisdiction of Caltrans. As such, the impacts are considered significant and unavoidable.

1.6 SITE ADJACENT ROADWAY AND SITE ACCESS IMPROVEMENTS

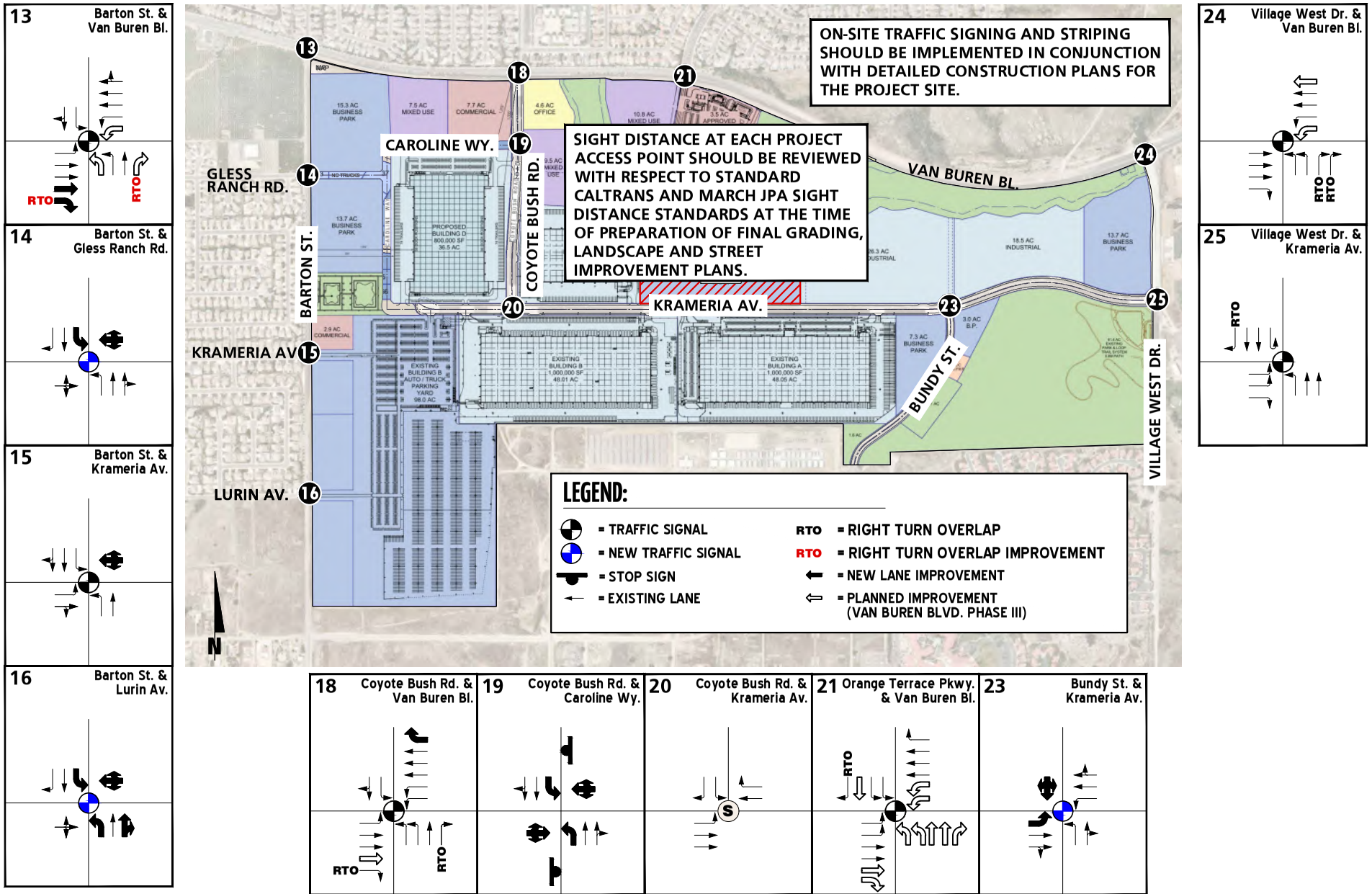
1.6.1 SITE ADJACENT AND SITE ACCESS RECOMMENDATIONS

The following recommendations are based on the improvements needed to accommodate site access. Exhibit 1-4 shows the site adjacent recommendations.

Barton Street is a north-south oriented roadway located along the Project's western boundary. Construct Barton Street at its ultimate half-section width as a Secondary Arterial (112-foot right-of-way) between the Project's northern boundary and Project's southern boundary consistent with the March JPA General Plan Circulation Element.

Van Buren Boulevard is an east-west oriented roadway located along the Project's northern boundary. Construct Van Buren Boulevard at its ultimate half-section width as an Arterial Highway/Urban Highway (120-foot right-of-way) between the Project's western boundary and Project's eastern boundary consistent with the March JPA General Plan Circulation Element.

EXHIBIT 1-4: SITE ADJACENT ROADWAY AND SITE ACCESS RECOMMENDATIONS



URBAN CROSSROADS

Village West Drive is a north-south oriented roadway located along the Project's eastern boundary. The improved portions of Village West Drive currently terminate at Lemay Drive to the south. Construct the extension of Village West Drive to provide a connection between Van Buren Boulevard to the north and Nandina Avenue to the south. The improved Village West Drive would include one through lane in each direction of travel, a center striped median, and a bike lane. Sidewalks would also be provided on either side of the roadway. The total roadway width would be 54-feet, and the length of the extension is expected to be 4,330-linear feet.

Since Coyote Bush Road, Village West Drive, and Krameria Avenue are built out to their ultimate cross-sections according to the March JPA and City of Moreno Valley General Plans, there are no roadway widening recommendations along these roadways. However, additional curb, gutter, and sidewalk improvements are recommended, as needed for site access along the Project's frontage consistent with March JPA standards.

Barton Street & Van Buren Boulevard (#13) – The following improvements are necessary to accommodate site access:

- Project to construct an eastbound through lane and right turn lane.
- Project to modify the traffic signal to implement overlap phasing for the northbound and eastbound right turn lanes.
- Project to construct a 2nd northbound left turn lane.
- Project to construct a 2nd westbound left turn lane.

Barton Street & Gless Ranch Road (#14) – The following improvements are necessary to accommodate site access:

- Project to install a traffic signal.
- Project to construct a southbound left turn lane.
- Project to construct a westbound shared left-through-right turn lane.

Barton Street & Krameria Avenue (#15) – The following improvement is necessary to accommodate site access:

- Project to construct a westbound shared left-through-right turn lane.

Barton Street & Lurin Avenue (#16) – The following improvements are necessary to accommodate site access:

- Project to install a traffic signal.
- Project to construct a northbound left turn lane and shared through-right turn lane.
- Project to construct a southbound left turn lane.
- Project to construct a westbound shared left-through-right turn lane.

Coyote Bush Road & Van Buren Boulevard (#18) – The following improvement is necessary to accommodate site access:

- Project to construct a westbound right turn lane.

Coyote Bush Road & Caroline Way (#19) – The following improvements are necessary to accommodate site access:

- Project to construct a northbound left turn lane.
- Project to construct a southbound left turn lane.
- Project to install a stop control on the eastbound approach and a shared left-through-right turn lane.
- Project to install a stop control on the westbound approach and a shared left-through-right turn lane.

