

Appendix A

Initial Study, Notice of Preparation (NOP), and NOP Comments



Antelope Valley Community College District 2016 Facilities Master Plan

Initial Study – Notice of Preparation

prepared by

Antelope Valley Community College District

3041 West Avenue K

Lancaster, California 93536-5426

Contact: Doug Jensen, Executive Director, Facilities Services

prepared with the assistance of

Rincon Consultants, Inc.

250 East 1st Street, Suite 301

Los Angeles, California 90012

July 2018

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Appendix A	Notice of Preparation
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Initial Study

1. Project Title

Antelope Valley Community College District 2016 Facilities Master Plan

2. Lead Agency Name and Address

Antelope Valley Community College District
3041 West Avenue K
Lancaster, California 93536-5426

3. Contact Person and Phone Number

Doug Jensen, Executive Director, Facilities Services
(661) 722-6526

4. Project Location

The project site is the Lancaster campus of Antelope Valley College (AVC), which is located at 3041 West Avenue K in the City of Lancaster, Los Angeles County, in the block of land between West Avenue K on the south, 35th Street West on the west, West Ave J8 on the north, and 30th Street West on the east. The project site is located about 2.5 miles southwest of downtown Lancaster, 7.5 miles northwest of downtown Palmdale, 12 miles east of the Antelope Valley Poppy Reserve, and 42 miles north of downtown Los Angeles. The project site is approximately 135 acres. Figure 1 shows the location of the site in the region and Figure 2 shows the project site in its local context.

5. Project Sponsor's Name and Address

Antelope Valley Community College District
3041 West Avenue K
Lancaster, California 93536-5426

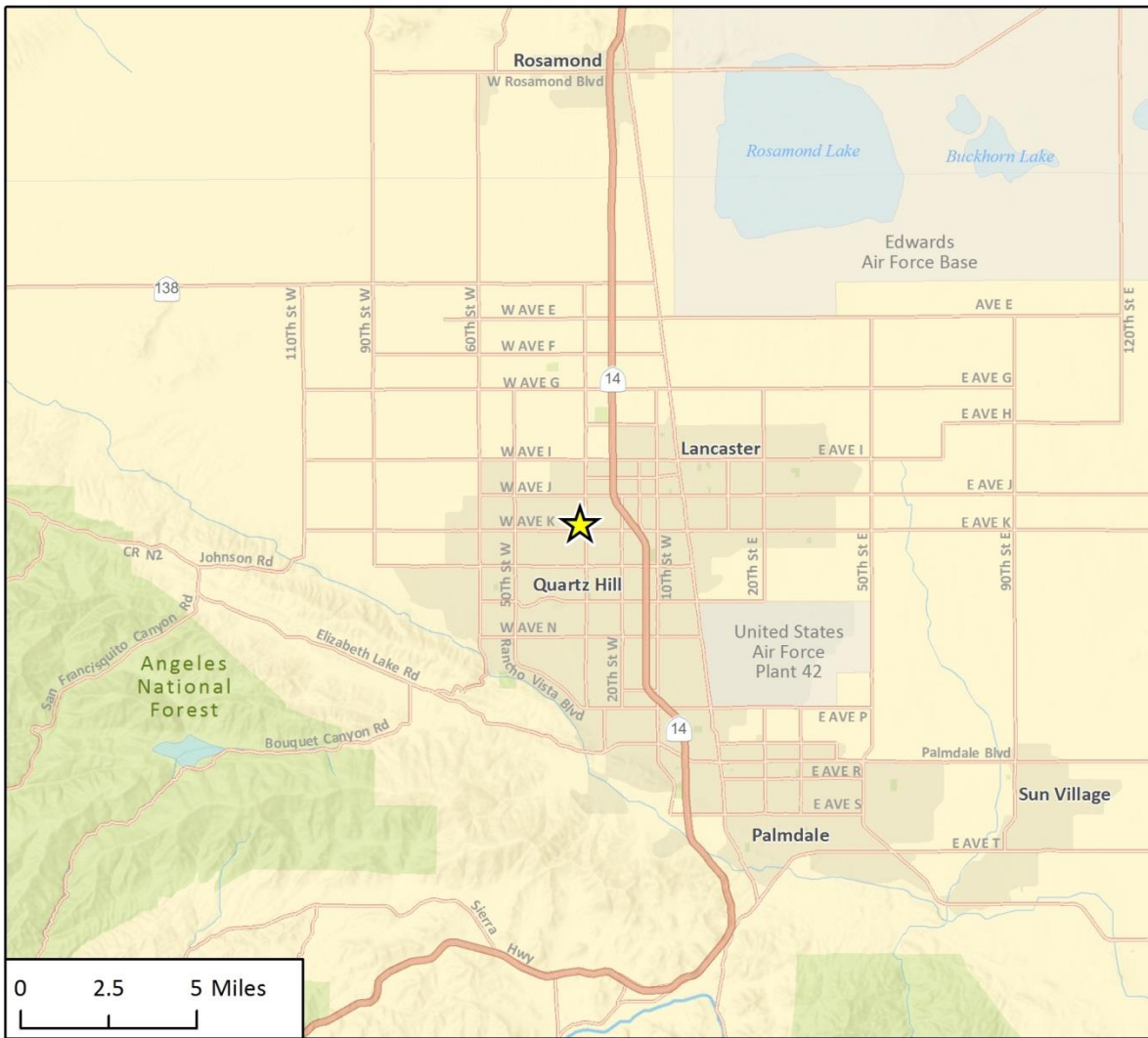
6. General Plan Designation

Public School (P,S)

7. Zoning

School (S)

Figure 1 Regional Location



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★ Project Site

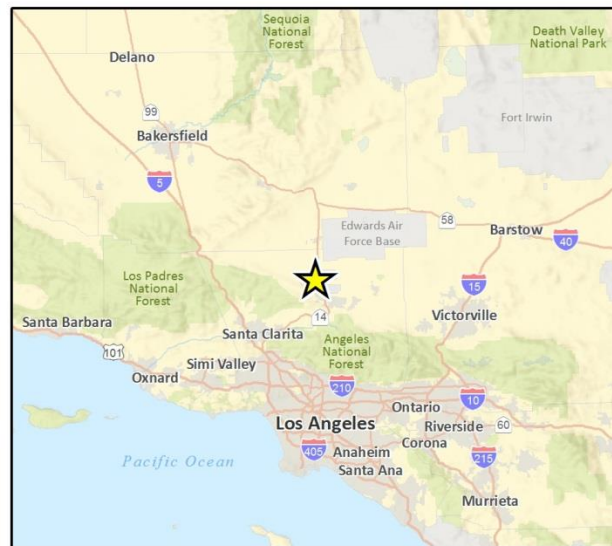
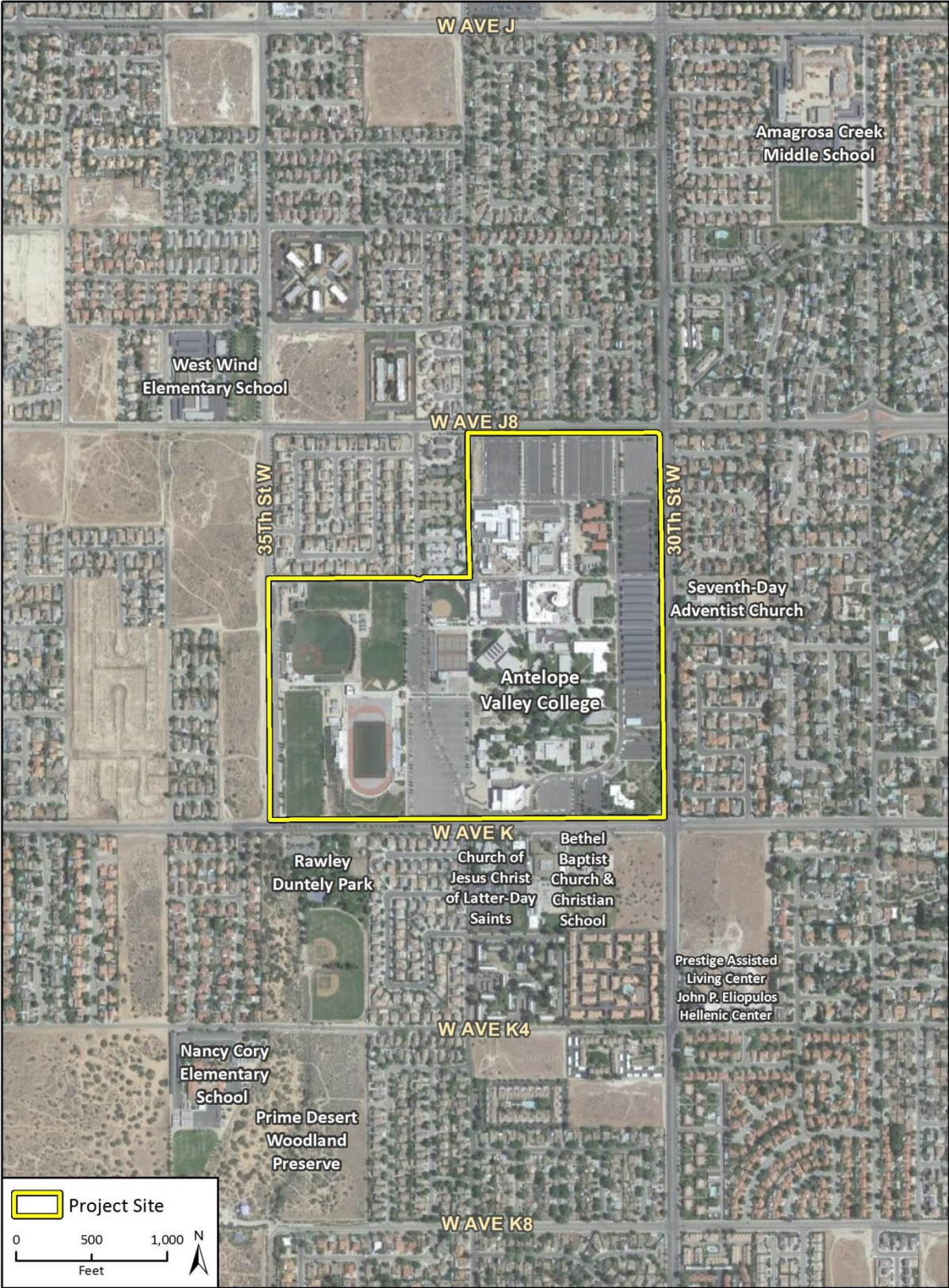


Fig. 1. Regional Location

Figure 2 Project Site Location



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Fig. 2 Project Location

8. Description of Project

The proposed project is an update of the Antelope Valley Community College District (AVCCD, or District) Facilities Master Plan (FMP), also known as the 2016 FMP. The 2016 FMP is guide for the future development of the Lancaster campus of AVCCD, also known as Antelope Valley College (AVC), and hereinafter also referred to as the project site. The District is one of 72 community college districts in California. The District consists of AVC’s Lancaster campus; and the AVC Palmdale Center, a leased facility in central Palmdale. According to the 2016 FMP, the District supported 14,677 full-time equivalent students (FTES) in 2014 at both campuses, and is anticipated to accommodate 19,852 FTES by 2030, a total increase of 5,175 FTES (35.3%) an annual increase of approximately 323 FTES (2.2%) (AVCCD, 2016). These FTES increases are based on estimates of future demand for AVCCD’s services. The 2016 FMP would accommodate, not cause, these projected FTES increases. FTES by campus are shown in Table 1.

Table 1 Enrollment Patterns by Location

Location	2014	2020	2025	2030	% Change	Annual % Change
Palmdale Center	902	1,099	1,293	1,428	58.3%	3.6%
Lancaster Campus	11,730	13,220	14,768	15,908	35.6%	2.2%
Both	2,045	2,136	2,279	2,516	23.0%	1.4%
Total	14,677	16,454	18,140	19,852	35.3%	2.2%

Source: AVCCD, 2016

The 2016 FMP is a strategy for modifying the physical campus in Lancaster to accommodate growth and change over the next 30 years. The initial FMP for the Palmdale Center is presently being developed to support proposed expansion plans of the center and will be incorporated into the District Facilities Master Plan at a later date. The 2016 FMP is based on findings from the District’s Educational Master Plan. It provides a guide for long-term land and building use, and serves as a guide for near-term decisions on program planning and implementation, resource allocation, setting priorities and other College administrative matters which influence the student educational experience at AVC (AVC, 2018).

The 2016 FMP presents an overall picture of the future developed campus and includes recommendations for new construction, building renovations, change of use, and site development projects. It recommends the demolition and replacement of a number of the oldest buildings on the campus. Functions currently housed in these facilities will be relocated to new or existing facilities and will be designed to support the new campus zoning diagram and address projected instructional program needs. Although the 2016 FMP does not specify an exact amount of new square footage that would be added to the AVC campus upon full implementation of the FMP, it does identify a need for additional assignable square feet (ASF) on campus (see page 22 of the FMP). ASF is the assignable or usable space within a building (AVCCD, 2016).

A map of AVC’s current campus is shown in Figure 3. Projects included in the 2016 FMP are listed in Table 2 and shown in Figure 4.

Figure 3 Existing AVC Campus Map



Figure 4 2016 Facilities Master Plan Map



Source: AVCCD, 2016

Table 2 2016 FMP Projects

Demolition	Relocation	New Construction	Renovations/Change of Use
Student Services	T100	Academic Commons	Applied Arts
Student Center	T503	Arts Complex	Business Education
Fine Arts 1, 2, 3, 4	T504	Campus Security	Gymnasium
Learning Center	T800	Community Center	Field House
Faculty Office 1, 2, and 3	T850	CSUB + University Center	
Lecture Hall	T851	CTE Instruction	
Liberal Studies 1 and 2		Field House	
Math/Engineering		Instruction Building 1 (IB1)	
Technical Education 1 and 2		Instruction Building 2 (IB2)	
Learning Center		Instruction Building 3 (IB3)	
SOAR High School		SOAR High School	
CSUB		Student Center	
		Student Services	

Source: AVCCD, 2016

Planning and Design

Planning and design decisions in the 2016 FMP are based on two themes:

- To respect and honor the history of the original Antelope Valley College campus
- To approach design of the overall campus in an authentic way which ties the campus to its specific place

The Campus Development Guidelines within the 2016 FMP provide a framework for the future design of site and facilities projects. They are intended to ensure the development of AVC as a cohesive campus while supporting creative expression and innovative design solutions for individual projects. The Development Guidelines include the following elements:

Campus Guidelines

The campus guidelines recommend a new landscape pattern using existing grid system of the campus and surrounding community and overlaying it with a secondary system inspired by the natural curvilinear patterns seen within river washes inherent to the Antelope Valley floor in which Lancaster is located. The existing linear north-south and east-west grid of campus walks forms the backbone of the proposed pedestrian circulation system, while the more organic secondary system (nicknamed the garden ribbon) meanders through the grid, helping to create and define the edges of exterior gathering and learning areas.

Landscape Guidelines

The landscape guidelines recommend that the existing campus grid of walkways be designed with a linear planting of shade trees, pedestrian lightings, and a variety of seating opportunities; while the

secondary pedestrian system along the garden ribbon is envisioned as a more passive system than the utilitarian pedestrian spines. The landscape guidelines include different landscape typologies for the project site, including pedestrian spines and walks, landscape field, courtyards, garden ribbon, student plaza, historic commons, community corner, and community engagement walks.

Building Guidelines

The primary purpose of the building guidelines is to define a set of general design criteria for all future buildings on the project site, including new construction, additions and renovations. The ultimate goal is to create a well-defined, consistent physical campus environment that strengthens the AVC identity, fosters intellectual and social exchange, and inspires the entire campus and surrounding community. These guidelines focus on these primary elements:

- Transform the AVC campus identity
- Create a strong sense of place for AVC
- Enhance AVC's students' pride
- Respect and enhance the AVC legacy through authentic design

The building guidelines provide guidance for placemaking, form, massing, wayfinding, façade articulation, materiality, color palette, and sustainability.

9. Required Approvals

The following entitlements are required for the proposed project:

- Approval of the 2016 FMP by the AVCCD Board of Trustees

10. Surrounding Land Uses and Setting

The project site is located in the western portion of the City of Lancaster. As shown in Figure 2 and Figure 3, the project site is characterized by a central core of academic buildings set among areas landscaped with lawns and other ornamental vegetation, but with fewer lawn areas north of a line extending west from West Avenue J 12. This campus core is surrounded by perimeter parking lots fronting on the major streets that border the campus (except at the corner of West Avenue K and 30th Street West, which is occupied by the Administration Building and an area landscaped with lawn and trees), and athletic fields on the western edge of campus. Buildings on the project site are generally one to three stories in height, with some taller structures such as the Performing Arts Theater and athletic field lighting.

Areas surrounding the project site are mostly developed with residential subdivisions, although a considerable amount of undeveloped land also exists in this area. Other nearby uses include the following:

- Several elementary schools and a middle school exist within ½ mile of the project site
- The Seventh Day Adventist Church is located directly across 30th Street West from the project site, and the Church of Jesus Christ of Latter-Day Saints and the Bethel Baptist Church (including the Bethel Christian School) are located directly across West Avenue K from the project site

- The Prestige Assisted Living Center and the John P. Eliopolus Hellenic Center (an event center with banquet facilities) are located approximately 0.2 miles south of the southeastern corner of the project site on 30th Street West and West Avenue K 4
- Rawley Duntley Park is located directly across West Avenue K from the project site, with a strip of open space running along its western edge connecting to the Prime Desert Woodland Preserve located approximately ¼ mile to the south

Several parcels of land located on the south side of West Avenue K directly across from the project on either side of 30th Street West are zoned for commercial uses, but these parcels are currently undeveloped.

Buildings associated with these surrounding uses are generally one to two stories in height, with a few taller structures such as the church steeple/tower at the Church of Jesus Christ of Latter-Day Saints.

11. Other Public Agencies Whose Approval is Required

There are no other agencies than the lead agency from whom some facet of the project requires a permit/approval, along with the required permit/approval.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Potentially Significant Unless Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input checked="" type="checkbox"/> Tribal Cultural Resources | <input checked="" type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | |

Determination

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

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


Signature


Date


Printed Name


Title

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Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Have a substantial adverse effect on a scenic vista?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

The project site is located in a mostly developed area within the City of Lancaster, within the Antelope Valley, which is characterized by flat desert landscapes framed by mountain ranges on the south and west. The nearest hillsides are located approximately 4.3 miles to the south. Views of these distant hills are available from some locations on and around the project site, although they are frequently blocked by buildings and trees.

Foreground views from the project site are of surrounding urban development. As explained in Section 9 of the Initial Study portion of this document, surrounding development is mostly residential, and surrounding buildings are generally one to two stories in height, with a few taller structures such as the church steeple/tower at the Church of Jesus Christ of Latter-Day Saints across West Avenue K from the project site. Foreground views through the project site are of the AVC campus, mostly consisting of views of the surface parking lots around the perimeter of the campus, with campus buildings in the background. On the west side of campus, views from off campus through the project site include views of the athletic fields in this area. Off-site uses near the southeastern corner of campus have the AVC Administration Building in the foreground of their view through the project site.

Page 2-7 of the *Plan for the Natural Environment* chapter of the City of Lancaster General Plan (City of Lancaster, 2009a) states that “Maintaining views of the mountains and the desert scenes has

been identified by local residents as important in defining community identity.” Policy 3.8.1 of the General Plan is to “Preserve views of surrounding ridgelines, slope areas and hilltops, as well as other scenic vistas.” Because the proposed project would involve construction of new buildings on campus, thereby altering the arrangement of built space and open space on and around the project site, it could potentially block views of ridgelines, slope areas, and hilltops. This impact is therefore potentially significant and will be further studied in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

There are no designated state scenic highways in the vicinity of the project site. The nearest designated state scenic highway is State Route 2, the Angeles Crest Scenic Byway, located approximately 25 miles southeast of the site (Caltrans, 2018). The project site is not visible from this roadway, due to distance and intervening topography. Thus, the project site is not visible from any state scenic highway, and the proposed project would not directly damage or block the view of a scenic resource from a designated state scenic highway. There are no other specific, officially-designated scenic resources on or in the vicinity of the project site. The proposed project would therefore have no impact on scenic resources, and further analysis is not warranted.

NO IMPACT

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

As described in Section 9 of the Initial Study portion of this document, the project site’s visual character is typical of a community college campus, with a central core of academic buildings set among areas landscaped with lawns and other ornamental vegetation, but with fewer lawn areas north of a line extending west from West Avenue J 12. This campus core is surrounded by perimeter parking lots fronting on the major streets that border the campus (except at the corner of West Avenue K and 30th Street West, which is occupied by the Administration Building and an area landscaped with lawn and trees), and athletic fields on the western edge of campus. Buildings on the project site are generally one to three stories in height, with some taller structures such as the Performing Arts Theater and athletic field lighting.

As also described in Section 9, areas surrounding the project site are mostly developed with residential subdivisions, although a considerable amount of undeveloped land also exists in this area. Other nearby uses include schools, churches, parks, a nature preserve, an assisted living center, an event center, and undeveloped land. Buildings in these areas are generally one to two stories in height, with a few taller structures such as the church steeple/tower at the Church of Jesus Christ of Latter-Day Saints.

As described under Planning and Design in Section 8 of the Initial Study portion of this document, The 2016 FMP is meant to respect and honor the history of the original Antelope Valley College campus, and to approach the design of the overall campus in an authentic way which ties the campus to its specific place, including its surroundings. Buildings included in the 2016 FMP would generally be of a similar scale as existing on-campus buildings, and implementation of the 2016 FMP would not expand the overall footprint of the campus or greatly expand the amount of built square footage on campus. The extent to which the 2016 FMP would achieve these goals must be assessed in more depth in order to determine whether or not implementation of the proposed project may

substantially degrade the existing visual character or quality of the site and its surroundings. This impact is therefore potentially significant and will be further studied in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

The project site is in an urbanized area with high levels of existing lighting. Primary sources of light on the project site include lighting associated with the existing campus buildings, including building-mounted lighting, pathway lighting, and parking lot lighting. The primary source of glare on the project site is the sun's reflection from metallic and glass surfaces during the day, and from vehicle headlights at night. Adjacent buildings and roadway uses may generate light and glare along all sides of the project site, from both day-time reflected light from reflective building and vehicle surfaces, and from indoor and outdoor lighting and vehicle headlights at night.

The 2016 FMP includes elements that would introduce new sources of outdoor lighting, as well as indoor lighting that could spill into the outdoors, to the project site. These sources include exterior building lighting, pathway lighting, and interior building lighting shining from windows or other glazing. This lighting has the potential to spill over onto adjacent properties or roadways. Light from these sources could affect nearby light-sensitive receptors, such as residential uses. Headlights of vehicles entering, exiting, and driving on the project site could also affect nearby light-sensitive receptors. The windows and building materials on the exterior elevations of the proposed buildings could increase sources of reflected sunlight during certain times of the day, as could vehicles. These impacts are potentially significant and further analysis in an EIR is required.

POTENTIALLY SIGNIFICANT IMPACT

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

-
- a. *Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

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

The project site is within an urbanized area in the City of Lancaster. No forest land, agricultural land, agriculturally zoned land, or land under Williamson Act contract exists in the vicinity of the project site (City of Lancaster, 2009b). The proposed project would have no effect on forestland or the conversion of farmland to non-agricultural uses. No impact would occur and further analysis of these issues is not warranted.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>

Air Quality Standards and Attainment

The project site is located within the Mojave Desert Air Basin (MDAB), which is under the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD). As the local air quality management agency, the AVAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards (AVQMD, 2018).

Depending on whether or not the standards are met or exceeded, the MDAB is classified as being in “attainment” or “nonattainment.” Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The MDAB is in non-attainment for the state and federal ozone standards (and in severe nonattainment for the federal ozone standard), and the state standard for PM₁₀ (particulate matter up to 10 microns in size). The MDAB is unclassified for the state PM_{2.5} (particulate matter up to 2.5 microns in size) standard. The health effects associated with criteria pollutants for which the MDAB is in non-attainment are described in Table 3.

Table 3 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ^a

^a More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: EPA, Air Quality Criteria for Particulate Matter, October 2004.

Source: U.S. EPA, <https://www.epa.gov/criteria-air-pollutants>

Air Quality Plans and Regulations

In the Los Angeles County portion of the MDAB, the AVAQMD is required to prepare a plan for improvement for the air pollutants for which the MDAB is in non-attainment. The AVAQMD has developed the following federal and State attainment planning documents (City of Lancaster, November 2017):

- 2004 Ozone Attainment Plan (State and federal attainment)
- List and Implementation Schedule for District Measures to Reduce PM (2005 - State attainment)
- 8-Hour Reasonably Available Control Technology – State Implementation Plan Analysis (2006 & 2015)
- Federal 8-Hour Ozone Attainment Plan (2008)
- 2014 Update to the Reasonably Available Control Technology State Implementation Plan

Through the attainment planning process, the AVAQMD has developed the following Rules and Regulations to regulate sources of air pollution in the Los Angeles County portion of the MDAB (City of Lancaster, 2017).

- **Regulation II – Permits.** This regulation includes rule requirements for obtaining necessary permits to construct and operate that will be applicable to the proposed project’s portable or stationary construction equipment with engines greater than 50 horsepower that do not have permits under the CARB PERP program.
- **Rule 401 – Visible Emissions.** This rule prohibits discharge of air contaminants or other material, which are as dark or darker in shade as that designated No. 1 on the Ringelmann Chart.
- **Rule 402 – Nuisance.** This rule prohibits discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any such persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property.

- **Rule 403 – Fugitive Dust.** The purpose of this rule is to control the amount of PM entrained in the atmosphere from man-made sources of fugitive dust. The rule prohibits emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area to be visible beyond the emission source’s property line. This rule also requires other reasonable precautions be taken to minimize dust during construction activities and prevent track-out upon public roadways. These measures may include, adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities (such as during periods of high winds). In addition, a Dust Control Plan (DCP) would need to be submitted to the Air Pollution Control Officer (APCO) for approval if more than 5 acres would be disturbed or if more than 2,500 cubic yards of material will be excavated per day for at least three days (for each phase of the project as applicable). The DCP requirements necessary to comply with Rule 403 were revised in 2016. These revisions include requiring the contractor to meet on-site with a AVAQMD Field Inspector to review the DCP requirements prior to earthmoving/site clearing activities and follow the control measures approved in the DCP during construction, as well as requiring renewable energy projects to complete active operations DCP applications that require the operator to address dust control issue complaints during operation.
- **Rule 1110.2 – Internal Combustion Engines.** This rule establishes emissions limits for stationary, nonroad, and portable internal combustion engines rated at 50 or more brake horsepower (bhp). Permitting non-road and portable equipment through the CARB PERP program provide compliance with this rule.
- **Rule 1113 – Architectural Coatings.** This rule limits the volatile organic compound (VOC) content of paints applied to various surfaces that would be applicable to any construction painting operation.
- **Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil.** This rule sets requirements to control emissions from excavating, grading, handling and treating VOC-contaminated soils that may be encountered during project construction. The project site does not have known contamination issues. Regardless if VOC contaminated soils are discovered during project construction, this rule would apply and the proposed project would have to comply with applicable parts of this rule.

Significance Thresholds

The AVAQMD, in their *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines* document, recommends air quality analysis methodologies and establishes recommended CEQA significance thresholds for emissions from construction (daily thresholds) and operation (annual/yearly thresholds) for applicable criteria pollutant emissions as follows (City of Lancaster, November 2017):

- Carbon Monoxide (CO) – 548 pounds per day, 100 tons per year
- Oxides of Nitrogen (NOx) – 137 pounds per day, 25 tons per year
- Volatile Organic Compounds (VOC) – 137 pounds per day, 25 tons per year
- Oxides of Sulfur (SOx) – 137 pounds per day, 25 tons per year
- Particulate Matter (PM10) – 82 pounds per day, 15 tons per year
- Particulate Matter (PM2.5) – 82 pounds per day, 15 tons per year

- a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*
- b. *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*
- c. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

Emissions generated by the proposed project would include temporary construction emissions and long-term operational emissions. Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction vehicles, in addition to reactive organic gases (ROG) that would be released during the drying phase upon application of architectural coatings. It is assumed that the proposed project would comply with all applicable AVAQMD rules regarding construction, including those listed in the *Air Quality Plans and Regulations* section above.

The 2016 FMP includes four implementation phases. Construction would occur during each of these phases, beginning as early as 2019 through approximately the end of the 2016 FMP planning period in 2030. As stated in the 2016 FMP, the final design of each site and facility project will take place as projects are funded and detailed programming and design occurs. The exact schedule for the final design of each project is thus not known. Design would necessarily precede construction, so an exact construction schedule by project is thus also not known. Construction would generally consist of demolition, grading, building construction, paving, and architectural coating.

Long-term emissions associated with operation of the uses included in the 2016 FMP would include emissions from vehicle trips (mobile sources), natural gas and electricity use (energy sources), and landscape maintenance equipment, consumer products, and architectural coating associated with onsite development (area sources).

Emissions from construction and operation of the project listed in the 2016 FMP have the potential to exceed AVAQMD significance thresholds and conflict with or obstruct implementation of the applicable air quality plan, but further analysis is required to quantify the emissions associated with construction and operation of these projects. This impact is therefore potentially significant and emissions related to the construction and operation of the project will be further analyzed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- d. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Certain communities or population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as land uses that are more likely to be used by these population groups and include health care facilities, retirement homes, school and playground facilities, and residential areas. The sensitive receptor nearest to the project site include the Bethel Christian School, which is located directly across West Avenue K from the project site, as is Rawley Duntley Park. As discussed in Section 9 of the Initial Study portion of this document, other schools, as well as an assisted living center, are located within ½ mile of the site. Due to the project site's proximity to these uses, project-related construction and operational emissions may expose sensitive receptors to substantial pollutant concentrations. This impact is therefore potentially significant and will be further analyzed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

The educational uses proposed in the 2016 FMP are similar to those already existing on the site. Substantial objectionable odors are normally associated with such uses as agriculture, wastewater treatment, industrial facilities, or landfills, none of which are included in the 2016 FMP. The proposed project would therefore have a less than significant impact related to creation of objectionable odors, and further analysis of this issue is not warranted.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

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

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*
- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The project site is located in an urbanized area and does not contain native biological habitat but, given that there is a substantial amount of open (although developed) space on the project site, the potential for special-status species to occur on the project site cannot be completely ruled out. The 2030 General Plan Master Environmental Assessment (City of Lancaster, 2009b) identifies numerous special-status species that occur within the General Plan study area. As shown on Figure 3-3 of this document, an area to the southwest of the project site, apparently corresponding to the location of the Prime Desert Woodland Preserve, is characterized as containing Joshua Tree Woodland habitat. The CDFG considers the Joshua tree woodland as a threatened habitat within California. It is also recognized as a sensitive habitat by the City of Lancaster. The Prime Desert Woodland Preserve is one of the most significant existing Joshua tree stands in the General Plan study area (City of Lancaster, 2009b). While no direct impacts to this area are expected from the proposed project, given that it is neither on nor directly adjacent to the project site, indirect impacts cannot be ruled out. This area may also have the potential to act as a wildlife movement corridor connecting to other undeveloped lands, including the undeveloped area to the west of Rawley Duntley Park and the undeveloped land on the west side of the project site. These impact are therefore potentially significant, and will be further analyzed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

The project site is not located on or in the vicinity of a federally protected wetland (USFWS, 2018). No impact would occur and further analysis of this issue is not warranted.

NO IMPACT

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

Objective 3.4 of the Lancaster General Plan (City of Lancaster, 2009a) is the following: Identify, preserve and maintain important biological systems within the Lancaster sphere of influence, and educate the general public about these resources, which include the Joshua Tree - California Juniper Woodlands, areas that support endangered or sensitive species, and other natural areas of regional significance. Policy 3.4.1, and the specific actions listed under it, are meant to help achieve this objective. Because, as discussed above, the proposed project may have a potentially significant effect on Joshua Tree woodlands, it also has the potential to conflict with this policy. This impact is therefore potentially significant, and the proposed project's potential to conflict with this and any

other applicable local policies or ordinances protecting biological resources will be further analyzed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

The project site is not located within an area that is subject to an adopted conservation plan (City of Lancaster, 2009a, 2009b). No impact would occur and further analysis of this issue is not warranted.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The California Environmental Quality Act (CEQA) requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically 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, if it can be demonstrated that a project would 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 resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b]).

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:

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; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

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

AVC has occupied the project site since 1961, making some buildings on campus over 50 years old. Given their age, and the important role that AVC has played in the community, on-campus buildings and other features may have historical significance. The 2016 FMP would lead to demolition or relocation of some existing buildings on campus, and construction of new facilities that could alter the setting of on-campus buildings and other features with potential historical significance. Further investigation is required to determine if the 2016 FMP would affect historic resources on the project site or adjacent properties as defined under the California Public Resources Code § 15064.5. This impact is therefore potentially significant, and this issue will be further addressed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

c. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

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

The project site is located in an urbanized area of Lancaster that has generally been subject to previous disturbance. The project site is developed, and there is no evidence that archaeological or paleontological resources or human remains are present onsite. In the unlikely event that such resources are unearthed during excavation and grading, applicable regulatory requirements pertaining to the handling and treatment of such resources would be followed. If archaeological or paleontological resources are identified, as defined by Section 2103.2 of the Public Resources Code, the site would be required to be treated in accordance with the provisions of Section 21083.2 of the Public Resources Code as appropriate. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. However, further investigation as to whether the project site or adjacent properties contain any archaeological or paleontological resources, human remains, or tribal cultural resources (further discussed in Section 17 of this Environmental Checklist) is required in order to determine the potential significance of this impact, and these issues will be further addressed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

6 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

a.3. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps, known as Alquist-Priolo (AP) maps (California Department of Conservation, 2017). According to the Lancaster West Quadrangle AP map that covers the project site (California Department of Conservation, 2005), the project site is not located within or near an Alquist-Priolo (AP) fault zone, or on a known fault. No other seismic hazards (such as liquefaction zones or earthquake-induced landslide zones) are shown on or near the project site on this map. This impact would therefore be less than significant, and further analysis of this issue is not warranted.

LESS THAN SIGNIFICANT IMPACT

a.4. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The flat topography of the project site and its surroundings rules out potential impacts related to landslides. No impact would occur and further analysis of this issue is not warranted.

NO IMPACT

a.2. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

There are several active earthquake faults near Lancaster, the most significant of which is the San Andreas Fault, located approximately 5.5 miles southwest of the project site. Other active faults in the area include the Garlock Fault Zone, the Sierra Madre-San Fernando Fault Zones, and the Sierra Nevada (Owens Valley) Fault Zone. As with any site in the southern California region, the project site is susceptible to strong seismic ground shaking in the event of a major earthquake. These faults are capable of producing strong seismic ground shaking at the project site. For example, the maximum probable magnitude (or Moment magnitude) for the San Andreas Fault is 8.0+, with a recurrence interval of 50-200 years; and the Moment magnitude for the Garlock Fault is 7.5, with a recurrence interval of 500-700 years (City of Lancaster, 2009b).

On-site structures would be required to be constructed to comply with the California Building Code (CBC). Several geotechnical investigations have been conducted by United-Heider Inspection Group for construction projects at AVC which are included in the proposed 2016 FMP, including reports for the proposed Academic Commons Building, Community Center Building, CTE Building, and Photovoltaic Panel Array Structures, among others (United-Heider Inspection Group, 2017). These reports include recommendations for measures to comply with CBC Seismic Design Parameters, and have found that seismic ground shaking effects can be adequately addressed for each facility with incorporation of the recommended measures for each facility. Therefore, with adherence to the CBC and the recommendations of site-specific geotechnical reports, the facilities included in the

proposed project would be engineered to withstand the expected ground acceleration that may occur at the project site. In addition, project construction would be subject to review and approval by the Department of General Service's - Division of the State Architect (DSA) to ensure proper safety guidelines and all applicable buildings codes are adhered to. This impact is therefore less than significant, and further analysis of this issue is not warranted.

LESS THAN SIGNIFICANT IMPACT

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

Because the project site is already developed, a substantial amount of impermeable surfaces already exist on the site. As can be seen by comparing Figure 3 to Figure 4, the developed area of the project site would not substantially change under the proposed project. The proposed project would therefore not lead to a substantial change in the amount of impermeable surfaces on the project site, and substantial changes in runoff patterns or rates would not occur.

Any construction project carried out the proposed project would be comply with the NPDES Multiple Separate Storm Sewer System (MS4) Permit issued by the Los Angeles Regional Water Quality Control Board, including implementation of Best Management Practices (BMPs) to reduce polluted runoff from the project site by retaining, treating, or infiltrating polluted runoff onsite. This would also help prevent increased runoff from the project site onto surrounding areas that could cause soil erosion or the loss of topsoil. Construction projects carried out under the 2016 FMP would submit a Dust Control Plan, in accordance with AVAQMD Rule 403, to the AVAQMD for review and approval.

For the reasons discussed above, the proposed project would have a less than significant impact related to soil erosion or the loss of topsoil, and further analysis of this issue is not warranted.

LESS THAN SIGNIFICANT IMPACT

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

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is caused by a variety of activities, which include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydrocompaction. Lateral spreading is the horizontal movement or spreading of soil toward an open face. The potential for failure from subsidence and lateral spreading is highest in areas where the groundwater table is high and where relatively soft and recent alluvial deposits exist. Lateral spreading hazards may also be present in areas with liquefaction risks. Expansive soils are generally clays, which increase in volume when saturated and shrink when dried. As shown on Figure 2-3 of the Master Environmental Assessment for the City's General Plan, certain parts of Lancaster are located on soils with a moderate shrink-swell potential, and some areas have experienced sinkholes or fissures due to subsidence, but the project site is not in or near one of these areas (City of Lancaster, 2009b).

On-site structures would be required to be constructed to comply with the CBC. In addition, as discussed in Impact a, the DSA would provide design and construction oversight, review, and

approval for all construction plans proposed by AVC. The DSA has accessibility, structural safety, and historical buildings codes that the project would be required to adhere to. Lastly, several geotechnical investigations have been conducted by United-Heider Inspection Group for construction projects at AVC which are included in the proposed 2016 FMP, including reports for the proposed Academic Commons Building, Community Center Building, CTE Building, and Photovoltaic Panel Array Structures, among others (United-Heider Inspection Group, 2017). These reports include recommendations to avoid soil instability issues with specific construction projects, as necessary.

With adherence to the CBC, review and approval by the DSA, and compliance with recommendations in site-specific geotechnical reports, design and construction of the facilities included in the proposed project would be engineered to withstand any soil instability issues that may occur at the project site. These impacts are therefore less than significant, and further analysis of this issue is not warranted.

LESS THAN SIGNIFICANT IMPACT

- e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The project site is fully served by municipal utilities, including sewer, and would not use septic tanks or alternative wastewater disposal systems. No impact would occur and further analysis of this issue is not warranted.

NO IMPACT

7 Greenhouse Gas Emissions

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

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

GHGs occur naturally and from human activities. Human activities that produce GHGs include fossil fuel burning (coal, oil, and natural gas for heating and electricity, gasoline and diesel for transportation); methane generated by landfill wastes and raising livestock; deforestation activities; and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Since 1750, estimated concentrations of CO₂, CH₄, and N₂O in the atmosphere have increased over by 36 percent, 148 percent, and 18 percent respectively, primarily due to human activity. Emissions of GHGs affect the atmosphere directly by changing its chemical composition. Changes to the land surface indirectly affect the atmosphere by changing the way in the Earth absorbs gases from the atmosphere. Potential impacts in California of global warming may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Energy Commission [CEC] 2009).

a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Many local air pollution control agencies in California have proposed numerical or other GHG significance criteria. The AVAQMD, which has local regulatory authority over air pollutant emissions,

has established a recommended CEQA-significant emissions level for addressing GHG emissions of 100,000 tons CO₂e per year or 548,000 CO₂e per day (AVAQMD, 2016; p. 7). However, the AVAQMD does not currently have any additional CEQA guidelines related to assessing GHG impacts or have current or proposed new specific local regulations related to GHG emissions (City of Lancaster, 2017).