Bundy Street & Krameria Avenue (#23) – The following improvements are necessary to accommodate site access:

- Project to install a traffic signal.
- Project to construct a southbound shared left-through-right turn lane.
- Project to construct an eastbound left turn lane.

At the intersections of Coyote Bush Road & Krameria Avenue (#20) and Village West Drive & Krameria Avenue (#25), no improvements are recommended; the existing traffic control and intersection geometrics should be maintained.

Similarly, no additional improvements are necessary beyond those improvements planned by the Van Buren Boulevard Phase III roadway widening improvement project at the intersections of Orange Terrace Parkway & Van Buren Boulevard (#21) and Village West Drive & Van Buren Boulevard (#24). The Van Buren Boulevard Phase III roadway widening improvement project is currently underway.

Summary of Improvements by Analysis Scenario and Project Fair Share

#	Intersection Location	Jurisdiction	Existing (2019)	Existing plus Project	2024 Without Project	2024 With Project	Horizon Year (2040) Without Project	Horizon Year (2040) With Project	Improvements in TUMF?[1,2]	Total Cost[12]	Fair Share %[3]	Fair Share Cost[13]
19	Coyote Bush Rd. & Caroline	JPA	- None	- NB left turn lane[5] - SB left turn lane[5] -EB shared left-through-right turn lane[5] -WB shared left-through-right turn lane[5]	- Not Applicable - Not Applicable - Not Applicable - Not Applicable	- Same as E+P - Same as E+P - Same as E+P - Same as E+P	- Not Applicable - Not Applicable - Not Applicable - Not Applicable	- Same as E+P - Same as E+P - Same as E+P - Same as E+P	No No No No	$0 $0 $0 $0 **$0**	--	$0 $0 $0 $0 **$0**
23	Bundy St. & Krameria Av.	JPA	- None	- Install a traffic signal[5] -SB shared left-through-right turn lane[5] - EB left turn lane[5]	- Same - Not Applicable - Not Applicable	- Same - Same as E+P - Same as E+P	- Same - Not Applicable - Not Applicable	- Same - Same as E+P - Same as E+P	No No No	$0 $0 $0 $0 **$0**	--	$0 $0 $0 $0 **$0**
26	Village West Dr./Clark St. & Nandina Av.	County/JPA	- None	- None	- None	- None	- Install a traffic signal - NB left turn lane - SB left turn lane	- Same - Same - Same	No No No	$392,000 $78,400 $78,400 **$548,800**	9.49%	$37,220 $7,444 $7,444 **$52,108**
27	Sycamore Canyon Dr./Meridian Pkwy. & Alessandro Bl.	Riverside/JPA	- None	- None	- Modify the TS to implement overlap phasing on the SB, EB, and WB right turn lane	- Same	- Same - 2nd EB left turn lane	- Same - Same	No No	$117,600 $78,400 **$196,000**	1.96%	$2,301 $1,534 **$3,835**
32	Meridian Pkwy. & Van Buren Bl.	JPA	- None	- None	- No feasible improvements[4]	- No feasible improvements[4]	- No feasible improvements[4]	- No feasible improvements[4]	N/A	$0 **$0**	--	$0 **$0**
37	I-215 SB Ramps & Van Buren Bl.	Caltrans/JPA/County	- None	- None	- 3rd WB through lane	- Same	- Same	- Same	Yes (TUMF)	NA[9] **$0**	--	$0 **$0**
39	Old 215 Frontage Rd./I-215 NB Ramps & Cactus Av.	Caltrans/JPA	- None	- None	- 3rd EB through lane - 3rd WB through lane	- Same - Same	- Same - Same - 2nd NB left turn lane - 2nd NB through lane - 1st and 2nd SB right turn lanes - 2nd EB left turn lane - EB right turn lane - 4th WB through lane - WB right turn lane - Modify the TS to implement overlap phasing on the SB right turn lane	- Same - Same - Same - Same - Same - Same - Same - Same - Same - Same	Yes (TUMF)[6] Yes (TUMF)[6] Yes (TUMF)[6] Yes (TUMF)[6] Yes (TUMF)[6] Yes (TUMF)[6] Yes (TUMF)[6] Yes (TUMF)[6] Yes (TUMF)[6] Yes (TUMF)[6]	NA[9] NA[9] NA[9] NA[9] NA[9] NA[9] NA[9] NA[9] NA[9] NA[9] **$0**	--	$0 $0 $0 $0 $0 $0 $0 $0 $0 $0 **$0**
40	Van Buren Bl. & I-215 NB Ramps	Caltrans/JPA/County	- None	- None	- None	- None	- No feasible improvements[4]	- No feasible improvements[4]	N/A	$0 **$0**	--	$0 **$0**

4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The proposed Project involves amending the South Campus Specific Plan to change the mix of uses. The square footage calculated based on maximum allowable floor area ratio (FAR) for each land use type is shown below:

Proposed Project

- Office – 388.011 TSF
- Commercial – 221.394 TSF
- Grocery Store – 61.336 TSF
- Business Park – 1,764.180 TSF
- High Cube Warehouse – 800.000 TSF
- High Cube Cold Storage Warehouse – 700.000 TSF
- Warehousing – 274.437 TSF
- Dog Park – 6.2 Acres

The following uses that are built or entitled, but not yet occupied and operational will also be included as part of the proposed Project scenarios:

- Amazon (Building A) – 1,000.000 TSF
- Parcel Delivery (Building B) – 1,000.000 TSF
- Parking Lot – 61.0 Acres
- Building C (Warehousing) – 500.000 TSF
- Commercial (Parcel 72) – 13.922 TSF

The report is intended to evaluate the net change in potential impacts from the 2003 EIR Phase III to the proposed Project. For analytical purposes the "without project" conditions will reflect the EIR Phase III and the "with project" conditions will reflect the proposed net change in trips to the proposed Project.

4.1 PROJECT TRIP GENERATION

4.1.1 PROPOSED PROJECT

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. Trip generation rates for the Project in actual vehicles are shown in Table 4-1.

Table 4-1

Trip Generation Rates

Land Use[1]	ITE LU Code	Units[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Trip Generation Rates[1]									
Warehousing[3,4]	150	TSF	Based on the ITE Fitted Curve Equation						
Warehousing (274.437 TSF)			0.163	0.049	0.212	0.060	0.162	0.222	1.746
Warehousing (1,234.926 TSF)			0.108	0.032	0.140	0.038	0.104	0.142	1.617
High-Cube Transload Short-Term Warehouse[3,4]	154	TSF	0.062	0.018	0.080	0.028	0.072	0.100	1.400
High-Cube Cold Storage Warehouse[3,4]	157	TSF	0.085	0.025	0.110	0.032	0.088	0.120	2.263
General Office	710	TSF	Based on the ITE Fitted Curve Equation						
General Office (388.011 TSF)			0.870	0.140	1.010	0.170	0.890	1.060	10.190
General Office (529.254 TSF)			0.850	0.140	0.990	0.170	0.880	1.050	10.090
Shopping Center	820	TSF	Based on the ITE Fitted Curve Equation						
Shopping Center (221.394 TSF)			0.740	0.450	1.190	2.120	2.300	4.420	46.620
Supermarket	850	TSF	Based on the ITE Fitted Curve Equation						
Supermarket (61.336 TSF)			2.368	1.452	3.820	4.516	4.339	8.855	90.660
Public Park	411	AC	Based on the ITE Fitted Curve Equation						
Public Park (6.20 AC)			0.012	0.008	0.020	2.038	1.667	3.705	14.908

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

[2] AC = Acres; TSF = Thousand Square Feet

[3] Vehicle Mix Source: ITE High Cube Warehouse Vehicle Trip Generation Analysis, October 2016 and SCAQMD.