The project's proposed construction activities, energy use, daily operational activities, and mobile sources (traffic) would generate GHG emissions. Project-related construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed project. Operational Emissions include area sources (consumer products, landscape maintenance equipment, and painting), energy use (electricity and natural gas), solid waste, electricity to deliver water, and transportation emissions.

In order to fully and accurately account for the proposed project's emissions in all these categories, and compare them to applicable CEQA thresholds, the project's emissions must be modeled based on details related to construction schedule, construction equipment, and building materials; energy use during operation; and transportation emissions based on the results of a traffic study (see Section 16, Transportation, of this Environmental Checklist). Emissions related to construction and operation of the proposed project are therefore potentially significant, and will be modeled and evaluated in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

Many jurisdictions within California have adopted climate change plans or climate action plans. The City of Lancaster's Climate Action Plan (CAP) was adopted in March 2017. Lancaster's CAP includes a GHG emissions inventory, GHG emissions forecasts, proposed GHG emissions reduction measures by sector, and an implementation plan (City of Lancaster, 2016). The proposed project would be consistent with the City's CAP if it includes provisions to implement the applicable CAP GHG reduction measures. Consistency with the applicable measures will be evaluated in an EIR. The GHG analysis included in the EIR will consider court direction provided in the Newhall decisions; the 2030 statewide 40 percent GHG emissions reductions targets in Senate Bill 32, which took effect January 1 2017; and the ARB's Scoping Plan, which was adopted in December 2017 (ARB, December 2017). The EIR will also analyze consistency with applicable GHG reduction policies from other applicable plans, such as the Southern California Association of Government's Sustainable Communities Strategy/Regional Transportation Plan (SCAG's RTP/SCS).

POTENTIALLY SIGNIFICANT IMPACT

8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	■	□	□	□
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	□	□	□	■

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*
- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The proposed project would involve demolition and relocation of existing buildings, and construction of new buildings over the approximately 16-year span of the 2016 FMP. The proposed uses may involve the routine transport, use or disposal of hazardous substances typically associated with the operation of a community college, such as fuels for on-campus vehicles, chemicals for science classes, cleaning supplies, chlorine or bromine for pools, etc. Additionally, current uses on the project site, and soils beneath the project site, may contain hazardous materials such as asbestos or lead in buildings and contaminated soils. Demolition of buildings may release asbestos or lead, and excavation could release hazardous materials in contaminated soils. Because there are several schools located in the vicinity of the project site, including at least one school within ¼ mile (the Bethel Christian School, located directly across West Avenue K from the project site), the proposed project has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. These possible hazards represent potentially significant impacts and will be further analyzed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

In order to determine the potential significance of this impact, it is necessary to conduct a standard record search from federal, state, county and City environmental record sources for known hazardous materials contamination at the project site; assess applicable Phase I environmental assessments (ESA) or other technical reports that may be available from the City, applicant, or other

property owners in the study area; and examine files readily available from online databases, the Los Angeles County Fire Department, and the Regional Water Quality Control Board concerning past contamination spills and/or cleanup activities. Further analysis of this issue in an EIR is therefore required.

POTENTIALLY SIGNIFICANT IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*
- f. *For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area?*

The project site is not located within an are covered by an airport land use plan, or within two miles of a public airport or private airstrip. The closest airports or airstrips are the General William J. Fox Airfield, located approximately four miles to the northwest, and Palmdale Regional Airport, located approximately five miles to the southeast. No impact would occur and further analysis of these issues is not warranted.

NO IMPACT

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

The proposed project involves development in an urbanized area of Lancaster. While the project site generally has good vehicular access, the proposed project may result in an intensification of development on the project site, and increased traffic in the area. While the project would be required to comply with applicable California Fire Code requirements, the mix of proposed uses and emergency access to them after development may affect emergency response and emergency access. For these reasons, the proposed uses, including the details of ingress and egress and their effect on local traffic patterns, must be evaluated to determine the significance of this impact. These issues are therefore potentially significant and will be further addressed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- h. *Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

The project site is in an urbanized area and not adjacent to wildlands, and the Lancaster General Plan does not identify any wildland hazard areas in the vicinity (City of Lancaster, 2009b). Therefore, no impact would occur and further analysis of these issues is not warranted.

NO IMPACT

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9 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g. Place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place structures in a 100-year flood hazard area that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements?*
- e. *Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*
- f. *Would the project otherwise substantially degrade water quality?*

Implementation of the proposed project would involve demolition, new construction, building renovations, change of use, and site development projects but, as can be seen by comparing Figure 3 to Figure 4, the developed area of the project site would not substantially change under the proposed project. The proposed project would therefore not lead to a permanent, substantial change in the amount of impermeable surfaces or changes in drainage patterns on the project site, and permanent, substantial changes in runoff patterns or rates would not occur.

Temporary changes in drainage patterns can also occur during construction of projects, creating the potential to temporarily increase the amount of runoff, including polluted runoff. Storm water can carry with it pollutants such as: oil, pesticides, herbicides, sediment, trash, bacteria and metals and can then drain directly into surface water bodies. The proposed project would comply with the NPDES Multiple Separate Storm Sewer System (MS4) Permit issued by the Los Angeles Regional Water Quality Control Board, including implementation of Best Management Practices (BMPs) to avoid such impacts. BMPs would reduce polluted runoff from the project site by retaining, treating, or infiltrating polluted runoff onsite. Additionally, construction projects disturbing 1 or more acres are required to obtain coverage under the statewide National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. This is administered by the State Water

Resources Control Board (SWRCB). The applicant would also prepare a Storm Water Pollution Prevention Plan (SWPPP) that complies with the statewide permit.

For all the reasons discussed above, implementation of the proposed project would not violate any water quality standards or waste discharge requirements, create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality. These impacts would therefore be less than significant, and further analysis of this issue is not warranted.

LESS THAN SIGNIFICANT IMPACT

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

The Antelope Valley is located in a desert environment and underlain by a closed groundwater basin. The two primary sources of supply to the valley are imported water from the State Water Project (SWP) via the California aqueduct and groundwater extracted from the Antelope Valley groundwater basin. Water service to the project site would be provided by Los Angeles County Water Works District 40 (City of Lancaster, 2009b. Figure 10.1-2).

Implementation of the proposed project would involve an increase in the total amount of water-consuming facilities on the project site, but the 2016 FMP also includes water-saving features, such as plans for drought-tolerant and low water use landscaping. The Antelope Valley groundwater basin is in a state of overdraft. Records indicate that extraction has continued beyond the safe-yield levels, causing areas of land subsidence and the loss of basin (aquifer) storage (City of Lancaster, 2009b). Although implementation of the proposed project may incrementally increase water consumption (see Section 18, Utilities and Service Systems, of this Environmental Checklist), the proposed project includes water conservation features and would not receive its water exclusively from groundwater supplies. Any increase in water consumption associated with the proposed project would therefore not be sufficiently substantial to deplete groundwater supplies. This impact would be less than significant, and further analysis of this issue is not warranted.

LESS THAN SIGNIFICANT IMPACT

- c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?*
- d. Would the project substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?*

As discussed under Impact 9.a, e, f above, the developed area of the project site would not substantially change under the proposed project, and substantial changes in runoff patterns or rates would not occur. Potential impacts from temporary changes in drainage patterns due to construction would be addressed through compliance with the storm water quality regulations

discussed under Impact 9.a, e, f. This impact would be less than significant, and further analysis of this issue is not warranted.

LESS THAN SIGNIFICANT IMPACT

- g. Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?*
- h. Would the project place structures in a 100-year flood hazard area that would impede or redirect flood flows?*

The project site is not in a 100-year flood hazard area, as mapped on the FEMA flood maps for this portion of Lancaster (Department of Homeland Security, September 2008). As shown on the FEMA flood maps, it is in Zone X, Areas of 0.2% annual chance flood (also known as the 500-year floodplain). The proposed project would therefore have no impact in this regard and further analysis of these issues is not warranted.

NO IMPACT

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

According to the Master Environmental Assessment for the 2030 General Plan (City of Lancaster, 2009b), the California Aqueduct and Little Rock Reservoir present some risk of overflow. In the event of a major earthquake, the Aqueduct might be breached. During such a break, millions of gallons of water could spill north across the western portion of the study area. Failure of the Little Rock Dam would result in the inundation of a large area north of the dam. However, Little Rock dam was improved in 1994 to meet seismic requirements, reducing the risk of this potential hazard to a less than significant level. Also, Action 4.1.1(f) of the General Plan is to Assist and encourage the efforts of the State and local entities responsible for regular maintenance of the California Aqueduct and the Little Rock Dam to reduce the risk of seismic failure and to ensure that water levels are kept at or below the designed safe water levels, thereby reducing the risk of overtopping. For these reasons, and because the project site is located approximately 4.5 miles from the Aqueduct and approximately 16 miles from Little Rock Dam, this impact would be less than significant and further analysis of these issues is not warranted.

LESS THAN SIGNIFICANT IMPACT

- j. Would the project result in inundation by seiche, tsunami, or mudflow?*

The project site is located approximately 50 miles from the Pacific Ocean, at an elevation of approximately 2,400 feet above sea level, and thus would not be subject to inundation by tsunami. It is also not located sufficiently near any other large inland body of water for seiche to be a potential hazard. The project site is also not located in or near any hillside areas where mudflow could be a hazard, the nearest hillside areas being approximately five miles to the southwest. The proposed project would therefore have no impact related to these issues, and further analysis of these issues is not warranted.

NO IMPACT

10 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with an applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project physically divide an established community?

The proposed project is a plan for the future development of AVC, on a site that is already developed. The project does not include new roads or other facilities that would physically divide the community. There would be no impact in this regard and further analysis of this issue is not warranted.

NO IMPACT

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

The City of Lancaster establishes land use policy and practice in Lancaster through its General Plan and Municipal Code. The proposed project would not change the land use on the project site, which would continue to be a community college campus. As listed in Section 6 and Section 7 of the Initial Study portion of this document, the project site’s zoning and land use designation are consistent with its use as a school.

Another policy documents with relevance and applicability to the proposed project is the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) of the Southern California Association of Governments (SCAG). SCAG functions as the federally recognized Metropolitan Planning Organization (MPO) for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties (SCAG Region). As the MPO, SCAG develops long-range regional transportation plans (RTPs) in cooperation with the California Department of Transportation (Caltrans) and the U.S.

Department of Transportation (US DOT). Utilizing much of the same regional data, it also prepares and/or assists other agencies in developing the state-required regional Sustainable Communities Strategy (SCS); population, housing, and employment growth forecasts; regional transportation improvement programs; regional housing needs allocations (RHNA); and air quality management plans.

Although SCAG has no direct land use authority, generalized land use planning consistency between local jurisdictions and SCAG is required by state law for purposes of meeting state-required environmental quality goals and/or for eligibility for a wide range of transportation and other types of intergovernmental grants and funding programs that have long-range positive environmental impacts. In already-developed areas, the RTP/SCS largely incorporates local land use plans provided to SCAG by local jurisdictions during development of the SCS/RTP. Because the proposed project is consistent with existing uses and Lancaster's land use plan, it would also be generally consistent with the RTP/SCS in terms of land use.

SCAG's 2016 RTP/SCS includes the following foundational policies, which are intended to guide the development of member jurisdictions' land use strategies:

1. Identify regional strategic areas for infill and investment
2. Structure the plan on a three-tiered system of centers development
3. Develop "Complete Communities"
4. Develop nodes on a corridor
5. Plan for additional housing and jobs near transit
6. Plan for changing demand in types of housing
7. Continue to protect stable, existing single-family areas
8. Ensure adequate access to open space and preservation of habitat
9. Incorporate local input and feedback on future growth.

Because the proposed project is a plan for the future development of an existing community college campus in an already-developed area, but would not expand the physical boundaries of this campus, the proposed project is a form of infill development, which is consistent with foundational policy #1 of SCAG's 2016 RTP/SCS, which is to identify regional strategic areas for infill and investment. The proposed project has no features that would conflict with any of the foundational policies of SCAG's 2016 RTP/SCS. The proposed project would therefore not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur and further analysis of this issue is not warranted.

NO IMPACT

- c. *Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?*

The project site is not located within an area that is subject to an adopted conservation plan (City of Lancaster, 2009a, 2009b). No impact would occur and further analysis of this issue is not warranted.

NO IMPACT

11 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The project site is already developed, and is not in an area of known mineral resources (City of Lancaster, 2009b). No impact would occur and further analysis of this issue is not warranted.

NO IMPACT

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12 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels above those existing prior to implementation of the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located in 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear works, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range.

Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance; while noise from a point source typically attenuates at about 6 dBA per doubling of distance. Noise levels may also be reduced by the introduction of intervening structures. For example, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm that breaks the line-of-sight reduces noise levels by 5 to 10 dBA. The construction style for dwelling units in California generally provides a reduction of exterior-to-interior noise levels of about 30 dBA with closed windows (FTA, 2006).

Some land uses are more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. For example, residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, museums, cultural facilities, parks, and outdoor recreation areas are more sensitive to noise than commercial and industrial land uses. The noise-sensitive receptors closest to the project site are residences, schools, and churches located on all sides of the project site (see Section 10 of the Initial Study portion of this document).

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas sound is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is measured in vibration decibels (VdB).

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources inside buildings such as the operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads.

Vibration impacts would be significant if they exceed the following Federal Transit Administration (FTA) thresholds (FTA, 2006):

- 65 VdB where low ambient vibration is essential for interior operations, such as hospitals and recording studios
- 72 VdB for residences and buildings where people normally sleep, including hotels
- 75 VdB for institutional land uses with primary daytime use, such as churches and schools
- 95 VdB for physical damage to extremely fragile historic buildings
- 100 VdB for physical damage to buildings

In addition to the groundborne vibration thresholds outlined above, the FTA outlined human response to different levels of groundborne vibration and determined that vibration that is 85 VdB is acceptable only if there are an infrequent number of events per day.

The City of Lancaster adopted its Plan for Public Health and Safety, which includes all the necessary information and analysis to comply with the State requirements for the Noise Element of a General Plan, in July 2009. The Noise section of the Plan for Public Health and Safety provides a description of existing noise levels and sources in the community. It also includes Objective 4.3, which is to promote noise compatible land use relationships by implementing the noise standards identified in Table 4 (Table 3-1 of the General Plan) to be utilized for design purposes in new development, and establishing a program to attenuate existing noise problems. The Noise section also includes comprehensive goals, policies, and implementing actions to help achieve this objective.

Table 4 City of Lancaster Compatible Noise and Land Use Compatibility Guidelines

Land Use	Maximum Exterior CNEL (dBA)	Maximum Interior CNEL (dBA)
Rural, Single Family, Multiple Family Residential	65	45
Schools		
Classrooms	65	45
Playgrounds	70	–
Libraries	–	50
Hospitals/Convalescent Facilities		
Living Areas	–	50
Sleeping Areas	–	40
Commercial and Industrial	70	–
Office Areas	–	50

Source: City of Lancaster, 2009a

To implement the City’s noise policies, the City adopted a Noise Regulations (also known as the Noise Ordinance), which are contained in Chapter 8.24 of the City’s Municipal Code (City of Lancaster, 2018). The Lancaster Noise Ordinance has no numerical standards, but prohibits loud, unnecessary and unusual noises within City limits. It also prohibits construction, including operation of certain construction equipment and any other machine, tool, device or equipment making loud noises within 500 feet of an occupied dwelling, apartment, hotel, mobile home or other place of residence, at any time on Sunday or any day between the hours of eight p.m. and seven a.m., with certain exceptions (Sections 8.24.040 and 8.24.050).

The City has not adopted any thresholds or regulations addressing vibration. Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The most common sources of noise in the project site vicinity are transportation-related, such as automobiles, trucks, buses and motorcycles. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create a sustained noise level, and

because of its proximity to areas sensitive to noise exposure. Other sources of noise in the vicinity include noise from temporary events, such as crowd noise at athletic events at AVC's Marauder Stadium.

- a. *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*
- b. *Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*
- c. *Would the project result in a substantial permanent increase in ambient noise levels above levels existing without the project?*
- d. *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

The proposed project could generate temporary noise increases during construction and long-term increases associated with project operation.

Construction would be required to comply with Section 8.24.040 of the Lancaster Municipal Code, which, as explained above, forbids construction at any time on Sunday or any day between the hours of eight p.m. and seven a.m, with certain exceptions. With compliance with this ordinance, project-related construction would not occur during recognized sleep hours for residences. However, other noise-sensitive uses, such as schools, exist adjacent to and nearby the project site, and temporary construction noise during hours allowed by the Municipal Code could negatively affect these sensitive receptors. Temporary construction noise impacts will therefore be evaluated in an EIR.

Existing uses near the project site may periodically be subject to noises associated with operation of the proposed project, including noise that is typical of a community college, such as conversations, music, delivery trucks, crowd noise (including occasional outdoor athletic events), and noise associated with rooftop ventilation and heating systems and other mechanical equipment. The project would be required to comply with applicable regulations of the City of Lancaster, including Section 8.24.030 of the Municipal Code, which prohibits loud, unnecessary, and unusual noises that are physically annoying or discomfiting to persons of ordinary sensitiveness or would occasion physical discomfort to the inhabitants of any neighborhood. Nevertheless, the potential impacts of the proposed project in this regard require further analysis to determine if they would be consistent with these regulations. Potential impacts to noise-sensitive receptors from operation of the proposed project would therefore be potentially significant and will also be analyzed in an EIR.

The proposed project would also contribute to noise related to vehicular movement, since it would contribute to an increase in the number of vehicle trips to and from the project site. Long-term noise impacts associated with increased vehicle traffic will therefore also be evaluated in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

The project site is not located within an area covered by an airport land use plan, or within two miles of a public airport or private airstrip. The closest airports or airstrips are the General William J. Fox Airfield, located approximately four miles to the northwest, and Palmdale Regional Airport, located approximately five miles to the southeast. No impact would occur and further analysis of these issues is not warranted.

NO IMPACT

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13 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*
- b. *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

As explained at the beginning of Section 8 of the Initial Study portion of this document, while the 2016 FMP would accommodate an increase in FTES at AVC, this FTES increase is based on estimates of future demand for AVCCD’s services, and the 2016 FMP would accommodate, not cause, this increase. The proposed project does not include any residential component, and would not extend roads or other infrastructure into new areas. It would therefore not directly or indirectly induce substantial population growth in the area. It would also not involve displacement of any existing housing or people. The proposed project would therefore have no impact related to population and housing, and further analysis of these issues is not warranted.

NO IMPACT

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14 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The City of Lancaster contracts with the Los Angeles County Fire Department for fire and paramedic services. There are currently six fire stations within the City of Lancaster, as well as one in the unincorporated community of Antelope Acres and one in the unincorporated community of Quartz Hill. Of these six fire stations, the closest to the project site is Los Angeles County Fire Department Station 134, located at 43225 25th Street West, approximately one mile from the project site. Services provided from this and the City’s other fire stations include fire suppression, fire prevention, paramedic response, swift water rescue, and hazardous materials response (City of Lancaster, 2017). The project site is within the service area of this station (City of Lancaster, 2009b, Figure 9.1-1).

Policy 4.7.1 of the Lancaster General Plan is to ensure that an adequate number of fire stations and adequate firefighting equipment and personnel are provided to protect the citizens and businesses of the City of Lancaster. The General Plan includes several specific actions to implement this policy, including Action 4.7.1(c), which requires the City to involve fire department personnel in the development review process for all new development proposals through participation in the

Development Review Committee and by referring development requests to the Los Angeles County Fire Department for review and comment. Because the proposed project would accommodate, not cause, population growth (see Section 13, Population and Housing), it would not create the need for new or physically altered fire protection facilities that could cause significant environmental impacts. Nevertheless, AVC would still be required to comply with these policies and actions for all projects carried out under the proposed 2016 FMP. Impacts related to provision of fire protection facilities would therefore be less than significant, and further analysis of these issues is not warranted.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The City of Lancaster contracts with the Los Angeles County Sheriff's Department (LASD) for police services. The Lancaster Sheriff's station is located approximately three miles northeast of the project site, at 501 West Lancaster Boulevard in downtown Lancaster. The Lancaster Station has 189 sworn personnel and 74 civilian personnel assigned to cover an area of more than 600 square miles, including the City of Lancaster, and the communities of Lake Los Angeles, Quartz Hill, and Antelope Acres. Law enforcement services are provided for over 190,000 residents (City of Lancaster, 2017).

Because the proposed project would accommodate, not cause, population growth (see Section 13, Population and Housing), it would not create the need for new or physically altered police protection facilities that could cause significant environmental impacts. Impacts related to provision of police protection facilities would therefore be less than significant, and further analysis of these issues is not warranted.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The City of Lancaster is served by four public school districts: Antelope Valley Union High School District (AVUHSD), Eastside Union School District (EUSD), Lancaster School District (LSD), and the Westside Union School District (WUSD) (City of Lancaster, 2009b). While implementation of the proposed project would itself result in the physical alteration of a school (AVC), any physical effects of the project are analyzed throughout the Environmental Checklist portion of this Initial Study, and in some cases will also be analyzed in an EIR. Because the proposed project would accommodate, not cause, population growth (see Section 4.11.12, *Population and Housing*), it would not create the need for any other new or physically altered schools, and accordingly, would not generate construction that has the potential to cause significant environmental impacts. Thus, impacts to parks, schools, and other governmental facilities (including schools) would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Parks and recreational facilities are made available to Lancaster residents through the Department of Parks, Recreation, and Arts. The State of California, County of Los Angeles, the City of Lancaster, and private groups provide and operate recreation facilities in the north Antelope Valley area, which includes the City of Lancaster and General Plan study area. The park closest to the project site is Rawley-Duntley Park, which is located directly across West Avenue K from the project site. The park consists of 19 acres, which include four acres dedicated to Desert Woodland open space and seven acres pending future park development. Facilities provided at Rawley Duntley include an open play area, children's play area, picnic facilities and group picnic area, basketball courts, two baseball fields, and volleyball courts (City of Lancaster, 2009b).

Because the proposed project would accommodate, not cause, population growth (see Section 13, Population and Housing), it would not create the need for new or physically altered parks that could cause significant environmental impacts. Impacts related to provision of parks would therefore be less than significant, and further analysis of these issues is not warranted.

LESS THAN SIGNIFICANT IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?

Public library services in Lancaster are provided by the Los Angeles County Public Library system. The Los Angeles County Public Library first opened the Lancaster Community Library on October 19, 1912 at Antelope Valley High School. Over the years, the Community Library relocated to several locations. Currently, the Los Angeles County Public Library operates two facilities available to the public within the study area, which include the Lancaster Regional Library and the Quartz Hill Community Library. Lancaster Regional Library, the larger of the two County Public libraries, was opened in 1996 and occupies 48,721 square feet of floor space at 601 West Lancaster Boulevard in downtown Lancaster, approximately 2.9 miles northeast of the project site. The Quartz Hill occupies 12,514 square feet of floor space at 5040 West Avenue M-2 in Quartz Hill, approximately 2.8 miles southwest of the project site. These libraries offer not only books and other publications, but also online collections, audio books, downloadable music, streaming movies, audiobooks, and music, live homework help, and children's areas (City of Lancaster, 2009b; County of Los Angeles Public Library, 2018a, 2018b).

The proposed project would accommodate an expansion of AVC in response to future demand for its services. AVC currently includes an on-campus library, and would continue to do so under the proposed project. In fact, the 2016 FMP identifies 9,741 ASF of additional library space (AVCCD, 2016).

Because the proposed project would accommodate, not cause, population growth (see Section 13, Population and Housing), it would not create the need for new or physically altered public libraries or other governmental facilities that could cause significant environmental impacts. Impacts related

to provision of governmental facilities would therefore be less than significant, and further analysis of these issues is not warranted.

LESS THAN SIGNIFICANT IMPACT

15 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?*

As discussed under Item 14.a.4, the proposed project would not substantially increase demand for parks. It would therefore not 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. This impact would be less than significant, and further analysis of these issues is not warranted.

LESS THAN SIGNIFICANT IMPACT

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?*

As listed in Table 2 and shown in Figure 4, the 2016 FMP does include plans for future new or renovated recreational facilities, including a new Field House and a renovated Gymnasium. Space for the new Field House will be created by relocating existing modular buildings. The new Field House will meet accessibility requirements for restrooms, locker rooms, first-aid & training rooms and equipment areas for the athletic complex. The facility will support community and college events. The existing gymnasium was built in 1961 and is in poor condition. The FMP recommends a complete renovation of the existing facility to correct building deficiencies and address the current and projected kinesiology program needs (AVCCD, 2016).

The potential environmental effects of these proposed facilities are part of the overall environmental effects of the proposed project, which are analyzed throughout this Initial Study and has been found to either have no impact, a less than significant impact, or potentially significant impacts that will be further studied in an EIR. The proposed recreational facilities would have no separate environmental impacts which might have an adverse physical effect on the environment. There would be no impact in this regard and further analysis of these issues is not warranted.

NO IMPACT

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16 Transportation/Traffic

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?*
- b. *Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*
- d. *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*
- e. *Would the project result in inadequate emergency access?*
- f. *Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?*

The increased enrollment on the AVC campus associated with the proposed project could increase vehicular traffic to and from the project site, as well as demand for transit. Increased traffic, as well as changes in circulation patterns included in the proposed project (such as relocating the campus's main entrance to 30th Street West rather than West Avenue K), or prompted by the proposed project, may adversely affect operation of the local circulation system. Therefore, the project has the potential to conflict with applicable transportation plans or policies, substantially increase hazards due to a design feature, result in inadequate emergency access, or decrease the performance or safety of bikeways and pedestrian facilities. These are potentially significant impacts and will be further studied in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

The project site is not located within an area covered by an airport land use plan. The closest airports or airstrips are the General William J. Fox Airfield, located approximately four miles to the northwest, and Palmdale Regional Airport, located approximately five miles to the southeast. There are no elements of the proposed project that would increase or change the location of air traffic, and the 2016 FMP does not include any exceptionally tall facilities or facilities that would otherwise pose a hazard to aviation. No impact would occur and further analysis of these issues is not warranted.

NO IMPACT

17 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a 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:</p>				
<p>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</p>	■	□	□	□
<p>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 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	■	□	□	□

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, “tribal cultural resources.” AB 52 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

1. 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
2. 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 these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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 2024.1?*

The project site has been previously graded and disturbed during construction of the existing structures. For this reason, no tribal cultural resources are anticipated to be discovered during construction. However, the possibility that that new ground disturbance associated with construction of projects included in the 2016 FMP could encounter previously undiscovered tribal cultural resources cannot be completely ruled out. This impact is therefore potentially significant, and will be further studied in an EIR, which will also include the results of the AB 52 consultation process that will be undertaken by the lead agency.

POTENTIALLY SIGNIFICANT IMPACT

18 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	■	□	□	□
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	■	□	□	□
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	□	□	□	■
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	■	□	□	□
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	■	□	□	□
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	■	□	□	□
g. Comply with federal, state, and local statutes and regulations related to solid waste?	■	□	□	□

-
- a. *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*
- b. *Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

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

Collection, treatment, and disposal of wastewater within the City of Lancaster and adjacent unincorporated areas are under the jurisdiction of County Sanitation District No. 14 of Los Angeles County (District No. 14). District No. 14 owns and maintains the trunk sewers and Lancaster Wastewater Reclamation Plant (LWRP), which convey and treat wastewater generated by residential, commercial and industrial areas of the City of Lancaster, as well as portions of the City of Palmdale and unincorporated County. Local sewer collection is provided by the small diameter pipelines owned by the City of Lancaster (City of Lancaster, 2009b).

Because the proposed project would represent an intensification of use on the project site compared to existing conditions, it would increase wastewater generation. Such an increase could potentially exceed wastewater treatment capabilities. This impact is potentially significant, and will be analyzed in an EIR, which will calculate current wastewater generation and the project's wastewater generation, and compare any increase to the available capacity of wastewater systems serving the project site and the City.

POTENTIALLY SIGNIFICANT IMPACT

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

As discussed under Item a, e, f, in Section 9, Hydrology and Water Quality, of this Environmental Checklist, the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems. No new storm water drainage facilities would be required. No impact would occur and further analysis of these issues is not warranted.

NO IMPACT

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

The Antelope Valley is located in a desert environment and underlain by a closed groundwater basin. The two primary sources of supply to the valley are imported water from the State Water Project (SWP) via the California aqueduct and groundwater extracted from the Antelope Valley groundwater basin. The Antelope Valley basin is in a state of overdraft. Records indicate that extraction has continued beyond the safe-yield levels, causing areas of land subsidence and the loss of basin (aquifer) storage (City of Lancaster, 2009b). Water service to the project site would be provided by Los Angeles County Water Works District 40 (City of Lancaster, 2009b. Figure 10.1-2).

Implementation of the proposed project would involve an increase in the total amount of water-consuming facilities on the project site. Although the 2016 FMP also includes water-saving features, such as plans for drought-tolerant and low water use landscaping, the increase in the total amount of facilities and FTES may increase water consumption. Such an increase could potentially exceed, or substantially contribute to an exceedance of, local supplies. This impact is potentially significant and will be analyzed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*
- g. Would the project comply with federal, state, and local statutes and regulations related to solid waste?*

Waste Management of Antelope Valley is currently the sole franchise private hauler serving the City of Lancaster for waste collection. The Lancaster Landfill and Antelope Valley Landfill are two landfill sites located in the Antelope Valley. Both sites are in the process of expanding to accommodate increasing waste generation. Nearly 100 percent of Lancaster's solid waste is taken to one of these landfills; however, other regional landfills in Los Angeles County also accept solid waste from the City (City of Lancaster, 2017).

Senate Bill (SB) 1016 requires that the 50 percent diversion requirement mandated by Assembly Bill (AB) 939 be measured in terms of pounds per person per day (ppd), instead of by volume or as an aggregate measure separate from population. CalRecycle sets a target for resident and employee per capita per day disposal rates. In Lancaster, the target for residents is 6.4 ppd and 23.2 ppd for employees. In 2015 the per capita disposal rate per resident in Lancaster was 3.9 ppd, and the per capita disposal rate per employee was 15.1 ppd (CalRecycle, 1995, 2018). Lancaster has therefore achieved both the resident and employee targets set by CalRecycle.

Because the proposed project would intensify development on the project site compared to existing conditions, it would increase waste generation compared to existing conditions. This increase could exceed the capacity of solid waste disposal facilities. This is a potentially significant impact that will be studied further in an EIR, which will compare the project's solid waste generation to available landfill capacities and waste reduction mandates.

POTENTIALLY SIGNIFICANT IMPACT

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19 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. 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)?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

As discussed in Section IV, Biological Resources of this Environmental Checklist, although the project site is in an urbanized area, the proposed project has the potential to significantly impact biological resources, since the project site is near areas with known sensitive biological resources, with potential connectivity to the project site. As explained in Section 5, Cultural Resources, the proposed project’s impacts to cultural resources are potentially significant. These impacts will be studied further in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As described in the discussion of Environmental Checklist Sections 1 through 18, the proposed project has potentially significant impacts requiring further analysis in an EIR for the following environmental issues: aesthetics, air quality, biological resources, cultural resources, greenhouse gas emissions, hazards and hazardous materials, noise, transportation/traffic, and utilities and service systems. The potential cumulative impacts of these environmental issues are therefore also potentially significant and will be studied in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed throughout the Environmental Checklist portion of this Initial Study, the proposed project has potentially significant impacts related to each of these issues. These impacts will therefore be studied further in an EIR in order to determine whether or not the project would result, either directly or indirectly, in adverse hazards related to human beings.

POTENTIALLY SIGNIFICANT IMPACT

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List of Preparers

Rincon Consultants, Inc. prepared this IS-NOP under contract to the Antelope Valley Community College District. Persons involved in data gathering analysis, project management, and quality control are listed below.

RINCON CONSULTANTS, INC.

Greg Martin, AICP, Senior Planner/Project Manager

Joe Power, AICP, Principal

Appendix A

Notice of Preparation and Responses

NOTICE OF PREPARATION

TO: Agencies, Organizations and Interested Parties

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Section 15082(a) of the California Code of Regulations

Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the Antelope Valley Community College District (District) is the Lead Agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts associated with the project identified below.

AGENCIES: The purpose of this notice is to serve as a Notice of Preparation (NOP) of an EIR pursuant to the State CEQA Guidelines Section 15082, and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project. Specifically, the District requests input on environmental information germane to your agency's statutory responsibility in connection with the proposed project. Responsible agencies may rely on the Draft EIR prepared by the City when considering permits or other approvals for this project.

ORGANIZATIONS AND INTERESTED PARTIES: The District requests your comments regarding the proposed scope and content of the environmental information to be included in the EIR.

PROJECT TITLE: Antelope Valley Community College District 2016 Facilities Master Plan

PROJECT LOCATION: Antelope Valley College, 3041 West Avenue K, Lancaster, California, 93536-5426.

PROJECT DESCRIPTION: The proposed project is an update of the Antelope Valley Community College District (District) Facilities Master Plan (FMP), also known as the 2016 FMP. The 2016 FMP is guide for the future development of the District's Lancaster campus, also known as Antelope Valley College (AVC). The 2016 FMP would accommodate an increase in full-time equivalent students (FTES) district-wide (including both the Lancaster campus and the District's Palmdale Center) of 5,175 FTES by 2030, compared to 2014 levels, for 19,852 total FTES in 2030, 15,908 of which would be at the Lancaster campus.

The 2016 FMP is a strategy for modifying the Lancaster campus to accommodate growth and change over the next 30 years. The initial FMP for the Palmdale Center is presently being developed to support proposed expansion plans of the center and will be incorporated into the District Facilities Master Plan at a later date. The 2016 FMP is based on findings from the District's Educational Master Plan. It provides a guide for long-term land and building use, and serves as a guide for near-term decisions on program planning and implementation, resource allocation, setting priorities and other College administrative matters which influence the student educational experience at AVC.

The 2016 FMP presents an overall picture of the future developed campus and includes recommendations for new construction, building renovations, change of use, and site development projects. It recommends the demolition and replacement of a number of the oldest buildings on the campus. Functions currently housed in these facilities will be relocated to new or existing facilities and will be designed to support the new campus zoning diagram and address projected instructional program needs. Although the 2016 FMP does not specify an exact amount of new square footage that would be added to the Lancaster campus upon full implementation of

the 2016 FMP, it does identify a need for additional assignable square feet (ASF) on campus. ASF is the assignable or usable space within a building. The 2016 FMP requires approval by the District's Board of Trustees.

PROBABLE ENVIRONMENTAL EFFECTS OF THE PROJECT: The Initial Study for the proposed project found that it would have potentially significant environmental impacts in the following areas, which will therefore be studied in the EIR: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas Emissions, Hazards & Hazardous Materials, Noise, Transportation/Traffic, Tribal Cultural Resources, and Utilities and Service Systems.

Scoping Meeting/Community Workshop. The Antelope Valley Community College District, in its role as Lead Agency, will hold a public scoping meeting to provide an opportunity for the public and representatives of public agencies to address the scope of the Environmental Impact Report. The Scoping Meeting for the project is scheduled to occur during a regular meeting of the Antelope Valley Community College District Board of Trustees on **Monday, June 11, 2018, 6:30 pm** at the following location:

Antelope Valley Community College District – PALMDALE CENTER
Room 147 & 148
2301 East Palmdale Boulevard
Palmdale, CA 93550

PUBLIC REVIEW PERIOD: The Initial Study – Notice of Preparation (IS-NOP) for the proposed project is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). The public review and comment period during which the District will receive comments on the IS-NOP **begins Tuesday, May 29, 2018** and ends **Wednesday, June 27, 2018**.

THE IS-NOP IS AVAILABLE FOR PUBLIC REVIEW AT THE FOLLOWING LOCATIONS:

- Antelope Valley College, Facilities Services Building, 3041 West Ave K, Lancaster, CA, 93536-5426, Monday through Thursday between the hours of 7:30 a.m. – 12:00 p.m. and 1:00 p.m. - 5:30 p.m., and Friday between the hours of 8:00 a.m. – 11:00 a.m.
- Online at: <http://www.avc.edu/news/2018/may/NOP>

RESPONSES AND COMMENTS: Please list a contact person for your agency or organization, include U.S. mail and email addresses, and send your comments to:

Antelope Valley Community College District
Attn: Doug Jensen, Executive Director, Facilities Services
3041 West Avenue K
Lancaster, CA 93536-5426

Or via email to: djensen@avc.edu

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
 - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
 - a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
 - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
 - e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
 - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
 - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
 - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

This process should be documented in the Cultural Resources section of your environmental document.

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires **local governments** to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. **Tribal Consultation**: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation**. There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality**: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation**: Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.



Antelope Valley Air Quality Management District
43301 Division St., Suite 206
Lancaster, CA 93535-4649

661.723.8070

In reply, please refer to AV0618/066

June 11, 2018

Antelope Valley Community College District
ATTN: Doug Jensen, Executive Director, Facilities Services
3041 West Avenue K
Lancaster, CA 93536

RE: Initial Study-Notice of Preparation (IS-NOP)

Mr. Jensen,

The Antelope Valley Air Quality Management District (District) has received the request for comment on IS-NOP for the proposed project to update the Antelope Valley Community College District Facilities Master Plan.

The District requires that all demolition/renovation activities must comply with the requirements outlined in District Rule 1403, *Asbestos Emissions From Demolition/Renovation Activities*. The District's California Environmental Quality Act (CEQA) significance thresholds can be found in the "AVAQMD CEQA and Federal Conformity Guidelines" located on the District web site www.avaqmd.ca.gov.

The District requires applicable permit application(s) and fees be submitted for any equipment or process that may not be exempt under District Rule 219 and have the potential to emit or control air contaminants as a condition of approval.

All construction equipment utilized on this project must comply with Air Resources Board In-Use Off-Road Diesel Vehicle Regulation.

Thank you for the opportunity to review this planning document. If you have any questions regarding the information presented in this letter please contact me at (661) 723-8070 ext. 2 or bbanks@avaqmd.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Bret Banks". The signature is stylized and somewhat cursive.

Bret Banks
Executive Director/APCO

BSB/bjl
Sent via Email

DEPARTMENT OF TRANSPORTATION

DISTRICT 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-0673
FAX (213) 897-1337
TTY 711
www.dot.ca.gov



*Serious Drought.
Making Conservation
a California Way of Life.*

June 27, 2018

Mr. Doug Jensen
Antelope Valley Community College District
3041 West Avenue K
Lancaster, CA 93536

RE: Antelope Valley Community College
District 2016 Facilities Master Plan
Notice of Preparation of Environmental
Impact Report (NOP)
SCH # 2018051057
GTS # 07-LA-2018-01477-FL
Vic. LA/14/PM R 66.99

Dear Mr. Jensen:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The plan proposes an update to the Antelope Valley Community College District (District) Facilities Master Plan (FMP), also known as the 2016 FMP. It is a guide for the future development of the District's Lancaster campus to accommodate growth and change over the next 30 years.

The District consists of Antelope Valley College's (AVC) Lancaster campus and the AVC Palmdale center. According to the 2016 FMP, the District supported 14,677 full-time equivalent students (FTES) in 2014 in both campuses, and it anticipated to accommodate 19,852 FTES by 2030, a total increase of 5,175 FTES (35.3%).

The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. Senate Bill 743 (2013) mandated that CEQA review of transportation impacts of proposed development be modified by using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts for all future development projects. Please reference to The Governor's Office of Planning and Research (OPR) for more information: <http://opr.ca.gov/ceqa/updates/guidelines/>.

Caltrans supports the implementation of complete street and pedestrian safety measures such as road diet and other traffic calming measures. Please note that the Federal Highway Administration (FHWA) recognizes the road diet treatment as a proven safety countermeasure, and the cost of the road diet can be significantly reduced if implemented in tandem with routine street resurfacing.

Mr. Doug Jensen
June 27, 2018
Page 2 of 2

Good geometric and traffic engineering design to accommodate bicyclists and pedestrians are critical at every on and off ramp and freeway terminus intersection with local streets. Caltrans will work with the Lead Agency to look for every opportunity to develop projects that improve safety and connectivity for pedestrians and bicyclists. Opportunities for improvements may exist on State facilities such as: freeway termini, on/off-ramp intersections, overcrossings, under crossings, tunnels, bridges, on both conventional state highways and freeways.

Caltrans encourages the lead agency to actively promote alternatives to car use and consider vehicle demand-reducing strategies including incentives for commuters to use transit, park-and-ride lots, discounts on months bus and rail passes, shuttle buses, vanpools, etc. to the extent that more of the population shifts to transit for some of their inter-regional trips, future cumulative traffic impacts to freeways may be satisfactorily mitigated.

With regard to public transit, we recommend planning for gradual continual improvement of transit stops, bus bays, or other facilities, to accommodate traffic flow, especially on streets that are State Route locations or are near freeway intersections.

Caltrans also seeks to provide equitable mobility options for people who are economically, socially, or physically disadvantaged. Therefore, we ask the Lead Agency to evaluate future development for access problems, VMT and service needs that may need to be addressed.

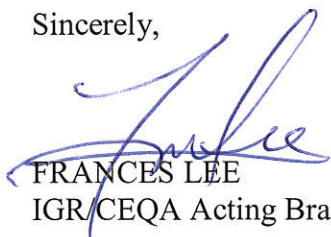
Analysis should include existing traffic, traffic generated by the project assigning to the State facilities, cumulative traffic generated from all specific planning developments in the area, and traffic growth other than from the project and developments.

A discussion of mitigation measures appropriate to alleviate anticipated traffic impacts. Any mitigation involving transit or Transportation Demand Management (TDM) is encouraged and should be justified to reduce VMT and greenhouse gas emissions. Such measures are critical to facilitating efficient site access.

For additional TDM options, please refer to the Federal Highway Administration's *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (Chapter 8). The reference is available online: <http://www.ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf>.

If you have any questions, please contact me, the project coordinator at (213) 897-0673 and refer to GTS #07-LA-2018-01477-FL.

Sincerely,



FRANCES LEE

IGR/CEQA Acting Branch Chief

cc: Scott Morgan, State Clearinghouse

Appendix B

Transportation Impact Study

**Antelope Valley Community College
District 2016 Facilities Master Plan
Draft Transportation Impact Study**

Prepared for:
Rincon Consultants, Inc.

July 2018

LA18-3015

FEHR  PEERS

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1. INTRODUCTION

This report documents the assumptions, methodologies, and findings of a transportation impact study conducted by Fehr & Peers to evaluate the potential traffic impacts of an update of the Antelope Valley Community College District (AVCCD, or District) Facilities Master Plan (FMP) in the City of Lancaster, California. The project is located at the Lancaster campus of Antelope Valley College, in the western portion of the City, between West Avenue J-8 to the north, West Avenue K to the south, 35th Street West to the west, and 30th Street West to the east.

Project Description

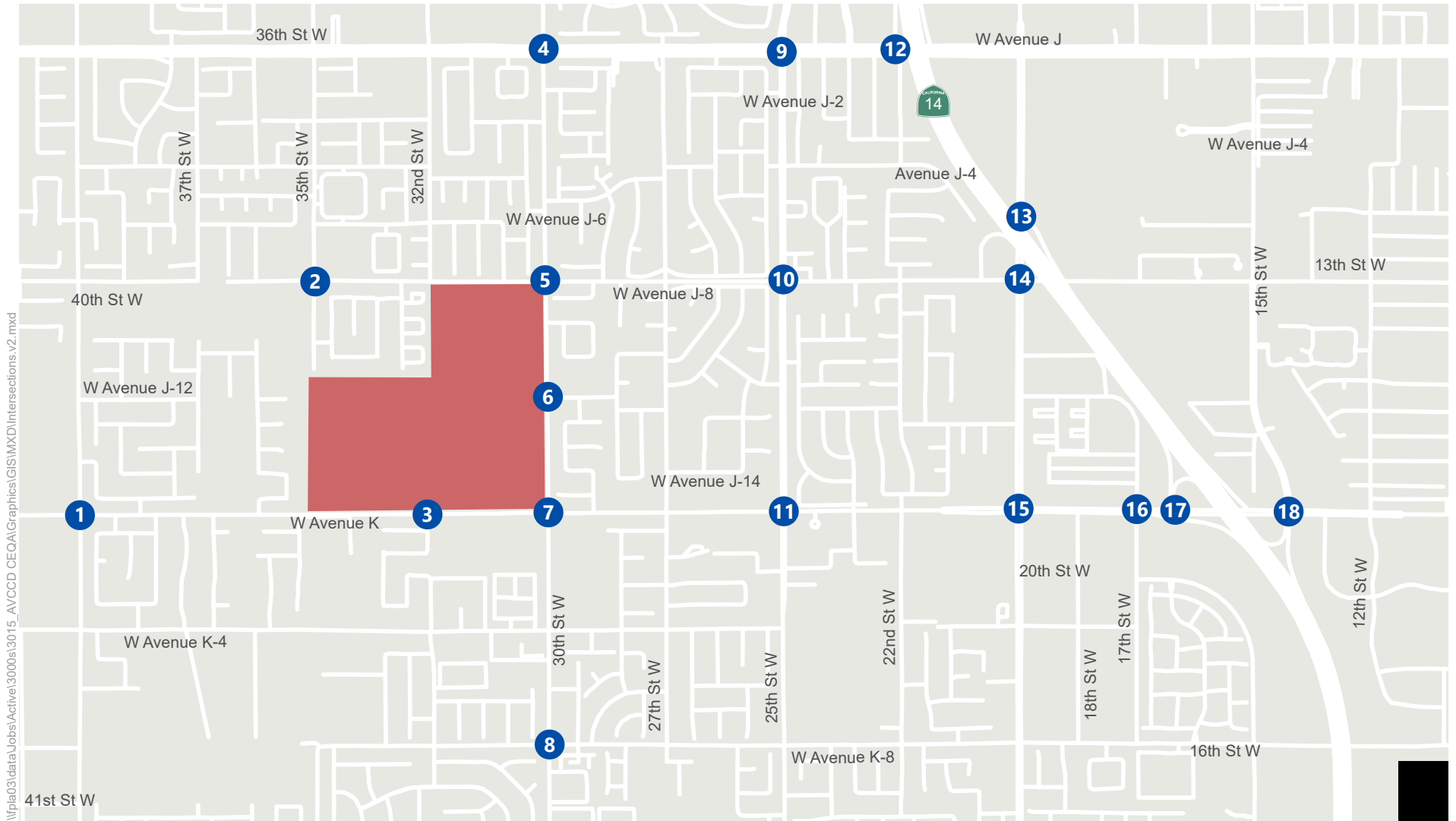
The proposed project is an update of the Antelope Valley Community College District (AVCCD, or District) Facilities Master Plan (FMP), also known as the 2016 FMP. The 2016 FMP is a guide for the future development of the Lancaster campus of AVCCD, also known as Antelope Valley College (AVC), and hereinafter also referred to as the Project site.

The 2016 FMP presents an overall picture of the future developed campus, based on estimated future enrollment, and includes recommendations for new construction, building renovations, change of use, and site development projects. In the year 2030, the FMP estimates student enrollment of 15,908 students. To accommodate this growth in enrollment, it recommends the demolition and replacement of a number of the oldest buildings on the campus. Functions currently housed in these facilities will be relocated to new or existing facilities and will be designed to support the new campus zoning diagram and address projected instructional program needs. Although the 2016 FMP does not specify an exact amount of new square footage that would be added to the AVC campus upon full implementation of the FMP, it does identify a need for additional assignable square feet (ASF) on campus (see page 22 of the FMP). ASF is the assignable or usable space within a building (AVCCD, 2016).

The project site is located in the western portion of the City of Lancaster and is characterized by a central core of academic buildings set among areas landscaped with lawns and other ornamental vegetation, but with fewer lawn areas north of a line extending west from West Avenue J-12. This campus core is surrounded by perimeter parking lots fronting on the major streets that border the campus (except at the corner of West Avenue K and 30th Street West, which is occupied by the Administration Building and an area landscaped with lawn and trees), and athletic fields on the western edge of campus. Buildings on the project site are generally one to three stories in height, with some taller structures such as the Performing Arts Theater and athletic field lighting.

In addition to renovating many of the existing buildings on campus, the Project also includes adding a new main driveway to the campus at the intersection of 30th Street & Avenue J-12. The new driveway would include adding eastbound access from the campus and signaling the intersection. It would also entail closing two existing driveways immediately south of that intersection.

Figure 1 illustrates the location of the Project, 18 study intersections, and the surrounding street system. Figure 2 shows the site plan of the Project.



\\plao3\data\Jobs\Active\3000s\3015_AVCCD_CEOA\Graphics\GIS\MXD\Intersections.v2.mxd

- StudyIntersections
- ProjectSite

Figure 1
Study Intersections



Source: AVCCD, 2016



Figure 2
Site Plan

Study Scope

The scope of work for this study was determined in consultation with the City of Lancaster's Traffic Engineering staff.

Traffic Scenarios

The study assumes that the Project would be completed by year 2030 and is directed at analyzing the potential project-generated traffic impacts on the local street system under both existing and future year traffic conditions. The following traffic scenarios have been developed and analyzed as part of this study:

- Existing Conditions – The analysis of existing traffic conditions is intended to provide a basis for the remainder of the study. The existing conditions analysis includes a description of the transportation system serving the Project site, existing traffic volumes, and an assessment of the operating conditions at the study analysis locations described below. This scenario is described in detail in Chapter 2.
- Existing with Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under existing conditions with the addition of project-generated traffic. The impacts of the proposed Project on existing traffic operating conditions were then identified. This scenario is described in detail in Chapter 4.
- Future without Project Conditions – Future traffic projections without the proposed Project were developed for the year 2030. The objective of this analysis was to project future traffic growth and operating conditions that could be expected to result from regional growth, cumulative projects, and transportation network changes in the vicinity of the Project site by the year 2030. This scenario is described in detail in Chapter 3.
- Future with Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under future conditions with the addition of Project-generated traffic. The impacts of the proposed Project on future traffic operating conditions were then identified. This scenario is described in detail in Chapter 4.

Study Intersections

A total of 18 intersections were selected for the analysis of the Project in consultation with the City of Lancaster. Sixteen of the 18 intersections are signalized (Figure 1). The following intersections were identified in conjunction with the City of Lancaster to be analyzed as part of the scope of work for this Project:

1. 40th Street & Avenue K (signalized)
2. 35th Street & Avenue J-8 (all-way stop-controlled)
3. 32nd Street/Campus Driveway & Avenue K (signalized)
4. 30th Street & Avenue J (signalized)
5. 30th Street & Avenue J-8 (signalized)
6. 30th Street & Avenue J-12/New Driveway (one-way stop-controlled, to be signalized with the Project)
7. 30th Street & Avenue K (signalized)
8. 30th Street & Avenue K-8 (signalized)
9. 25th Street & Avenue J (signalized)
10. 25th Street & Avenue J-8 (signalized)
11. 25th Street & Avenue K
12. SR-14 Southbound Off Ramp & Avenue J (signalized)
13. 20th Street & SR-14 Northbound Off Ramp (signalized)
14. 20th Street & Avenue J-8 (signalized)
15. 20th Street & Avenue K (signalized)
16. 17th Street & Avenue K (signalized)
17. SR-14 Southbound Ramps & Avenue K (signalized)
18. 15th Street/SR-14 Northbound Ramps & Avenue K (signalized)

Regional Transportation Impact Analysis

Regional access to the Project site is provided by the State Route 14 (SR 14) located approximately 1.3 miles east of the Project site and State Route 138 (SR 138) located approximately 7 miles north of the Project site.

Chapter 6 discusses the regional transportation impact analysis conducted according to the 2010 Congestion Management Program (CMP) (Metro, 2010), including a discussion of CMP arterial monitoring stations, freeway impact analysis, and regional transit impact analysis.

Organization of Report

This report is divided into six chapters, including this introduction. Chapter 2 describes the existing conditions, including an inventory of the streets, highways, and transit service in the study area, a summary of existing traffic volumes, and an assessment of existing operating conditions. The methodologies used to develop traffic forecasts for the Existing, Existing with Project, Future without Project, and Future with Project scenarios and the forecasts themselves are included in Chapter 3. Chapter 4 presents an assessment of potential intersection traffic impacts of the proposed Project under both existing and future conditions. Chapter 5 discusses internal circulation and parking at the site. Chapter 6 provides a regional transportation impact analysis. Chapter 7 provides the summary and conclusions.

2. EXISTING CONDITIONS

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the study area. The assessment of conditions relevant to this study includes a description of the study area, an inventory of the local street system in the vicinity of the Project site, a review of traffic volumes on these facilities, an assessment of the resulting operating conditions, and the current transit service in the study area. A detailed description of these elements is presented in this chapter.

Study Area

The Project site is within the City of Lancaster. The study area selected for analysis extends to include 40th Street to the west, 15th Street to the east, West Avenue J to the north, and W Avenue K-8 to the south. The streets and intersections in the study area are under the jurisdiction of the City of Lancaster.

Existing Street System

As illustrated in Figure 1, the Project site is located at the northwest corner of 30th Street West, and West Avenue K. Aerospace Highway (State Route 14) provides regional access to the Project site.

Major arterials serving the study area include 20th Street West and 30th Street West in the north/south direction, and West Avenue J in the east/west direction.

The characteristics of the freeways and major roadways serving the study area are described below.

Freeways

- **State Route 14** runs in the north/south direction, east of the Project site, through Lancaster. In the vicinity of the study area, the freeway provides three lanes in each direction. Ramps are provided at West Avenue J, West Avenue J-8, and West Avenue K.

North/South Streets

- **40th Street West** runs in the north/south direction, west of the Project site. 40th Street West has two travel lanes in the northbound direction and one travel lane in the southbound direction. Parking is not permitted on either side of the street within the study area. The posted speed limit is 50 miles per hour (mph).

- **35th Street West** runs in the north/south direction adjacent to the Project site. 35th Street West has one travel lane in each direction with left-turn pockets present at major intersections south of West Avenue J-6 and one bicycle lane in each direction north of West Avenue J-6. Parking is not permitted on either side of the street within the study area. The posted speed limit is 40 mph.
- **30th Street West** runs in the north/south direction adjacent to the Project site. 30th Street West has two travel lanes and one bicycle lane in each direction and a center turn lane south of West Avenue J-12 within the study area. Street parking is available on the east side of the street, south of West Avenue K-4 and north of West Avenue J-4, as well as on the west side of the street south of West Avenue K. The posted speed limit is 50 mph.
- **25th Street West** runs in the north/south direction, east of the Project site. 25th street West has two travel lanes and one bicycle lane in each direction, with a center turn lane, within the study area. Parking is not permitted on either side of the street. The posted speed limit is 45 mph.
- **20th Street West** runs in the north/south direction, east of the Project site. 20th Street West has two travel lanes and one bicycle lane in each direction, with a center turn lane south of West Avenue J-12, within the study area. There is a raised median north of West Avenue J-12. 20th Street West has three travel lanes in each direction north of West Avenue J-8. Parking is not permitted on either side of the street. The posted speed limit is 45 mph.
- **15th Street West** runs in the north/south direction, east of the Project site. 15th Street West has two travel lanes in each direction with a raised median on portions of the roadway. Street parking is not permitted on either side of the street. The posted speed limit is 40 mph.

East/West Streets

- **West Avenue J** runs in the east/west direction, north of the Project site. West Avenue J has three travel lanes in each direction with left-turn pockets at major intersections and a raised median within the study area. Parking is not permitted in either direction. The posted speed limit is 50 mph west of 25th Street West and 45 mph east of 25th Street West.
- **West Avenue J-8** runs in the east/west direction adjacent to the Project site. West Avenue J-8 has two travel lanes and one bicycle lane in each direction, with a center turn lane within the study area. Parking is not permitted in either direction within the study area. The posted speed limit is 45 mph.
- **West Avenue K** runs in the east/west direction adjacent to the Project site. West Avenue K has two travel lanes in each direction with a center turn-lane and a raised median on portions of the roadway west of 32nd Street West and east of 22nd Street West. West Avenue K provides three travel lanes west of 27th Street West and east of 22nd Street West. Parking is not permitted in both direction within the Study Area. The posted speed limit is 50 mph.

- **West Avenue K-8** runs in the east/west direction south of Project site. West Avenue K-8 has two travel lanes and one bicycle lane in each direction, with a center turn lane within the study area. Parking is not permitted in either direction within the study area. The posted speed limit is 45 mph.

Existing Public Transit Service

The Project site is served by six local and regional bus lines. The Project is directly served by Antelope Valley Transit Authority Route 7 (north-south service from Palmdale Transportation center to Lancaster City Hall), Route 9 (east-west service between Quartz Hill and Lancaster City Park via Avenue H), Route 11 (east-west service via Avenue I), Route 12 (east-west service along Avenue J), and Kern Transit Route 100 (east-west service between Bakersfield and Lancaster) and Route 250 (north-south service connecting Mojave to Ridgecrest) within the vicinity of the project.

Existing Bicycle and Pedestrian Facilities

The study area has a limited existing bikeway network that includes Class II bicycle lanes. Bicycle lanes are present on the following north-south streets in the study area:

- 40th Street West
- 35th Street West
- 30th Street West

West Avenue J-8 is the only east/west street in the study area with a bicycle facility. The study area is served by relatively robust pedestrian facilities, including 8-10-foot wide sidewalks. There is currently no sidewalk present along West Avenue K-8 within the study area.

Existing Traffic Volumes and Level of Service

This section presents existing peak hour traffic volumes, describes the methodology used to assess the traffic conditions at each intersection, and analyzes the resulting operating conditions at each, indicating volume-to-capacity (V/C) ratios and levels of service (LOS).

Existing Traffic Volumes

Weekday AM and PM peak hour turning movement counts were collected at the study intersections in April 2018. The existing weekday morning and afternoon peak hour volumes at the study intersections are provided in Appendix A. Traffic count worksheets for these intersections are contained in Appendix B.

Level of Service (LOS) Methodology

The City of Lancaster utilizes the Intersection Capacity Utilization (ICU) methodology to determine LOS at signalized intersections. The ICU method estimates the V/C ratio for an intersection based on the individual V/C ratios for the conflicting traffic movements. The ICU value represents the percent signal green time of capacity of the intersection movements. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing. The overall intersection V/C ratio is subsequently assigned an LOS value to describe intersection operations in Table 1. LOS ranges from LOS A (free flow) to LOS F (jammed condition).

**Table 1:
Level of Service Definitions for Signalized Intersections
ICU Methodology**

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat what restricted within groups of vehicles.
C	>0.700 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900 - 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths

Source:

Transportation Research Circular No. 212, *Interim Materials on Highway Capacity*, Transportation Research Board, 1980.

Unsignalized intersections in the City of Lancaster are analyzed using the Highway Capacity Manual (HCM) methodology to determine traffic operations. The 2010 HCM analysis methodology describes the

operations of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on a range of stopped delay in seconds experienced per vehicle, shown in Table 2.

Table 2: Level of Service Definitions for Unsignalized Intersections HCM Methodology		
Level of Service	Average Control Delay (Seconds/Vehicle)	Definition
A	≤ 10.0	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	> 20.0 and ≤ 15.0	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat what restricted within groups of vehicles.
C	> 15.0 and ≤ 25.0	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	> 25.0 and ≤ 35.0	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	> 35.0 and ≤ 50.0	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 50.0	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths

Source:

Highway Capacity Manual, Transportation Research Board, 2010.

Existing 2018 Levels of Service

Existing year traffic volumes presented in Appendix A were analyzed using the methodologies described above to determine the existing operating conditions at the study intersections. Table 3 summarizes the results of the analysis of the existing weekday morning and evening peak hour V/C ratio and corresponding LOS at each of the analyzed intersections. Existing LOS were analyzed with the current lane configurations observed in the field. Of the 18 study intersections, including two unsignalized intersections, all operate at LOS D or better during both peak periods. Detailed LOS analysis sheets for the Project are provided in Appendix C.

**Table 3:
Existing Conditions Intersection Level of Service**

ID	N/S Street Name	E/W Street Name	Intersection Control	Analyzed Period	Existing (2018)	
					V/C or Delay	LOS
1	40th Street West	West Avenue K	Signalized	AM	0.572	A
				PM	0.558	A
2	35th Street West	West Avenue J-8	All-Way Stop-Controlled	AM	28.2	D
				PM	13.2	B
3	32nd Street West/Driveway	West Avenue K	Signalized	AM	0.501	A
				PM	0.376	A
4	30th Street West	West Avenue J	Signalized	AM	0.671	B
				PM	0.472	A
5	30th Street West	West Avenue J-8	Signalized	AM	0.635	B
				PM	0.514	A
6	30th Street West	West Avenue J-12/New Driveway	Two-Way Stop-Controlled	AM	20.9	C
				PM	13.8	B
7	30th Street West	West Avenue K	Signalized	AM	0.638	B
				PM	0.490	A
8	30th Street West	West Avenue K-8	Signalized	AM	0.568	A
				PM	0.447	A
9	25th Street West	West Avenue J	Signalized	AM	0.466	A
				PM	0.500	A
10	25th Street West	West Avenue J-8	Signalized	AM	0.576	A
				PM	0.528	A
11	25th Street West	West Avenue K	Signalized	AM	0.551	A
				PM	0.472	A
12	SR-14 Southbound Off-Ramp	West Avenue J	Signalized	AM	0.430	A
				PM	0.483	A
13	20th Street West	SR-14 Northbound Off Ramp	Signalized	AM	0.559	A
				PM	0.586	A
14	20th Street West	West Avenue J-8	Signalized	AM	0.481	A
				PM	0.649	B
15	20th Street West	West Avenue K	Signalized	AM	0.495	A
				PM	0.541	A
16	17th Street West	West Avenue K	Signalized	AM	0.517	A
				PM	0.558	A

**Table 3:
Existing Conditions Intersection Level of Service**

ID	N/S Street Name	E/W Street Name	Intersection Control	Analyzed Period	Existing (2018)	
					V/C or Delay	LOS
17	SR-14 Southbound Ramps	West Avenue K	Signalized	AM	0.488	A
				PM	0.593	A
18	15th Street/SR-14 Northbound Ramps	West Avenue K	Signalized	AM	0.673	B
				PM	0.837	D

3. TRAFFIC PROJECTIONS

Project Traffic

The development of trip generation estimates for the proposed Project involves the use of a 3-step process: trip generation, trip distribution, and traffic assignment.

Project Trip Generation

As indicated in Chapter 1, the proposed Project would include an increase in student enrollment to 15,908 students by 2030.

As shown in Table 4, trip generation rates from Trip Generation, 10th Edition (Institute of Transportation Engineers [ITE], 2017) were used to estimate the number of trips associated with the Project, based on student enrollment. Current student enrollment numbers were obtained in February 2018, when the Spring 2018 headcount recorded 12,946 students. Net new Project trips were estimated from the difference between existing and future student enrollment. A 5% trip credit was applied to account for trips made by transit. As shown in Table 4, the Project would generate an estimated net increase of 3,236 daily trips, including 310 trips (252 inbound/58 outbound) during the AM peak hour and 310 trips (174 inbound/136 outbound) during the PM peak hour.

**Table 4:
Trip Generation**

Land Use	Size [1]		Trip Generation Rates [2]							Trip Generation Estimates						
			Daily	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour		
				Rate	% In	% Out	Rate	% In	% Out		Total	In	Out	Total	In	Out
Future 2030 Enrollment																
Community College	15,908	students	1.15	0.11	81%	19%	0.11	56%	44%	18,294	1,750	1,418	332	1,750	980	770
		<i>Less Transit Credit</i>	5%	5%			5%			(915)	(88)	(71)	(17)	(88)	(49)	(39)
		Subtotal								17,379	1,663	1,347	315	1,663	931	732
Existing 2018 Enrollment																
Community College	12,946	students	1.15	0.11	81%	19%	0.11	56%	44%	(14,888)	(1,424)	(1,153)	(271)	(1,424)	(797)	(627)
		<i>Less Transit Credit</i>	5%	5%			5%			744	71	58	14	71	40	31
		Subtotal								(14,144)	(1,353)	(1,095)	(257)	(1,353)	(757)	(596)
Net New Project Trips										3,236	310	252	58	310	174	136

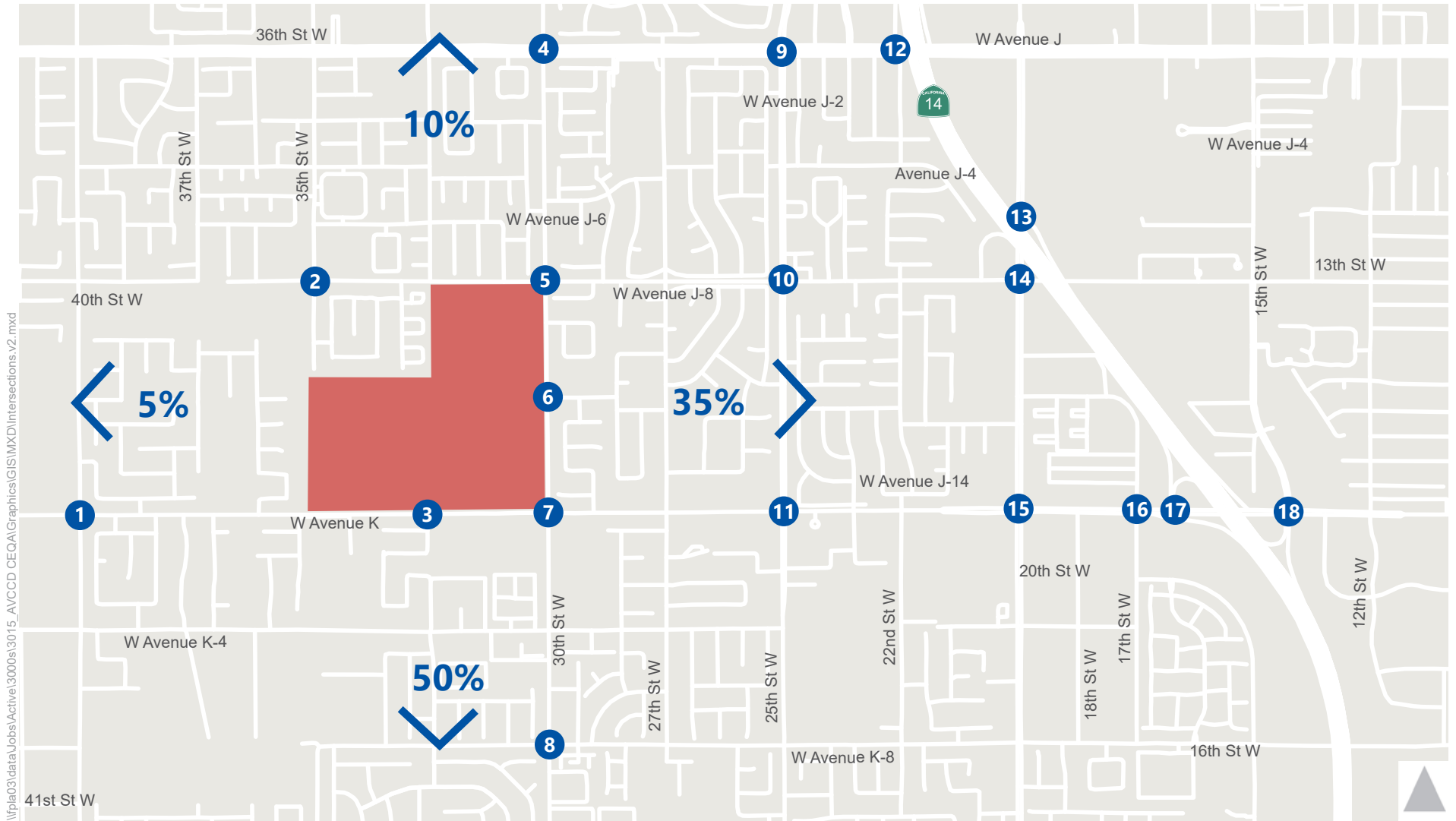
Notes:

[1] Future 2030 enrollment from 2016 Facilities Master Plan, Antelope Valley Community College District, 2016. Existing 2018 enrollment represents headcount from Spring 2018 Census, 19 February 2018.

[2] Rates from Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition, 2017: Junior/Community College - ITE #540.

Project Traffic Distribution

The geographic distribution of traffic generated by the proposed Project depends on several factors. These include the type and density of the proposed land use, the locations of population centers from which students and employees of the campus would be drawn, characteristics of the street system serving the site, and the level of accessibility of the routes to and from the Project site. The zip codes of currently enrolled students were used to develop a trip distribution pattern and a corresponding percentage of traffic likely to be regionally oriented and using the freeway as opposed to the local street system. Figure 3 illustrates the Project's trip distribution pattern.



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- Study Intersections
- Project Site



Figure 3
Project Trip Distribution

Project Traffic Assignment

Project traffic assignment involved a three-step process: because the Project involves the addition and signalization of a new driveway at 30th Street West & West Avenue J-12 and the removal of two existing driveways just south of the new signalized entry, existing trips to and from the campus were first unassigned to the network. This accounts for the fact that the new signalized driveway and the closed driveways will change the travel behavior of existing trips in addition to Project-related trips.

In the first step, the estimate of existing campus trip generation (shown in Table 4) was used. It was assumed that the new driveway will change the behavior of the existing driveways on 30th Street West, while driveways on West Avenue J-8 and West Avenue K would be unaffected by the new access point. Based on field observations of existing parking supply and utilization on campus on a typical weekday, the four other existing driveways on 30th Street West were estimated to accommodate 45% of all existing trips to and from the campus. These trips were removed from the network.

In the second step, these existing trips were re-assigned to the network, including at the new driveway. This step represents the shift in traffic from existing driveways to the new access point. In the third and final step, traffic expected to be generated by the proposed Project was assigned to the street network using the distribution patterns described in Figure 3. Appendix A shows the assignment of Project-only traffic volumes for the morning and afternoon peak hours at the 18 analyzed intersection locations.

Existing With Project Traffic Conditions

The traffic generated by the Project was estimated and assigned to the study intersections in addition to the existing traffic volumes to estimate Existing with Project traffic volumes. Turning movement traffic volumes for the Existing with Project scenario are provided in Appendix A. Analysis sheets are provided in Appendix C.

Future Traffic Scenarios

Future Year 2030 Traffic Conditions

To evaluate the potential impacts of the proposed Project on future conditions, it was necessary to develop estimates of future traffic conditions in the area both without and with Project traffic. The City of Lancaster Subarea Model was used to forecast turning movement volumes at study intersections for the year 2030.

The North Los Angeles County subarea model was used to develop the City of Lancaster model. The North Los Angeles County model includes portions of the SCAG 2012 Regional Transportation Plan (RTP) model

and the 2011 KERN COG model. Each of these land-use based regional models is used to develop vehicle trip demand matrices that are re-assigned to a more detailed roadway network covering northern Los Angeles County and southern Kern County. Below is an overview of each of the models:

- **SCAG 2012 RTP** – This model is developed and maintained by SCAG. A few updates have been made to this model since the release of the 2012 RTP in April 2012; version 6.1 was used as the starting point of the subarea model. The SCAG RTP model has a 2008 Base Year and a 2035 Future Year. It is a regional model that covers six Southern California counties (Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial). The subarea model includes Santa Clarita, northern Los Angeles County, and the Victor Valley in western San Bernardino County.
- **Kern COG** – This model is maintained by the Kern Council of Governments. The version used has a 2006 Base Year, and both Interim (2020) and Buildout (2035-2040) future years. The Kern COG model covers the extent of Kern County, with external gateways to and from SR-14 and I-5 in Los Angeles County. The subarea model includes the entirety of Kern County.

The *City of Lancaster Subarea Model: Model Development Report* (December 2016) contains the full description of the model.

Sub-Area Model Transportation Network

The following projects of regional significance were included in the future year model consistent with the 2012 SCAG RTP/SCS (it should be noted that the regional projects in the 2016 RTP/SCS have not changed within the study area):

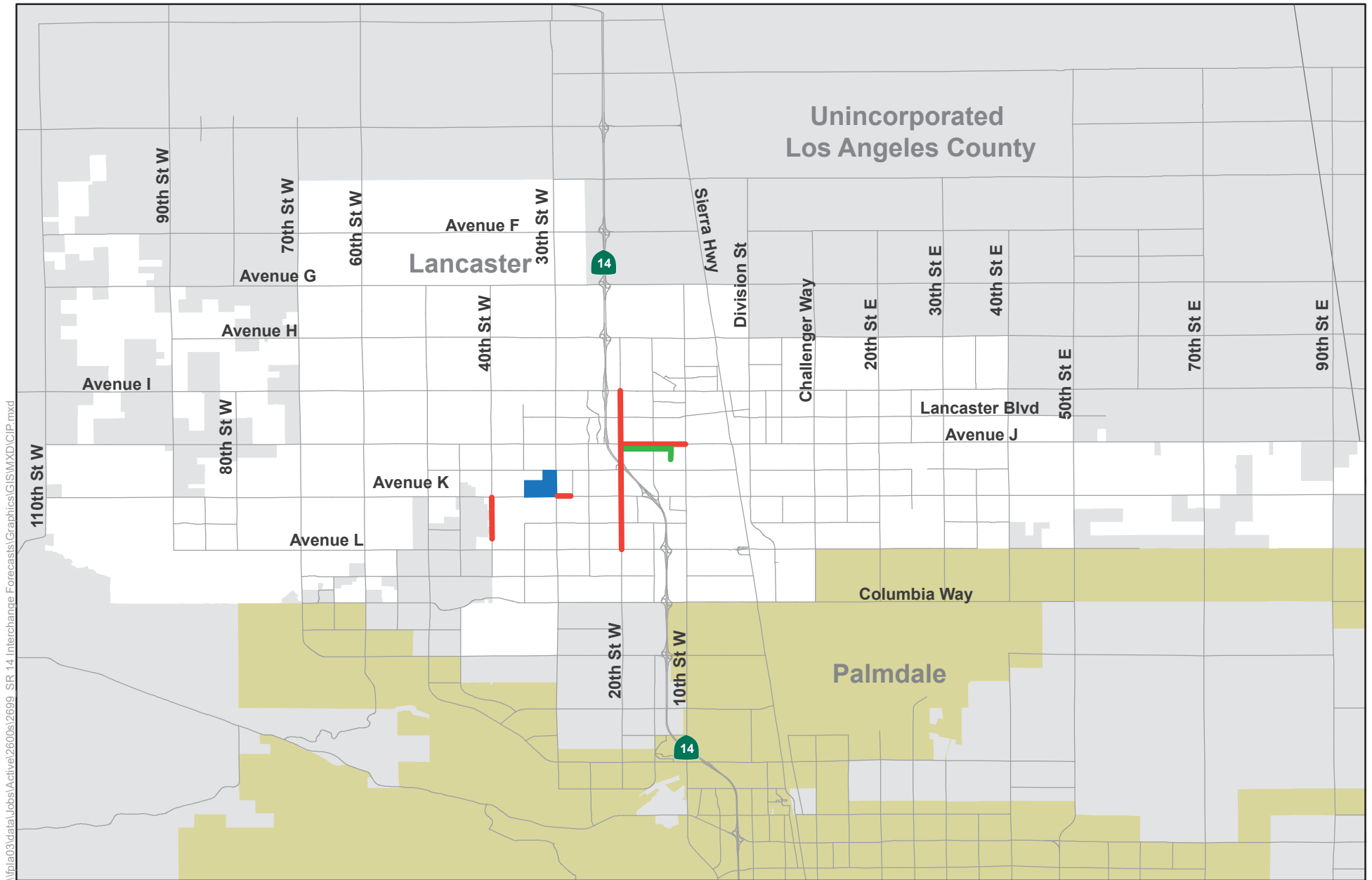
- *High Speed Rail* – Phase I of the High Speed Rail project, with extents from Anaheim into Kern County. In the model area, the High Speed Rail travels north/south between SR-14 and I-5. The High Speed Rail also travels south on SR-14 into Santa Clarita with a station in Palmdale.
- *High Desert Corridor* – New expressway route with limited access beginning at SR-14 and extending east into San Bernardino County. The High Desert Corridor would be a divided highway with two to four travel lanes in each direction.
- *SR-138 between I-5 and SR-14* – Planned widening from a 2-lane full-access expressway route with at-grade crossings to a 6-lane limited-access expressway route with interchanges.
- *Sierra Highway between SR-138 and Avenue E* – Planned widening from a 2-lane full-access arterial to a 4-lane limited access expressway route (SR-138 extension/High Desert Corridor).
- *Avenue E between Sierra Highway and 90th Street East* – Planned widening from a 2-lane full-access collector to a 4-lane limited access expressway route (SR-138 extension).

- *90th Street East between Avenue E and Avenue L* – Planned widening from a 2-lane full-access collector to a 4-lane limited access expressway route (SR-138 extension).
- *I-5 between Ridge Route Road and SR-14* – Construction of an HOV lane in each direction.
- *SR-14 between Avenue M and Technology Drive* – Addition of an HOV lane in each direction.

Network improvements within the City of Lancaster include projects from the existing Capital Improvements Projects (CIP) list provided by the City. The following projects, within the study area, were incorporated into the future year model since they result in capacity changes from adding or removing travel lanes. The locations of these changes are shown in Figure 4:

- 40th Street West northbound from three to one lane between Avenue K and Avenue K-4
- 20th Street West in each direction from two lanes to one lane between Avenue I and Avenue J
- 20th Street West in each direction from three to two lanes between Avenue J and Avenue J-8
- 20th Street West in each direction from three to two lanes between Avenue J and Avenue L
- Avenue J westbound from three to two lanes between 15th Street West and 20th Street West
- Avenue J eastbound from three to two lanes between 10th Street W and 20th Street West
- Avenue J-5 constructed with one lane in each direction between 20th Street West and 17th Street West and between 15th Street West and 10th Street West

These projected traffic volumes, identified herein as the Future without Project conditions, represent the future conditions without the proposed Project.



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■ Project site
 — Roadway capacity to be added
 — Roadway capacity to be removed



Figure 4
Capital Improvements Projects included in the City of Lancaster Demand Model

Transportation Infrastructure Projects

Two transportation infrastructure projects are currently planned or occurring in the vicinity of the Project site (not including the signalization of 30th Street West & West Avenue J-12 as part of the Project). These include improvements to the Avenue J and Avenue J-8 interchanges on State Route 14 (SR-14) and improvements to the Avenue K interchanges on SR-14. Three study intersections are affected by improvements associated with the Avenue J project. While a preferred alternative is not yet known for this Project, all of the Build alternatives include the following network changes, which were included in the analysis of Future without Project and Future with Project conditions for the year 2030:

- Avenue J and 30th Street
 - Convert northbound right-turn lane to a through/right lane
 - Convert southbound right-turn lane to a through/right lane
- Avenue J and 25th Street
 - Remove one through lane in the westbound direction
 - Add a bicycle lane in each direction, eastbound and westbound, beginning on the east side of the intersection
- Avenue J and SR-14 Southbound Ramps
 - Convert one through lane in each direction, eastbound and westbound, to a bicycle lane, resulting in two through lanes in both eastbound and westbound directions

Three study intersections are affected by improvements associated with the Avenue K project. These were included in the analysis of Future without Project and Future with Project conditions for the year 2030:

- Avenue K & 15th Street/SR-14 northbound on-/off-ramp
 - Add eastbound right-turn lane and convert existing eastbound through/right lane to a through lane
 - Add northbound left-turn lane and through/right lane
 - Add southbound through/right lane
 - Convert existing southbound through/left lane to a left-turn lane
- Avenue K & SR-14 southbound on/off-ramp
 - Add southbound right-turn lane

- Add one westbound through lane, and convert existing westbound through/right lane to a right-turn lane
- Extend eastbound right-turn pocket to provide additional storage for vehicles traveling to southbound on-ramp
- Avenue K & 17th Street
 - Convert existing southbound through lane to left-turn lane
 - Convert existing southbound right-turn lane to through/right lane
 - Convert existing northbound through lane to through/right lane

Future Year 2030 Without Project Traffic Volumes

Future without Project weekday AM and PM peak hour traffic volumes and lane geometries for the analyzed intersections are provided in Appendix A. The Future without Project traffic conditions represent an estimate of future conditions without the proposed Project inclusive of the ambient background growth and related projects traffic.