[4] Truck Percentage: ITE Trip Generation Handbook, 3rd Edition (2017) for Industrial Park; 2% trucks used for office commercial areas

Truck Mix Source: South Coast Air Quality Management District (SCAQMD) Warehouse Truck Trip Study Data Results and Usage (2014).

Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks

Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

The trip generation summary illustrating daily and peak hour trip generation estimates for the proposed Project are shown on Table 4-2. The building square footages were derived based on the acreages and maximum floor-area-ratios utilized in March JPA. The trip generation rates used for this analysis are based upon information collected by the ITE as provided in their Trip Generation Manual, 10th Edition, 2017. (8) In order to accurately reflect the impact that heavy trucks would have on the street system, Project trips have been further broken down between passenger cars and trucks for each of the peak hours and weekday daily trip generation. As noted on Table 4-1, refinements to the raw trip generation estimates have been made to provide a more detailed breakdown of trips by vehicle mix. Total vehicle mix percentages were also obtained from the ITE Trip Generation manual in conjunction with the SCAQMD recommended truck mix, by axle type.

For the Business Park use, a blended rate has been used based on the ITE description for Business Park that the average mix is 20 to 30 percent office/commercial and 70 to 80 percent industrial/warehousing. As such, 30% of the business park area has been designated as office related uses, while the remaining 70% of the business park area has been allocated to warehousing uses. For office and commercial uses, a truck percentage of 2% has been used to provide a conservative analysis. For industrial portions of the Business Park, a truck percentage of 13% has been utilized based on average truck percentage for Industrial Park in ITE Trip Generation Handbook, 3rd Edition (2017). (9)

Employees of the office use may also visit other uses on-site, such as the retail uses. In other words, trips may be made between individual retail and office uses on-site and can be made either by walking or using internal roadways without using external streets. As such, a maximum 10 percent internal capture reduction was applied to recognize the interactions that would occur between the various complementary land uses. As the project is proposed to include shopping center and grocery store uses, pass-by percentages have been obtained from the ITE Trip Generation Handbook (3rd Edition, 2017). (9)

As shown on Table 4-2, the proposed Project is anticipated to generate a total of 31,424 trip-ends per day with 2,759 AM peak hour trips and 3,503 PM peak hour trips (actual vehicles as opposed to PCE).

For the purposes of this analysis, it is proposed that the actual vehicles be utilized in order to most accurately reflect the effects of heavy trucks in the analysis. Trucks will be accounted for in the analysis as a percentage of total traffic, which will be input into the analysis software (Synchro, Version 10).

Table 4-2

Proposed Project Trip Generation Summary

Project Land Uses	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Vacant Land Uses									
Office	70.132	TSF							
Office (75% of Mixed Use)	317.879	TSF							
Office Passenger Cars (98%)			*331*	*53*	*384*	*65*	*338*	*403*	*3,874*
Office Truck Trips (2%)			*7*	*1*	*8*	*1*	*7*	*8*	*80*
Office Subtotal	***388.011***	***TSF***	***338***	***54***	***392***	***66***	***345***	***411***	***3,954***
Commercial Retail	115.434	TSF							
Commercial Retail (25% of Mixed Use)	105.960	TSF							
Commercial Retail Subtotal	221.394	TSF	164	100	264	469	509	978	10,322
Pass-by Reduction (AM: 0%, PM/Daily: 34%)[3]			0	0	0	-159	-159	-318	-3,510
Commercial (Grocery Store)	61.336	TSF	145	89	234	277	266	543	5,562
Pass-by Reduction (AM: 0%, PM/Daily: 36%)[3]			0	0	0	-96	-96	-192	-2,004
Commercial Passenger Cars (98%)			*303*	*185*	*488*	*481*	*510*	*991*	*10,162*
Commercial Truck Trips (2%)			*6*	*4*	*10*	*10*	*10*	*20*	*208*
Commercial Subtotal	***282.730***	***TSF***	***309***	***189***	***498***	***491***	***520***	***1,011***	***10,370***
Business Park	1,764.180	TSF							
Office (30% of Business Park)	529.254	TSF	450	74	524	90	466	556	5,342
Office Passenger Cars (98%)			*441*	*73*	*514*	*88*	*457*	*545*	*5,234*
Office Truck Trips (2%)			*9*	*1*	*10*	*2*	*9*	*11*	*108*
Warehouse (70% of Business Park)	1,234.926	TSF	133	40	173	47	128	175	1,998
Warehouse Passenger Cars (69.2% AM, 78.3% PM, 63.2% Daily)			*92*	*28*	*120*	*37*	*100*	*137*	*1,262*
Warehouse Truck Trips (30.8% AM, 21.7% PM, 36.8% Daily)			*41*	*12*	*53*	*10*	*28*	*38*	*736*
Business Park Subtotal	***1,764.180***	***TSF***	***583***	***114***	***697***	***137***	***594***	***731***	***7,340***
Industrial	1,774.437	TSF							
Warehousing	274.437	TSF							
Warehouse Passenger Cars (69.2% AM, 78.3% PM, 63.2% Daily)			*31*	*9*	*40*	*13*	*34*	*47*	*302*
Warehouse Truck Trips (30.8% AM, 21.7% PM, 36.8% Daily)			*14*	*4*	*18*	*3*	*10*	*13*	*178*
Warehousing Subtotal			45	13	58	16	44	60	480
High-Cube Cold Storage Warehouse	700.000	TSF							
Cold Storage Passenger Cars (69.2% AM, 78.3% PM, 63.2% Daily)			*41*	*12*	*53*	*18*	*48*	*66*	*1,000*
Cold Storage Truck Trips (30.8% AM, 21.7% PM, 36.8% Daily)			*18*	*6*	*24*	*5*	*13*	*18*	*584*
High-Cube Cold Storage Warehouse Subtotal			59	18	77	23	61	84	1,584
High-Cube Transload Short-Term Warehouse (Building D)	800.000	TSF							
High-Cube Warehouse Passenger Cars (69.2% AM, 78.3% PM, 63.2% Daily)			*34*	*10*	*44*	*17*	*45*	*63*	*706*
High-Cube Warehouse Truck Trips (30.8% AM, 21.7% PM, 36.8% Daily)			*15*	*5*	*20*	*5*	*13*	*17*	*414*
High-Cube Warehousing Subtotal			49	15	64	22	58	80	1,120
Industrial Subtotal	***1,774.437***	***TSF***	***153***	***46***	***199***	***61***	***163***	***224***	***3,184***
Dog Park & Paseo	6.200	AC	0	0	0	13	10	23	94
Vacant Land Uses Passenger Car Trips			*1,273*	*370*	*1,643*	*732*	*1,542*	*2,275*	*22,634*
Vacant Land Uses Truck Trips			*110*	*33*	*143*	*36*	*90*	*125*	*2,308*
Vacant Land Uses Total Trips[2]			*1,383*	*403*	*1,786*	*768*	*1,632*	*2,400*	*24,942*