Future With Project Traffic Projections

The proposed Project traffic volumes were added to the year 2030 Future without Project traffic projections, resulting in Future with Project AM and PM peak hour traffic volumes. The Future with Project scenario presents future traffic conditions with the completion of the proposed Project. Appendix A shows the lane configurations and volumes analyzed as part of the Future with Project scenario.

4. INTERSECTION TRAFFIC IMPACT ANALYSIS

The traffic impact analysis evaluates the projected LOS at each study intersection under the Existing with Project and Future with Project conditions to estimate the incremental increase in the V/C ratio caused by the proposed Project. This provides the information needed to assess the potential impact of the Project using significance criteria established by the City of Lancaster.

Criteria for Determination of Significant Traffic Impact

Signalized Intersections

The City of Lancaster has established threshold criteria to determine significant traffic impact of a proposed project in its jurisdiction. A signalized intersection would be significantly impacted if LOS is degraded due to Project-added trips from LOS A, B, C, or D to LOS E or F. A signalized intersection may also be significantly impacted with an increase in V/C ratio equal to or greater than 0.020 for intersections operating at LOS E or F after the addition of project traffic. Intersections operating at LOS A through D after the addition of project traffic are not considered significantly impacted regardless of the increase in V/C ratio.

A stop-controlled intersection would be significantly impacted if LOS is degraded due to Project-added trips from LOS A, B, C, or D to LOS E or F, or if the intersection delay per vehicle increases by 2.0% or more for intersections already operating at LOS E or F before Project trips are added.

Existing With Project Impact Analysis

Existing With Project Traffic Level of Service

The Existing with Project traffic volumes presented in Appendix A were analyzed to determine the projected V/C ratios and LOS for each of the analyzed signalized intersections under this scenario and the projected delay and LOS for the one unsignalized intersection under this scenario. Table 5 summarizes the Existing with Project LOS. Analysis sheets are provided in Appendix C. As indicated in Table 5, all 18 analyzed intersections are projected to operate at LOS D or better during both morning and evening peak hours with the Project. Detailed LOS analysis sheets for the Project are provided in Appendix C.



Existing With Project Intersection Impacts

Table 5 shows that the proposed Project would not result in significant traffic impacts at any of the 18 study intersections.



Table 5: Existing with Project Intersection Level of Service and Impact Analysis										
ID	N/S Street Name	E/W Street Name	Intersection Control	Analyzed Period	Existing (2018)		Existing with Project (2018)		Project Increase	Significant Impact
					V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	
1	40th Street West	West Avenue K	Signalized	AM	0.572	A	0.576	A	0.004	No
				PM	0.558	A	0.559	A	0.001	No
2	35th Street West	West Avenue J-8	All-Way Stop-Controlled	AM	28.2	D	27.8	D	-1.4%	No
				PM	13.2	B	13.1	B	-0.8%	No
3	32nd Street West/Driveway	West Avenue K	Signalized	AM	0.501	A	0.517	A	0.016	No
				PM	0.376	A	0.392	A	0.016	No
4	30th Street West	West Avenue J	Signalized	AM	0.671	B	0.698	B	0.027	No
				PM	0.472	A	0.491	A	0.019	No
5	30th Street West	West Avenue J-8	Signalized	AM	0.635	B	0.674	B	0.039	No
				PM	0.514	A	0.543	A	0.029	No
6	30th Street West	West Avenue J-12/ New Driveway	Two-Way Stop-Controlled (without Project)	AM	20.9	C	0.424	A	N/A	N/A
			Signalized (with Project)	PM	13.8	B	0.408	A	N/A	N/A
7	30th Street West	West Avenue K	Signalized	AM	0.638	B	0.691	B	0.053	No
				PM	0.490	A	0.528	A	0.038	No
8	30th Street West	West Avenue K-8	Signalized	AM	0.568	A	0.576	A	0.008	No
				PM	0.447	A	0.454	A	0.007	No
9	25th Street West	West Avenue J	Signalized	AM	0.466	A	0.473	A	0.007	No



**Table 5:
Existing with Project Intersection Level of Service and Impact Analysis**

ID	N/S Street Name	E/W Street Name	Intersection Control	Analyzed Period	Existing (2018)		Existing with Project (2018)		Project Increase	Significant Impact
					V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	
				PM	0.500	A	0.506	A	0.006	No
10	25th Street West	West Avenue J-8	Signalized	AM	0.576	A	0.579	A	0.003	No
				PM	0.528	A	0.537	A	0.009	No
11	25th Street West	West Avenue K	Signalized	AM	0.551	A	0.557	A	0.006	No
				PM	0.472	A	0.492	A	0.020	No
12	SR-14 Southbound Off-Ramp	West Avenue J	Signalized	AM	0.430	A	0.432	A	0.002	No
				PM	0.483	A	0.489	A	0.006	No
13	20th Street West	SR-14 Northbound Off Ramp	Signalized	AM	0.559	A	0.559	A	0.000	No
				PM	0.586	A	0.586	A	0.000	No
14	20th Street West	West Avenue J-8	Signalized	AM	0.481	A	0.478	A	-0.003	No
				PM	0.649	B	0.650	B	0.001	No
15	20th Street West	West Avenue K	Signalized	AM	0.495	A	0.508	A	0.013	No
				PM	0.541	A	0.552	A	0.011	No
16	17th Street West	West Avenue K	Signalized	AM	0.517	A	0.521	A	0.004	No
				PM	0.558	A	0.565	A	0.007	No
17	SR-14 Southbound Ramps	West Avenue K	Signalized	AM	0.488	A	0.495	A	0.007	No
				PM	0.593	A	0.608	B	0.015	No
18	15th Street/SR-14 Northbound Ramps	West Avenue K	Signalized	AM	0.673	B	0.678	B	0.005	No
				PM	0.837	D	0.854	D	0.017	No

Future With Project Impact Analysis

Future Without Project Traffic Level of Service

The Future without Project peak hour traffic volumes were analyzed to determine the projected V/C ratio or delay and LOS for each of the analyzed intersections. Table 6 summarizes the future LOS. Seventeen of the 18 study intersections are projected to operate at LOS D or better during both morning and evening peak hours. The unsignalized intersection of 35th Street West & West Avenue J-8 is projected to operate at LOS F during both the AM and PM peak hours. Detailed LOS analysis sheets are provided in Appendix C.

Future With Project Traffic Level of Service

The Future with Project peak hour traffic volumes, provided in Appendix A, were analyzed to determine the projected future operating conditions with the addition of the proposed Project traffic. The results of the Future with Project analysis are also presented in Table 6, with analysis sheets provided in Appendix C. Seventeen of the 18 study intersections are projected to operate at LOS D or better during both morning and evening peak hours. The unsignalized intersection of 35th Street West & West Avenue J-8 is projected to operate at LOS F during both the AM and PM peak hours. Detailed LOS analysis sheets are provided in Appendix C.

Future With Project Intersection Impacts

As shown in Table 6, using the criteria for determination of significant impacts, it is determined that the proposed Project would not result in significant impacts at any of the 18 intersections under Future with Project conditions.



**Table 6:
Future with Project Intersection Level of Service and Impact Analysis**

ID	N/S Street Name	E/W Street Name	Intersection Control	Analyzed Period	Future without Project (2030)		Future with Project (2030)		Project Increase	Significant Impact
					V/C or Delay	LOS	V/C or Delay	LOS		
1	40th Street West	West Avenue K	Signalized	AM	0.606	B	0.610	B	0.004	No
				PM	0.608	B	0.610	B	0.002	No
2	35th Street West	West Avenue J-8	All-Way Stop-Controlled	AM	76.0	F	75.3	F	-0.9%	No
				PM	60.3	F	59.9	F	-0.7%	No
3	32nd Street West/Driveway	West Avenue K	Signalized	AM	0.561	A	0.577	A	0.016	No
				PM	0.461	A	0.472	A	0.011	No
4	30th Street West	West Avenue J	Signalized	AM	0.680	B	0.707	C	0.027	No
				PM	0.565	A	0.584	A	0.019	No
5	30th Street West	West Avenue J-8	Signalized	AM	0.724	C	0.762	C	0.038	No
				PM	0.598	A	0.628	B	0.030	No
6	30th Street West	West Avenue J-12/ New Driveway	Two-Way Stop-Controlled (without Project)	AM	23.9	C	0.414	A	N/A	N/A
			Signalized (with Project)	PM	16.5	C	0.387	A	N/A	N/A
7	30th Street West	West Avenue K	Signalized	AM	0.664	B	0.715	C	0.051	No
				PM	0.542	A	0.582	A	0.040	No
8	30th Street West	West Avenue K-8	Signalized	AM	0.596	A	0.603	B	0.007	No
				PM	0.503	A	0.516	A	0.013	No
9	25th Street West	West Avenue J	Signalized	AM	0.547	A	0.562	A	0.015	No
				PM	0.599	A	0.608	B	0.009	No

**Table 6:
Future with Project Intersection Level of Service and Impact Analysis**

ID	N/S Street Name	E/W Street Name	Intersection Control	Analyzed Period	Future without Project (2030)		Future with Project (2030)		Project Increase V/C or Delay	Significant Impact
					V/C or Delay	LOS	V/C or Delay	LOS		
10	25th Street West	West Avenue J-8	Signalized	AM	0.592	A	0.595	A	0.003	No
				PM	0.556	A	0.565	A	0.009	No
11	25th Street West	West Avenue K	Signalized	AM	0.579	A	0.585	A	0.006	No
				PM	0.517	A	0.536	A	0.019	No
12	SR-14 Southbound Off-Ramp	West Avenue J	Signalized	AM	0.585	A	0.588	A	0.003	No
				PM	0.647	B	0.656	B	0.009	No
13	20th Street West	SR-14 Northbound Off Ramp	Signalized	AM	0.600	A	0.600	A	0.000	No
				PM	0.626	B	0.626	B	0.000	No
14	20th Street West	West Avenue J-8	Signalized	AM	0.544	A	0.546	A	0.002	No
				PM	0.713	C	0.712	C	-0.001	No
15	20th Street West	West Avenue K	Signalized	AM	0.538	A	0.551	A	0.013	No
				PM	0.588	A	0.597	A	0.009	No
16	17th Street West	West Avenue K	Signalized	AM	0.566	A	0.569	A	0.003	No
				PM	0.682	B	0.689	B	0.007	No
17	SR-14 Southbound Ramps	West Avenue K	Signalized	AM	0.479	A	0.485	A	0.006	No
				PM	0.541	A	0.547	A	0.006	No
18	15th Street/SR-14 Northbound Ramps	West Avenue K	Signalized	AM	0.595	A	0.600	A	0.005	No
				PM	0.682	B	0.688	B	0.006	No

Transit System Project Impacts

This section discusses impacts related to the transit system. This section evaluates whether impacts could include disruptions to existing transit service, interference with planned transit facilities, conflict with adopted transit system plans, guidelines, policies, or standards, or create demand for public transit above the available capacity.

Disruptions to Existing Transit Service

Significance Criteria

A significant impact would occur if a project disrupts existing transit services or facilities. This includes disruptions on transit streets caused by proposed project driveways, impacts to transit stops/shelters, and impacts to transit operations from traffic improvements proposed or resulting from the Project.

Project Impact

Bus stops, and ADA-accessible sidewalks and curb ramps that provide access to the bus stops, exist at the intersections below:

1. 30th Street West & West Avenue J-8 (SB)
2. 30th Street West, between West Avenue J-9 and West Avenue J-12 (SB)
3. 30th Street West & West Avenue J-12 (NB)
4. 30th Street West & West Avenue K (NB)
5. 30th Street West & West Avenue K (EB)

The project is anticipated to improve one northbound and one southbound bus stop each on 30th Street West between West Avenue J-9 and West Avenue J-12. The southbound bus stop would be relocated approximately 500 feet south, to just south of the new campus driveway at Avenue J-12. The remaining bus stops in the vicinity of the project will remain unchanged. Therefore, the impact is less than significant.

Interference with Planned Transit Services

Significance Criteria

A significant impact occurs if a project interferes with planned transit services or facilities.

Project Impact

Based on a review of available documents, including Antelope Valley Transit Authority's Comprehensive Long Range Transit Plan (2010), there are no planned transit services that would be impacted by the development of the Project. Therefore, the impact is less than significant.

Inconsistencies with Adopted Transit System Plans, Guidelines, Policies, or Standards

Significance Criteria

A significant impact occurs if a project conflicts or creates inconsistencies with adopted transit system plans, guidelines, policies, or standards.

Project Impact

The proposed project will not result in any significant impacts to increased transit usage. Therefore, the impact is less than significant.

Bicycle Network Project Impacts

This section reviews project-related impacts on the bicycle network in the study area. Potential impacts include disruptions to existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to bicycles.

Disruptions to Existing Facilities

Significance Criteria

A significant impact occurs if a project disrupts existing bicycle facilities.

Project Impact

Bicycle facilities within the study area include on-street bicycle lanes on West Avenue J-8, 40th Street West, 35th Street West, and 30th Street West. The proposed project will not result in any significant impacts to existing bicycle facilities. Therefore, the impact is less than significant.

Interference with Planned Bicycle Facilities

Significance Criteria

A significant impact occurs if a project interferes with planned bicycle facilities. This includes failure to dedicate rights-of-way for planned on- and off-street bicycle facilities included in an adopted Bicycle Specific Plan or to contribute towards construction of planned bicycle facilities along the project frontage.

Project Impact

There are no bicycle facilities planned within the study area. Thus, the project impact is not significant.

Conflicts with Adopted Bicycle Plans, Guidelines, Policies, or Standards

Significance Criteria

A significant impact occurs if the project conflicts or creates inconsistencies with adopted bicycle system, plans, guidelines, policies, or standards.

Project Impact

In 2012, the City of Lancaster adopted a Master Plan of Trails and Bikeways. The Master Plan recognized the public health benefits of increased bicycling and the importance of providing safe and comfortable bicycle facilities. The Project does not conflict with or create inconsistencies with the adopted bicycle system, plans, guidelines, policies, or standards. Therefore, this impact is less than significant.

Pedestrian Network Project Impacts

This section reviews Project-related impacts on the pedestrian network in the study area. Potential impacts include disruptions on existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to pedestrians.

Disruptions to Existing Facilities

Significance Criteria

A significant impact occurs if a project disrupts existing pedestrian facilities. This can include adding new vehicular, pedestrian, or bicycle traffic at locations experiencing pedestrian safety concerns including: reduction in the number of pedestrian-acceptable gaps at unsignalized crossings or queues spilling back through pedestrian crossings.

Project Impact

Pedestrian walkways exist within the study area along all but West Avenue K-8. The pedestrian network will be maintained along these ways. Since no existing pedestrian facilities would be affected by the project, the project impact is less than significant.

Interference with Planned Pedestrian Facilities

Significance Criteria

A significant impact occurs if a project interferes with planned pedestrian facilities. In existing or planned urbanized areas, main streets, or pedestrian districts, this can include impacts to the quality of the walking environment.

Project Impact

No planned pedestrian facilities would be affected by the project. The project impact is less than significant.

Conflicts with Adopted Pedestrian Plans, Guidelines, Policies, or Standards

Significance Criteria

A significant impact occurs if a project conflicts or creates inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards.

Project Impact

The project does not conflict with adopted pedestrian system plans, guidelines, policies, or standards.

5. PARKING AND SITE CIRCULATION ANALYSIS

This chapter presents an analysis of the parking supply and access system proposed by the Project. The 2016 FMP includes an estimate of parking need and supply, which is presented here. Issues relating to the project's proposed site access scheme were also evaluated.

Parking Guidelines

2016 Facilities Master Plan

The 2016 FMP includes guidelines for determining parking need and presents an inventory of existing parking supply, as shown in Table 7. Under Future with Project conditions, the campus is expected to have a surplus of parking supply.

**Table 7:
Parking Need and Supply**

Year	Enrollment	Spaces Needed (1 space per 5 enrolled)	Existing Supply	Excess Capacity
2018	12,946	2,589	3,794	1,205
2030	15,908	3,182	3,794	612

Site Access and Circulation

As shown in Figure 5 and described above, the Project includes construction of a new driveway at the intersection of 30th Street West & West Avenue J-12 and the closure of two existing driveways on 30th Street West, located immediately south of the new access point. Two new pick-up and drop-off locations are planned: one on the east side of campus, near the new 30th Street entry, and one on the west side of campus, between the new Community Center and SOAR High School. Internal circulation within the Project site is provided in a loop connecting parking lots on the north, east, and south ends of campus with campus buildings and adjacent neighborhood streets to the west and northwest.

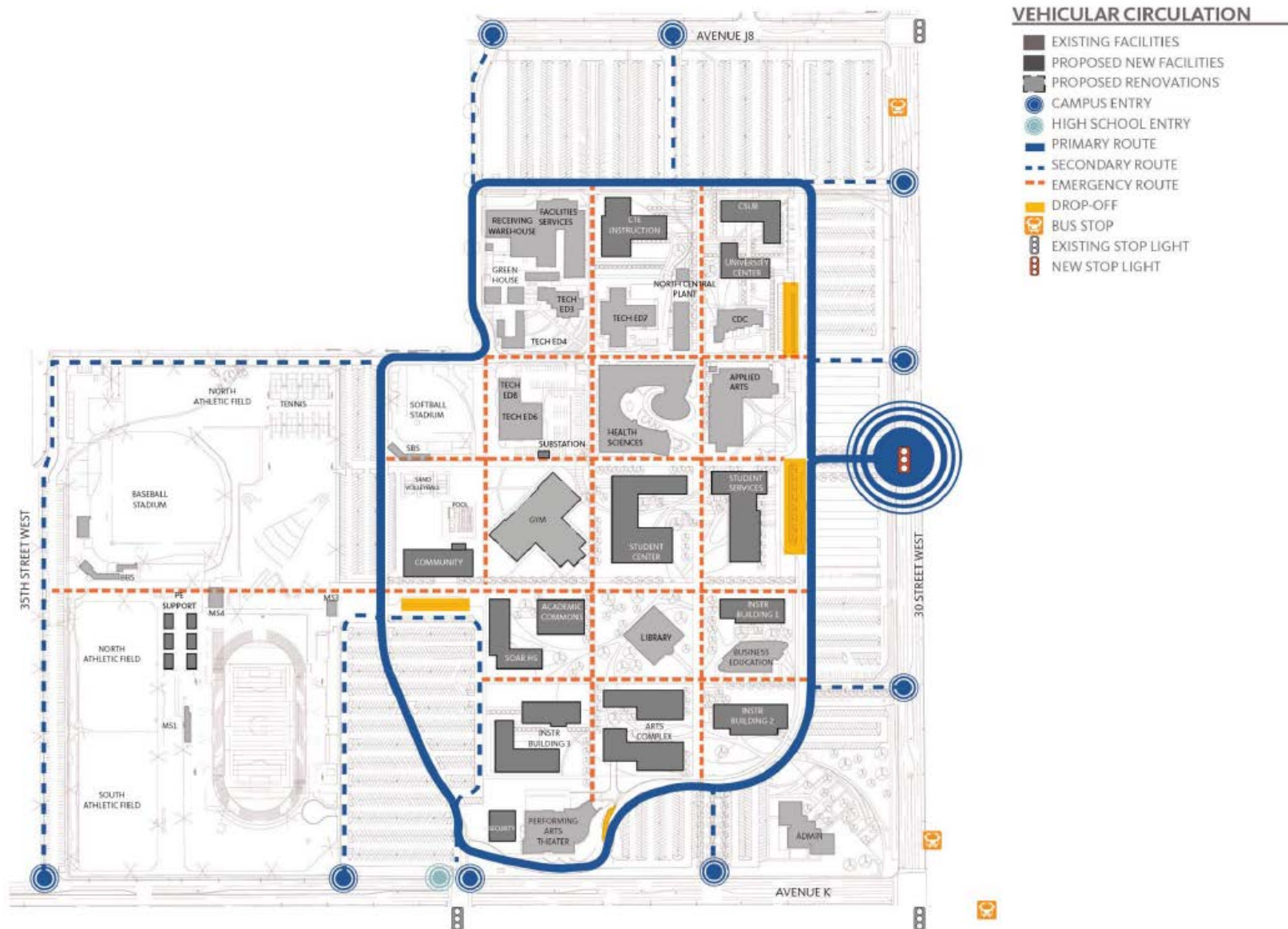


Figure 5
Site Access and Vehicular Circulation

As shown in Figure 6, the Project will add pedestrian site access at the intersections of 30th Street West & West Avenue K and 30th Street West and the northernmost driveway on the east side of campus. Primary, secondary, and tertiary paths provide internal circulation for pedestrians, connecting bus stops along 30th Street West and parking lots on the perimeter of campus to buildings and areas of student gathering internal to the Project site.

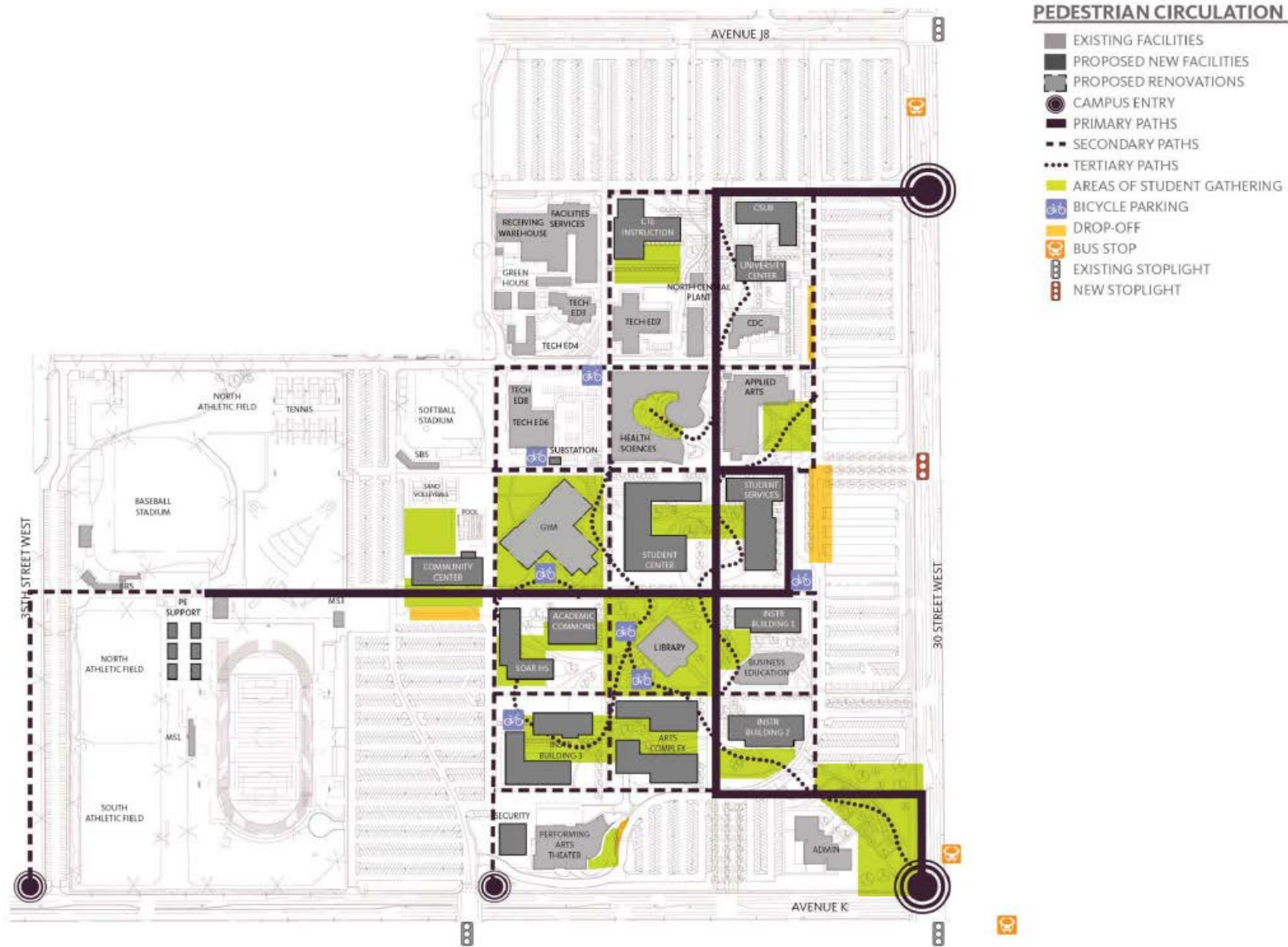


Figure 6
Site Access and Pedestrian Circulation

6. REGIONAL TRANSPORTATION SYSTEM ANALYSIS

This section presents the regional transportation system impact analysis, conducted in accordance with the procedures outlined in *2010 Congestion Management Program for Los Angeles County* (Metro, October 2010). The CMP requires that when an environmental impact report is prepared for a project, traffic impact analyses be conducted for select regional facilities based on the quantity of project traffic expected to use these facilities.

It should be noted that as a result of SB 743, passed in September 2013, and subsequent revisions to CEQA, Metro will also be revising its CMP requirements to reflect the new legislation. The analysis described here conforms to existing CMP guidelines.

Congestion Management Program

CMP Regional Traffic Impact Analysis

The CMP guidelines require that the first issue to be addressed is the determination of the geographic scope of the study area. The criteria for determining the study area for CMP arterial monitoring intersections and for freeway monitoring locations are:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the AM or PM peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the AM or PM peak hours.

Significant CMP Traffic Impact Criteria

The CMP traffic impact analysis guidelines establish that a significant project impact occurs when the following threshold is exceeded:

- The proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C 0.02), causing LOS F (V/C > 1.00)
- If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C 0.02)

Arterial CMP Monitoring Station Analysis

The CMP arterial monitoring stations nearest to the Project site are the intersections of Avenue D & 60th Street West (approximately 10.0 miles away) and Palmdale Boulevard & Sierra Highway (approximately 10.3 miles away). Neither of these are study intersections. Based on the Project trip generation estimates presented in Table 4 and a review of the Project trip assignment presented in Appendix A, the Project is expected to add fewer than 50 peak hour vehicle trips through either of these CMP arterial monitoring stations. Therefore, Project impacts on the CMP arterial system are considered to be less than significant and no further CMP arterial analysis is required.

Freeway CMP Impact Analysis

The 2010 Congestion Management Program (CMP) (Metro, 2010) for Los Angeles County requires that all CMP mainline freeway monitoring locations where a proposed Project will add 150 or more trips, in either direction, during either the AM or PM peak hours be analyzed. The closest CMP freeway monitoring stations to the Project are located on SR-14 south of Angeles Forest Highway (approximately 14.6 miles away) and on SR-14 at the junction of Route 48 (approximately 7.0 miles away). Based on the incremental Project trip generation estimates and Project trip assignment, the Project would not add enough new traffic to exceed the freeway analysis criteria at either of these locations. Because incremental Project-related traffic in any direction during either weekday peak hour is projected to be below the minimum criterion of 150 one-way vehicles per hour, Project impacts on the CMP regional freeway system are considered to be less than significant and no further CMP freeway analysis is required.

Regional Transit Impact Analysis

Potential transit related person-trips generated by the proposed Project were estimated. Appendix D.8.4 of the 2010 CMP provides a methodology for estimating the number of transit trips expected to result from a proposed Project based on the projected number of vehicle trips. This methodology assumes an average vehicle ridership (AVR) factor of 1.4 in order to estimate the number of person trips to and from the Project and then provides guidance regarding the percentage of person trips assigned to public transit depending on the type of use (commercial/other versus residential) and the proximity to transit services. Appendix D.8.4 of the 2010 CMP recommends summarizing the fixed-route local bus services within ¼ mile of the Project site and express bus routes and rail service within two miles of the Project site.

The Project is located within ¼ mile of bus stops serving Antelope Valley Transit Authority Local Routes 7, 9, 11, and 12, and within 2 miles of Kern Transit Express Routes 100 and 250. Approximately 15% of total person trips generated by the Project are conservatively assumed to use transit to travel to and from the site. The proposed Project would have an estimated increase in trip generation of approximately 326 trips

during the AM peak hour and 326 during the PM peak hour. Applying the AVR factor of 1.4 to the estimated trips would result in an estimated increase of approximately 456 person trips during each peak hour. Applying the 15% transit use would result in approximately 68 new transit person trips during each of the weekday AM and PM peak hours.

Within a ¼ mile of the Project site, Antelope Valley Transit Authority operates Local Route 7 (approximately 30-minute headways during the peak hours), Route 9 (approximately 45-minute headways during the peak hours), Route 11 (approximately 35-minute headways during the peak hours), and Route 12 (approximately 25-minute headways during the peak hours). Within the two miles of the Project site, Kern Transit operates Route 100 with more than 60-minute headways during peak hours and Route 250 with 45-minute headways during peak hours. The total of these services has an estimated seating capacity of 560 persons per hour during the peak periods based on a seating capacity of 40 persons per bus. The proposed Project would utilize up to 12% of available transit capacity during the peak hours using the CMP assumption of transit trips equating to 15% of person trips. At this level of transit capacity utilization, the Project is not anticipated to result in a significant CMP transit impact.

At this level of absorption of transit system capacity, it is concluded that Project-related impacts to the regional transit system would not be significant.

7. SUMMARY AND CONCLUSIONS

The following summarizes the results of the Project transportation impact analysis for the proposed Antelope Valley Community College District 2016 Facilities Master Plan:

- The Project consists of increasing student enrollment to 15,908 students in 2030 from the current level of 12,946 students in the Spring of 2018.
- The Project also involves addition of a new signalized driveway at the intersection of 30th Street West & West Avenue J-12 and the closure of two existing driveways currently located immediately south of that intersection.
- The Project is expected to generate approximately 3,236 daily trips, including 310 trips during the AM peak hour, and 310 trips during the PM peak hour.
- The LOS analysis for the Existing with Project scenario determined that the Project would not result in significant impacts at any of the 18 study intersections. The LOS analysis for the Future with Project scenario determined that the Project would not result in significant impacts at any of the 18 study intersections.
- The Project will require 3,182 parking spaces, according to the 2016 FMP guidelines. Under Future with Project conditions, the Project will provide 3,794 spaces, more than meeting the estimated parking need.
- The project would not result in a significant impact to any CMP arterial or freeway monitoring stations. The projected level of additional transit riders generated by the proposed Project would not result in a significant impact on public transit services in the vicinity of the Project.

REFERENCES

2010 Congestion Management Program for Los Angeles County, Metro, October 2010.

2016 Facilities Master Plan, Antelope Valley Community College District, 2016.

City of Lancaster Subarea Model: Model Development Report, Fehr & Peers, 2016.

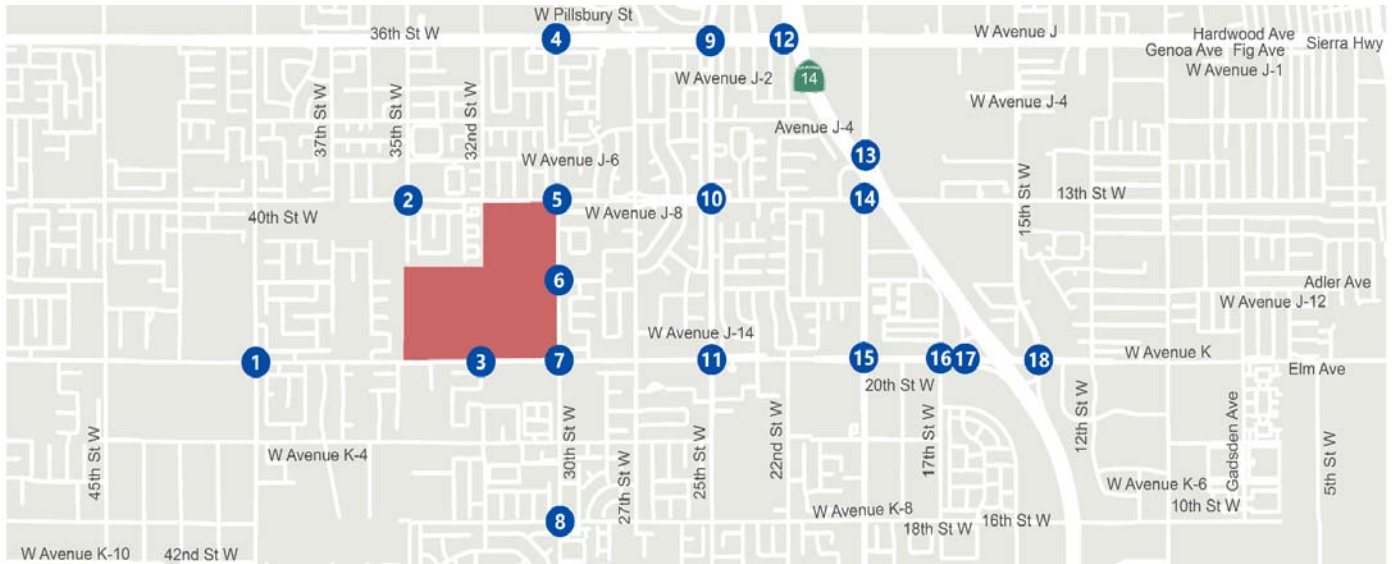
Highway Capacity Manual, Transportation Research Board, 2010.

Transportation Research Circular No. 212, *Interim Materials on Highway Capacity*, Transportation Research Board, 1980.

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

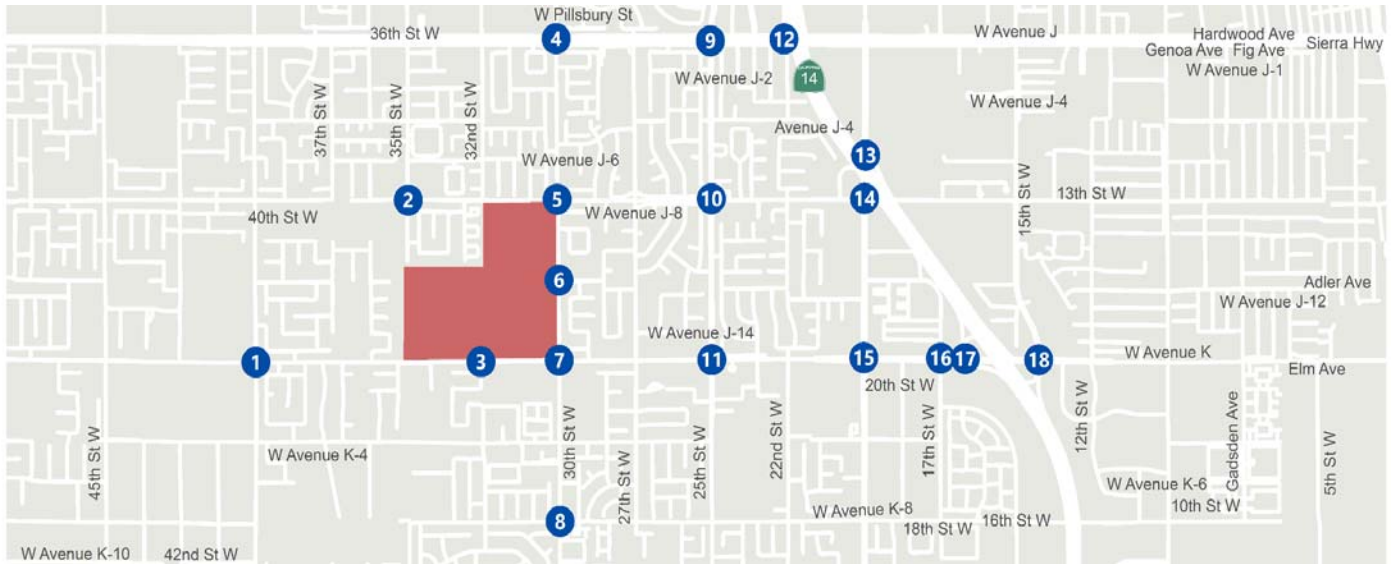
Appendix A:
Lane Configurations and Traffic Volumes





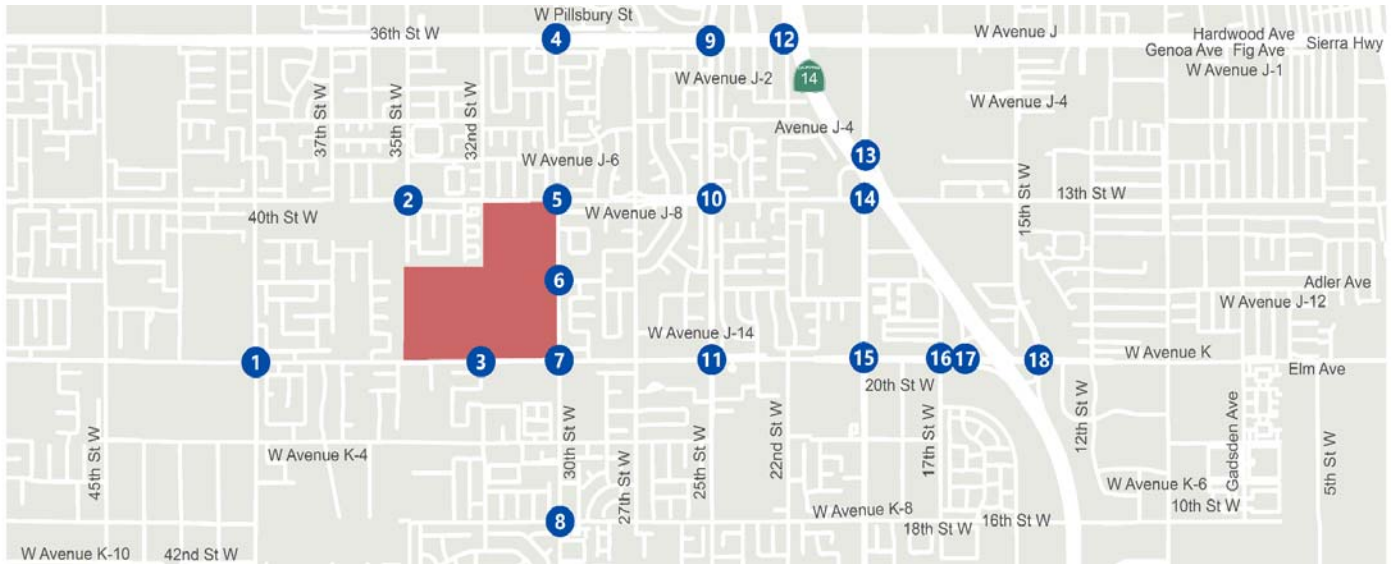
1. 40th Street/Avenue K	2. 35th Street/Avenue J-8	3. 32nd St/Driveway/Avenue K	4. 30th Street/Avenue J
<p>40th Street</p> <p>Avenue K</p> <p>16 (11) 174 (201) 71 (44)</p> <p>42 (42) 305 (429) 37 (83)</p> <p>31 (25) 760 (378) 99 (38)</p> <p>99 (65) 184 (183) 127 (68)</p>	<p>35th Street</p> <p>Avenue J-8</p> <p>64 (15) 39 (8) 200 (32)</p> <p>50 (33) 245 (338) 10 (2)</p> <p>15 (20) 312 (189) 30 (12)</p> <p>20 (9) 16 (12) 3 (14)</p>	<p>32nd St/Driveway</p> <p>Avenue K</p> <p>23 (31) 5 (3) 116 (103)</p> <p>223 (76) 424 (629) 11 (33)</p> <p>132 (65) 923 (539) 21 (7)</p> <p>38 (6) 20 (4) 48 (35)</p>	<p>30th Street</p> <p>Avenue J</p> <p>104 (134) 441 (280) 54 (15)</p> <p>33 (36) 488 (568) 182 (221)</p> <p>106 (86) 833 (432) 211 (59)</p> <p>161 (71) 285 (274) 127 (159)</p>
5. 30th Street/Avenue J-8	6. 30th Street/Ave J-12/New Driveway	7. 30th Street/Avenue K	8. 30th Street/Avenue K-8
<p>30th Street</p> <p>Avenue J-8</p> <p>124 (51) 680 (504) 138 (50)</p> <p>49 (68) 380 (419) 153 (165)</p> <p>64 (66) 457 (236) 98 (76)</p> <p>85 (88) 425 (441) 123 (109)</p>	<p>30th Street</p> <p>Ave J-12/New Driveway</p> <p>667 (646) 17 (21)</p> <p>15 (14) 11 (5)</p> <p>771 (631) 15 (19)</p>	<p>30th Street</p> <p>Avenue K</p> <p>145 (105) 405 (495) 154 (214)</p> <p>260 (169) 476 (509) 57 (107)</p> <p>136 (96) 742 (506) 176 (159)</p> <p>258 (141) 666 (447) 154 (124)</p>	<p>30th Street</p> <p>Avenue K-8</p> <p>50 (77) 515 (612) 95 (59)</p> <p>125 (85) 85 (176) 83 (112)</p> <p>92 (62) 168 (84) 33 (46)</p> <p>18 (53) 805 (684) 79 (115)</p>
9. 25th Street/Avenue J	10. 25th Street/Avenue J-8	11. 25th Street/Avenue K	12. SR-14 SB Off Ramp/Avenue J
<p>25th Street</p> <p>Avenue J</p> <p>139 (80) 121 (138) 20 (32)</p> <p>21 (59) 660 (759) 82 (174)</p> <p>192 (157) 888 (479) 118 (48)</p> <p>46 (26) 143 (198) 108 (98)</p>	<p>25th Street</p> <p>Avenue J-8</p> <p>18 (26) 163 (212) 225 (144)</p> <p>75 (155) 555 (658) 20 (46)</p> <p>34 (25) 728 (363) 53 (22)</p> <p>78 (26) 152 (181) 96 (36)</p>	<p>25th Street</p> <p>Avenue K</p> <p>43 (51) 107 (136) 100 (74)</p> <p>43 (70) 755 (775) 27 (40)</p> <p>57 (44) 988 (798) 27 (17)</p> <p>10 (21) 133 (112) 66 (40)</p>	<p>SR-14 SB Off Ramp</p> <p>Avenue J</p> <p>154 (259) 172 (151)</p> <p>707 (1,062)</p> <p>1,064 (883)</p>





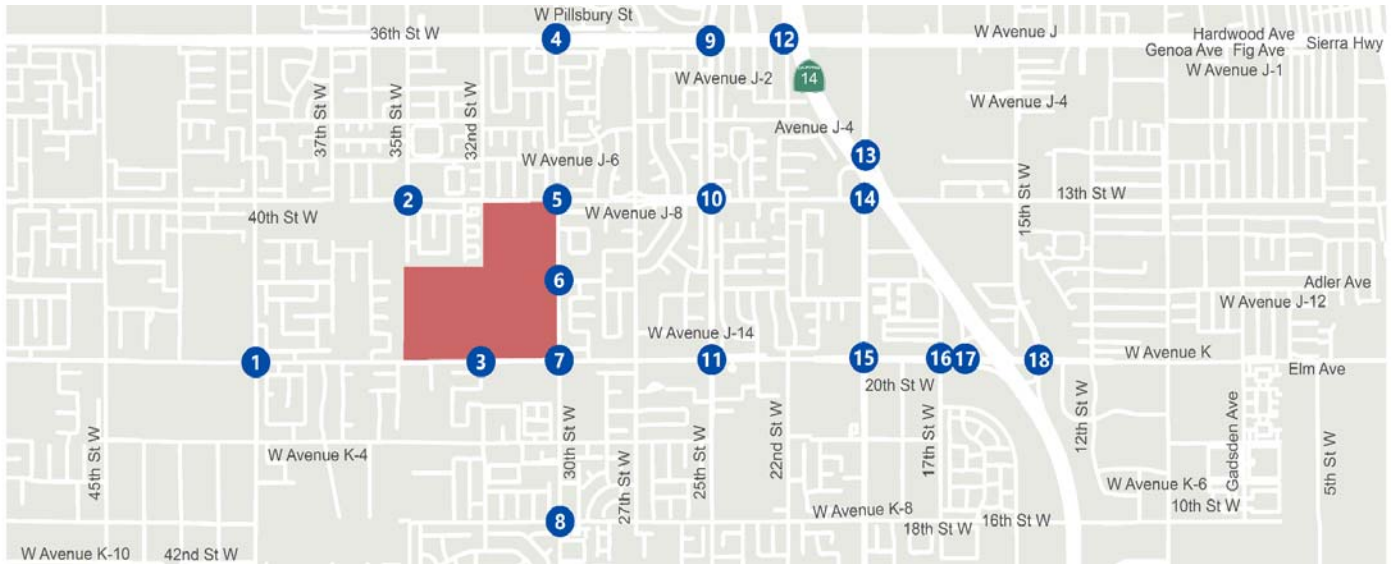
13. 20th Street/SR-14 NB Off Ramp	14. 20th Street/Avenue J-8	15. 20th Street/Avenue K	16. 17th Street/Avenue K
17. SR-14 SB Ramps/Avenue K	18. 15th St/SR-14 NB Ramps/Ave K		





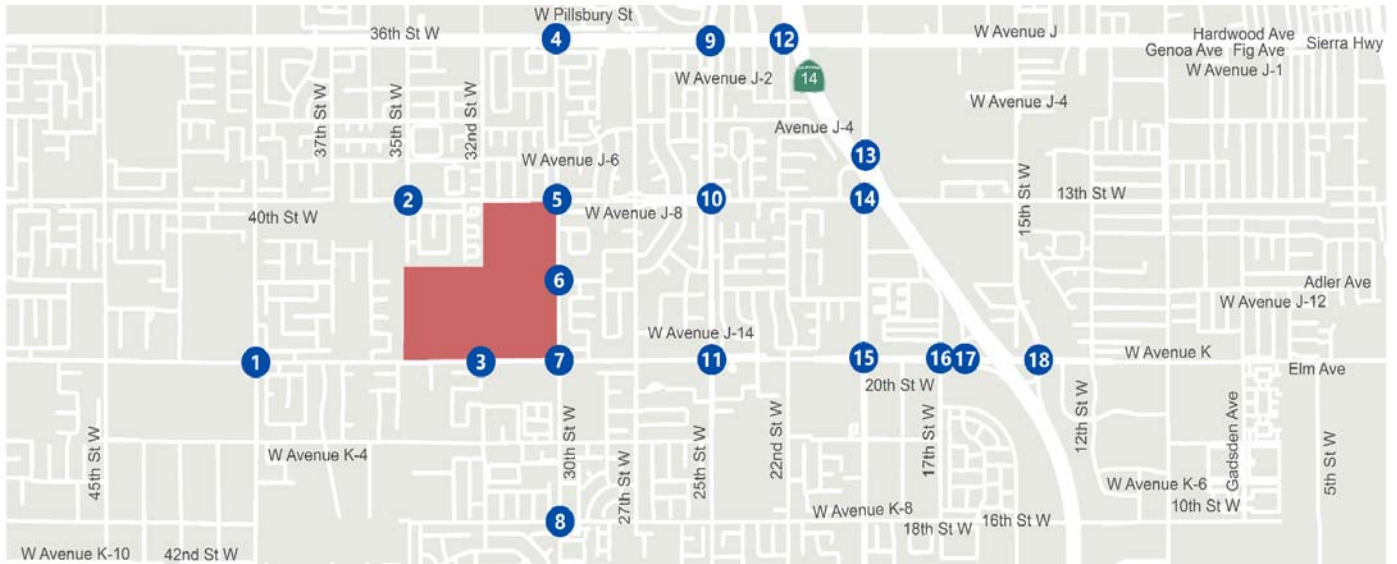
1. 40th Street/Avenue K	2. 35th Street/Avenue J-8	3. 32nd St/Driveway/Avenue K	4. 30th Street/Avenue J
<p>40th Street</p> <p>Avenue K</p> <p>33 (60) 191 (210) 105 (48)</p> <p>46 (55) 309 (455) 41 (87)</p> <p>35 (29) 781 (382) 103 (47)</p> <p>103 (69) 193 (200) 131 (72)</p>	<p>35th Street</p> <p>Avenue J-8</p> <p>68 (19) 43 (12) 290 (118)</p> <p>106 (106) 275 (497) 14 (6)</p> <p>19 (24) 419 (266) 34 (21)</p> <p>29 (18) 20 (16) 7 (18)</p>	<p>32nd St/Driveway</p> <p>Avenue K</p> <p>27 (35) 9 (7) 120 (107)</p> <p>227 (80) 428 (663) 58 (149)</p> <p>136 (69) 979 (543) 25 (11)</p> <p>42 (10) 24 (8) 129 (129)</p>	<p>30th Street</p> <p>Avenue J</p> <p>116 (216) 481 (303) 54 (18)</p> <p>36 (42) 499 (585) 189 (228)</p> <p>157 (114) 925 (486) 212 (59)</p> <p>162 (74) 319 (355) 135 (165)</p>
5. 30th Street/Avenue J-8	6. 30th Street/Ave J-12/New Driveway	7. 30th Street/Avenue K	8. 30th Street/Avenue K-8
<p>30th Street</p> <p>Avenue J-8</p> <p>128 (60) 710 (525) 142 (54)</p> <p>53 (81) 436 (603) 153 (174)</p> <p>68 (70) 637 (352) 111 (123)</p> <p>115 (122) 446 (488) 136 (122)</p>	<p>30th Street</p> <p>Ave J-12/New Driveway</p> <p>701 (693) 21 (25)</p> <p>19 (18) 15 (9)</p> <p>818 (700) 19 (23)</p>	<p>30th Street</p> <p>Avenue K</p> <p>151 (109) 438 (546) 157 (247)</p> <p>287 (172) 482 (578) 58 (115)</p> <p>146 (99) 800 (522) 191 (168)</p> <p>262 (149) 698 (532) 159 (126)</p>	<p>30th Street</p> <p>Avenue K-8</p> <p>54 (81) 549 (616) 108 (72)</p> <p>138 (119) 89 (240) 87 (125)</p> <p>96 (66) 194 (88) 37 (63)</p> <p>27 (57) 809 (657) 88 (128)</p>
9. 25th Street/Avenue J	10. 25th Street/Avenue J-8	11. 25th Street/Avenue K	12. SR-14 SB Off Ramp/Avenue J
<p>25th Street</p> <p>Avenue J</p> <p>144 (87) 131 (158) 21 (40)</p> <p>37 (68) 669 (777) 103 (209)</p> <p>200 (163) 972 (514) 121 (54)</p> <p>49 (36) 151 (206) 129 (124)</p>	<p>25th Street</p> <p>Avenue J-8</p> <p>20 (31) 176 (232) 232 (161)</p> <p>76 (161) 584 (693) 23 (49)</p> <p>36 (26) 743 (369) 57 (26)</p> <p>81 (33) 164 (193) 102 (36)</p>	<p>25th Street</p> <p>Avenue K</p> <p>47 (55) 116 (157) 104 (78)</p> <p>47 (74) 781 (805) 36 (57)</p> <p>61 (48) 1,018 (854) 31 (21)</p> <p>14 (25) 142 (121) 92 (53)</p>	<p>SR-14 SB Off Ramp</p> <p>Avenue J</p> <p>172 (282) 193 (157)</p> <p>762 (1,187)</p> <p>1,164 (955)</p>





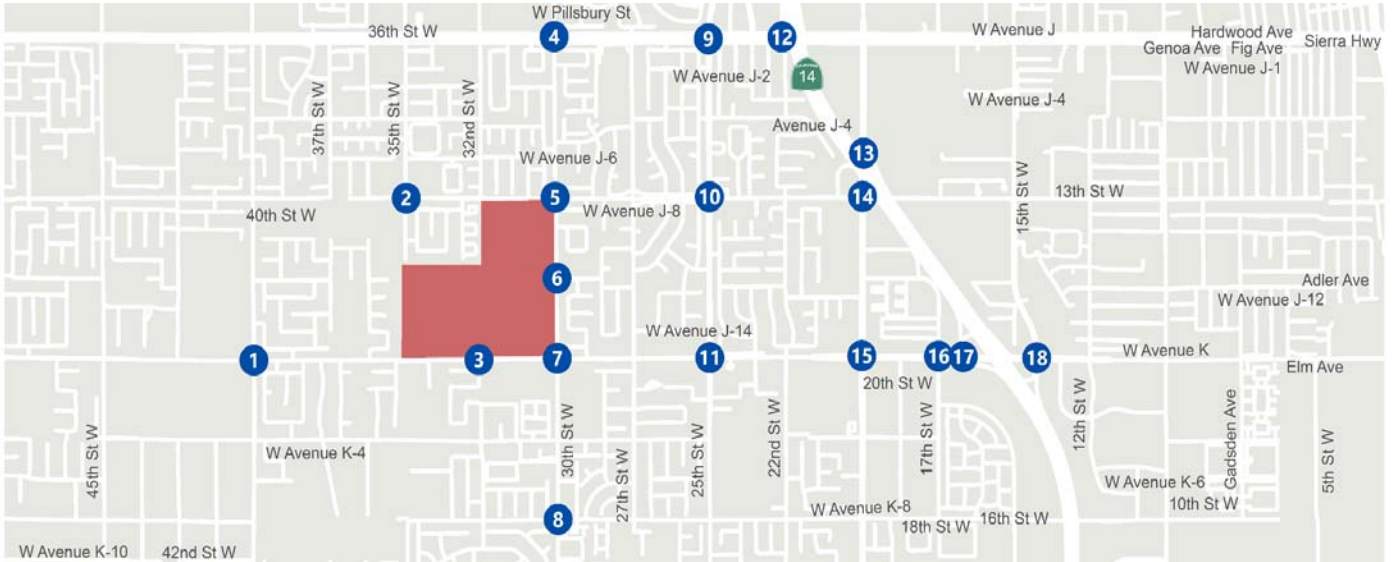
13. 20th Street/SR-14 NB Off Ramp	14. 20th Street/Avenue J-8	15. 20th Street/Avenue K	16. 17th Street/Avenue K
<p>SR-14 NB Off Ramp</p> <p>483 (897)</p> <p>639 (543) 305 (451)</p> <p>391 (483)</p>	<p>20th Street</p> <p>470 (783) 257 (435) 75 (82)</p> <p>30 (60) 452 (687) 120 (307)</p> <p>97 (72) 517 (279) 82 (67)</p> <p>65 (145) 302 (382) 276 (195)</p>	<p>20th Street</p> <p>85 (116) 189 (355) 117 (178)</p> <p>65 (127) 742 (825) 84 (176)</p> <p>176 (166) 983 (855) 82 (66)</p> <p>67 (110) 298 (287) 83 (111)</p>	<p>17th Street</p> <p>31 (41) 31 (46) 158 (186)</p> <p>72 (144) 828 (1,030) 128 (237)</p> <p>50 (51) 1,013 (1,033) 79 (99)</p> <p>64 (90) 50 (62) 193 (246)</p>
17. SR-14 SB Ramps/Avenue K	18. 15th St/SR-14 NB Ramps/Ave K		
<p>SR-14 SB Ramps</p> <p>168 (221) 212 (226)</p> <p>288 (540) 926 (1,257)</p> <p>985 (993)</p>	<p>15th St/SR-14 NB Ramps</p> <p>231 (471) 10 (22) 199 (353)</p> <p>210 (228) 811 (1,127)</p> <p>219 (156) 847 (963) 101 (108)</p> <p>312 (388) 460 (402) 409 (413)</p>		





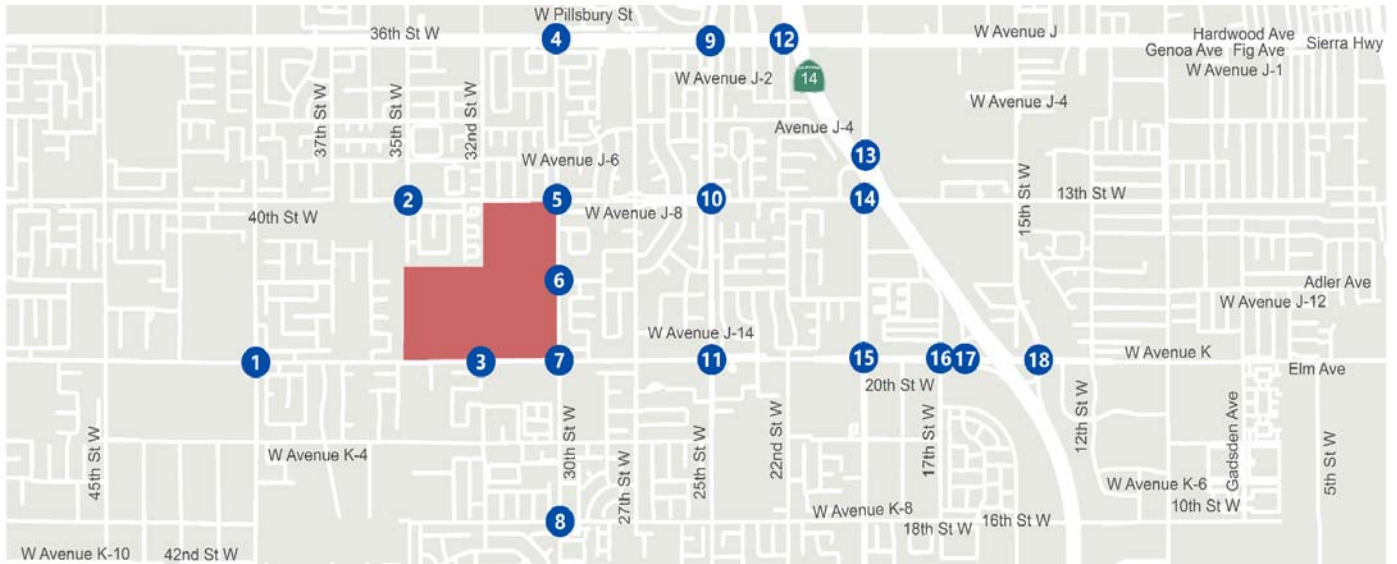
1. 40th Street/Avenue K	2. 35th Street/Avenue J-8	3. 32nd St/Driveway/Avenue K	4. 30th Street/Avenue J
5. 30th Street/Avenue J-8	6. 30th Street/Ave J-12/New Driveway	7. 30th Street/Avenue K	8. 30th Street/Avenue K-8
9. 25th Street/Avenue J	10. 25th Street/Avenue J-8	11. 25th Street/Avenue K	12. SR-14 SB Off Ramp/Avenue J





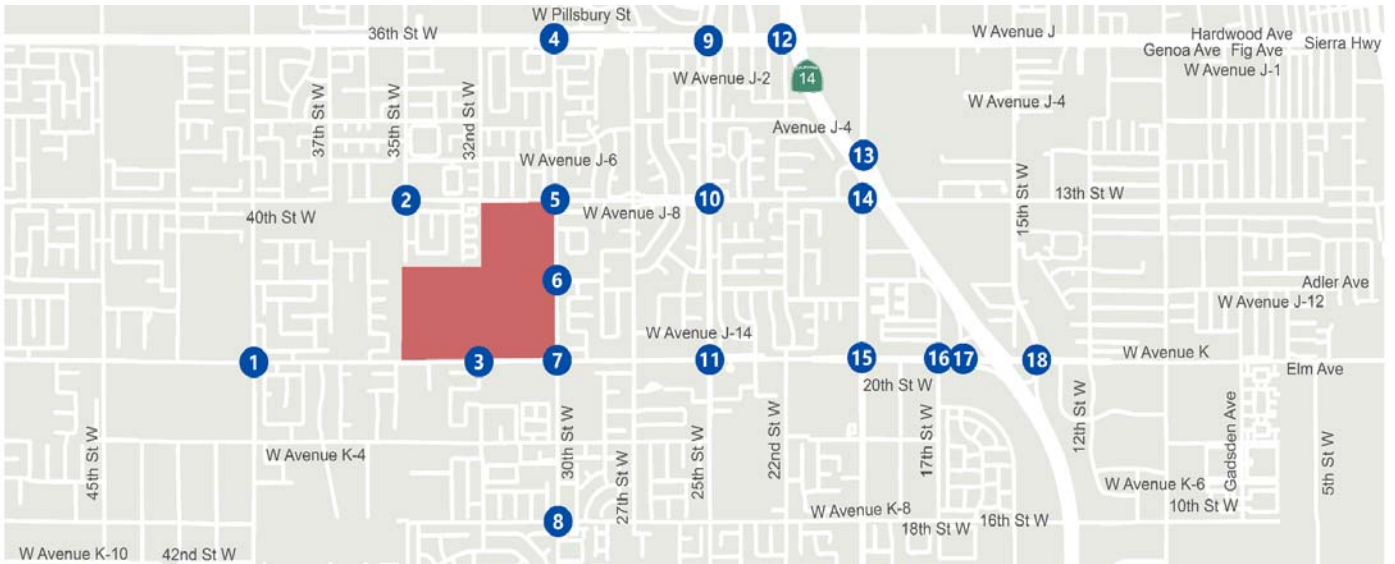
<p>13. 20th Street/SR-14 NB Off Ramp</p>	<p>14. 20th Street/Avenue J-8</p>	<p>15. 20th Street/Avenue K</p>	<p>16. 17th Street/Avenue K</p>
<p>17. SR-14 SB Ramps/Avenue K</p>	<p>18. 15th St/SR-14 NB Ramps/Ave K</p>		





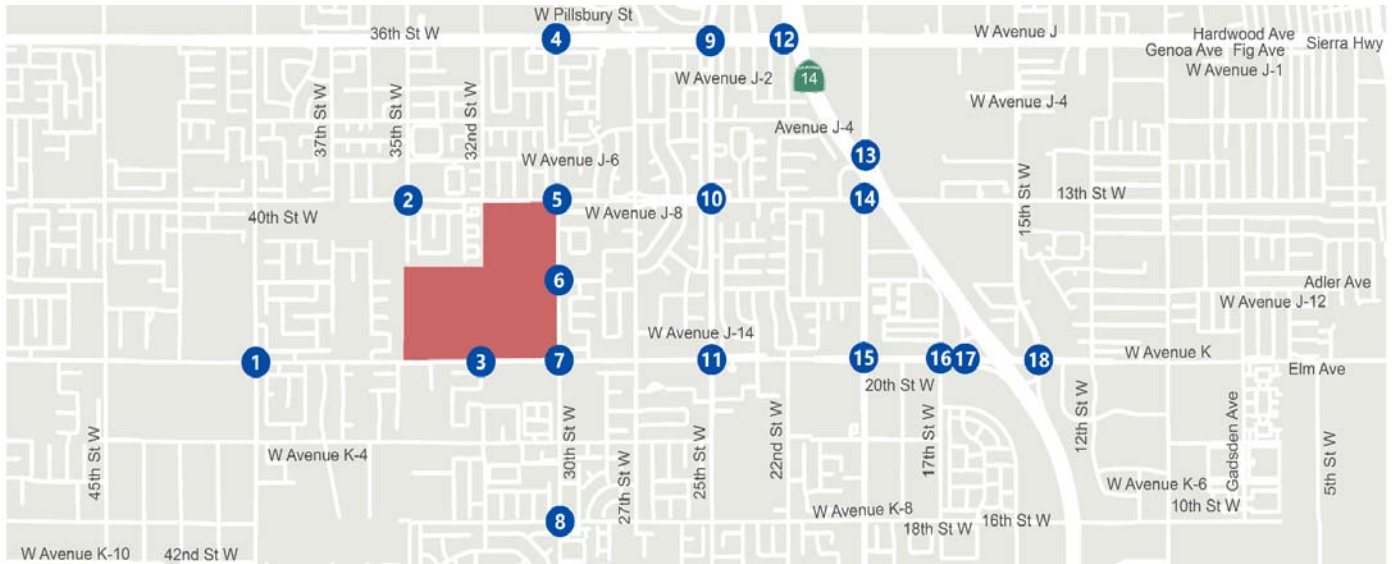
1. 40th Street/Avenue K	2. 35th Street/Avenue J-8	3. 32nd St/Driveway/Avenue K	4. 30th Street/Avenue J
<p>40th Street</p> <p>15 (11) 173 (202) 81 (50)</p> <p>45 (48) 307 (432) 42 (96)</p> <p>Avenue K</p> <p>30 (24) 766 (381) 99 (38)</p> <p>99 (65) 184 (182) 143 (79)</p>	<p>35th Street</p> <p>64 (15) 39 (8) 202 (34)</p> <p>51 (34) 244 (336) 10 (2)</p> <p>Avenue J-8</p> <p>15 (20) 309 (187) 30 (12)</p> <p>20 (9) 16 (12) 3 (14)</p>	<p>32nd St/Driveway</p> <p>24 (33) 5 (3) 121 (115)</p> <p>246 (92) 438 (649) 11 (33)</p> <p>Avenue K</p> <p>135 (67) 950 (557) 21 (7)</p> <p>39 (6) 21 (4) 48 (35)</p>	<p>30th Street</p> <p>104 (134) 444 (282) 54 (15)</p> <p>33 (36) 488 (568) 224 (250)</p> <p>Avenue J</p> <p>106 (86) 833 (433) 211 (59)</p> <p>161 (71) 286 (275) 137 (181)</p>
5. 30th Street/Avenue J-8	6. 30th Street/Ave J-12/New Driveway	7. 30th Street/Avenue K	8. 30th Street/Avenue K-8
<p>30th Street</p> <p>129 (54) 720 (531) 138 (50)</p> <p>49 (68) 396 (430) 177 (181)</p> <p>Avenue J-8</p> <p>65 (69) 461 (245) 100 (83)</p> <p>100 (98) 434 (461) 128 (122)</p>	<p>30th Street</p> <p>208 (117) 662 (635) 17 (21)</p> <p>15 (14) 0 (0) 11 (5)</p> <p>Ave J-12/New Driveway</p> <p>29 (66) 0 (0) 64 (169)</p> <p>194 (134) 750 (615) 15 (19)</p>	<p>30th Street</p> <p>171 (132) 411 (506) 172 (255)</p> <p>325 (214) 513 (535) 57 (107)</p> <p>Avenue K</p> <p>160 (116) 747 (516) 178 (164)</p> <p>277 (154) 681 (458) 154 (124)</p>	<p>30th Street</p> <p>50 (77) 517 (619) 100 (69)</p> <p>144 (98) 85 (176) 83 (112)</p> <p>Avenue K-8</p> <p>92 (62) 168 (84) 33 (46)</p> <p>18 (53) 819 (694) 79 (115)</p>
9. 25th Street/Avenue J	10. 25th Street/Avenue J-8	11. 25th Street/Avenue K	12. SR-14 SB Off Ramp/Avenue J
<p>25th Street</p> <p>139 (80) 124 (140) 20 (32)</p> <p>21 (59) 702 (788) 82 (174)</p> <p>Avenue J</p> <p>192 (157) 899 (502) 118 (48)</p> <p>46 (26) 144 (199) 108 (98)</p>	<p>25th Street</p> <p>18 (26) 166 (214) 225 (144)</p> <p>75 (155) 597 (687) 20 (46)</p> <p>Avenue J-8</p> <p>33 (25) 738 (386) 53 (20)</p> <p>76 (25) 152 (182) 96 (36)</p>	<p>25th Street</p> <p>46 (53) 107 (134) 100 (74)</p> <p>43 (70) 840 (834) 27 (40)</p> <p>Avenue K</p> <p>57 (45) 1,008 (842) 30 (24)</p> <p>24 (31) 131 (111) 67 (42)</p>	<p>SR-14 SB Off Ramp</p> <p>152 (258) 172 (151)</p> <p>751 (1,092)</p> <p>Avenue J</p> <p>1,075 (906)</p>





13. 20th Street/SR-14 NB Off Ramp	14. 20th Street/Avenue J-8	15. 20th Street/Avenue K	16. 17th Street/Avenue K
17. SR-14 SB Ramps/Avenue K	18. 15th St/SR-14 NB Ramps/Ave K		





1. 40th Street/Avenue K	2. 35th Street/Avenue J-8	3. 32nd St/Driveway/Avenue K	4. 30th Street/Avenue J
<p>40th Street</p> <p>32 (60) 190 (211) 115 (54)</p> <p>49 (61) 311 (458) 46 (100)</p> <p>Avenue K</p> <p>34 (28) 787 (385) 103 (47)</p> <p>103 (69) 193 (199) 147 (83)</p>	<p>35th Street</p> <p>68 (19) 43 (12) 292 (120)</p> <p>107 (107) 274 (495) 14 (6)</p> <p>Avenue J-8</p> <p>19 (24) 416 (264) 34 (21)</p> <p>29 (18) 20 (16) 7 (18)</p>	<p>32nd St/Driveway</p> <p>28 (37) 9 (7) 125 (119)</p> <p>250 (96) 442 (683) 58 (149)</p> <p>Avenue K</p> <p>139 (71) 1,006 (561) 25 (11)</p> <p>43 (10) 25 (8) 129 (129)</p>	<p>30th Street</p> <p>116 (216) 484 (305) 54 (18)</p> <p>36 (42) 499 (585) 231 (257)</p> <p>Avenue J</p> <p>157 (114) 925 (487) 212 (59)</p> <p>162 (74) 320 (366) 145 (187)</p>
5. 30th Street/Avenue J-8	6. 30th Street/Ave J-12/New Driveway	7. 30th Street/Avenue K	8. 30th Street/Avenue K-8
<p>30th Street</p> <p>133 (63) 750 (552) 142 (54)</p> <p>53 (81) 452 (614) 177 (190)</p> <p>Avenue J-8</p> <p>69 (73) 641 (361) 113 (130)</p> <p>130 (132) 455 (508) 141 (135)</p>	<p>30th Street</p> <p>119 (83) 696 (682) 21 (25)</p> <p>19 (18) 0 (0) 15 (9)</p> <p>Ave J-12/New Driveway</p> <p>28 (65) 0 (0) 45 (103)</p> <p>193 (134) 797 (684) 19 (23)</p>	<p>30th Street</p> <p>177 (136) 444 (557) 175 (288)</p> <p>352 (217) 519 (604) 58 (115)</p> <p>Avenue K</p> <p>170 (119) 805 (532) 193 (173)</p> <p>281 (162) 713 (543) 159 (126)</p>	<p>30th Street</p> <p>54 (81) 551 (623) 113 (82)</p> <p>157 (132) 89 (240) 87 (125)</p> <p>Avenue K-8</p> <p>96 (66) 194 (88) 37 (63)</p> <p>27 (57) 823 (667) 88 (128)</p>
9. 25th Street/Avenue J	10. 25th Street/Avenue J-8	11. 25th Street/Avenue K	12. SR-14 SB Off Ramp/Avenue J
<p>25th Street</p> <p>144 (87) 134 (160) 21 (40)</p> <p>37 (68) 711 (806) 103 (209)</p> <p>Avenue J</p> <p>200 (163) 983 (537) 121 (54)</p> <p>49 (36) 152 (207) 129 (124)</p>	<p>25th Street</p> <p>20 (31) 179 (234) 232 (161)</p> <p>76 (161) 626 (722) 23 (49)</p> <p>Avenue J-8</p> <p>35 (26) 753 (392) 57 (24)</p> <p>79 (32) 164 (194) 102 (36)</p>	<p>25th Street</p> <p>50 (57) 116 (155) 104 (78)</p> <p>47 (74) 866 (864) 36 (57)</p> <p>Avenue K</p> <p>61 (49) 1,038 (898) 34 (28)</p> <p>28 (35) 140 (120) 93 (55)</p>	<p>SR-14 SB Off Ramp</p> <p>170 (281) 193 (157)</p> <p>806 (1,217)</p> <p>Avenue J</p> <p>1,175 (978)</p>



Appendix B:
Turning Movement Count Sheets



National Data & Surveying Services

Intersection Turning Movement Count

Location: 40th St & Avenue K
City: Lancaster
Control: Signalized

Project ID: 18-05266-001
Date: 4/26/2018

Total

NS/EW Streets:	40th St				40th St				Avenue K				Avenue K				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	1	0	1	0.5	0.5	0	1	2	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	20	35	9	0	6	33	1	0	4	82	14	0	12	79	5	0	300
7:15 AM	23	46	21	0	7	45	4	0	3	136	18	0	9	85	11	0	408
7:30 AM	26	49	23	0	23	62	3	0	11	196	31	0	11	69	14	0	518
7:45 AM	28	59	49	0	28	38	6	0	12	249	22	0	8	75	10	0	584
8:00 AM	22	30	34	0	13	29	3	0	5	179	28	0	9	76	7	0	435
8:15 AM	9	22	21	0	18	16	2	0	6	115	9	0	7	37	3	0	265
8:30 AM	9	25	18	0	13	16	7	0	1	94	8	0	5	40	5	0	241
8:45 AM	10	22	12	0	7	24	1	0	2	95	9	0	11	36	12	0	241
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	147	288	187	0	115	263	27	0	44	1146	139	0	72	497	67	0	2992
	23.63%	46.30%	30.06%	0.00%	28.40%	64.94%	6.67%	0.00%	3.31%	86.23%	10.46%	0.00%	11.32%	78.14%	10.53%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	99	184	127	0	71	174	16	0	31	760	99	0	37	305	42	0	1945
PEAK HR FACTOR :	0.884	0.780	0.648	0.000	0.634	0.702	0.667	0.000	0.646	0.763	0.798	0.000	0.841	0.897	0.750	0.000	0.833
		0.754				0.741				0.786				0.914			
PM	1	2	1	0	1	0.5	0.5	0	1	2	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	13	36	14	0	11	45	8	0	4	98	11	0	21	84	16	0	361
4:15 PM	11	30	15	0	5	40	3	0	3	104	10	0	25	102	8	0	356
4:30 PM	16	46	23	0	11	45	2	0	4	105	9	0	19	102	7	0	389
4:45 PM	15	48	23	0	13	52	4	0	7	90	14	0	21	103	8	0	398
5:00 PM	21	49	9	0	9	57	2	0	5	94	7	0	22	107	16	0	398
5:15 PM	13	40	13	0	11	47	3	0	9	89	8	0	21	117	11	0	382
5:30 PM	17	41	11	0	8	37	2	0	4	99	8	0	15	95	8	0	345
5:45 PM	5	39	19	0	5	44	3	0	5	78	8	0	12	83	19	0	320
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	111	329	127	0	73	367	27	0	41	757	75	0	156	793	93	0	2949
	19.58%	58.02%	22.40%	0.00%	15.63%	78.59%	5.78%	0.00%	4.70%	86.71%	8.59%	0.00%	14.97%	76.10%	8.93%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	65	183	68	0	44	201	11	0	25	378	38	0	83	429	42	0	1567
PEAK HR FACTOR :	0.774	0.934	0.739	0.000	0.846	0.882	0.688	0.000	0.694	0.900	0.679	0.000	0.943	0.917	0.656	0.000	0.984
		0.919				0.928				0.934				0.930			

National Data & Surveying Services

Intersection Turning Movement Count

Location: 35th St & Avenue J-8
City: Lancaster
Control: 4-Way Stop (NB/SB/EB/WB)

Project ID: 18-05266-002
Date: 4/26/2018

Total

NS/EW Streets:	35th St				35th St				Avenue J-8				Avenue J-8				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	2	12	0	0	15	3	3	0	6	46	2	0	0	45	17	0	
7:15 AM	1	7	0	0	55	7	19	0	6	58	2	0	1	66	24	0	
7:30 AM	6	1	1	0	65	12	27	0	4	82	6	0	3	75	11	0	
7:45 AM	9	4	2	0	64	18	15	0	3	106	15	0	4	61	6	0	
8:00 AM	4	4	0	0	16	2	3	0	2	66	7	0	2	43	9	0	
8:15 AM	1	1	2	0	11	4	2	0	2	68	3	0	2	26	2	0	
8:30 AM	3	0	0	0	8	2	2	0	2	41	0	0	0	43	2	0	
8:45 AM	4	2	3	0	12	2	4	0	1	42	1	0	0	26	5	0	
TOTAL VOLUMES :	30	31	8	0	246	50	75	0	26	509	36	0	12	385	76	0	
APPROACH %'s :	43.48%	44.93%	11.59%	0.00%	66.31%	13.48%	20.22%	0.00%	4.55%	89.14%	6.30%	0.00%	2.54%	81.40%	16.07%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM				200	39	64	0	15	312	30	0	10	245	50	0	
PEAK HR VOL :	20	16	3	0	200	39	64	0	15	312	30	0	10	245	50	0	
PEAK HR FACTOR :	0.556	0.571	0.375	0.000	0.769	0.542	0.593	0.000	0.625	0.736	0.500	0.000	0.625	0.817	0.521	0.000	
	0.650				0.728				0.720				0.838				0.818
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:00 PM	0	2	0	0	6	3	4	0	3	59	1	0	2	89	6	0	
4:15 PM	0	5	2	0	9	1	2	0	3	51	3	0	2	90	18	0	
4:30 PM	5	4	1	0	7	4	6	0	0	36	1	0	1	67	14	0	
4:45 PM	4	2	1	0	12	5	4	0	1	43	3	0	1	79	9	0	
5:00 PM	3	2	1	0	5	2	8	0	5	39	3	0	1	79	10	0	
5:15 PM	0	4	2	0	10	2	4	0	6	47	3	0	1	96	4	0	
5:30 PM	3	3	1	0	7	1	0	0	5	52	0	0	0	85	9	0	
5:45 PM	3	3	10	0	10	3	3	0	4	51	6	0	0	78	10	0	
TOTAL VOLUMES :	18	25	18	0	66	21	31	0	27	378	20	0	8	663	80	0	
APPROACH %'s :	29.51%	40.98%	29.51%	0.00%	55.93%	17.80%	26.27%	0.00%	6.35%	88.94%	4.71%	0.00%	1.07%	88.28%	10.65%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM				32	8	15	0	20	189	12	0	2	338	33	0	
PEAK HR VOL :	9	12	14	0	32	8	15	0	20	189	12	0	2	338	33	0	
PEAK HR FACTOR :	0.750	0.750	0.350	0.000	0.800	0.667	0.469	0.000	0.833	0.909	0.500	0.000	0.500	0.880	0.825	0.000	
	0.547				0.859				0.906				0.923				0.945

National Data & Surveying Services

Intersection Turning Movement Count

Location: 32nd St/Campus Dwy & Avenue K
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-003
 Date: 4/26/2018

Total

NS/EW Streets:	32nd St/Campus Dwy				32nd St/Campus Dwy				Avenue K				Avenue K				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	1	0	0	1	0.5	0.5	0	1	3	0	0	1	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	9	9	6	0	6	0	3	0	8	95	3	1	4	96	5	0	245
7:15 AM	7	7	7	0	8	1	4	0	12	161	3	2	0	114	19	0	345
7:30 AM	19	4	17	0	29	1	7	0	30	231	8	0	5	121	65	0	537
7:45 AM	6	7	11	0	61	2	8	0	60	309	5	2	4	103	101	0	679
8:00 AM	6	2	13	0	18	1	4	0	25	222	5	1	2	86	38	0	423
8:15 AM	0	1	7	0	9	0	0	0	4	185	2	0	1	58	16	0	283
8:30 AM	2	1	6	0	2	1	0	0	4	132	0	0	3	64	12	0	227
8:45 AM	0	1	3	0	15	1	3	0	4	130	0	0	8	50	24	0	239
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	49	32	70	0	148	7	29	0	147	1465	26	6	27	692	280	0	2978
	32.45%	21.19%	46.36%	0.00%	80.43%	3.80%	15.76%	0.00%	8.94%	89.11%	1.58%	0.36%	2.70%	69.27%	28.03%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	38	20	48	0	116	5	23	0	127	923	21	5	11	424	223	0	1984
PEAK HR FACTOR :	0.500	0.714	0.706	0.000	0.475	0.625	0.719	0.000	0.529	0.747	0.656	0.625	0.550	0.876	0.552	0.000	0.730
	0.663				0.507				0.715				0.791				
PM	1	1	0	0	1	0.5	0.5	0	1	3	0	0	1	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	2	5	0	24	1	3	0	4	129	2	0	6	145	10	1	332
4:15 PM	2	1	9	0	16	1	8	0	6	123	4	0	9	134	28	1	342
4:30 PM	2	2	6	0	35	2	7	0	8	144	0	4	6	141	17	0	374
4:45 PM	1	1	9	0	24	0	5	0	4	129	1	13	9	163	14	2	375
5:00 PM	1	0	11	0	28	0	11	0	26	143	2	4	6	191	17	0	440
5:15 PM	1	0	4	0	17	2	0	0	2	141	2	1	8	153	10	0	341
5:30 PM	3	1	5	0	12	1	2	0	4	131	6	1	8	150	11	1	336
5:45 PM	1	2	5	0	22	1	6	0	12	111	5	2	14	136	29	1	347
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	11	9	54	0	178	8	42	0	66	1051	22	25	66	1213	136	6	2887
	14.86%	12.16%	72.97%	0.00%	78.07%	3.51%	18.42%	0.00%	5.67%	90.29%	1.89%	2.15%	4.64%	85.36%	9.57%	0.42%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	6	4	35	0	103	3	31	0	44	539	7	21	30	629	76	3	1531
PEAK HR FACTOR :	0.750	0.500	0.795	0.000	0.736	0.375	0.705	0.000	0.423	0.936	0.438	0.404	0.833	0.823	0.679	0.375	0.870
	0.938				0.778				0.873				0.862				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 30th St & Avenue J
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-004
 Date: 4/26/2018