Table 4-2

Proposed Project Trip Generation Summary

Project Land Uses	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Built/Entitled Land Uses									
LGB6 (Building A)[4]	1,000.000	TSF							
LGB6 (Building A) Passenger Cars			*222*	*87*	*309*	*127*	*235*	*362*	*2,306*
LGB6 (Building A) Truck Trips			*57*	*22*	*79*	*33*	*60*	*93*	*592*
LGB6 (Building A) Subtotal			279	109	388	160	295	455	2,898
Parcel Delivery Site (Building B + Parking Lot)[5]	1,000.000	TSF							
Parcel Delivery Site (Building B + Parking Lot) Passenger Cars			*341*	*132*	*473*	*221*	*410*	*631*	*2,952*
Parcel Delivery Site (Building B + Parking Lot) Truck Trips			*151*	*59*	*210*	*61*	*113*	*174*	*1,720*
Parcel Delivery Site (Building B + Parking Lot) Subtotal			492	191	683	282	523	805	4,672
Commercial (Parcel 72)[6]	15.485	TSF	65	56	121	66	71	137	1,534
Commercial Passenger Cars (98%)			*64*	*55*	*119*	*65*	*70*	*135*	*1,502*
Commercial Truck Trips (2%)			*1*	*1*	*2*	*1*	*1*	*2*	*32*
Warehousing (Building C)[6]	500.000	TSF							
Warehousing (Building C) Passenger Cars			*46*	*14*	*60*	*20*	*54*	*74*	*550*
Warehousing (Building C) Truck Trips			*21*	*6*	*27*	*5*	*15*	*20*	*320*
Warehousing (Building C) Subtotal			67	20	87	25	69	94	870
Built/Entitled Passenger Car Trips			*673*	*288*	*961*	*433*	*769*	*1,202*	*7,310*
Built/Entitled Truck Trips			*230*	*88*	*318*	*100*	*189*	*289*	*2,664*
Built/Entitled Total Trips[2]			*903*	*376*	*1,279*	*533*	*958*	*1,491*	*9,974*
Vacant + Built/Entitled Passenger Car Trips			***1,946***	***658***	***2,604***	***1,165***	***2,311***	***3,477***	***29,944***
Vacant + Built/Entitled Truck Trips			***340***	***121***	***461***	***136***	***279***	***414***	***4,972***
Vacant + Built/Entitled Subtotal Trips[2]			***2,286***	***779***	***3,065***	***1,301***	***2,590***	***3,891***	***34,916***
Vacant + Built/Entitled Passenger Car Trips (With 10% Internal Trip Reduction)			*1,751*	*592*	*2,344*	*1,049*	*2,080*	*3,129*	*26,950*
Vacant + Built/Entitled Truck Trips (With 10% Internal Trip Reduction)			*306*	*109*	*415*	*122*	*251*	*374*	*4,475*
Vacant + Built/Entitled Subtotal Trips (With 10% Internal Trip Reduction)			***2,057***	***701***	***2,759***	***1,171***	***2,331***	***3,503***	***31,424***
Previous EIR Ph. III Trips			***2,965***	***648***	***3,613***	***808***	***2,907***	***3,715***	***31,267***
Previous EIR Ph. III Passenger Car Trips (92.6%) (With 10% Internal Trip Reduction)			*2,471*	*540*	*3,011*	*673*	*2,423*	*3,096*	*26,058*
Previous EIR Ph. III Truck Trips (7.4%) (With 10% Internal Trip Reduction)			*197*	*43*	*240*	*54*	*194*	*248*	*2,082*
Previous EIR Ph. III Subtotal Trips (With 10% Internal Trip Reduction)			***2,668***	***583***	***3,251***	***727***	***2,617***	***3,344***	***28,140***
Proposed Project Net Passenger Car Trips[7]			***-720***	***52***	***-667***	***376***	***-343***	***33***	***892***
Proposed Project Net Truck Trips[7]			***109***	***66***	***175***	***68***	***57***	***126***	***2,393***
Proposed Project Net Trip Generation[7]			***-611***	***118***	***-493***	***444***	***-286***	***159***	***3,284***

[1] AC = Acres; TSF = Thousand Square Feet

[2] Total Trips (Actual Vehicles) = Passenger Cars + Truck Trips (Actual Trucks).

[3] Pass-by reduction percentage consistent with ITE Trip Generation Handbook , 3rd Edition (2017)

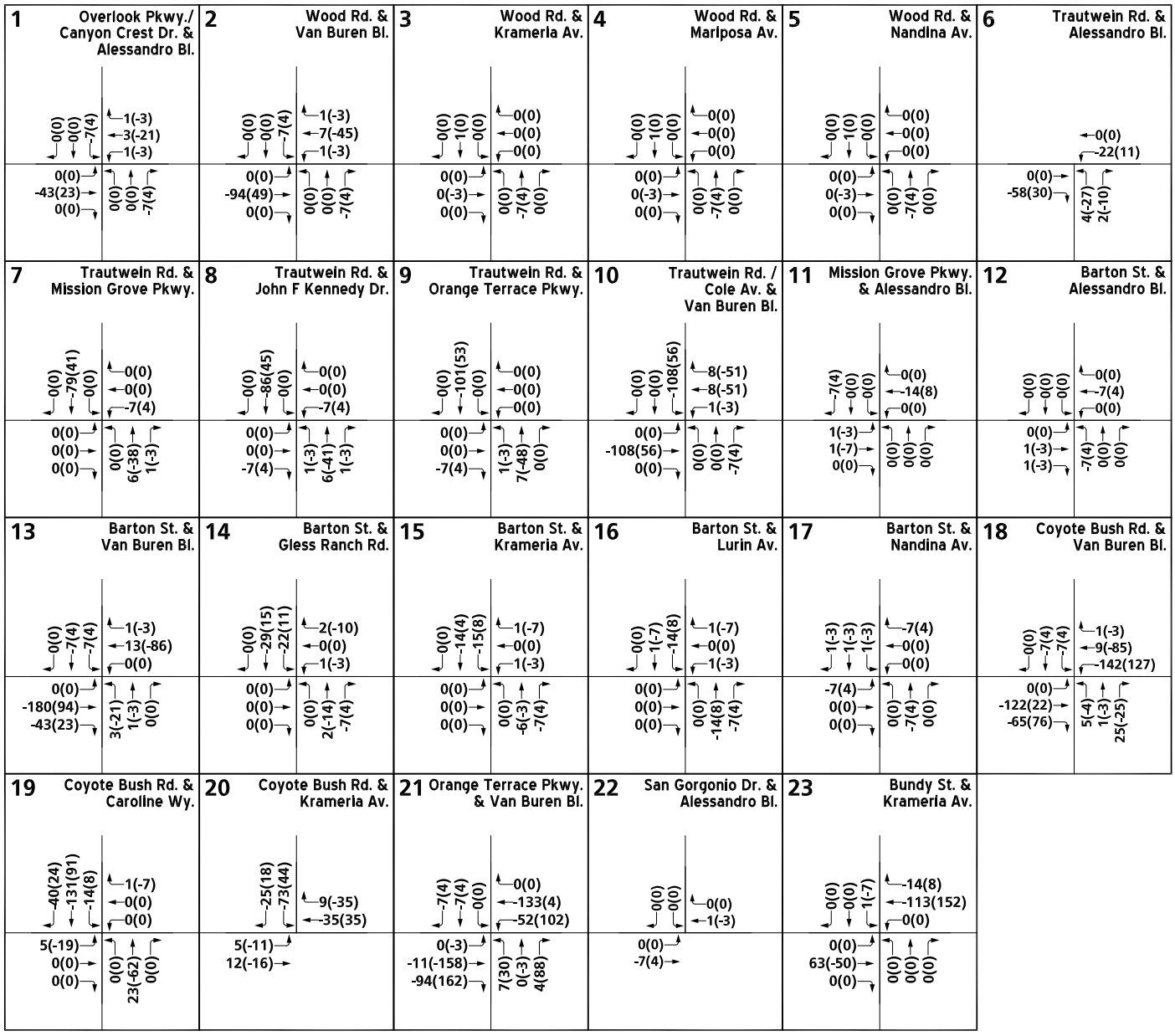
[4] Source: LGB6 Project Substantial Conformance Traffic Assessment (November 13, 2017, prepared by Urban Crossroads, Inc.)