Total

NS/EW Streets:	30th St				30th St				Avenue J				Avenue J				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
7:00 AM	56	72	13	0	13	63	28	0	10	141	44	0	20	120	12	0	592
7:15 AM	59	59	24	0	12	102	27	0	34	213	65	0	36	177	10	0	818
7:30 AM	32	74	40	0	14	150	33	0	22	233	65	0	61	82	5	0	811
7:45 AM	14	80	50	0	15	126	16	0	40	246	37	0	65	109	6	0	804
8:00 AM	9	72	49	0	16	100	7	0	24	134	13	0	48	55	9	0	536
8:15 AM	5	58	28	0	3	40	13	0	11	130	20	0	28	67	5	0	408
8:30 AM	11	47	28	0	4	71	7	0	10	92	18	0	27	64	5	1	385
8:45 AM	15	37	33	0	5	41	15	0	16	113	24	0	30	70	3	0	402
TOTAL VOLUMES :	NL 201	NT 499	NR 265	NU 0	SL 82	ST 693	SR 146	SU 0	EL 167	ET 1302	ER 286	EU 0	WL 315	WT 744	WR 55	WU 1	TOTAL 4756
APPROACH %'s :	20.83%	51.71%	27.46%	0.00%	8.90%	75.24%	15.85%	0.00%	9.52%	74.19%	16.30%	0.00%	28.25%	66.73%	4.93%	0.09%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	161	285	127	0	54	441	104	0	106	833	211	0	182	488	33	0	3025
PEAK HR FACTOR :	0.682	0.891	0.635	0.000	0.900	0.735	0.788	0.000	0.663	0.847	0.812	0.000	0.700	0.689	0.688	0.000	0.925
	0.981				0.760				0.890				0.788				
PM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
4:00 PM	12	61	39	0	6	72	26	0	23	107	17	0	47	127	7	0	544
4:15 PM	15	84	36	0	4	81	27	0	21	95	18	0	62	122	8	0	573
4:30 PM	8	75	39	0	5	80	21	0	20	104	24	0	52	123	1	0	552
4:45 PM	29	78	40	0	5	83	36	0	23	116	16	0	46	122	10	0	604
5:00 PM	13	68	30	0	4	65	37	0	16	94	10	0	73	149	8	0	567
5:15 PM	12	69	44	0	3	68	32	0	19	100	13	0	63	164	12	0	599
5:30 PM	17	59	45	0	3	64	29	0	28	122	20	0	38	133	6	1	565
5:45 PM	36	67	37	0	6	72	24	0	13	105	24	0	60	141	7	0	592
TOTAL VOLUMES :	NL 142	NT 561	NR 310	NU 0	SL 36	ST 585	SR 232	SU 0	EL 163	ET 843	ER 142	EU 0	WL 441	WT 1081	WR 59	WU 1	TOTAL 4596
APPROACH %'s :	14.02%	55.38%	30.60%	0.00%	4.22%	68.58%	27.20%	0.00%	14.20%	73.43%	12.37%	0.00%	27.88%	68.33%	3.73%	0.06%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	71	274	159	0	15	280	134	0	86	432	59	0	220	568	36	1	2335
PEAK HR FACTOR :	0.612	0.878	0.883	0.000	0.750	0.843	0.905	0.000	0.768	0.885	0.738	0.000	0.753	0.866	0.750	0.250	0.966
	0.857				0.865				0.849				0.863				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 30th St & Avenue J-8
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-005
 Date: 4/26/2018

Total

NS/EW Streets:	30th St				30th St				Avenue J-8				Avenue J-8				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	18	122	9	0	34	90	6	0	8	69	15	0	15	69	25	0	480
7:15 AM	27	115	24	0	45	170	19	0	10	110	33	0	33	94	18	0	698
7:30 AM	20	99	41	0	37	184	42	0	22	134	27	0	40	98	12	0	756
7:45 AM	23	113	32	0	31	199	45	0	22	133	26	0	44	122	10	0	800
8:00 AM	15	98	26	0	25	127	18	0	10	80	12	0	36	66	9	0	522
8:15 AM	12	77	24	0	17	77	7	0	10	80	21	0	21	42	3	0	391
8:30 AM	17	71	15	0	19	84	11	0	5	55	12	0	25	41	4	0	359
8:45 AM	6	67	9	0	18	78	12	1	8	65	16	0	22	31	10	0	343
TOTAL VOLUMES :	138	762	180	0	226	1009	160	1	95	726	162	0	236	563	91	0	4349
APPROACH %'s :	12.78%	70.56%	16.67%	0.00%	16.19%	72.28%	11.46%	0.07%	9.66%	73.86%	16.48%	0.00%	26.52%	63.26%	10.22%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	85	425	123	0	138	680	124	0	64	457	98	0	153	380	49	0	2776
PEAK HR FACTOR :	0.787	0.924	0.750	0.000	0.767	0.854	0.689	0.000	0.727	0.853	0.742	0.000	0.869	0.779	0.681	0.000	0.868
	0.942				0.856				0.846				0.827				
PM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	20	97	22	0	8	108	17	0	16	69	13	0	32	97	14	0	513
4:15 PM	17	91	21	0	15	113	14	0	15	68	25	0	42	112	18	0	551
4:30 PM	29	97	28	0	18	100	13	0	27	57	14	0	30	86	13	0	512
4:45 PM	20	104	34	0	9	137	15	0	14	69	18	0	47	106	14	0	587
5:00 PM	32	126	24	0	8	134	11	0	17	45	18	0	38	106	15	0	574
5:15 PM	17	109	28	0	14	123	13	0	19	60	21	0	46	111	22	0	583
5:30 PM	19	102	23	0	19	110	12	0	16	62	19	0	34	96	17	0	529
5:45 PM	26	82	28	0	18	119	21	0	18	76	17	0	24	101	18	0	548
TOTAL VOLUMES :	180	808	208	0	109	944	116	0	142	506	145	0	293	815	131	0	4397
APPROACH %'s :	15.05%	67.56%	17.39%	0.00%	9.32%	80.75%	9.92%	0.00%	17.91%	63.81%	18.28%	0.00%	23.65%	65.78%	10.57%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	88	441	109	0	50	504	51	0	66	236	76	0	165	419	68	0	2273
PEAK HR FACTOR :	0.688	0.875	0.801	0.000	0.658	0.920	0.850	0.000	0.868	0.855	0.905	0.000	0.878	0.944	0.773	0.000	0.968
	0.876				0.939				0.936				0.911				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 30th St & Avenue J-12/New Dwy
 City: Lancaster
 Control: 2-Way Stop (EB/WB)

Project ID: 18-05266-006
 Date: 4/26/2018

Total

NS/EW Streets:	30th St				30th St				Avenue J-12/New Dwy				Avenue J-12/New Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	161	2	0	2	121	2	0	0	0	1	0	6	0	3	0	298
7:15 AM	0	187	1	0	0	214	13	0	0	0	2	0	2	0	1	0	420
7:30 AM	0	193	5	0	4	175	32	0	0	0	3	0	2	0	6	0	420
7:45 AM	0	237	4	0	8	153	36	3	0	0	12	0	5	0	5	0	463
8:00 AM	1	154	5	0	2	125	8	0	1	0	2	0	2	0	3	0	303
8:15 AM	0	104	3	0	1	106	3	0	0	0	2	0	1	0	1	0	221
8:30 AM	0	114	2	0	4	94	5	1	0	0	1	0	2	0	1	0	224
8:45 AM	0	100	3	0	0	93	1	0	0	0	1	0	0	0	1	0	199
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	1250	25	0	21	1081	100	4	1	0	24	0	20	0	21	0	2548
	0.08%	97.96%	1.96%	0.00%	1.74%	89.64%	8.29%	0.33%	4.00%	0.00%	96.00%	0.00%	48.78%	0.00%	51.22%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	771	15	0	14	667	89	3	1	0	19	0	11	0	15	0	1606
PEAK HR FACTOR :	0.250	0.813	0.750	0.000	0.438	0.779	0.618	0.250	0.250	0.000	0.396	0.000	0.550	0.000	0.625	0.000	0.867
		0.816				0.851				0.417				0.650			
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	126	0	0	5	164	6	0	0	0	16	0	0	0	2	0	319
4:15 PM	0	129	4	0	3	176	3	0	0	0	12	0	2	0	5	0	334
4:30 PM	0	135	1	0	7	142	2	1	0	0	18	0	1	0	3	0	310
4:45 PM	0	165	3	0	3	176	15	0	0	0	15	0	0	0	1	0	378
5:00 PM	0	154	6	0	5	166	11	0	1	0	19	0	2	0	4	0	368
5:15 PM	0	177	9	0	5	162	6	0	0	0	14	0	2	0	6	0	381
5:30 PM	0	142	0	0	8	144	0	1	0	0	7	0	6	0	2	0	310
5:45 PM	0	140	2	0	2	150	6	0	0	0	10	0	2	0	0	0	312
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1168	25	0	38	1280	49	2	1	0	111	0	15	0	23	0	2712
	0.00%	97.90%	2.10%	0.00%	2.78%	93.50%	3.58%	0.15%	0.89%	0.00%	99.11%	0.00%	39.47%	0.00%	60.53%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	631	19	0	20	646	34	1	1	0	66	0	5	0	14	0	1437
PEAK HR FACTOR :	0.000	0.891	0.528	0.000	0.714	0.918	0.567	0.250	0.250	0.000	0.868	0.000	0.625	0.000	0.583	0.000	0.943
		0.874				0.903				0.838				0.594			

National Data & Surveying Services

Intersection Turning Movement Count

Location: 30th St & Avenue K
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-007
 Date: 4/26/2018

Total

NS/EW Streets:	30th St				30th St				Avenue K				Avenue K				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
AM	2	3	0	0	2	3	0	0	2	3	0	0	2	3	0	0	2	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
7:00 AM	28	132	25	0	14	75	15	0	9	92	14	0	6	86	33	0					529
7:15 AM	31	158	31	0	27	149	24	0	16	135	23	0	18	114	53	0					779
7:30 AM	74	183	45	0	51	109	52	0	33	148	47	0	9	104	53	0					908
7:45 AM	85	216	34	0	38	76	35	0	45	254	53	0	15	161	109	0					1121
8:00 AM	68	109	44	0	38	71	34	0	42	205	53	0	15	97	45	0					821
8:15 AM	34	82	27	0	21	62	29	0	28	145	53	0	14	76	27	0					598
8:30 AM	24	66	21	0	25	59	13	0	31	134	36	0	16	63	26	0					514
8:45 AM	25	90	29	0	23	74	13	0	9	115	16	0	18	69	26	0					507
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	369	1036	256	0	237	675	215	0	213	1228	295	0	111	770	372	0					5777
	22.22%	62.37%	15.41%	0.00%	21.03%	59.89%	19.08%	0.00%	12.27%	70.74%	16.99%	0.00%	8.86%	61.45%	29.69%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																				TOTAL
PEAK HR VOL :	258	666	154	0	154	405	145	0	136	742	176	0	57	476	260	0					3629
PEAK HR FACTOR :	0.759	0.771	0.856	0.000	0.755	0.680	0.697	0.000	0.756	0.730	0.830	0.000	0.792	0.739	0.596	0.000					0.809
			0.804				0.830				0.749				0.696						
PM	2	3	0	0	2	3	0	0	2	3	0	0	2	3	0	0	TOTAL				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
4:00 PM	31	100	34	0	60	111	20	0	15	141	36	0	27	121	31	0	727				
4:15 PM	31	100	25	0	39	142	32	0	20	103	30	0	33	136	22	0	713				
4:30 PM	33	94	38	0	53	99	20	0	23	142	40	0	28	119	37	0	726				
4:45 PM	42	122	21	0	44	121	34	0	16	112	39	0	26	132	50	0	759				
5:00 PM	43	98	34	0	73	142	29	0	34	124	47	0	26	133	46	0	829				
5:15 PM	23	133	31	0	44	133	22	0	23	128	33	0	27	125	36	0	758				
5:30 PM	33	105	24	0	53	114	28	0	16	122	31	0	26	115	31	0	698				
5:45 PM	32	103	20	0	26	121	33	0	16	87	29	0	28	126	48	0	669				
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL				
APPROACH %'s :	268	855	227	0	392	983	218	0	163	959	285	0	221	1007	301	0	5879				
	19.85%	63.33%	16.81%	0.00%	24.61%	61.71%	13.68%	0.00%	11.58%	68.16%	20.26%	0.00%	14.45%	65.86%	19.69%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL				
PEAK HR VOL :	141	447	124	0	214	495	105	0	96	506	159	0	107	509	169	0	3072				
PEAK HR FACTOR :	0.820	0.840	0.816	0.000	0.733	0.871	0.772	0.000	0.706	0.891	0.846	0.000	0.955	0.957	0.845	0.000	0.926				
			0.952				0.834				0.928				0.944						

National Data & Surveying Services

Intersection Turning Movement Count

Location: 30th St & Avenue K-8
City: Lancaster
Control: Signalized

Project ID: 18-05266-008
Date: 4/26/2018

Total

NS/EW Streets:	30th St				30th St				Avenue K-8				Avenue K-8				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	3	113	16	0	8	93	11	0	25	12	6	0	14	22	27	0	350
7:15 AM	3	171	14	0	26	155	15	0	22	32	9	0	26	27	41	0	541
7:30 AM	8	223	24	0	24	122	12	0	28	50	5	0	24	25	26	0	571
7:45 AM	4	250	23	0	31	125	13	0	26	52	10	0	19	15	34	0	602
8:00 AM	3	161	18	0	14	113	10	0	16	34	9	0	14	18	24	0	434
8:15 AM	3	109	18	0	20	101	10	0	11	18	7	0	9	14	10	0	330
8:30 AM	4	101	16	0	16	88	17	0	9	23	10	0	13	14	9	0	320
8:45 AM	0	110	18	0	11	90	8	0	13	37	5	0	18	20	13	0	343
TOTAL VOLUMES :	NL 28	NT 1238	NR 147	NU 0	SL 150	ST 887	SR 96	SU 0	EL 150	ET 258	ER 61	EU 0	WL 137	WT 155	WR 184	WU 0	TOTAL 3491
APPROACH %'s :	1.98%	87.62%	10.40%	0.00%	13.24%	78.29%	8.47%	0.00%	31.98%	55.01%	13.01%	0.00%	28.78%	32.56%	38.66%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL 2148
PEAK HR VOL :	18	805	79	0	95	515	50	0	92	168	33	0	83	85	125	0	2148
PEAK HR FACTOR :	0.563	0.805	0.823	0.000	0.766	0.831	0.833	0.000	0.821	0.808	0.825	0.000	0.798	0.787	0.762	0.000	0.892
	0.814				0.842				0.832				0.779				
PM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
4:00 PM	6	138	26	0	9	145	14	0	16	24	6	0	33	40	18	0	475
4:15 PM	9	123	28	0	17	157	21	0	12	18	6	0	25	39	21	0	476
4:30 PM	7	151	19	0	16	135	25	0	12	18	9	0	24	30	21	0	467
4:45 PM	9	143	29	0	12	132	16	0	14	17	11	0	31	49	25	0	488
5:00 PM	20	152	32	0	20	208	19	0	11	27	8	0	20	42	28	0	587
5:15 PM	17	154	28	0	15	131	19	0	19	27	12	0	29	49	16	0	516
5:30 PM	7	135	26	0	12	141	23	0	18	13	15	0	32	36	16	0	474
5:45 PM	12	119	15	0	10	121	14	0	13	19	10	0	25	21	11	0	390
TOTAL VOLUMES :	NL 87	NT 1115	NR 203	NU 0	SL 111	ST 1170	SR 151	SU 0	EL 115	ET 163	ER 77	EU 0	WL 219	WT 306	WR 156	WU 0	TOTAL 3873
APPROACH %'s :	6.19%	79.36%	14.45%	0.00%	7.75%	81.70%	10.54%	0.00%	32.39%	45.92%	21.69%	0.00%	32.16%	44.93%	22.91%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL 2065
PEAK HR VOL :	53	584	115	0	59	612	77	0	62	84	46	0	112	176	85	0	2065
PEAK HR FACTOR :	0.663	0.948	0.898	0.000	0.738	0.736	0.837	0.000	0.816	0.778	0.767	0.000	0.875	0.898	0.759	0.000	0.879
	0.922				0.757				0.828				0.888				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 25th St & Avenue J
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-009
 Date: 4/26/2018

Total

NS/EW Streets:	25th St				25th St				Avenue J				Avenue J				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	3 WT	1 WR	0 WU	TOTAL
7:00 AM	12	21	16	0	2	24	29	0	21	140	16	0	11	146	4	1	443
7:15 AM	18	38	27	0	7	28	20	0	29	194	19	0	17	168	4	1	570
7:30 AM	10	35	27	0	6	35	15	0	46	241	38	0	18	147	3	0	621
7:45 AM	6	34	26	0	5	32	50	0	52	250	31	0	25	204	9	0	724
8:00 AM	12	36	28	0	2	26	54	0	65	203	30	0	18	141	5	3	623
8:15 AM	2	44	18	0	6	29	14	0	32	145	21	0	21	95	5	2	434
8:30 AM	3	31	22	0	3	17	13	0	27	114	17	0	15	94	9	0	365
8:45 AM	3	37	16	0	7	31	9	0	20	125	7	0	25	91	6	1	378
TOTAL VOLUMES :	66	276	180	0	38	222	204	0	292	1412	179	0	150	1086	45	8	4158
APPROACH %'s :	12.64%	52.87%	34.48%	0.00%	8.19%	47.84%	43.97%	0.00%	15.51%	74.99%	9.51%	0.00%	11.64%	84.25%	3.49%	0.62%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	46	143	108	0	20	121	139	0	192	888	118	0	78	660	21	4	2538
PEAK HR FACTOR :	0.639	0.941	0.964	0.000	0.714	0.864	0.644	0.000	0.738	0.888	0.776	0.000	0.780	0.809	0.583	0.333	0.876
	0.895				0.805				0.899				0.801				
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	3 WT	1 WR	0 WU	TOTAL
4:00 PM	8	45	25	0	5	24	26	0	33	129	11	0	39	176	14	1	536
4:15 PM	4	43	23	0	5	44	28	0	36	112	11	0	36	175	9	2	528
4:30 PM	4	47	23	0	4	36	22	0	38	113	12	0	36	176	19	4	534
4:45 PM	6	58	19	0	8	29	13	0	33	100	11	0	61	203	12	1	554
5:00 PM	6	54	17	0	7	28	15	0	29	121	10	0	46	196	13	2	544
5:15 PM	7	63	23	0	10	49	25	0	37	123	15	0	42	190	17	2	603
5:30 PM	8	43	29	0	9	32	24	0	40	113	11	1	41	171	13	0	535
5:45 PM	5	38	29	0	6	29	16	0	50	122	12	0	40	202	16	1	566
TOTAL VOLUMES :	48	391	188	0	54	271	169	0	296	933	93	1	341	1489	113	13	4400
APPROACH %'s :	7.66%	62.36%	29.98%	0.00%	10.93%	54.86%	34.21%	0.00%	22.37%	70.52%	7.03%	0.08%	17.43%	76.12%	5.78%	0.66%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	26	198	98	0	32	138	80	0	156	479	48	1	169	759	59	5	2248
PEAK HR FACTOR :	0.813	0.786	0.845	0.000	0.800	0.704	0.800	0.000	0.780	0.974	0.800	0.250	0.918	0.939	0.868	0.625	0.932
	0.866				0.744				0.929				0.958				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 25th St & Avenue J-8
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-010
 Date: 4/26/2018

Total

NS/EW Streets:	25th St				25th St				Avenue J-8				Avenue J-8				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	21	23	8	0	35	24	8	0	5	111	8	0	3	94	12	0	352
7:15 AM	20	42	23	0	45	29	3	0	7	178	7	0	3	125	21	0	503
7:30 AM	18	37	40	0	71	34	3	0	10	194	15	0	5	141	20	0	588
7:45 AM	23	40	23	0	53	51	7	0	6	204	14	0	5	168	9	0	603
8:00 AM	17	33	10	0	56	49	5	0	11	152	17	0	7	121	25	0	503
8:15 AM	7	35	20	0	44	36	3	0	4	139	4	0	5	59	17	0	373
8:30 AM	5	32	16	0	25	29	3	0	5	85	5	0	9	72	21	0	307
8:45 AM	4	31	10	0	42	29	3	0	3	94	3	0	9	56	13	0	297
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	115	273	150	0	371	281	35	0	51	1157	73	0	46	836	138	0	3526
APPROACH %'s :	21.38%	50.74%	27.88%	0.00%	54.00%	40.90%	5.09%	0.00%	3.98%	90.32%	5.70%	0.00%	4.51%	81.96%	13.53%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	78	152	96	0	225	163	18	0	34	728	53	0	20	555	75	0	2197
PEAK HR FACTOR :	0.848	0.905	0.600	0.000	0.792	0.799	0.643	0.000	0.773	0.892	0.779	0.000	0.714	0.826	0.750	0.000	0.911
	0.858				0.914				0.910				0.893				
PM	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	6	33	7	0	37	44	5	0	7	87	8	0	15	154	35	0	438
4:15 PM	12	44	22	0	39	42	8	0	11	102	7	0	12	158	35	0	492
4:30 PM	6	40	10	0	28	60	9	0	7	94	3	0	19	139	32	0	447
4:45 PM	9	45	6	0	32	50	10	0	8	94	9	0	9	158	37	0	467
5:00 PM	5	50	11	0	32	52	8	0	3	79	3	0	10	168	30	0	451
5:15 PM	5	46	11	0	39	64	5	0	7	97	2	0	11	175	47	0	509
5:30 PM	7	40	8	0	41	46	3	0	7	93	8	0	16	157	41	0	467
5:45 PM	9	39	8	0	29	37	7	0	9	112	3	0	14	131	25	0	423
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	59	337	83	0	277	395	55	0	59	758	43	0	106	1240	282	0	3694
APPROACH %'s :	12.32%	70.35%	17.33%	0.00%	38.10%	54.33%	7.57%	0.00%	6.86%	88.14%	5.00%	0.00%	6.51%	76.17%	17.32%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	26	181	36	0	144	212	26	0	25	363	22	0	46	658	155	0	1894
PEAK HR FACTOR :	0.722	0.905	0.818	0.000	0.878	0.828	0.650	0.000	0.781	0.936	0.611	0.000	0.719	0.940	0.824	0.000	0.930
	0.920				0.884				0.923				0.922				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 25th St & Avenue K
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-011
 Date: 4/26/2018

Total

NS/EW Streets:	25th St				25th St				Avenue K				Avenue K				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
7:00 AM	6	22	6	0	12	13	4	0	6	124	3	0	5	99	16	0	316
7:15 AM	0	23	5	0	11	14	15	0	13	182	2	0	3	164	11	0	443
7:30 AM	5	34	18	0	27	35	7	0	14	230	5	0	6	197	9	0	587
7:45 AM	4	38	18	0	20	32	16	0	21	319	8	0	10	254	5	0	745
8:00 AM	1	38	25	0	42	26	5	0	9	257	12	0	8	140	18	0	581
8:15 AM	2	20	19	0	27	18	5	0	16	201	4	0	5	110	11	0	438
8:30 AM	1	18	24	0	20	17	6	0	13	178	4	0	15	103	22	0	421
8:45 AM	1	21	20	0	20	14	5	0	8	166	8	0	8	111	10	0	392
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	20	214	135	0	179	169	63	0	100	1657	46	0	60	1178	102	0	3923
	5.42%	57.99%	36.59%	0.00%	43.55%	41.12%	15.33%	0.00%	5.55%	91.90%	2.55%	0.00%	4.48%	87.91%	7.61%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	10	133	66	0	100	107	43	0	57	988	27	0	27	755	43	0	2356
PEAK HR FACTOR :	0.500	0.875	0.660	0.000	0.595	0.764	0.672	0.000	0.679	0.774	0.563	0.000	0.675	0.743	0.597	0.000	0.791
	0.816				0.856				0.770				0.767				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
4:00 PM	3	28	16	0	22	39	9	0	11	211	4	0	9	179	20	1	552
4:15 PM	3	25	8	0	14	28	12	0	10	176	3	0	10	201	27	0	517
4:30 PM	6	26	11	0	11	39	16	0	17	215	3	0	6	164	10	0	524
4:45 PM	4	23	7	0	22	35	10	0	7	182	2	0	12	220	22	0	546
5:00 PM	4	33	7	0	13	35	11	0	10	204	6	0	9	199	22	0	553
5:15 PM	7	30	15	0	28	27	14	0	10	197	6	0	13	192	16	0	555
5:30 PM	5	18	5	0	18	38	6	0	7	178	12	0	14	167	24	0	492
5:45 PM	4	24	5	0	17	20	17	0	8	140	5	0	13	196	18	0	467
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	36	207	74	0	145	261	95	0	80	1503	41	0	86	1518	159	1	4206
	11.36%	65.30%	23.34%	0.00%	28.94%	52.10%	18.96%	0.00%	4.93%	92.55%	2.52%	0.00%	4.88%	86.05%	9.01%	0.06%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	21	112	40	0	74	136	51	0	44	798	17	0	40	775	70	0	2178
PEAK HR FACTOR :	0.750	0.848	0.667	0.000	0.661	0.872	0.797	0.000	0.647	0.928	0.708	0.000	0.769	0.881	0.795	0.000	0.981
	0.832				0.946				0.914				0.871				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 20th St & SR-14 NB Off Ramp
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-015
 Date: 4/26/2018

Total

NS/EW Streets:	20th St				20th St				SR-14 NB Off Ramp				SR-14 NB Off Ramp				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	48	0	0	0	79	0	0	0	0	0	0	26	0	75	0	228
7:15 AM	0	52	0	0	0	70	0	0	0	0	0	0	43	0	90	0	255
7:30 AM	0	73	0	0	0	102	0	0	0	0	0	0	105	0	138	0	418
7:45 AM	0	94	0	0	0	123	0	0	0	0	0	0	103	0	180	0	500
8:00 AM	0	102	0	0	0	106	0	0	0	0	0	0	43	0	143	0	394
8:15 AM	0	112	0	0	0	137	0	0	0	0	0	0	34	0	117	0	400
8:30 AM	0	116	0	0	0	128	0	0	0	0	0	0	35	0	102	0	381
8:45 AM	0	116	0	0	0	121	0	0	0	0	0	0	42	0	128	0	407
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	713	0	0	0	866	0	0	0	0	0	0	431	0	973	0	2983
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.70%	0.00%	69.30%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	381	0	0	0	468	0	0	0	0	0	0	285	0	578	0	1712
PEAK HR FACTOR :	0.000	0.850	0.000	0.000	0.000	0.854	0.000	0.000	0.000	0.000	0.000	0.000	0.679	0.000	0.803	0.000	0.856
		0.850				0.854								0.762			
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	137	0	0	0	186	0	0	0	0	0	0	81	0	127	0	531
4:15 PM	0	132	0	0	0	179	0	0	0	0	0	0	100	0	145	0	556
4:30 PM	0	128	0	0	0	213	0	0	0	0	0	0	102	0	111	0	554
4:45 PM	0	112	0	0	0	196	0	0	0	0	0	0	113	0	115	0	536
5:00 PM	0	120	0	0	0	220	0	0	0	0	0	0	93	0	129	0	562
5:15 PM	0	117	0	0	0	217	0	0	0	0	0	0	115	0	130	0	579
5:30 PM	0	119	0	0	0	240	0	0	0	0	0	0	103	0	113	0	575
5:45 PM	0	107	0	0	0	193	0	0	0	0	0	0	78	0	101	0	479
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	972	0	0	0	1644	0	0	0	0	0	0	785	0	971	0	4372
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	44.70%	0.00%	55.30%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	468	0	0	0	873	0	0	0	0	0	0	424	0	487	0	2252
PEAK HR FACTOR :	0.000	0.975	0.000	0.000	0.000	0.909	0.000	0.000	0.000	0.000	0.000	0.000	0.922	0.000	0.937	0.000	0.972
		0.975				0.909								0.930			

National Data & Surveying Services

Intersection Turning Movement Count

Location: 20th St & Avenue J-8
City: Lancaster
Control: Signalized

Project ID: 18-05266-016
Date: 4/26/2018

Total

NS/EW Streets:	20th St				20th St				Avenue J-8				Avenue J-8				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	2 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	11	33	7	0	4	38	54	1	12	43	7	7	11	75	2	1	306
7:15 AM	17	33	23	0	8	36	75	1	17	88	14	7	16	113	3	0	451
7:30 AM	15	59	34	0	19	51	124	2	12	98	17	7	22	121	1	0	582
7:45 AM	11	69	43	0	23	44	148	1	17	144	25	10	24	118	6	1	684
8:00 AM	26	72	38	0	11	75	80	1	16	125	16	7	25	96	11	0	599
8:15 AM	13	76	30	0	13	72	76	1	26	107	21	2	30	95	11	0	573
8:30 AM	16	85	23	1	10	67	89	0	11	46	11	5	18	91	16	0	489
8:45 AM	17	84	28	1	9	76	71	0	17	60	12	3	30	65	13	0	486
TOTAL VOLUMES :	126	511	226	2	97	459	717	7	128	711	123	48	176	774	63	2	4170
APPROACH %'s :	14.57%	59.08%	26.13%	0.23%	7.58%	35.86%	56.02%	0.55%	12.67%	70.40%	12.18%	4.75%	17.34%	76.26%	6.21%	0.20%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	65	276	145	0	66	242	428	5	71	474	79	26	101	430	29	1	2438
PEAK HR FACTOR :	0.625	0.908	0.843	0.000	0.717	0.807	0.723	0.625	0.683	0.823	0.790	0.650	0.842	0.888	0.659	0.250	0.891
	0.893				0.858				0.829				0.941				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	2 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
4:00 PM	38	105	23	1	25	97	170	0	8	50	16	6	38	141	22	0	740
4:15 PM	28	95	27	1	22	75	151	1	16	69	18	6	40	144	24	0	717
4:30 PM	22	100	38	1	25	115	185	1	11	47	16	8	37	136	14	0	756
4:45 PM	31	89	25	0	17	96	181	0	14	68	20	4	39	154	7	0	745
5:00 PM	38	94	21	0	19	107	196	1	9	45	11	2	28	157	13	0	741
5:15 PM	30	81	32	1	17	99	197	0	21	71	17	3	40	180	18	0	807
5:30 PM	29	86	31	0	18	119	188	1	21	45	12	6	25	134	17	0	732
5:45 PM	19	63	27	1	12	105	159	2	19	81	10	3	25	122	15	0	663
TOTAL VOLUMES :	235	713	224	5	155	813	1427	6	119	476	120	38	272	1168	130	0	5901
APPROACH %'s :	19.97%	60.58%	19.03%	0.42%	6.46%	33.86%	59.43%	0.25%	15.80%	63.21%	15.94%	5.05%	17.32%	74.39%	8.28%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	121	364	116	2	78	417	759	2	55	231	64	17	144	627	52	0	3049
PEAK HR FACTOR :	0.796	0.910	0.763	0.500	0.780	0.907	0.963	0.500	0.655	0.813	0.800	0.531	0.900	0.871	0.722	0.000	0.945
	0.936				0.963				0.819				0.864				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 20th St & Avenue K
City: Lancaster
Control: Signalized

Project ID: 18-05266-017
Date: 4/26/2018

Total

NS/EW Streets:	20th St				20th St				Avenue K				Avenue K				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	5	19	12	0	17	22	12	0	6	106	6	1	6	107	7	0	326
7:15 AM	17	45	18	0	14	38	8	0	20	166	10	0	8	150	2	0	496
7:30 AM	16	61	23	0	20	30	27	0	21	225	10	6	10	202	6	0	657
7:45 AM	24	73	16	0	21	38	20	0	48	253	25	3	10	207	8	0	746
8:00 AM	10	57	27	0	28	41	13	0	38	244	24	2	29	166	18	0	697
8:15 AM	13	56	14	0	28	60	24	0	50	193	17	3	29	108	15	0	610
8:30 AM	9	39	13	0	12	43	14	0	49	196	25	5	20	128	16	0	569
8:45 AM	13	55	17	0	32	51	22	0	43	173	16	3	15	120	24	1	585
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	107	405	140	0	172	323	140	0	275	1556	133	23	127	1188	96	1	4686
	16.41%	62.12%	21.47%	0.00%	27.09%	50.87%	22.05%	0.00%	13.84%	78.31%	6.69%	1.16%	8.99%	84.14%	6.80%	0.07%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	63	247	80	0	97	169	84	0	157	915	76	14	78	683	47	0	2710
PEAK HR FACTOR :	0.656	0.846	0.741	0.000	0.866	0.704	0.778	0.000	0.785	0.904	0.760	0.583	0.672	0.825	0.653	0.000	0.908
			0.863				0.781				0.883				0.898		
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	20	50	22	0	30	64	22	0	44	221	27	4	30	204	24	2	764
4:15 PM	25	66	21	0	44	68	23	0	29	181	11	5	33	184	19	1	710
4:30 PM	19	56	24	0	37	73	24	0	35	207	15	3	31	198	32	0	754
4:45 PM	29	63	21	0	51	76	26	0	40	175	12	5	41	170	23	1	733
5:00 PM	27	50	23	0	34	62	28	0	27	196	13	5	36	225	29	0	755
5:15 PM	20	68	26	0	41	79	32	0	37	197	16	8	46	174	18	0	762
5:30 PM	24	44	19	0	35	77	34	0	36	193	12	6	32	171	28	0	711
5:45 PM	13	52	20	0	37	78	19	0	38	150	15	3	35	177	21	0	658
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	177	449	176	0	309	577	208	0	286	1520	121	39	284	1503	194	4	5847
	22.07%	55.99%	21.95%	0.00%	28.24%	52.74%	19.01%	0.00%	14.55%	77.31%	6.15%	1.98%	14.31%	75.72%	9.77%	0.20%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	95	237	94	0	163	290	110	0	139	775	56	21	154	767	102	1	3004
PEAK HR FACTOR :	0.819	0.871	0.904	0.000	0.799	0.918	0.859	0.000	0.869	0.936	0.875	0.656	0.837	0.852	0.797	0.250	0.986
			0.934				0.920				0.953				0.883		

National Data & Surveying Services

Intersection Turning Movement Count

Location: 17th St & Avenue K
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-018
 Date: 4/26/2018

Total

NS/EW Streets:	17th St				17th St				Avenue K				Avenue K				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
7:00 AM	4	7	35	0	28	6	8	0	3	142	2	1	8	98	7	1	
7:15 AM	11	7	29	0	44	5	9	0	12	170	3	0	14	147	14	0	
7:30 AM	10	14	29	0	50	2	6	0	12	224	13	1	15	201	10	2	
7:45 AM	15	12	40	0	34	5	6	0	16	273	15	0	15	231	16	2	
8:00 AM	11	16	41	0	36	13	8	0	9	264	16	1	17	182	27	0	
8:15 AM	8	5	37	0	31	8	11	0	11	180	14	0	23	153	19	1	
8:30 AM	3	13	35	0	29	9	4	0	12	223	14	0	24	157	16	0	
8:45 AM	6	10	34	0	34	6	10	0	5	180	8	0	34	167	15	3	
TOTAL VOLUMES :	68	84	280	0	286	54	62	0	80	1656	85	3	150	1336	124	9	
APPROACH %'s :	15.74%	19.44%	64.81%	0.00%	71.14%	13.43%	15.42%	0.00%	4.39%	90.79%	4.66%	0.16%	9.26%	82.52%	7.66%	0.56%	
PEAK HR :	07:30 AM - 08:30 AM																
PEAK HR VOL :	44	47	147	0	151	28	31	0	48	941	58	2	70	767	72	5	
PEAK HR FACTOR :	0.733	0.734	0.896	0.000	0.755	0.538	0.705	0.000	0.750	0.862	0.906	0.500	0.761	0.830	0.667	0.625	
	0.875				0.905				0.863				0.866				
TOTAL	2411																
0.886																	
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
4:00 PM	5	9	34	0	39	15	6	0	11	230	18	1	36	235	35	1	
4:15 PM	5	13	33	0	45	13	8	0	16	224	18	3	22	231	33	0	
4:30 PM	15	18	36	0	37	12	8	0	16	270	8	0	43	249	36	5	
4:45 PM	5	6	27	0	48	10	9	0	8	216	20	4	25	231	31	4	
5:00 PM	11	18	36	0	52	11	13	0	7	221	15	1	30	260	38	7	
5:15 PM	13	17	33	0	41	10	8	0	12	258	19	2	31	234	33	8	
5:30 PM	15	17	57	0	40	17	4	0	10	219	12	1	39	213	28	3	
5:45 PM	8	5	41	0	25	9	11	0	8	193	21	3	38	228	30	4	
TOTAL VOLUMES :	77	103	297	0	327	97	67	0	88	1831	131	15	264	1881	264	32	
APPROACH %'s :	16.14%	21.59%	62.26%	0.00%	66.60%	19.76%	13.65%	0.00%	4.26%	88.67%	6.34%	0.73%	10.82%	77.06%	10.82%	1.31%	
PEAK HR :	04:30 PM - 05:30 PM																
PEAK HR VOL :	44	59	132	0	178	43	38	0	43	965	62	7	129	974	138	24	
PEAK HR FACTOR :	0.733	0.819	0.917	0.000	0.856	0.896	0.731	0.000	0.672	0.894	0.775	0.438	0.750	0.937	0.908	0.750	
	0.851				0.852				0.916				0.944				
TOTAL	2836																
0.942																	

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-14 SB Ramps & Avenue K
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-019
 Date: 4/26/2018

Total

NS/EW Streets:	SR-14 SB Ramps				SR-14 SB Ramps				Avenue K				Avenue K				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	0	0	0	1	0.5	0.5	0	0	3	1	0	0	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	22	0	14	0	0	127	78	0	0	113	84	0	438
7:15 AM	0	0	0	0	32	0	24	0	0	147	87	0	0	167	66	0	523
7:30 AM	0	0	0	0	46	0	30	0	0	217	91	0	0	204	66	0	654
7:45 AM	0	0	0	0	84	0	47	0	0	257	99	0	0	226	77	0	790
8:00 AM	0	0	0	0	41	0	32	0	0	251	94	0	0	206	66	0	690
8:15 AM	0	0	0	0	39	0	40	0	0	198	54	0	0	160	70	0	561
8:30 AM	0	0	0	0	40	0	33	0	0	205	86	0	0	185	82	0	631
8:45 AM	0	0	0	0	53	0	27	0	0	192	66	0	0	205	91	0	634
TOTAL VOLUMES :	0	0	0	0	357	0	247	0	0	1594	655	0	0	1466	602	0	4921
APPROACH %'s :					59.11%	0.00%	40.89%	0.00%	0.00%	70.88%	29.12%	0.00%	0.00%	70.89%	29.11%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	210	0	149	0	0	923	338	0	0	796	279	0	2695
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.000	0.793	0.000	0.000	0.898	0.854	0.000	0.000	0.881	0.906	0.000	0.853
							0.685				0.886				0.887		
PM	0	0	0	0	1	0.5	0.5	0	0	3	1	0	0	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	55	0	36	0	0	206	99	0	0	303	118	0	817
4:15 PM	0	0	0	0	55	0	40	0	0	218	78	0	0	270	121	0	782
4:30 PM	0	0	0	0	59	0	50	0	0	243	100	0	0	267	133	0	852
4:45 PM	0	0	0	0	51	0	43	0	0	197	101	0	0	293	120	0	805
5:00 PM	0	0	0	0	63	0	59	0	0	225	82	0	0	294	149	0	872
5:15 PM	0	0	0	0	47	0	57	0	0	218	119	0	0	269	127	0	837
5:30 PM	0	0	0	0	41	0	44	0	0	212	106	0	0	255	113	0	771
5:45 PM	0	0	0	0	44	0	54	0	0	191	81	0	0	267	126	0	763
TOTAL VOLUMES :	0	0	0	0	415	0	383	0	0	1710	766	0	0	2218	1007	0	6499
APPROACH %'s :					52.01%	0.00%	47.99%	0.00%	0.00%	69.06%	30.94%	0.00%	0.00%	68.78%	31.22%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	220	0	209	0	0	883	402	0	0	1123	529	0	3366
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.873	0.000	0.886	0.000	0.000	0.908	0.845	0.000	0.000	0.955	0.888	0.000	0.965
							0.879				0.937				0.932		

National Data & Surveying Services

Intersection Turning Movement Count

Location: 15th St/SR-14 NB Ramps & Avenue K
 City: Lancaster
 Control: Signalized

Project ID: 18-05266-020
 Date: 4/26/2018

Total

NS/EW Streets:	15th St/SR-14 NB Ramps				15th St/SR-14 NB Ramps				Avenue K				Avenue K				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	1	1	0	1.5	0.5	1	0	2	2.5	0.5	0	0	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	40	75	67	0	22	0	30	0	14	95	35	0	0	153	25	0	556
7:15 AM	66	106	69	0	26	0	26	0	26	135	23	0	0	178	18	0	673
7:30 AM	77	134	52	0	38	1	49	0	55	166	24	0	0	178	26	0	800
7:45 AM	95	116	103	0	44	2	47	0	88	233	28	0	0	185	59	0	1000
8:00 AM	87	129	82	0	48	2	47	0	52	205	17	0	0	156	42	0	867
8:15 AM	36	96	70	0	48	0	50	0	42	184	24	0	0	186	35	0	771
8:30 AM	57	108	100	0	53	3	63	0	35	173	25	0	0	183	44	0	844
8:45 AM	71	101	87	0	50	1	70	0	54	174	28	0	0	174	50	0	860
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	26.14%	42.74%	31.13%	0.00%	45.69%	1.25%	53.06%	0.00%	18.91%	70.54%	10.54%	0.00%	0.00%	82.33%	17.67%	0.00%	6371
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	275	449	355	0	193	7	207	0	217	795	94	0	0	710	180	0	3482
PEAK HR FACTOR :	0.724	0.870	0.862	0.000	0.910	0.583	0.821	0.000	0.616	0.853	0.839	0.000	0.000	0.954	0.763	0.000	0.871
	0.859				0.855				0.792				0.912				
PM	1	1	1	0	1.5	0.5	1	0	2	2.5	0.5	0	0	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	88	79	92	0	78	4	116	0	40	186	21	0	0	291	58	0	1053
4:15 PM	79	96	99	0	82	4	116	0	47	203	30	0	0	233	52	0	1041
4:30 PM	80	108	83	0	85	5	109	0	46	234	21	0	0	242	55	0	1068
4:45 PM	89	90	110	0	90	5	99	0	26	199	21	0	0	269	46	0	1044
5:00 PM	93	97	94	0	87	8	138	0	30	234	25	0	0	258	57	0	1121
5:15 PM	68	95	86	0	89	1	123	0	39	206	23	0	0	258	46	0	1034
5:30 PM	72	77	92	0	85	1	95	0	38	183	26	0	0	236	57	0	962
5:45 PM	78	77	88	0	57	2	102	0	41	183	19	0	0	255	50	0	952
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	30.66%	34.08%	35.26%	0.00%	41.30%	1.90%	56.80%	0.00%	14.47%	76.76%	8.77%	0.00%	0.00%	82.91%	17.09%	0.00%	8275
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	341	391	386	0	344	22	462	0	149	870	97	0	0	1002	210	0	4274
PEAK HR FACTOR :	0.917	0.905	0.877	0.000	0.956	0.688	0.837	0.000	0.793	0.929	0.808	0.000	0.000	0.931	0.921	0.000	0.953
	0.967				0.888				0.927				0.962				

Appendix C:
Project LOS Analysis Sheets



Project Title: AVCCD FMP EIR
Intersection: 1 - 40th Street & Avenue K
Description: Existing

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.08	16	135	0.109	N-S(1): 0.112
	TH	0.92	174	1,465	0.119 *	N-S(2): 0.181 *
	LT	1.00	71	1,600	0.044	E-W(1): 0.291 *
Westbound	RT	1.00	42	1,600	0.004	E-W(2): 0.210
	TH	1.00	305	1,600	0.191	V/C: 0.472
	LT	1.00	37	1,600	0.023 *	Lost Time: 0.100
Northbound	RT	1.00	127	1,600	0.068	ITS: 0.000
	TH	2.00	184	3,200	0.058	ICU: 0.572
	LT	1.00	99	1,600	0.062 *	LOS: A
Eastbound	RT	0.00	99	0	0.000	
	TH	2.00	760	3,200	0.268 *	
	LT	1.00	31	1,600	0.019	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.05	11	83	0.125	N-S(1): 0.085
	TH	0.95	201	1,517	0.133 *	N-S(2): 0.174 *
	LT	1.00	44	1,600	0.028	E-W(1): 0.182
Westbound	RT	1.00	42	1,600	0.013	E-W(2): 0.284 *
	TH	1.00	429	1,600	0.268 *	V/C: 0.458
	LT	1.00	83	1,600	0.052	Lost Time: 0.100
Northbound	RT	1.00	68	1,600	0.017	ITS: 0.000
	TH	2.00	183	3,200	0.057	ICU: 0.558
	LT	1.00	65	1,600	0.041 *	LOS: A
Eastbound	RT	0.00	38	0	0.000	
	TH	2.00	378	3,200	0.130	
	LT	1.00	25	1,600	0.016 *	

* - Denotes critical movement

Intersection	
Intersection Delay, s/veh	28.2
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵		↵	↑	↵	↵	↵	
Traffic Vol, veh/h	15	312	30	10	245	50	20	16	3	200	39	64
Future Vol, veh/h	15	312	30	10	245	50	20	16	3	200	39	64
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	380	37	12	299	61	24	20	4	244	48	78
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	38	28.4	12.5	18.4
HCM LOS	E	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	91%	0%	83%	0%	38%
Vol Right, %	0%	0%	100%	0%	9%	0%	17%	0%	62%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	16	3	15	342	10	295	200	103
LT Vol	20	0	0	15	0	10	0	200	0
Through Vol	0	16	0	0	312	0	245	0	39
RT Vol	0	0	3	0	30	0	50	0	64
Lane Flow Rate	24	20	4	18	417	12	360	244	126
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.064	0.049	0.008	0.04	0.849	0.027	0.744	0.564	0.257
Departure Headway (Hd)	9.474	8.955	8.228	7.899	7.328	8.074	7.444	8.321	7.358
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	377	398	432	452	492	442	486	432	486
Service Time	7.271	6.752	6.025	5.662	5.091	5.84	5.209	6.088	5.125
HCM Lane V/C Ratio	0.064	0.05	0.009	0.04	0.848	0.027	0.741	0.565	0.259
HCM Control Delay	12.9	12.2	11.1	11	39.2	11.1	29	21.4	12.7
HCM Lane LOS	B	B	B	B	E	B	D	C	B
HCM 95th-tile Q	0.2	0.2	0	0.1	8.7	0.1	6.2	3.4	1

Intersection	
Intersection Delay, s/veh	13.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵		↵	↑	↵	↵	↵	
Traffic Vol, veh/h	20	189	12	2	338	33	9	12	14	32	8	15
Future Vol, veh/h	20	189	12	2	338	33	9	12	14	32	8	15
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	201	13	2	360	35	10	13	15	34	9	16
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	11.1	15.3	9.3	9.8
HCM LOS	B	C	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	94%	0%	91%	0%	35%
Vol Right, %	0%	0%	100%	0%	6%	0%	9%	0%	65%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	12	14	20	201	2	371	32	23
LT Vol	9	0	0	20	0	2	0	32	0
Through Vol	0	12	0	0	189	0	338	0	8
RT Vol	0	0	14	0	12	0	33	0	15
Lane Flow Rate	10	13	15	21	214	2	395	34	24
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.019	0.023	0.024	0.037	0.335	0.003	0.581	0.067	0.041
Departure Headway (Hd)	7.12	6.613	5.903	6.182	5.637	5.862	5.298	7.07	6.097
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	506	544	610	573	631	605	675	510	591
Service Time	4.822	4.315	3.605	3.981	3.436	3.647	3.083	4.77	3.797
HCM Lane V/C Ratio	0.02	0.024	0.025	0.037	0.339	0.003	0.585	0.067	0.041
HCM Control Delay	10	9.5	8.8	9.2	11.3	8.7	15.3	10.3	9.1
HCM Lane LOS	A	A	A	A	B	A	C	B	A
HCM 95th-tile Q	0.1	0.1	0.1	0.1	1.5	0	3.8	0.2	0.1

Project Title: AVCCD FMP EIR
Intersection: 3 - 32nd St/Driveway & Avenue K
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.82	23	1,314	0.000	N-S(1): 0.116 * N-S(2): 0.042 E-W(1): 0.204 E-W(2): 0.285 *
	TH	0.18	5	286	0.018	
	LT	1.00	116	1,600	0.073 *	
Westbound	RT	0.00	223	0	0.000	V/C: 0.401 Lost Time: 0.100 ITS: 0.000
	TH	3.00	424	3,200	0.202 *	
	LT	1.00	11	1,600	0.007	
Northbound	RT	0.71	48	1,129	0.039	ICU: 0.501
	TH	0.29	20	471	0.043 *	
	LT	1.00	38	1,600	0.024	
Eastbound	RT	0.00	21	0	0.000	LOS: A
	TH	3.00	923	4,800	0.197	
	LT	1.00	132	1,600	0.083 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.91	31	1,459	0.001	N-S(1): 0.088 * N-S(2): 0.025 E-W(1): 0.135 E-W(2): 0.188 *
	TH	0.09	3	141	0.021	
	LT	1.00	103	1,600	0.064 *	
Westbound	RT	0.00	76	0	0.000	V/C: 0.276 Lost Time: 0.100 ITS: 0.000
	TH	3.00	629	4,800	0.147 *	
	LT	1.00	33	1,600	0.021	
Northbound	RT	0.90	35	1,436	0.014	ICU: 0.376
	TH	0.10	4	164	0.024 *	
	LT	1.00	6	1,600	0.004	
Eastbound	RT	0.00	7	0	0.000	LOS: A
	TH	3.00	539	4,800	0.114	
	LT	1.00	65	1,600	0.041 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 4 - 30th Street & Avenue J
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	104	1,600	0.032	N-S(1): 0.123 N-S(2): 0.239 * E-W(1): 0.332 * E-W(2): 0.219
	TH	2.00	441	3,200	0.138 *	
	LT	1.00	54	1,600	0.034	
Westbound	RT	1.00	33	1,600	0.004	V/C: 0.571 Lost Time: 0.100 ITS: 0.000
	TH	2.00	488	3,200	0.153	
	LT	1.00	182	1,600	0.114 *	
Northbound	RT	1.00	127	1,600	0.023	ICU: 0.671
	TH	2.00	285	3,200	0.089	
	LT	1.00	161	1,600	0.101 *	
Eastbound	RT	0.00	211	0	0.000	LOS: B
	TH	3.00	833	4,800	0.218 *	
	LT	1.00	106	1,600	0.066	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	134	1,600	0.057	N-S(1): 0.095 N-S(2): 0.132 * E-W(1): 0.240 * E-W(2): 0.232
	TH	2.00	280	3,200	0.088 *	
	LT	1.00	15	1,600	0.009	
Westbound	RT	1.00	36	1,600	0.018	V/C: 0.372 Lost Time: 0.100 ITS: 0.000
	TH	2.00	568	3,200	0.178	
	LT	1.00	221	1,600	0.138 *	
Northbound	RT	1.00	159	1,600	0.030	ICU: 0.472
	TH	2.00	274	3,200	0.086	
	LT	1.00	71	1,600	0.044 *	
Eastbound	RT	0.00	59	0	0.000	LOS: A
	TH	3.00	432	4,800	0.102 *	
	LT	1.00	86	1,600	0.054	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 5 - 30th Street & Avenue J-8
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	124	1,600	0.058	N-S(1): 0.219 N-S(2): 0.266 * E-W(1): 0.269 * E-W(2): 0.174
	TH	2.00	680	3,200	0.213 *	
	LT	1.00	138	1,600	0.086	
Westbound	RT	0.00	49	0	0.000	V/C: 0.535 Lost Time: 0.100 ITS: 0.000
	TH	2.00	380	3,200	0.134	
	LT	1.00	153	1,600	0.096 *	
Northbound	RT	1.00	123	1,600	0.029	ICU: 0.635
	TH	2.00	425	3,200	0.133	
	LT	1.00	85	1,600	0.053 *	
Eastbound	RT	0.00	98	0	0.000	LOS: B
	TH	2.00	457	3,200	0.173 *	
	LT	1.00	64	1,600	0.040	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	51	1,600	0.011	N-S(1): 0.169 N-S(2): 0.213 * E-W(1): 0.201 * E-W(2): 0.193
	TH	2.00	504	3,200	0.158 *	
	LT	1.00	50	1,600	0.031	
Westbound	RT	0.00	68	0	0.000	V/C: 0.414 Lost Time: 0.100 ITS: 0.000
	TH	2.00	419	3,200	0.152	
	LT	1.00	165	1,600	0.103 *	
Northbound	RT	1.00	109	1,600	0.017	ICU: 0.514
	TH	2.00	441	3,200	0.138	
	LT	1.00	88	1,600	0.055 *	
Eastbound	RT	0.00	76	0	0.000	LOS: A
	TH	2.00	236	3,200	0.098 *	
	LT	1.00	66	1,600	0.041	

* - Denotes critical movement

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑	↑	↓	↑↑
Traffic Vol, veh/h	11	15	771	15	17	667
Future Vol, veh/h	11	15	771	15	17	667
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	17	886	17	20	767

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1310	443	0	0	903
Stage 1	886	-	-	-	-
Stage 2	424	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	151	562	-	-	749
Stage 1	363	-	-	-	-
Stage 2	628	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	147	562	-	-	749
Mov Cap-2 Maneuver	147	-	-	-	-
Stage 1	353	-	-	-	-
Stage 2	628	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.9	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	256	749
HCM Lane V/C Ratio	-	-	0.117	0.026
HCM Control Delay (s)	-	-	20.9	9.9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	5	14	631	19	21	646
Future Vol, veh/h	5	14	631	19	21	646
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	15	671	20	22	687

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1059	336	0	0	691
Stage 1	671	-	-	-	-
Stage 2	388	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	220	660	-	-	900
Stage 1	470	-	-	-	-
Stage 2	655	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	215	660	-	-	900
Mov Cap-2 Maneuver	215	-	-	-	-
Stage 1	459	-	-	-	-
Stage 2	655	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.8	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	427	900
HCM Lane V/C Ratio	-	-	0.047	0.025
HCM Control Delay (s)	-	-	13.8	9.1
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

Project Title: AVCCD FMP EIR
Intersection: 7 - 30th Street & Avenue K
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	145	1,600	0.067	N-S(1):	0.261 *
	TH	2.00	405	3,200	0.127	N-S(2):	0.217
	LT	2.00	154	2,880	0.053 *	E-W(1):	0.211
Westbound	RT	0.00	260	0	0.000	E-W(2):	0.277 *
	TH	3.00	476	3,200	0.230 *	V/C:	0.538
	LT	2.00	57	2,880	0.020	Lost Time:	0.100
Northbound	RT	1.00	154	1,600	0.086	ITS:	0.000
	TH	2.00	666	3,200	0.208 *	ICU:	0.638
	LT	2.00	258	2,880	0.090	LOS:	B
Eastbound	RT	0.00	176	0	0.000		
	TH	3.00	742	4,800	0.191		
	LT	2.00	136	2,880	0.047 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	105	1,600	0.049	N-S(1):	0.214 *
	TH	2.00	495	3,200	0.155	N-S(2):	0.204
	LT	2.00	214	2,880	0.074 *	E-W(1):	0.176 *
Westbound	RT	0.00	169	0	0.000	E-W(2):	0.174
	TH	3.00	509	4,800	0.141	V/C:	0.390
	LT	2.00	107	2,880	0.037 *	Lost Time:	0.100
Northbound	RT	1.00	124	1,600	0.059	ITS:	0.000
	TH	2.00	447	3,200	0.140 *	ICU:	0.490
	LT	2.00	141	2,880	0.049	LOS:	A
Eastbound	RT	0.00	159	0	0.000		
	TH	3.00	506	4,800	0.139 *		
	LT	2.00	96	2,880	0.033		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 8 - 30th Street & Avenue K-8
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	50	1,600	0.003	N-S(1): 0.311 * N-S(2): 0.172 E-W(1): 0.157 * E-W(2): 0.136
	TH	2.00	515	3,200	0.161	
	LT	1.00	95	1,600	0.059 *	
Westbound	RT	0.00	125	1,600	0.078	V/C: 0.468 Lost Time: 0.100 ITS: 0.000
	TH	2.00	85	1,600	0.053	
	LT	1.00	83	1,600	0.052 *	
Northbound	RT	1.00	79	1,600	0.023	ICU: 0.568
	TH	2.00	805	3,200	0.252 *	
	LT	1.00	18	1,600	0.011	
Eastbound	RT	1.00	33	1,600	0.015	LOS: A
	TH	1.00	168	1,600	0.105 *	
	LT	1.00	92	1,600	0.058	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	77	1,600	0.029	N-S(1): 0.220 N-S(2): 0.224 * E-W(1): 0.123 * E-W(2): 0.121
	TH	2.00	612	3,200	0.191 *	
	LT	1.00	59	1,600	0.037	
Westbound	RT	0.00	85	0	0.000	V/C: 0.347 Lost Time: 0.100 ITS: 0.000
	TH	2.00	176	3,200	0.082	
	LT	1.00	112	1,600	0.070 *	
Northbound	RT	1.00	115	1,600	0.037	ICU: 0.447
	TH	2.00	584	3,200	0.183	
	LT	1.00	53	1,600	0.033 *	
Eastbound	RT	1.00	46	1,600	0.012	LOS: A
	TH	1.00	84	1,600	0.053 *	
	LT	1.00	62	1,600	0.039	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 9 - 25th Street & Avenue J
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	139	1,600	0.027	N-S(1): 0.102
	TH	1.00	121	1,600	0.076 *	N-S(2): 0.105 *
	LT	1.00	20	1,600	0.013	E-W(1): 0.261 *
Westbound	RT	1.00	21	1,600	0.007	E-W(2): 0.258
	TH	3.00	660	4,800	0.138	V/C: 0.366
	LT	1.00	82	1,600	0.051 *	Lost Time: 0.100
Northbound	RT	1.00	108	1,600	0.042	ITS: 0.000
	TH	1.00	143	1,600	0.089	
	LT	1.00	46	1,600	0.029 *	
Eastbound	RT	0.00	118	0	0.000	ICU: 0.466
	TH	3.00	888	4,800	0.210 *	
	LT	1.00	192	1,600	0.120	LOS: A

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	80	1,600	0.001	N-S(1): 0.144 *
	TH	1.00	138	1,600	0.086	N-S(2): 0.102
	LT	1.00	32	1,600	0.020 *	E-W(1): 0.219
Westbound	RT	1.00	59	1,600	0.027	E-W(2): 0.256 *
	TH	3.00	759	4,800	0.158 *	V/C: 0.400
	LT	1.00	174	1,600	0.109	Lost Time: 0.100
Northbound	RT	1.00	98	1,600	0.007	ITS: 0.000
	TH	1.00	198	1,600	0.124 *	
	LT	1.00	26	1,600	0.016	
Eastbound	RT	0.00	48	0	0.000	ICU: 0.500
	TH	3.00	479	4,800	0.110	
	LT	1.00	157	1,600	0.098 *	LOS: A

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 10 - 25th Street & Avenue J-8
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	18	0	0.000	N-S(1):	0.219 *
	TH	2.00	163	3,200	0.057	N-S(2):	0.106
	LT	1.00	225	1,600	0.141 *	E-W(1):	0.257 *
Westbound	RT	0.00	75	0	0.000	E-W(2):	0.218
	TH	2.00	555	3,200	0.197	V/C:	0.476
	LT	1.00	20	1,600	0.013 *	Lost Time:	0.100
Northbound	RT	0.00	96	0	0.000	ITS:	0.000
	TH	2.00	152	3,200	0.078 *	ICU:	0.576
	LT	1.00	78	1,600	0.049		
Eastbound	RT	0.00	53	0	0.000		
	TH	2.00	728	3,200	0.244 *		
	LT	1.00	34	1,600	0.021		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	26	0	0.000	N-S(1):	0.158 *
	TH	2.00	212	3,200	0.074	N-S(2):	0.090
	LT	1.00	144	1,600	0.090 *	E-W(1):	0.149
Westbound	RT	0.00	155	0	0.000	E-W(2):	0.270 *
	TH	2.00	658	3,200	0.254 *	V/C:	0.428
	LT	1.00	46	1,600	0.029	Lost Time:	0.100
Northbound	RT	0.00	36	0	0.000	ITS:	0.000
	TH	2.00	181	3,200	0.068 *	ICU:	0.528
	LT	1.00	26	1,600	0.016		
Eastbound	RT	0.00	22	0	0.000		
	TH	2.00	363	3,200	0.120		
	LT	1.00	25	1,600	0.016 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 11 - 25th Street & Avenue K
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	43	1,600	0.009	N-S(1): 0.125 *
	TH	1.00	107	1,600	0.067	N-S(2): 0.073
	LT	1.00	100	1,600	0.063 *	E-W(1): 0.326 *
Westbound	RT	1.00	43	1,600	0.000	E-W(2): 0.272
	TH	2.00	755	3,200	0.236	V/C: 0.451
	LT	1.00	27	1,600	0.017 *	Lost Time: 0.100
Northbound	RT	0.00	66	0	0.000	ITS: 0.000
	TH	2.00	133	3,200	0.062 *	ICU: 0.551
	LT	1.00	10	1,600	0.006	LOS: A
Eastbound	RT	1.00	27	1,600	0.014	
	TH	2.00	988	3,200	0.309 *	
	LT	1.00	57	1,600	0.036	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	51	1,600	0.018	N-S(1): 0.094
	TH	1.00	136	1,600	0.085 *	N-S(2): 0.098 *
	LT	1.00	74	1,600	0.046	E-W(1): 0.274 *
Westbound	RT	1.00	70	1,600	0.021	E-W(2): 0.270
	TH	2.00	775	3,200	0.242	V/C: 0.372
	LT	1.00	40	1,600	0.025 *	Lost Time: 0.100
Northbound	RT	0.00	40	0	0.000	ITS: 0.000
	TH	2.00	112	3,200	0.048	ICU: 0.472
	LT	1.00	21	1,600	0.013 *	LOS: A
Eastbound	RT	1.00	17	1,600	0.004	
	TH	2.00	798	3,200	0.249 *	
	LT	1.00	44	1,600	0.028	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 12 - SR-14 SB Off Ramp & Avenue J
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	154	1,600	0.096	N-S(1):	0.108 *
	TH	0.00	0	0	0.000	N-S(2):	0.096
	LT	1.00	172	1,600	0.108 *	E-W(1):	0.222 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.147
	TH	3.00	707	4,800	0.147	V/C:	0.330
	LT	0.00	0	0	0.000 *	Lost Time:	0.100
Northbound	RT	0.00	0	0	0.000	ITS:	0.000
	TH	0.00	0	0	0.000 *	ICU:	0.430
	LT	0.00	0	0	0.000	LOS:	A
Eastbound	RT	0.00	0	0	0.000		
	TH	3.00	1,064	4,800	0.222 *		
	LT	0.00	0	0	0.000		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	259	1,600	0.162 *	N-S(1):	0.094
	TH	0.00	0	0	0.000	N-S(2):	0.162 *
	LT	1.00	151	1,600	0.094	E-W(1):	0.184
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.221 *
	TH	3.00	1,062	4,800	0.221 *	V/C:	0.383
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	0.00	0	0	0.000	ITS:	0.000
	TH	0.00	0	0	0.000	ICU:	0.483
	LT	0.00	0	0	0.000 *	LOS:	A
Eastbound	RT	0.00	0	0	0.000		
	TH	3.00	883	4,800	0.184		
	LT	0.00	0	0	0.000 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 13 - 20th Street & SR-14 NB Off Ramp
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.079
	TH	3.00	468	4,800	0.098 *	N-S(2): 0.098 *
	LT	0.00	0	0	0.000	E-W(1): 0.178
Westbound	RT	1.00	578	1,600	0.361 *	E-W(2): 0.361 *
	TH	0.00	0	0	0.000	V/C: 0.459
	LT	1.00	285	1,600	0.178	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	3.00	381	4,800	0.079	ICU: 0.559
	LT	0.00	0	0	0.000 *	LOS: A
Eastbound	RT	0.00	0	0	0.000	
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.098
	TH	3.00	873	4,800	0.182 *	N-S(2): 0.182 *
	LT	0.00	0	0	0.000	E-W(1): 0.265
Westbound	RT	1.00	487	1,600	0.304 *	E-W(2): 0.304 *
	TH	0.00	0	0	0.000	V/C: 0.486
	LT	1.00	424	1,600	0.265	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	3.00	468	4,800	0.098	ICU: 0.586
	LT	0.00	0	0	0.000 *	LOS: A
Eastbound	RT	0.00	0	0	0.000	
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 14 - 20th Street & Avenue J-8
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	428	3,200	0.103 *	N-S(1): 0.130
	TH	2.00	242	3,200	0.076	N-S(2): 0.144 *
	LT	1.00	71	1,600	0.044	E-W(1): 0.237 *
Westbound	RT	0.00	29	0	0.000	E-W(2): 0.204
	TH	2.00	430	3,200	0.143	V/C: 0.381
	LT	1.00	102	1,600	0.064 *	Lost Time: 0.100
Northbound	RT	1.00	145	1,600	0.059	ITS: 0.000
	TH	2.00	276	3,200	0.086	ICU: 0.481
	LT	1.00	65	1,600	0.041 *	LOS: A
Eastbound	RT	0.00	79	0	0.000	
	TH	2.00	474	3,200	0.173 *	
	LT	1.00	97	1,600	0.061	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	759	3,200	0.215 *	N-S(1): 0.164
	TH	2.00	417	3,200	0.130	N-S(2): 0.292 *
	LT	1.00	80	1,600	0.050	E-W(1): 0.182
Westbound	RT	0.00	52	0	0.000	E-W(2): 0.257 *
	TH	2.00	627	3,200	0.212 *	V/C: 0.549
	LT	1.00	144	1,600	0.090	Lost Time: 0.100
Northbound	RT	1.00	116	1,600	0.028	ITS: 0.000
	TH	2.00	364	3,200	0.114	ICU: 0.649
	LT	1.00	123	1,600	0.077 *	LOS: B
Eastbound	RT	0.00	64	0	0.000	
	TH	2.00	231	3,200	0.092	
	LT	1.00	72	1,600	0.045 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 15 - 20th Street & Avenue K
Description: Existing

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	84	1,600	0.000	N-S(1):	0.136 *
	TH	2.00	169	3,200	0.053	N-S(2):	0.075
	LT	2.00	97	2,880	0.034 *	E-W(1):	0.240
Westbound	RT	0.00	47	0	0.000	E-W(2):	0.259 *
	TH	3.00	683	4,800	0.152 *	V/C:	0.395
	LT	1.00	78	1,600	0.049	Lost Time:	0.100
Northbound	RT	0.00	80	0	0.000	ITS:	0.000
	TH	2.00	247	3,200	0.102 *	ICU:	0.495
	LT	2.00	63	2,880	0.022	LOS:	A
Eastbound	RT	1.00	76	1,600	0.037		
	TH	3.00	915	4,800	0.191		
	LT	1.00	171	1,600	0.107 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	110	1,600	0.019	N-S(1):	0.160 *
	TH	2.00	290	3,200	0.091	N-S(2):	0.124
	LT	2.00	163	2,880	0.057 *	E-W(1):	0.258
Westbound	RT	0.00	102	0	0.000	E-W(2):	0.281 *
	TH	3.00	767	4,800	0.181 *	V/C:	0.441
	LT	1.00	155	1,600	0.097	Lost Time:	0.100
Northbound	RT	0.00	94	0	0.000	ITS:	0.000
	TH	2.00	237	3,200	0.103 *	ICU:	0.541
	LT	2.00	95	2,880	0.033	LOS:	A
Eastbound	RT	1.00	56	1,600	0.019		
	TH	3.00	775	4,800	0.161		
	LT	1.00	160	1,600	0.100 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 16 - 17th Street & Avenue K
Description: Existing

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	31	1,600	0.004	N-S(1):	0.162 *
	TH	1.00	28	1,600	0.018	N-S(2):	0.046
	LT	1.00	151	1,600	0.094 *	E-W(1):	0.255 *
Westbound	RT	0.00	72	0	0.000	E-W(2):	0.206
	TH	3.00	767	4,800	0.175	V/C:	0.417
	LT	1.00	75	1,600	0.047 *	Lost Time:	0.100
Northbound	RT	1.00	147	1,600	0.068 *	ITS:	0.000
	TH	1.00	47	1,600	0.029	ICU:	0.517
	LT	1.00	44	1,600	0.028	LOS:	A
Eastbound	RT	0.00	58	0	0.000		
	TH	3.00	941	4,800	0.208 *		
	LT	1.00	50	1,600	0.031		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	38	1,600	0.008	N-S(1):	0.148 *
	TH	1.00	43	1,600	0.027	N-S(2):	0.055
	LT	1.00	178	1,600	0.111 *	E-W(1):	0.310 *
Westbound	RT	0.00	138	0	0.000	E-W(2):	0.263
	TH	3.00	974	4,800	0.232	V/C:	0.458
	LT	1.00	153	1,600	0.096 *	Lost Time:	0.100
Northbound	RT	1.00	132	1,600	0.035	ITS:	0.000
	TH	1.00	59	1,600	0.037 *	ICU:	0.558
	LT	1.00	44	1,600	0.028	LOS:	A
Eastbound	RT	0.00	62	0	0.000		
	TH	3.00	965	4,800	0.214 *		
	LT	1.00	50	1,600	0.031		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 17 - SR-14 SB Ramps & Avenue K
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements: EBR,

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.83	149	1,328	0.112	N-S(1): 0.125 *
	TH	0.00	0	0	0.000	N-S(2): 0.112
	LT	1.17	210	1,685	0.125 *	E-W(1): 0.263 *
Westbound	RT	0.00	279	0	0.000	E-W(2): 0.224
	TH	3.00	796	4,800	0.224	V/C: 0.388
	LT	0.00	0	0	0.000 *	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	0.00	0	0	0.000 *	ICU: 0.488
	LT	0.00	0	0	0.000	LOS: A
Eastbound	RT	0.00	338	0	0.000	
	TH	3.00	923	4,800	0.263 *	
	LT	0.00	0	0	0.000	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.97	209	1,559	0.134	N-S(1): 0.149 *
	TH	0.00	0	0	0.000	N-S(2): 0.134
	LT	1.03	220	1,477	0.149 *	E-W(1): 0.268
Westbound	RT	0.00	529	0	0.000	E-W(2): 0.344 *
	TH	3.00	1,123	4,800	0.344 *	V/C: 0.493
	LT	0.00	0	0	0.000	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	0.00	0	0	0.000 *	ICU: 0.593
	LT	0.00	0	0	0.000	LOS: A
Eastbound	RT	0.00	402	0	0.000	
	TH	3.00	883	4,800	0.268	
	LT	0.00	0	0	0.000 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 18 - 15th St/SR-14 NB Ramps & Ave K
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	207	1,600	0.092	N-S(1):	0.350 *
	TH	0.07	7	112	0.062	N-S(2):	0.264
	LT	1.93	193	2,779	0.069 *	E-W(1):	0.185
Westbound	RT	1.00	180	1,600	0.113	E-W(2):	0.223 *
	TH	3.00	710	4,800	0.148 *	V/C:	0.573
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	1.00	355	1,600	0.222	ITS:	0.000
	TH	1.00	449	1,600	0.281 *	ICU:	0.673
	LT	1.00	275	1,600	0.172	LOS:	B
Eastbound	RT	0.00	94	0	0.000		
	TH	3.00	795	4,800	0.185		
	LT	2.00	217	2,880	0.075 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	462	1,600	0.263 *	N-S(1):	0.371
	TH	0.12	22	192	0.114	N-S(2):	0.476 *
	LT	1.88	344	2,707	0.127	E-W(1):	0.201
Westbound	RT	1.00	210	1,600	0.131	E-W(2):	0.261 *
	TH	3.00	1,002	4,800	0.209 *	V/C:	0.737
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	1.00	386	1,600	0.241	ITS:	0.000
	TH	1.00	391	1,600	0.244	ICU:	0.837
	LT	1.00	341	1,600	0.213 *	LOS:	D
Eastbound	RT	0.00	97	0	0.000		
	TH	3.00	870	4,800	0.201		
	LT	2.00	149	2,880	0.052 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 1 - 40th Street & Avenue K
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.15	33	236	0.129	N-S(1): 0.135
	TH	0.85	191	1,364	0.140 *	N-S(2): 0.204 *
	LT	1.00	105	1,600	0.066	E-W(1): 0.302 *
Westbound	RT	1.00	46	1,600	0.000	E-W(2): 0.215
	TH	1.00	309	1,600	0.193	V/C: 0.506
	LT	1.00	41	1,600	0.026 *	Lost Time: 0.100
Northbound	RT	1.00	131	1,600	0.069	ITS: 0.000
	TH	2.00	193	3,200	0.060	ICU: 0.606
	LT	1.00	103	1,600	0.064 *	LOS: B
Eastbound	RT	0.00	103	0	0.000	
	TH	2.00	781	3,200	0.276 *	
	LT	1.00	35	1,600	0.022	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.19	50	308	0.153	N-S(1): 0.093
	TH	0.81	210	1,292	0.163 *	N-S(2): 0.206 *
	LT	1.00	48	1,600	0.030	E-W(1): 0.188
Westbound	RT	1.00	55	1,600	0.019	E-W(2): 0.302 *
	TH	1.00	455	1,600	0.284 *	V/C: 0.508
	LT	1.00	87	1,600	0.054	Lost Time: 0.100
Northbound	RT	1.00	72	1,600	0.018	ITS: 0.000
	TH	2.00	200	3,200	0.063	ICU: 0.608
	LT	1.00	69	1,600	0.043 *	LOS: B
Eastbound	RT	0.00	47	0	0.000	
	TH	2.00	382	3,200	0.134	
	LT	1.00	29	1,600	0.018 *	

* - Denotes critical movement

Intersection	
Intersection Delay, s/veh	76
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵		↵	↑	↵	↵	↵	
Traffic Vol, veh/h	19	419	34	14	275	106	29	20	7	290	43	68
Future Vol, veh/h	19	419	34	14	275	106	29	20	7	290	43	68
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	22	476	39	16	313	120	33	23	8	330	49	77
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	127.3	65.4	14.5	34.7
HCM LOS	F	F	B	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	92%	0%	72%	0%	39%
Vol Right, %	0%	0%	100%	0%	8%	0%	28%	0%	61%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	20	7	19	453	14	381	290	111
LT Vol	29	0	0	19	0	14	0	290	0
Through Vol	0	20	0	0	419	0	275	0	43
RT Vol	0	0	7	0	34	0	106	0	68
Lane Flow Rate	33	23	8	22	515	16	433	330	126
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.096	0.063	0.021	0.053	1.187	0.039	0.976	0.814	0.279
Departure Headway (Hd)	11.198	10.67	9.931	8.867	8.3	9.268	8.552	9.45	8.482
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	322	338	363	404	438	389	429	386	426
Service Time	8.898	8.37	7.631	6.618	6.051	6.968	6.252	7.15	6.182
HCM Lane V/C Ratio	0.102	0.068	0.022	0.054	1.176	0.041	1.009	0.855	0.296
HCM Control Delay	15.1	14.1	12.8	12.1	132.1	12.3	67.4	42.5	14.4
HCM Lane LOS	C	B	B	B	F	B	F	E	B
HCM 95th-tile Q	0.3	0.2	0.1	0.2	19.8	0.1	11.8	7.2	1.1

Intersection	
Intersection Delay, s/veh	60.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵		↵	↑	↵	↵	↵	
Traffic Vol, veh/h	24	266	21	6	497	106	18	16	18	118	12	19
Future Vol, veh/h	24	266	21	6	497	106	18	16	18	118	12	19
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	283	22	6	529	113	19	17	19	126	13	20
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	18.8	97	11.5	13.9
HCM LOS	C	F	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	93%	0%	82%	0%	39%
Vol Right, %	0%	0%	100%	0%	7%	0%	18%	0%	61%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	16	18	24	287	6	603	118	31
LT Vol	18	0	0	24	0	6	0	118	0
Through Vol	0	16	0	0	266	0	497	0	12
RT Vol	0	0	18	0	21	0	106	0	19
Lane Flow Rate	19	17	19	26	305	6	641	126	33
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.046	0.038	0.039	0.053	0.586	0.012	1.118	0.286	0.067
Departure Headway (Hd)	9.043	8.526	7.803	7.731	7.17	6.902	6.273	8.622	7.663
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	398	422	462	466	507	518	577	419	470
Service Time	6.743	6.226	5.503	5.431	4.87	4.645	4.016	6.322	5.363
HCM Lane V/C Ratio	0.048	0.04	0.041	0.056	0.602	0.012	1.111	0.301	0.07
HCM Control Delay	12.2	11.6	10.8	10.9	19.5	9.7	97.9	14.7	10.9
HCM Lane LOS	B	B	B	B	C	A	F	B	B
HCM 95th-tile Q	0.1	0.1	0.1	0.2	3.7	0	20.2	1.2	0.2