[5] Source: Meridian South Parcel Delivery Traffic Impact Study Report (August 2017, prepared by VRPA Technologies, Inc.)

[6] Source: Meridian South Campus Addendum #3 Focused Traffic Impact Analysis (August 15, 2018, prepared by Urban Crossroads, Inc.)

[7] Proposed Project = Vacant + Built/Entitled Subtotal Trips (With 10% Internal Trip Reduction) - Previous EIR Ph. III Subtotal Trips (With 10% Internal Trip Reduction)

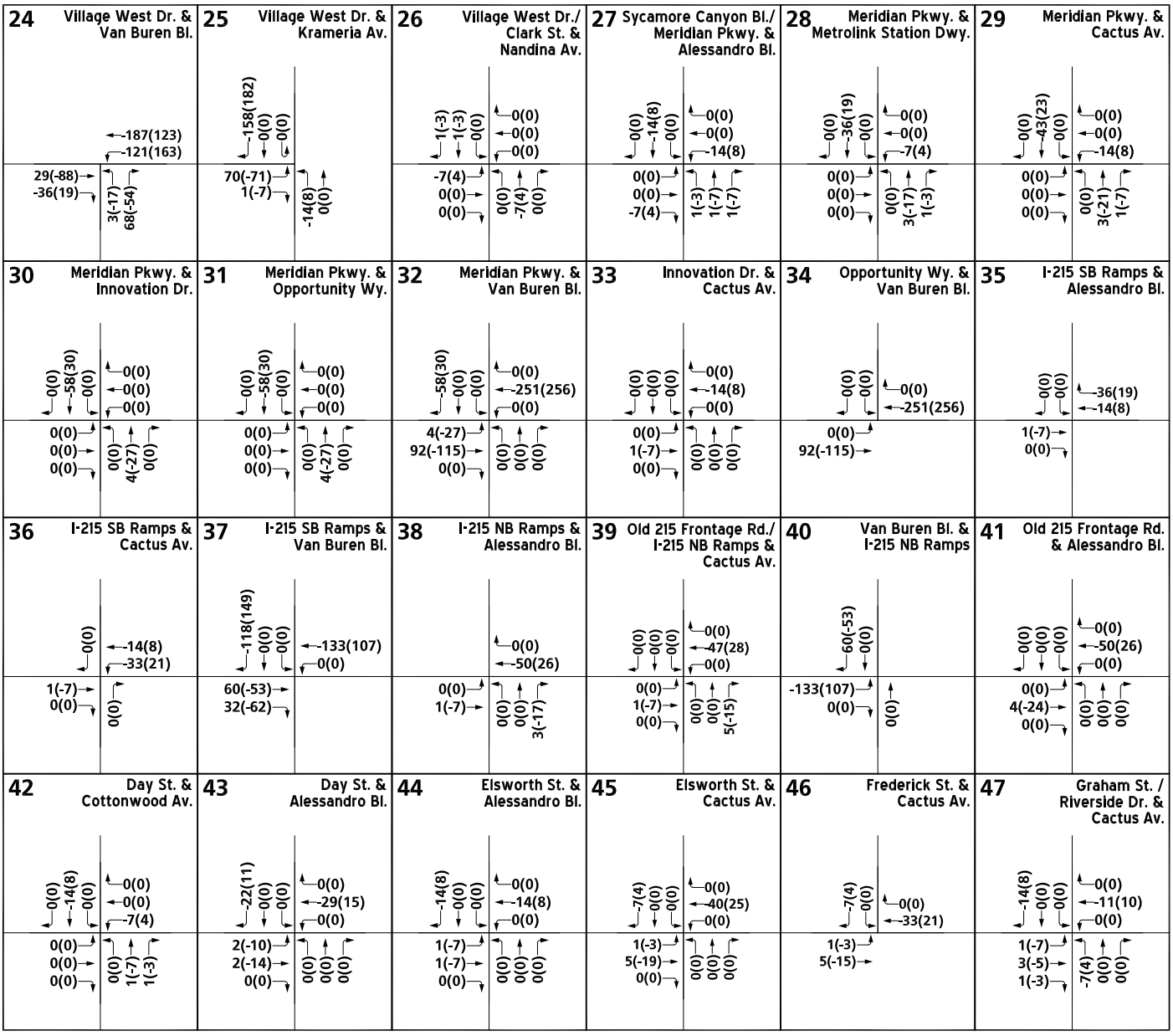
EXHIBIT 4-7 (1OF2): PROPOSED PROJECT ONLY (NEAR-TERM) TRAFFIC VOLUMES



LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

EXHIBIT 4-7 (2OF2): PROPOSED PROJECT ONLY (NEAR-TERM) TRAFFIC VOLUMES



LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

4.6 BACKGROUND TRAFFIC

To account for growth in traffic between Existing Conditions (2019) and the Project Opening Year Cumulative (2024), a compounded annual traffic growth rate of 2.0 percent was assumed (10.41 percent aggregate growth in background traffic for the period between 2019 and 2024). The 2.0 percent annual growth rate is intended to capture non-specific ambient traffic growth.

In context, the TIA's assumed 2.0 percent compounded annual growth rate is considered a reasonable approximation of future traffic growth when compared to demographic projections reflected in other local and regional growth modeling efforts. More specifically, the Southern California Association of Governments (SCAG) 2016—2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) growth forecasts for the unincorporated County of Riverside assume the County population to increase from 359,000 in 2012 to 499,200 by the year 2040, or an approximate 1.18 percent growth rate compounded annually. The RTP/SCS assumed growth in households over the same 28-year period reflects an increase from 112,300 households to 162,900 households; a rate of 1.34 percent compounded annually.

At the upper end of assumed RTP/SCS growth rates, employment over the same 28-year period is projected to increase from 70,500 jobs to 156,600 jobs; a rate of approximately 2.89 percent compounded annually. (10) The 2.0 percent compounded annual traffic growth rate used in the TIA reflects the fact that not all persons comprising population growth, household growth, or employment growth would translate on a one-to-one basis as a new vehicle trip in the region; and establishes a judicious midrange estimate lying between the RTP/SCS assumed regional population growth rate (1.18 percent) and the RTP/SCS assumed regional employment growth rate (2.89 percent). Conservatively, the TIA estimates of area traffic growth then add traffic generated by other known or probable related projects defined in Section 4.7 *Cumulative Development Traffic*. These related projects are at least in part already accounted for in the assumed annual 2.0 percent ambient growth in traffic noted above; and in some instances, these related projects would likely not be implemented and functional within the 2024 Opening Year Cumulative time frame assumed for the Project. The resulting traffic growth rate used in the TIA (2.0 percent annual ambient growth plus traffic generated by related projects) would therefore tend to overstate rather than understate background cumulative traffic impacts under 2024 conditions.

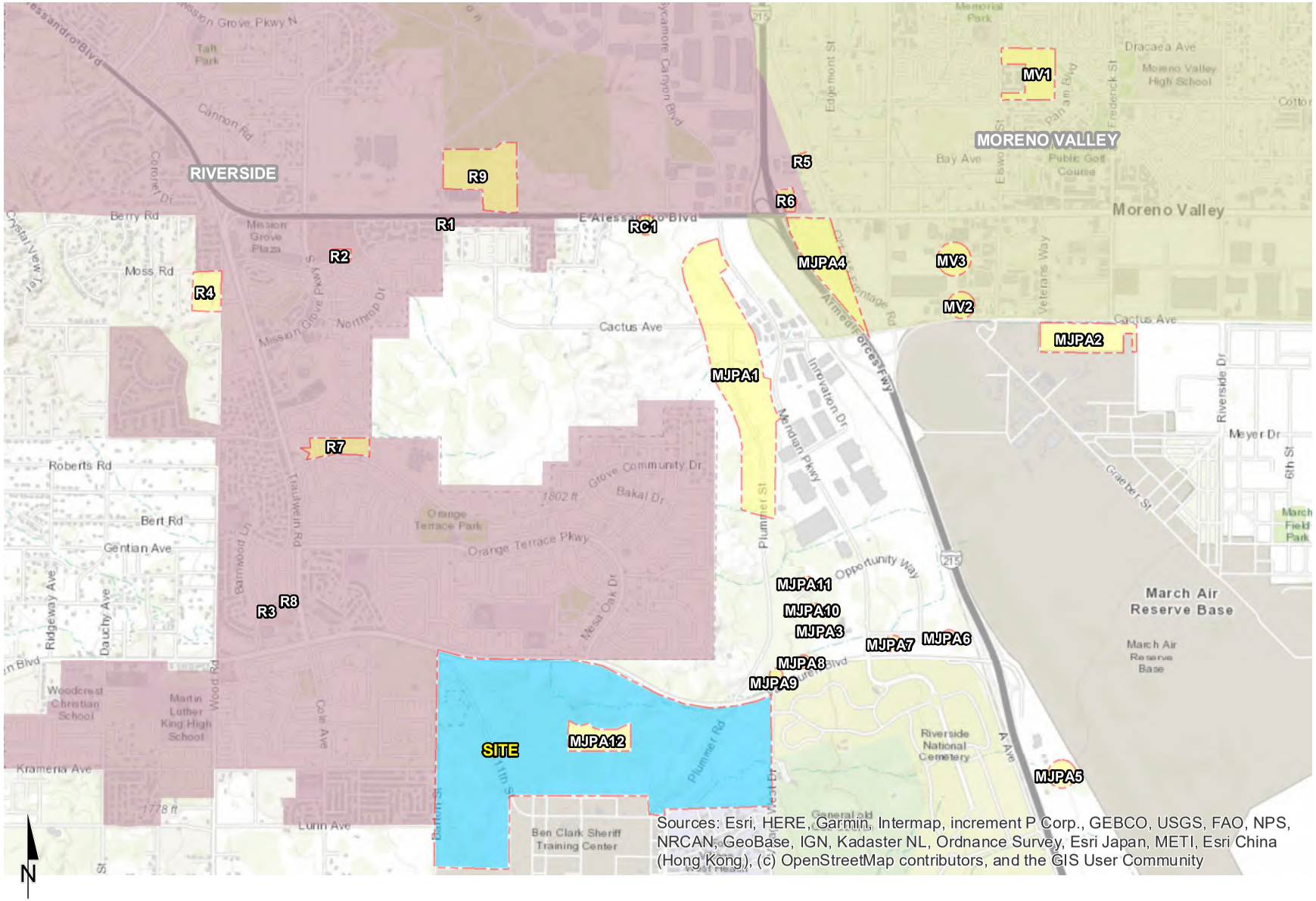
4.7 CUMULATIVE DEVELOPMENT TRAFFIC

A cumulative project list, which includes projects that are either approved or being processed concurrently in the study area, was developed for the purposes of this analysis through consultation with planning and engineering staff from the March JPA. The cumulative project list includes known and foreseeable projects that are anticipated to contribute traffic to the study area intersections.

Where applicable, cumulative projects anticipated to contribute measurable traffic (i.e. 50 or more peak hour trips) to study area intersections have been manually added to the study area network to generate Opening Year Cumulative forecasts. In other words, this list of cumulative development projects has been reviewed to determine which projects would likely contribute measurable traffic through the study area intersections (e.g., those cumulative projects in close proximity to the proposed Project). For the purposes of this analysis, the cumulative projects that were determined to affect one or more of the study area intersections are shown on Exhibit 4-10, listed on Table 4-3, and have been considered for inclusion.

Although it is unlikely that all of these cumulative projects would be fully built and occupied by Year 2024, they have been included in an effort to conduct a conservative analysis and overstate as opposed to understate potential traffic impacts. Any other cumulative projects that are not expected to contribute measurable traffic to study area intersections have not been included since the traffic would dissipate due to the distance from the Project site and study area intersections. Any additional traffic generated by other projects not on the cumulative projects list is accounted for through background ambient growth factors that have been applied to the peak hour volumes at study area intersections as discussed in Section 4.6 *Background Traffic*.

EXHIBIT 4-10: CUMULATIVE DEVELOPMENT LOCATION MAP



URBAN CROSSROADS

Table 4-3

Cumulative Development Land Use Summary

ID	Project Name	Land Use[1]	Quantity	Units[2]
March Joint Powers Authority				
MJPA1	Meridian Business Park (West Campus)	Industrial Park	2,278.852	TSF
MJPA2	K4 Parcel	Warehouse	718.000	TSF
MJPA3	Economic Business Center	Warehouse	124.523	TSF
MJPA4	Freeway Business Center	Warehouse	709	TSF
MJPA5	Veteran's Industrial Plaza/VIP 215	Warehouse	2,000.000	TSF
MJPA6	Veteran's Plaza	Commercial Retail	198.000	TSF
MJPA7	MS Van Buren I	Warehouse	176.396	TSF
MJPA8	MS Van Buren II	Warehouse	162.041	TSF
MJPA9	MS Prime Six	General Office	74.922	TSF
MJPA10	Meridian Distribution Center IV	Warehouse	90.000	TSF
MJPA11	Meridian Distribution Center III	Warehouse	262.269	TSF
MJPA12	Eagle Business Park	Business Park	390.480	TSF
City of Riverside				
R1	P17-0419/20/21	Fast Food w/ Drive Thru	1.857	TSF
R2	P16-0578	Warehouse	82.200	TSF
R3	P19-0151/P19-0152/P19-0153	Health and Fitness Club	21.706	TSF
R4	P13-0665	SFDR	8	DU
R5	P15-1035/P16-0556/P16-0567	Warehouse	176.149	TSF
R6	P14-0841 to P14-0848/P16-0472/P16-0474	Warehouse	73.200	TSF
		Commercial Retail	15.000	TSF
R7	P14-0472/P14-0473/P15-0321/P15-0322	SFDR	85	DU
R8	P19-0022/P19-0024/P19-0026/P19-0027/P19-0028	Fast Food w/ Drive Thru	4.319	TSF
R9	Sycamore Hills Distribution Center	Warehouse	603.100	TSF
County of Riverside				
RC1	PP 25422	Warehouse	814.000	TSF
RC2	Knox Business Park	Warehouse	1,259.050	TSF
RC3	Oleander Business Park	Warehouse	710.736	TSF
City of Moreno Valley				
MV1	Scottish Village	Multifamily	194	DU
MV2	Moreno Valley Cactus Center (PEN16-0131)	Warehouse	36.950	TSF
		Fast Food w/ Drive Thru	7.900	TSF
		Gas Station w/ Car Wash	28	VFP
MV3	PA 08-0047-0052 (Komar Cactus Plaza)	Hotel	110	Rooms
		Fast Food w/ Drive Thru	8.000	TSF
		Commercial	42.400	TSF

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Units; TSF = Thousand Square Feet; SP = Spaces; VFP = Vehicle Fueling Positions

4.8 NEAR-TERM TRAFFIC FORECASTS

To provide a comprehensive assessment of potential transportation network deficiencies, a "buildup" analysis was performed in support of this work effort. The "buildup" method was used to approximate the Opening Year Cumulative traffic forecasts and is intended to identify the cumulative impacts on both the existing and planned near-term circulation system. The Opening Year Cumulative traffic forecasts include background traffic, traffic generated by other cumulative development projects within the study area, and the traffic generated by the proposed Project.

The "buildup" approach combines existing traffic counts with a background ambient growth factor to forecast the near-term 2024 traffic conditions. An ambient growth factor of 10.41% (2024) accounts for background (area-wide) traffic increases that occur over time, up to the year 2024 from the year 2019 (compounded two percent per year growth over a 5-year period). Traffic volumes generated by the Project are then added to assess the Opening Year Cumulative traffic conditions. The 2024 roadway network is similar to the existing conditions roadway network with the exception of future roadways and intersections proposed to be developed by the Project.

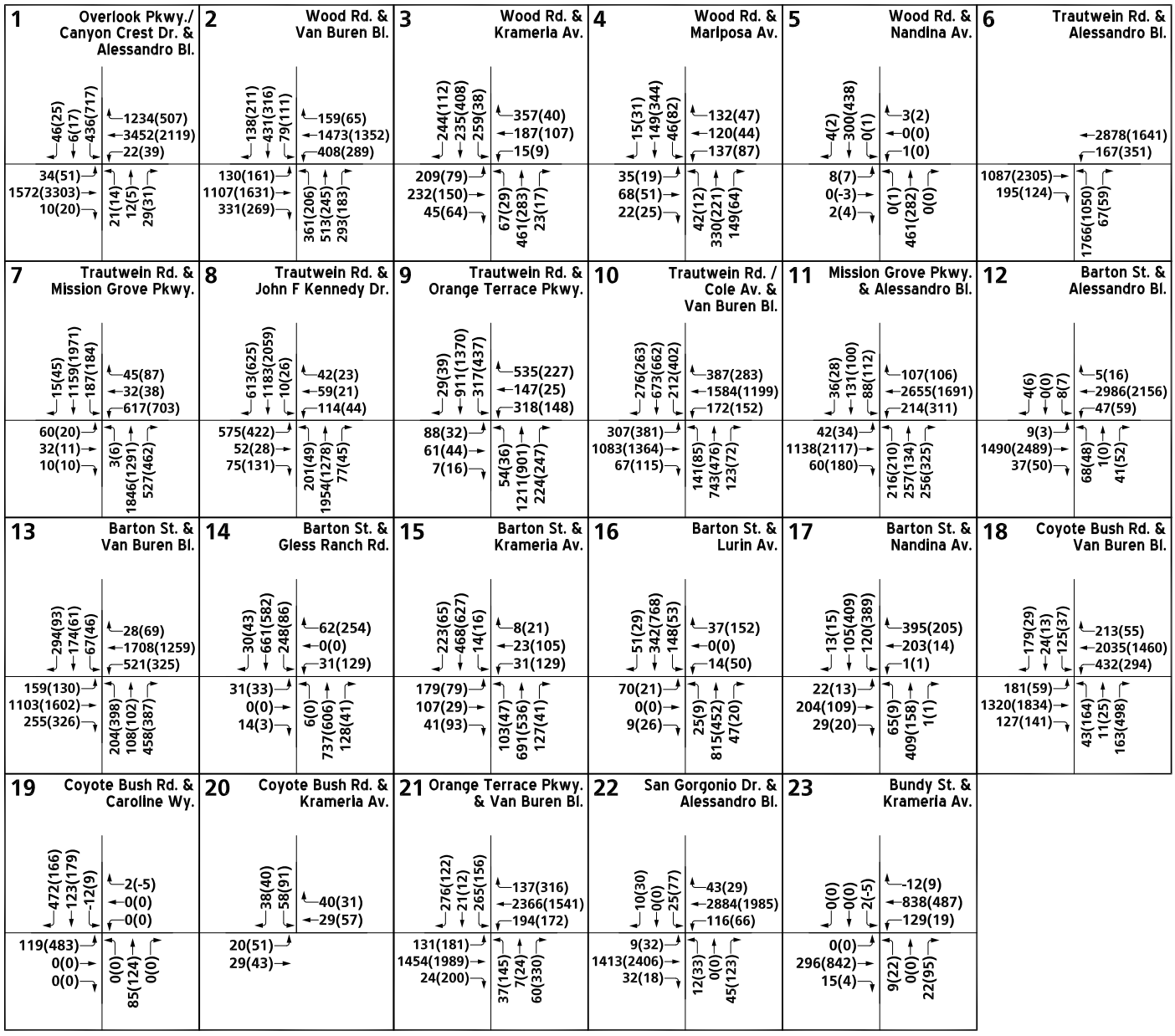
As noted previously, an analysis of the proposed Project at various development tiers has been assessed for the purposes of this traffic study. The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- Opening Year Cumulative (2024) Without Project
    - Existing 2019 counts
    - Ambient growth (10.41%)
    - Cumulative Development traffic
    - 2003 EIR Phase III traffic
- Opening Year Cumulative (2024) With Project
    - Opening Year Cumulative (2024) Without Project
    - Proposed Project traffic (Net change in Project trips compared to the trip generation evaluated in the 2003 EIR for Phase III)

4.9 HORIZON YEAR (2040) VOLUME DEVELOPMENT

The Horizon Year (2040) traffic conditions were derived from the RivTAM modified to represent Horizon Year conditions using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between Existing conditions and Horizon Year conditions.

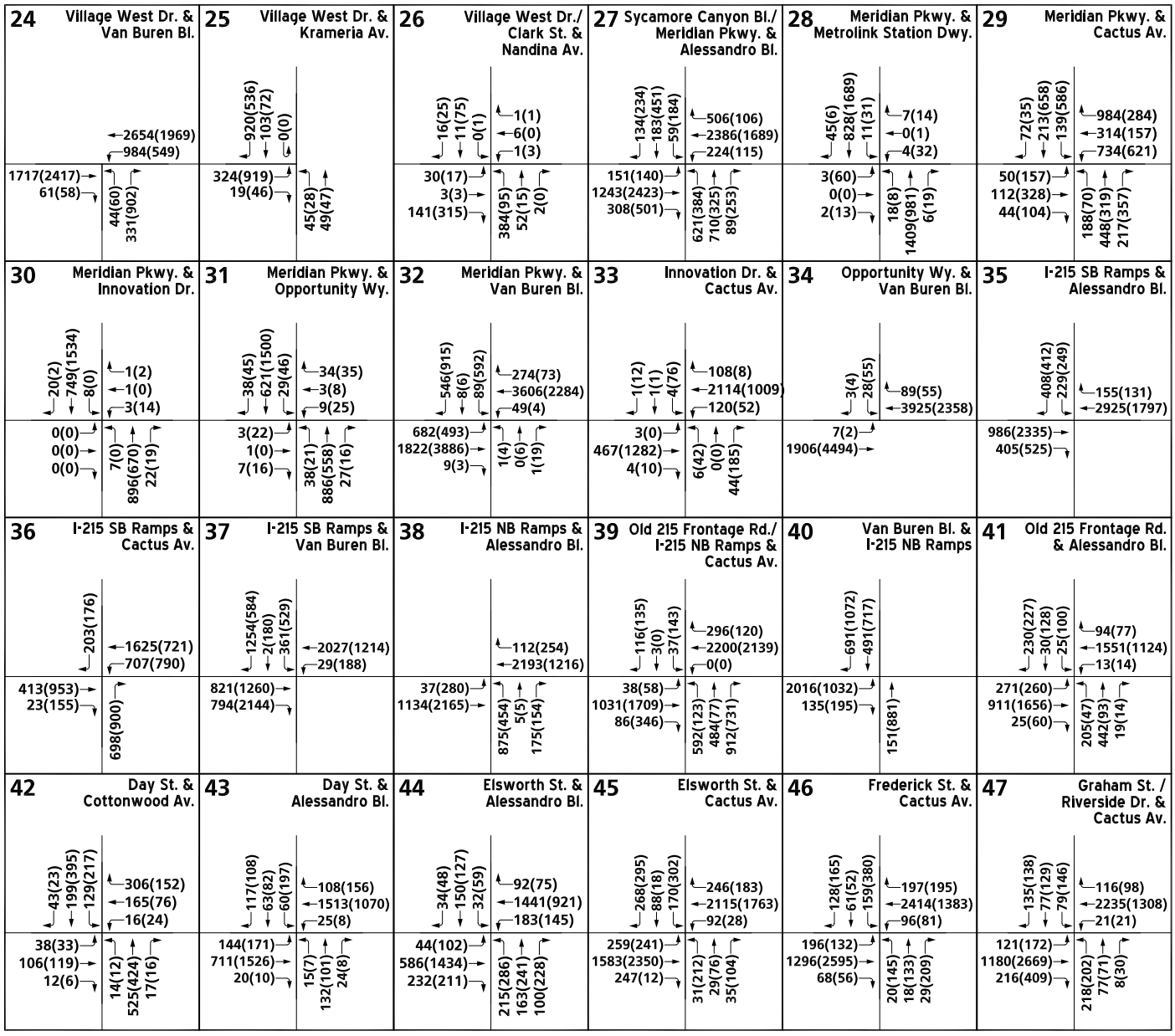
EXHIBIT 6-4 (1OF2): OPENING YEAR CUMULATIVE (2024) WITH PROPOSED PROJECT TRAFFIC VOLUMES



LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

EXHIBIT 6-4 (2OF2): OPENING YEAR CUMULATIVE (2024) WITH PROPOSED PROJECT TRAFFIC VOLUMES



LEGEND:

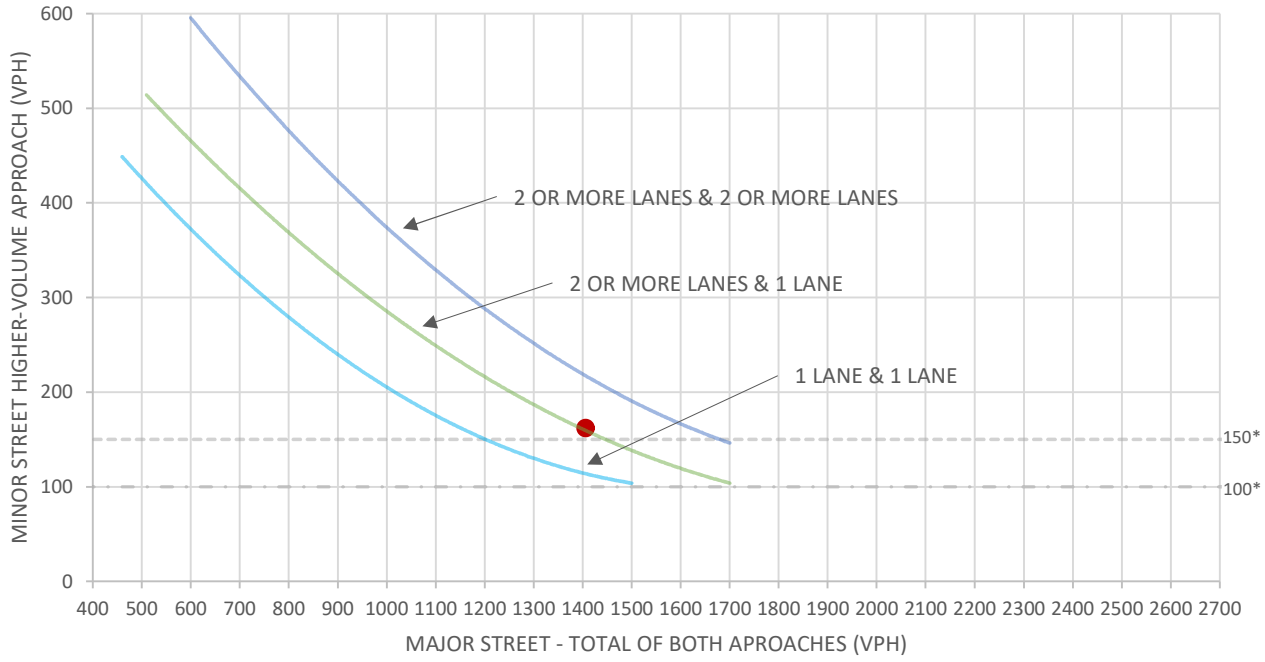
10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

Appendix D

Traffic Signal Warrants

				N-S	E-W
Project	School at Ben Clark Training Center	**Intersection #**	3	☐	☑
Scenario	2024 plus Project	**Major Street**	Krameria Avenue		
Peak Hour	PM	**Minor Street**	Bundy Avenue	☑	☐

Figure 4C-3. Warrant 3, Peak Hour



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	**Minor Street**	**Warrant Met?**
	Krameria Avenue	Bundy Avenue	
Number of Approach Lanes	2	1	Yes
Traffic Volume (VPH)*	1,406	162	

*Note:
Traffic volume for the Major Street approach is the total volume of both approaches.
Traffic volume for the Minor Street is the highest volume approach.