Project Title: AVCCD FMP EIR
Intersection: 3 - 32nd St/Driveway & Avenue K
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.75	27	1,200	0.000	N-S(1):	0.171 *
	TH	0.25	9	400	0.023	N-S(2):	0.049
	LT	1.00	120	1,600	0.075 *	E-W(1):	0.245
Westbound	RT	0.00	227	0	0.000	E-W(2):	0.290 *
	TH	3.00	428	3,200	0.205 *	V/C:	0.461
	LT	1.00	58	1,600	0.036	Lost Time:	0.100
Northbound	RT	0.84	129	1,349	0.078	ITS:	0.000
	TH	0.16	24	251	0.096 *	ICU:	0.561
	LT	1.00	42	1,600	0.026	LOS:	A
Eastbound	RT	0.00	25	0	0.000		
	TH	3.00	979	4,800	0.209		
	LT	1.00	136	1,600	0.085 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.83	35	1,333	0.005	N-S(1):	0.153 *
	TH	0.17	7	267	0.026	N-S(2):	0.032
	LT	1.00	107	1,600	0.067 *	E-W(1):	0.208 *
Westbound	RT	0.00	80	0	0.000	E-W(2):	0.198
	TH	3.00	663	4,800	0.155	V/C:	0.361
	LT	1.00	149	1,600	0.093 *	Lost Time:	0.100
Northbound	RT	0.94	129	1,507	0.039	ITS:	0.000
	TH	0.06	8	93	0.086 *	ICU:	0.461
	LT	1.00	10	1,600	0.006	LOS:	A
Eastbound	RT	0.00	11	0	0.000		
	TH	3.00	543	4,800	0.115 *		
	LT	1.00	69	1,600	0.043		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 4 - 30th Street & Avenue J
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	116	0	0.000	N-S(1): 0.129
	TH	3.00	481	4,800	0.124 *	N-S(2): 0.225 *
	LT	1.00	54	1,600	0.034	E-W(1): 0.355 *
Westbound	RT	1.00	36	1,600	0.006	E-W(2): 0.254
	TH	2.00	499	3,200	0.156	V/C: 0.580
	LT	1.00	189	1,600	0.118 *	Lost Time: 0.100
Northbound	RT	0.00	135	0	0.000	ITS: 0.000
	TH	3.00	319	4,800	0.095	ICU: 0.680
	LT	1.00	162	1,600	0.101 *	LOS: B
Eastbound	RT	0.00	212	0	0.000	
	TH	3.00	925	4,800	0.237 *	
	LT	1.00	157	1,600	0.098	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	216	0	0.000	N-S(1): 0.119
	TH	3.00	303	3,200	0.162 *	N-S(2): 0.208 *
	LT	1.00	18	1,600	0.011	E-W(1): 0.257 *
Westbound	RT	1.00	42	1,600	0.021	E-W(2): 0.254
	TH	2.00	585	3,200	0.183	V/C: 0.465
	LT	1.00	228	1,600	0.143 *	Lost Time: 0.100
Northbound	RT	0.00	165	0	0.000	ITS: 0.000
	TH	3.00	355	4,800	0.108	ICU: 0.565
	LT	1.00	74	1,600	0.046 *	LOS: A
Eastbound	RT	0.00	59	0	0.000	
	TH	3.00	486	4,800	0.114 *	
	LT	1.00	114	1,600	0.071	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 5 - 30th Street & Avenue J-8
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	128	1,600	0.059	N-S(1):	0.228
	TH	2.00	710	3,200	0.222 *	N-S(2):	0.294 *
	LT	1.00	142	1,600	0.089	E-W(1):	0.330 *
Westbound	RT	0.00	53	0	0.000	E-W(2):	0.196
	TH	2.00	436	3,200	0.153	V/C:	0.624
	LT	1.00	153	1,600	0.096 *	Lost Time:	0.100
Northbound	RT	1.00	136	1,600	0.037	ITS:	0.000
	TH	2.00	446	3,200	0.139	ICU:	0.724
	LT	1.00	115	1,600	0.072 *	LOS:	C
Eastbound	RT	0.00	111	0	0.000		
	TH	2.00	637	3,200	0.234 *		
	LT	1.00	68	1,600	0.043		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	60	1,600	0.016	N-S(1):	0.187
	TH	2.00	525	3,200	0.164 *	N-S(2):	0.240 *
	LT	1.00	54	1,600	0.034	E-W(1):	0.257
Westbound	RT	0.00	81	0	0.000	E-W(2):	0.258 *
	TH	2.00	603	3,200	0.214 *	V/C:	0.498
	LT	1.00	174	1,600	0.109	Lost Time:	0.100
Northbound	RT	1.00	122	1,600	0.022	ITS:	0.000
	TH	2.00	488	3,200	0.153	ICU:	0.598
	LT	1.00	122	1,600	0.076 *	LOS:	A
Eastbound	RT	0.00	123	0	0.000		
	TH	2.00	352	3,200	0.148		
	LT	1.00	70	1,600	0.044 *		

* - Denotes critical movement

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑	↑	↑	↑↑
Traffic Vol, veh/h	15	19	818	19	21	701
Future Vol, veh/h	15	19	818	19	21	701
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	22	930	22	24	797

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1377	465	0	0	952
Stage 1	930	-	-	-	-
Stage 2	447	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	136	544	-	-	717
Stage 1	344	-	-	-	-
Stage 2	611	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	132	544	-	-	717
Mov Cap-2 Maneuver	132	-	-	-	-
Stage 1	333	-	-	-	-
Stage 2	611	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.9	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	229	717
HCM Lane V/C Ratio	-	-	0.169	0.033
HCM Control Delay (s)	-	-	23.9	10.2
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.6	0.1

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	9	18	700	23	25	693
Future Vol, veh/h	9	18	700	23	25	693
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	19	745	24	27	737

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1168	373	0	0	769
Stage 1	745	-	-	-	-
Stage 2	423	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	186	624	-	-	841
Stage 1	430	-	-	-	-
Stage 2	629	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	180	624	-	-	841
Mov Cap-2 Maneuver	180	-	-	-	-
Stage 1	416	-	-	-	-
Stage 2	629	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.5	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	342	841
HCM Lane V/C Ratio	-	-	0.084	0.032
HCM Control Delay (s)	-	-	16.5	9.4
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1

Project Title: AVCCD FMP EIR
Intersection: 7 - 30th Street & Avenue K
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	151	1,600	0.069	N-S(1):	0.273 *
	TH	2.00	438	3,200	0.137	N-S(2):	0.228
	LT	2.00	157	2,880	0.055 *	E-W(1):	0.226
Westbound	RT	0.00	287	0	0.000	E-W(2):	0.291 *
	TH	3.00	482	3,200	0.240 *	V/C:	0.564
	LT	2.00	58	2,880	0.020	Lost Time:	0.100
Northbound	RT	1.00	159	1,600	0.089	ITS:	0.000
	TH	2.00	698	3,200	0.218 *	ICU:	0.664
	LT	2.00	262	2,880	0.091	LOS:	B
Eastbound	RT	0.00	191	0	0.000		
	TH	3.00	800	4,800	0.206		
	LT	2.00	146	2,880	0.051 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	109	1,600	0.051	N-S(1):	0.252 *
	TH	2.00	546	3,200	0.171	N-S(2):	0.223
	LT	2.00	247	2,880	0.086 *	E-W(1):	0.184
Westbound	RT	0.00	172	0	0.000	E-W(2):	0.190 *
	TH	3.00	578	4,800	0.156 *	V/C:	0.442
	LT	2.00	115	2,880	0.040	Lost Time:	0.100
Northbound	RT	1.00	126	1,600	0.059	ITS:	0.000
	TH	2.00	532	3,200	0.166 *	ICU:	0.542
	LT	2.00	149	2,880	0.052	LOS:	A
Eastbound	RT	0.00	168	0	0.000		
	TH	3.00	522	4,800	0.144		
	LT	2.00	99	2,880	0.034 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 8 - 30th Street & Avenue K-8
Description: Future without Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	54	1,600	0.004	N-S(1):	0.321 *
	TH	2.00	549	3,200	0.172	N-S(2):	0.189
	LT	1.00	108	1,600	0.068 *	E-W(1):	0.175 *
Westbound	RT	0.00	138	1,600	0.086	E-W(2):	0.146
	TH	2.00	89	1,600	0.056	V/C:	0.496
	LT	1.00	87	1,600	0.054 *	Lost Time:	0.100
Northbound	RT	1.00	88	1,600	0.028	ITS:	0.000
	TH	2.00	809	3,200	0.253 *	ICU:	0.596
	LT	1.00	27	1,600	0.017	LOS:	A
Eastbound	RT	1.00	37	1,600	0.015		
	TH	1.00	194	1,600	0.121 *		
	LT	1.00	96	1,600	0.060		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	81	1,600	0.030	N-S(1):	0.250 *
	TH	2.00	616	3,200	0.193	N-S(2):	0.229
	LT	1.00	72	1,600	0.045 *	E-W(1):	0.133
Westbound	RT	0.00	119	0	0.000	E-W(2):	0.153 *
	TH	2.00	240	3,200	0.112 *	V/C:	0.403
	LT	1.00	125	1,600	0.078	Lost Time:	0.100
Northbound	RT	1.00	128	1,600	0.041	ITS:	0.000
	TH	2.00	657	3,200	0.205 *	ICU:	0.503
	LT	1.00	57	1,600	0.036	LOS:	A
Eastbound	RT	1.00	63	1,600	0.022		
	TH	1.00	88	1,600	0.055		
	LT	1.00	66	1,600	0.041 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 9 - 25th Street & Avenue J
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	144	1,600	0.028	N-S(1):	0.107
	TH	1.00	131	1,600	0.082 *	N-S(2):	0.113 *
	LT	1.00	21	1,600	0.013	E-W(1):	0.292
Westbound	RT	1.00	37	1,600	0.017	E-W(2):	0.334 *
	TH	2.00	669	3,200	0.209 *	V/C:	0.447
	LT	1.00	103	1,600	0.064	Lost Time:	0.100
Northbound	RT	1.00	129	1,600	0.048	ITS:	0.000
	TH	1.00	151	1,600	0.094	ICU:	0.547
	LT	1.00	49	1,600	0.031 *	LOS:	A
Eastbound	RT	0.00	121	0	0.000		
	TH	3.00	972	4,800	0.228		
	LT	1.00	200	1,600	0.125 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	87	1,600	0.003	N-S(1):	0.154 *
	TH	1.00	158	1,600	0.099	N-S(2):	0.122
	LT	1.00	40	1,600	0.025 *	E-W(1):	0.249
Westbound	RT	1.00	68	1,600	0.030	E-W(2):	0.345 *
	TH	2.00	777	3,200	0.243 *	V/C:	0.499
	LT	1.00	209	1,600	0.131	Lost Time:	0.100
Northbound	RT	1.00	124	1,600	0.012	ITS:	0.000
	TH	1.00	206	1,600	0.129 *	ICU:	0.599
	LT	1.00	36	1,600	0.023	LOS:	A
Eastbound	RT	0.00	54	0	0.000		
	TH	3.00	514	4,800	0.118		
	LT	1.00	163	1,600	0.102 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 10 - 25th Street & Avenue J-8
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	20	0	0.000	N-S(1): 0.228 *
	TH	2.00	176	3,200	0.061	N-S(2): 0.112
	LT	1.00	232	1,600	0.145 *	E-W(1): 0.264 *
Westbound	RT	0.00	76	0	0.000	E-W(2): 0.229
	TH	2.00	584	3,200	0.206	V/C: 0.492
	LT	1.00	23	1,600	0.014 *	Lost Time: 0.100
Northbound	RT	0.00	102	0	0.000	ITS: 0.000
	TH	2.00	164	3,200	0.083 *	ICU: 0.592
	LT	1.00	81	1,600	0.051	LOS: A
Eastbound	RT	0.00	57	0	0.000	
	TH	2.00	743	3,200	0.250 *	
	LT	1.00	36	1,600	0.023	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	31	0	0.000	N-S(1): 0.173 *
	TH	2.00	232	3,200	0.082	N-S(2): 0.103
	LT	1.00	161	1,600	0.101 *	E-W(1): 0.154
Westbound	RT	0.00	161	0	0.000	E-W(2): 0.283 *
	TH	2.00	693	3,200	0.267 *	V/C: 0.456
	LT	1.00	49	1,600	0.031	Lost Time: 0.100
Northbound	RT	0.00	36	0	0.000	ITS: 0.000
	TH	2.00	193	3,200	0.072 *	ICU: 0.556
	LT	1.00	33	1,600	0.021	LOS: A
Eastbound	RT	0.00	26	0	0.000	
	TH	2.00	369	3,200	0.123	
	LT	1.00	26	1,600	0.016 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 11 - 25th Street & Avenue K
Description: Future without Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	47	1,600	0.010	N-S(1):	0.138 *
	TH	1.00	116	1,600	0.073	N-S(2):	0.082
	LT	1.00	104	1,600	0.065 *	E-W(1):	0.341 *
Westbound	RT	1.00	47	1,600	0.000	E-W(2):	0.282
	TH	2.00	781	3,200	0.244	V/C:	0.479
	LT	1.00	36	1,600	0.023 *	Lost Time:	0.100
Northbound	RT	0.00	92	0	0.000	ITS:	0.000
	TH	2.00	142	3,200	0.073 *	ICU:	0.579
	LT	1.00	14	1,600	0.009	LOS:	A
Eastbound	RT	1.00	31	1,600	0.015		
	TH	2.00	1,018	3,200	0.318 *		
	LT	1.00	61	1,600	0.038		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	55	1,600	0.019	N-S(1):	0.103
	TH	1.00	157	1,600	0.098 *	N-S(2):	0.114 *
	LT	1.00	78	1,600	0.049	E-W(1):	0.303 *
Westbound	RT	1.00	74	1,600	0.022	E-W(2):	0.282
	TH	2.00	805	3,200	0.252	V/C:	0.417
	LT	1.00	57	1,600	0.036 *	Lost Time:	0.100
Northbound	RT	0.00	53	0	0.000	ITS:	0.000
	TH	2.00	121	3,200	0.054	ICU:	0.517
	LT	1.00	25	1,600	0.016 *	LOS:	A
Eastbound	RT	1.00	21	1,600	0.005		
	TH	2.00	854	3,200	0.267 *		
	LT	1.00	48	1,600	0.030		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 12 - SR-14 SB Off Ramp & Avenue J
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	172	1,600	0.108	N-S(1): 0.121 * N-S(2): 0.108 E-W(1): 0.364 * E-W(2): 0.238
	TH	0.00	0	0	0.000	
	LT	1.00	193	1,600	0.121 *	
Westbound	RT	0.00	0	0	0.000	V/C: 0.485 Lost Time: 0.100 ITS: 0.000
	TH	2.00	762	3,200	0.238	
	LT	0.00	0	0	0.000 *	
Northbound	RT	0.00	0	0	0.000	ICU: 0.585
	TH	0.00	0	0	0.000 *	
	LT	0.00	0	0	0.000	
Eastbound	RT	0.00	0	0	0.000	LOS: A
	TH	2.00	1,164	3,200	0.364 *	
	LT	0.00	0	0	0.000	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	282	1,600	0.176 *	N-S(1): 0.098 N-S(2): 0.176 * E-W(1): 0.298 E-W(2): 0.371 *
	TH	0.00	0	0	0.000	
	LT	1.00	157	1,600	0.098	
Westbound	RT	0.00	0	0	0.000	V/C: 0.547 Lost Time: 0.100 ITS: 0.000
	TH	2.00	1,187	3,200	0.371 *	
	LT	0.00	0	0	0.000	
Northbound	RT	0.00	0	0	0.000	ICU: 0.647
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	
Eastbound	RT	0.00	0	0	0.000	LOS: B
	TH	2.00	955	3,200	0.298	
	LT	0.00	0	0	0.000 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 13 - 20th Street & SR-14 NB Off Ramp
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.081
	TH	3.00	483	4,800	0.101 *	N-S(2): 0.101 *
	LT	0.00	0	0	0.000	E-W(1): 0.191
Westbound	RT	1.00	639	1,600	0.399 *	E-W(2): 0.399 *
	TH	0.00	0	0	0.000	V/C: 0.500
	LT	1.00	305	1,600	0.191	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	3.00	391	4,800	0.081	ICU: 0.600
	LT	0.00	0	0	0.000 *	LOS: A
Eastbound	RT	0.00	0	0	0.000	
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.101
	TH	3.00	897	4,800	0.187 *	N-S(2): 0.187 *
	LT	0.00	0	0	0.000	E-W(1): 0.282
Westbound	RT	1.00	543	1,600	0.339 *	E-W(2): 0.339 *
	TH	0.00	0	0	0.000	V/C: 0.526
	LT	1.00	451	1,600	0.282	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	3.00	483	4,800	0.101	ICU: 0.626
	LT	0.00	0	0	0.000 *	LOS: B
Eastbound	RT	0.00	0	0	0.000	
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 14 - 20th Street & Avenue J-8
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	470	3,200	0.117	N-S(1): 0.182 * N-S(2): 0.158 E-W(1): 0.262 * E-W(2): 0.212
	TH	2.00	257	3,200	0.080	
	LT	1.00	75	1,600	0.047 *	
Westbound	RT	0.00	30	0	0.000	V/C: 0.444 Lost Time: 0.100 ITS: 0.000
	TH	2.00	452	3,200	0.151	
	LT	1.00	120	1,600	0.075 *	
Northbound	RT	1.00	276	1,600	0.135 *	ICU: 0.544
	TH	2.00	302	3,200	0.094	
	LT	1.00	65	1,600	0.041	
Eastbound	RT	0.00	82	0	0.000	LOS: A
	TH	2.00	517	3,200	0.187 *	
	LT	1.00	97	1,600	0.061	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	783	3,200	0.222 *	N-S(1): 0.170 N-S(2): 0.313 * E-W(1): 0.300 * E-W(2): 0.278
	TH	2.00	435	3,200	0.136	
	LT	1.00	82	1,600	0.051	
Westbound	RT	0.00	60	0	0.000	V/C: 0.613 Lost Time: 0.100 ITS: 0.000
	TH	2.00	687	3,200	0.233	
	LT	1.00	307	1,600	0.192 *	
Northbound	RT	1.00	195	1,600	0.026	ICU: 0.713
	TH	2.00	382	3,200	0.119	
	LT	1.00	145	1,600	0.091 *	
Eastbound	RT	0.00	67	0	0.000	LOS: C
	TH	2.00	279	3,200	0.108 *	
	LT	1.00	72	1,600	0.045	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 15 - 20th Street & Avenue K
Description: Future without Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	85	1,600	0.000	N-S(1): 0.160 * N-S(2): 0.082 E-W(1): 0.258 E-W(2): 0.278 *
	TH	2.00	189	3,200	0.059	
	LT	2.00	117	2,880	0.041 *	
Westbound	RT	0.00	65	0	0.000	V/C: 0.438 Lost Time: 0.100 ITS: 0.000
	TH	3.00	742	4,800	0.168 *	
	LT	1.00	84	1,600	0.053	
Northbound	RT	0.00	83	0	0.000	ICU: 0.538
	TH	2.00	298	3,200	0.119 *	
	LT	2.00	67	2,880	0.023	
Eastbound	RT	1.00	82	1,600	0.040	LOS: A
	TH	3.00	983	4,800	0.205	
	LT	1.00	176	1,600	0.110 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	116	1,600	0.021	N-S(1): 0.186 * N-S(2): 0.149 E-W(1): 0.288 E-W(2): 0.302 *
	TH	2.00	355	3,200	0.111	
	LT	2.00	178	2,880	0.062 *	
Westbound	RT	0.00	127	0	0.000	V/C: 0.488 Lost Time: 0.100 ITS: 0.000
	TH	3.00	825	4,800	0.198 *	
	LT	1.00	176	1,600	0.110	
Northbound	RT	0.00	111	0	0.000	ICU: 0.588
	TH	2.00	287	3,200	0.124 *	
	LT	2.00	110	2,880	0.038	
Eastbound	RT	1.00	66	1,600	0.022	LOS: A
	TH	3.00	855	4,800	0.178	
	LT	1.00	166	1,600	0.104 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 16 - 17th Street & Avenue K
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	2.00	31	3,200	0.000	N-S(1):	0.154
	TH	0.16	31	262	0.118 *	N-S(2):	0.158 *
	LT	0.84	158	1,338	0.118	E-W(1):	0.308 *
Westbound	RT	0.00	72	0	0.000	E-W(2):	0.219
	TH	3.00	828	4,800	0.188	V/C:	0.466
	LT	1.00	128	1,600	0.080 *	Lost Time:	0.100
Northbound	RT	2.00	193	3,200	0.020	ITS:	0.000
	TH	0.88	50	1,404	0.036	ICU:	0.566
	LT	1.12	64	1,617	0.040 *	LOS:	A
Eastbound	RT	0.00	79	0	0.000		
	TH	3.00	1,013	4,800	0.228 *		
	LT	1.00	50	1,600	0.031		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	2.00	41	3,200	0.000	N-S(1):	0.193
	TH	0.20	46	317	0.145 *	N-S(2):	0.198 *
	LT	0.80	186	1,283	0.145	E-W(1):	0.384 *
Westbound	RT	0.00	144	0	0.000	E-W(2):	0.277
	TH	3.00	1,030	4,800	0.245	V/C:	0.582
	LT	1.00	237	1,600	0.148 *	Lost Time:	0.100
Northbound	RT	2.00	246	3,200	0.003	ITS:	0.000
	TH	0.82	62	1,305	0.048	ICU:	0.682
	LT	1.18	90	1,705	0.053 *	LOS:	B
Eastbound	RT	0.00	99	0	0.000		
	TH	3.00	1,033	4,800	0.236 *		
	LT	1.00	51	1,600	0.032		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 17 - SR-14 SB Ramps & Avenue K
Description: Future without Project

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	10 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:	EBR,		

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.33	168	2,122	0.079	N-S(1): 0.088 *
	TH	0.00	0	0	0.000	N-S(2): 0.079
	LT	1.67	212	2,410	0.088 *	E-W(1): 0.291 *
Westbound	RT	1.00	288	1,600	0.180	E-W(2): 0.193
	TH	3.00	926	4,800	0.193	V/C: 0.379
	LT	0.00	0	0	0.000 *	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	0.00	0	0	0.000 *	
	LT	0.00	0	0	0.000	
Eastbound	RT	0.00	410	0	0.000	ICU: 0.479
	TH	3.00	985	4,800	0.291 *	
	LT	0.00	0	0	0.000	LOS: A

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.48	221	2,373	0.093	N-S(1): 0.103 *
	TH	0.00	0	0	0.000	N-S(2): 0.093
	LT	1.52	226	2,184	0.103 *	E-W(1): 0.307
Westbound	RT	1.00	540	1,600	0.338 *	E-W(2): 0.338 *
	TH	3.00	1,257	4,800	0.262	V/C: 0.441
	LT	0.00	0	0	0.000	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	0.00	0	0	0.000 *	
	LT	0.00	0	0	0.000	
Eastbound	RT	0.00	481	0	0.000	ICU: 0.541
	TH	3.00	993	4,800	0.307	
	LT	0.00	0	0	0.000 *	LOS: A

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 18 - 15th St/SR-14 NB Ramps & Ave K
Description: Future without Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.92	231	3,067	0.037	N-S(1):	0.250 *
	TH	0.08	10	133	0.075	N-S(2):	0.183
	LT	2.00	199	2,880	0.069 *	E-W(1):	0.176
Westbound	RT	1.00	210	1,600	0.131	E-W(2):	0.245 *
	TH	3.00	811	4,800	0.169 *	V/C:	0.495
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	1.41	409	2,259	0.181	ITS:	0.000
	TH	1.59	460	2,541	0.181 *	ICU:	0.595
	LT	2.00	312	2,880	0.108	LOS:	A
Eastbound	RT	1.00	101	1,600	0.009		
	TH	3.00	847	4,800	0.176		
	LT	2.00	219	2,880	0.076 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.91	471	3,057	0.127	N-S(1):	0.293 *
	TH	0.09	22	143	0.154	N-S(2):	0.289
	LT	2.00	353	2,880	0.123 *	E-W(1):	0.201
Westbound	RT	1.00	228	1,600	0.143	E-W(2):	0.289 *
	TH	3.00	1,127	4,800	0.235 *	V/C:	0.582
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	1.52	413	2,432	0.170	ITS:	0.000
	TH	1.48	402	2,368	0.170 *	ICU:	0.682
	LT	2.00	388	2,880	0.135	LOS:	B
Eastbound	RT	1.00	108	1,600	0.000		
	TH	3.00	963	4,800	0.201		
	LT	2.00	156	2,880	0.054 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 1 - 40th Street & Avenue K
Description: Existing with Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.08	15	128	0.108	N-S(1): 0.127
	TH	0.92	173	1,472	0.118 *	N-S(2): 0.180 *
	LT	1.00	81	1,600	0.051	E-W(1): 0.296 *
Westbound	RT	1.00	45	1,600	0.003	E-W(2): 0.211
	TH	1.00	307	1,600	0.192	V/C: 0.476
	LT	1.00	42	1,600	0.026 *	Lost Time: 0.100
Northbound	RT	1.00	143	1,600	0.076	ITS: 0.000
	TH	2.00	184	3,200	0.058	ICU: 0.576
	LT	1.00	99	1,600	0.062 *	LOS: A
Eastbound	RT	0.00	99	0	0.000	
	TH	2.00	766	3,200	0.270 *	
	LT	1.00	30	1,600	0.019	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.05	11	83	0.126	N-S(1): 0.088
	TH	0.95	202	1,517	0.133 *	N-S(2): 0.174 *
	LT	1.00	50	1,600	0.031	E-W(1): 0.191
Westbound	RT	1.00	48	1,600	0.014	E-W(2): 0.285 *
	TH	1.00	432	1,600	0.270 *	V/C: 0.459
	LT	1.00	96	1,600	0.060	Lost Time: 0.100
Northbound	RT	1.00	79	1,600	0.019	ITS: 0.000
	TH	2.00	182	3,200	0.057	ICU: 0.559
	LT	1.00	65	1,600	0.041 *	LOS: A
Eastbound	RT	0.00	38	0	0.000	
	TH	2.00	381	3,200	0.131	
	LT	1.00	24	1,600	0.015 *	

* - Denotes critical movement

Intersection	
Intersection Delay, s/veh	27.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵		↵	↑	↵	↵	↵	
Traffic Vol, veh/h	15	309	30	10	244	51	20	16	3	202	39	64
Future Vol, veh/h	15	309	30	10	244	51	20	16	3	202	39	64
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	377	37	12	298	62	24	20	4	246	48	78
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	37.1	28.3	12.5	18.6
HCM LOS	E	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	91%	0%	83%	0%	38%
Vol Right, %	0%	0%	100%	0%	9%	0%	17%	0%	62%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	16	3	15	339	10	295	202	103
LT Vol	20	0	0	15	0	10	0	202	0
Through Vol	0	16	0	0	309	0	244	0	39
RT Vol	0	0	3	0	30	0	51	0	64
Lane Flow Rate	24	20	4	18	413	12	360	246	126
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.064	0.048	0.008	0.04	0.842	0.027	0.743	0.569	0.256
Departure Headway (Hd)	9.467	8.948	8.221	7.906	7.335	8.07	7.438	8.309	7.346
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	377	398	433	452	492	443	486	434	487
Service Time	7.262	6.743	6.016	5.666	5.094	5.834	5.201	6.073	5.11
HCM Lane V/C Ratio	0.064	0.05	0.009	0.04	0.839	0.027	0.741	0.567	0.259
HCM Control Delay	12.9	12.2	11.1	11	38.3	11.1	28.9	21.6	12.6
HCM Lane LOS	B	B	B	B	E	B	D	C	B
HCM 95th-tile Q	0.2	0.2	0	0.1	8.5	0.1	6.2	3.4	1

Intersection	
Intersection Delay, s/veh	13.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵		↵	↑	↵	↵	↵	
Traffic Vol, veh/h	20	186	12	2	336	34	9	12	14	34	8	15
Future Vol, veh/h	20	186	12	2	336	34	9	12	14	34	8	15
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	198	13	2	357	36	10	13	15	36	9	16
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	11	15.2	9.3	9.8
HCM LOS	B	C	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	94%	0%	91%	0%	35%
Vol Right, %	0%	0%	100%	0%	6%	0%	9%	0%	65%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	12	14	20	198	2	370	34	23
LT Vol	9	0	0	20	0	2	0	34	0
Through Vol	0	12	0	0	186	0	336	0	8
RT Vol	0	0	14	0	12	0	34	0	15
Lane Flow Rate	10	13	15	21	211	2	394	36	24
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.019	0.023	0.024	0.037	0.33	0.003	0.579	0.071	0.041
Departure Headway (Hd)	7.112	6.605	5.895	6.187	5.642	5.864	5.298	7.057	6.084
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	506	545	611	573	630	605	673	511	592
Service Time	4.815	4.308	3.598	3.986	3.441	3.648	3.081	4.757	3.784
HCM Lane V/C Ratio	0.02	0.024	0.025	0.037	0.335	0.003	0.585	0.07	0.041
HCM Control Delay	10	9.5	8.7	9.2	11.2	8.7	15.2	10.3	9
HCM Lane LOS	A	A	A	A	B	A	C	B	A
HCM 95th-tile Q	0.1	0.1	0.1	0.1	1.4	0	3.7	0.2	0.1

Project Title: AVCCD FMP EIR
Intersection: 3 - 32nd St/Driveway & Avenue K
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.83	24	1,324	0.000	N-S(1):	0.119 *
	TH	0.17	5	276	0.018	N-S(2):	0.042
	LT	1.00	121	1,600	0.076 *	E-W(1):	0.209
Westbound	RT	0.00	246	0	0.000	E-W(2):	0.298 *
	TH	3.00	438	3,200	0.214 *	V/C:	0.417
	LT	1.00	11	1,600	0.007	Lost Time:	0.100
Northbound	RT	0.70	48	1,113	0.040	ITS:	0.000
	TH	0.30	21	487	0.043 *	ICU:	0.517
	LT	1.00	39	1,600	0.024	LOS:	A
Eastbound	RT	0.00	21	0	0.000		
	TH	3.00	950	4,800	0.202		
	LT	1.00	135	1,600	0.084 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.92	33	1,467	0.002	N-S(1):	0.096 *
	TH	0.08	3	133	0.023	N-S(2):	0.027
	LT	1.00	115	1,600	0.072 *	E-W(1):	0.139
Westbound	RT	0.00	92	0	0.000	E-W(2):	0.196 *
	TH	3.00	649	4,800	0.154 *	V/C:	0.292
	LT	1.00	33	1,600	0.021	Lost Time:	0.100
Northbound	RT	0.90	35	1,436	0.014	ITS:	0.000
	TH	0.10	4	164	0.024 *	ICU:	0.392
	LT	1.00	6	1,600	0.004	LOS:	A
Eastbound	RT	0.00	7	0	0.000		
	TH	3.00	557	4,800	0.118		
	LT	1.00	67	1,600	0.042 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 4 - 30th Street & Avenue J
Description: Existing with Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	104	1,600	0.032	N-S(1):	0.123
	TH	2.00	444	3,200	0.139 *	N-S(2):	0.240 *
	LT	1.00	54	1,600	0.034	E-W(1):	0.358 *
Westbound	RT	1.00	33	1,600	0.004	E-W(2):	0.219
	TH	2.00	488	3,200	0.153	V/C:	0.598
	LT	1.00	224	1,600	0.140 *	Lost Time:	0.100
Northbound	RT	1.00	137	1,600	0.016	ITS:	0.000
	TH	2.00	286	3,200	0.089	ICU:	0.698
	LT	1.00	161	1,600	0.101 *	LOS:	B
Eastbound	RT	0.00	211	0	0.000		
	TH	3.00	833	4,800	0.218 *		
	LT	1.00	106	1,600	0.066		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	134	1,600	0.057	N-S(1):	0.095
	TH	2.00	282	3,200	0.088 *	N-S(2):	0.132 *
	LT	1.00	15	1,600	0.009	E-W(1):	0.259 *
Westbound	RT	1.00	36	1,600	0.018	E-W(2):	0.232
	TH	2.00	568	3,200	0.178	V/C:	0.391
	LT	1.00	250	1,600	0.156 *	Lost Time:	0.100
Northbound	RT	1.00	181	1,600	0.035	ITS:	0.000
	TH	2.00	275	3,200	0.086	ICU:	0.491
	LT	1.00	71	1,600	0.044 *	LOS:	A
Eastbound	RT	0.00	59	0	0.000		
	TH	3.00	433	4,800	0.103 *		
	LT	1.00	86	1,600	0.054		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 5 - 30th Street & Avenue J-8
Description: Existing with Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	129	1,600	0.060	N-S(1):	0.222
	TH	2.00	720	3,200	0.225 *	N-S(2):	0.288 *
	LT	1.00	138	1,600	0.086	E-W(1):	0.286 *
Westbound	RT	0.00	49	0	0.000	E-W(2):	0.180
	TH	2.00	396	3,200	0.139	V/C:	0.574
	LT	1.00	177	1,600	0.111 *	Lost Time:	0.100
Northbound	RT	1.00	128	1,600	0.025	ITS:	0.000
	TH	2.00	434	3,200	0.136	ICU:	0.674
	LT	1.00	100	1,600	0.063 *	LOS:	B
Eastbound	RT	0.00	100	0	0.000		
	TH	2.00	461	3,200	0.175 *		
	LT	1.00	65	1,600	0.041		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	54	1,600	0.012	N-S(1):	0.175
	TH	2.00	531	3,200	0.166 *	N-S(2):	0.227 *
	LT	1.00	50	1,600	0.031	E-W(1):	0.216 *
Westbound	RT	0.00	68	0	0.000	E-W(2):	0.199
	TH	2.00	430	3,200	0.156	V/C:	0.443
	LT	1.00	181	1,600	0.113 *	Lost Time:	0.100
Northbound	RT	1.00	122	1,600	0.020	ITS:	0.000
	TH	2.00	461	3,200	0.144	ICU:	0.543
	LT	1.00	98	1,600	0.061 *	LOS:	A
Eastbound	RT	0.00	83	0	0.000		
	TH	2.00	245	3,200	0.103 *		
	LT	1.00	69	1,600	0.043		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 6 - 30th Street & Ave J-12/New Driveway
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	208	0	0.000	N-S(1): 0.170
	TH	3.00	662	4,800	0.181 *	N-S(2): 0.302 *
	LT	1.00	17	1,600	0.011	E-W(1): 0.007
Westbound	RT	1.00	15	1,600	0.004 *	E-W(2): 0.022 *
	TH	0.00	0	0	0.000	V/C: 0.324
	LT	1.00	11	1,600	0.007	Lost Time: 0.100
Northbound	RT	0.00	15	0	0.000	ITS: 0.000
	TH	3.00	750	4,800	0.159	ICU: 0.424
	LT	1.00	194	1,600	0.121 *	LOS: A
Eastbound	RT	1.00	64	1,600	0.000	
	TH	0.00	0	0	0.000	
	LT	1.00	29	1,600	0.018 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	117	0	0.000	N-S(1): 0.145
	TH	3.00	635	4,800	0.157 *	N-S(2): 0.241 *
	LT	1.00	21	1,600	0.013	E-W(1): 0.067 *
Westbound	RT	1.00	14	1,600	0.002	E-W(2): 0.043
	TH	0.00	0	0	0.000	V/C: 0.308
	LT	1.00	5	1,600	0.003 *	Lost Time: 0.100
Northbound	RT	0.00	19	0	0.000	ITS: 0.000
	TH	3.00	615	4,800	0.132	ICU: 0.408
	LT	1.00	134	1,600	0.084 *	LOS: A
Eastbound	RT	1.00	169	1,600	0.064 *	
	TH	0.00	0	0	0.000	
	LT	1.00	66	1,600	0.041	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 7 - 30th Street & Avenue K
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	171	1,600	0.079	N-S(1): 0.273 * N-S(2): 0.224 E-W(1): 0.213 E-W(2): 0.318 *
	TH	2.00	411	3,200	0.128	
	LT	2.00	172	2,880	0.060 *	
Westbound	RT	0.00	325	0	0.000	V/C: 0.591 Lost Time: 0.100 ITS: 0.000
	TH	3.00	513	3,200	0.262 *	
	LT	2.00	57	2,880	0.020	
Northbound	RT	1.00	154	1,600	0.086	ICU: 0.691
	TH	2.00	681	3,200	0.213 *	
	LT	2.00	277	2,880	0.096	
Eastbound	RT	0.00	178	0	0.000	LOS: B
	TH	3.00	747	4,800	0.193	
	LT	2.00	160	2,880	0.056 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	132	1,600	0.062	N-S(1): 0.232 * N-S(2): 0.211 E-W(1): 0.179 E-W(2): 0.196 *
	TH	2.00	506	3,200	0.158	
	LT	2.00	255	2,880	0.089 *	
Westbound	RT	0.00	214	0	0.000	V/C: 0.428 Lost Time: 0.100 ITS: 0.000
	TH	3.00	535	4,800	0.156 *	
	LT	2.00	107	2,880	0.037	
Northbound	RT	1.00	124	1,600	0.059	ICU: 0.528
	TH	2.00	458	3,200	0.143 *	
	LT	2.00	154	2,880	0.053	
Eastbound	RT	0.00	164	0	0.000	LOS: A
	TH	3.00	516	4,800	0.142	
	LT	2.00	116	2,880	0.040 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 8 - 30th Street & Avenue K-8
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	50	1,600	0.003	N-S(1): 0.319 * N-S(2): 0.173 E-W(1): 0.157 * E-W(2): 0.148
	TH	2.00	517	3,200	0.162	
	LT	1.00	100	1,600	0.063 *	
Westbound	RT	0.00	144	1,600	0.090	V/C: 0.476 Lost Time: 0.100 ITS: 0.000
	TH	2.00	85	1,600	0.053	
	LT	1.00	83	1,600	0.052 *	
Northbound	RT	1.00	79	1,600	0.023	ICU: 0.576
	TH	2.00	819	3,200	0.256 *	
	LT	1.00	18	1,600	0.011	
Eastbound	RT	1.00	33	1,600	0.015	LOS: A
	TH	1.00	168	1,600	0.105 *	
	LT	1.00	92	1,600	0.058	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	77	1,600	0.029	N-S(1): 0.229 * N-S(2): 0.226 E-W(1): 0.123 E-W(2): 0.125 *
	TH	2.00	619	3,200	0.193	
	LT	1.00	69	1,600	0.043 *	
Westbound	RT	0.00	98	0	0.000	V/C: 0.354 Lost Time: 0.100 ITS: 0.000
	TH	2.00	176	3,200	0.086 *	
	LT	1.00	112	1,600	0.070	
Northbound	RT	1.00	115	1,600	0.037	ICU: 0.454
	TH	2.00	594	3,200	0.186 *	
	LT	1.00	53	1,600	0.033	
Eastbound	RT	1.00	46	1,600	0.012	LOS: A
	TH	1.00	84	1,600	0.053	
	LT	1.00	62	1,600	0.039 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 9 - 25th Street & Avenue J
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	139	1,600	0.027	N-S(1):	0.103
	TH	1.00	124	1,600	0.078 *	N-S(2):	0.107 *
	LT	1.00	20	1,600	0.013	E-W(1):	0.263
Westbound	RT	1.00	21	1,600	0.007	E-W(2):	0.266 *
	TH	3.00	702	4,800	0.146 *	V/C:	0.373
	LT	1.00	82	1,600	0.051	Lost Time:	0.100
Northbound	RT	1.00	108	1,600	0.042	ITS:	0.000
	TH	1.00	144	1,600	0.090	ICU:	0.473
	LT	1.00	46	1,600	0.029 *	LOS:	A
Eastbound	RT	0.00	118	0	0.000		
	TH	3.00	899	4,800	0.212		
	LT	1.00	192	1,600	0.120 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	80	1,600	0.001	N-S(1):	0.144 *
	TH	1.00	140	1,600	0.088	N-S(2):	0.104
	LT	1.00	32	1,600	0.020 *	E-W(1):	0.224
Westbound	RT	1.00	59	1,600	0.027	E-W(2):	0.262 *
	TH	3.00	788	4,800	0.164 *	V/C:	0.406
	LT	1.00	174	1,600	0.109	Lost Time:	0.100
Northbound	RT	1.00	98	1,600	0.007	ITS:	0.000
	TH	1.00	199	1,600	0.124 *	ICU:	0.506
	LT	1.00	26	1,600	0.016	LOS:	A
Eastbound	RT	0.00	48	0	0.000		
	TH	3.00	502	4,800	0.115		
	LT	1.00	157	1,600	0.098 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 10 - 25th Street & Avenue J-8
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	18	0	0.000	N-S(1): 0.219 *
	TH	2.00	166	3,200	0.058	N-S(2): 0.106
	LT	1.00	225	1,600	0.141 *	E-W(1): 0.260 *
Westbound	RT	0.00	75	0	0.000	E-W(2): 0.231
	TH	2.00	597	3,200	0.210	V/C: 0.479
	LT	1.00	20	1,600	0.013 *	Lost Time: 0.100
Northbound	RT	0.00	96	0	0.000	ITS: 0.000
	TH	2.00	152	3,200	0.078 *	ICU: 0.579
	LT	1.00	76	1,600	0.048	LOS: A
Eastbound	RT	0.00	53	0	0.000	
	TH	2.00	738	3,200	0.247 *	
	LT	1.00	33	1,600	0.021	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	26	0	0.000	N-S(1): 0.158 *
	TH	2.00	214	3,200	0.075	N-S(2): 0.091
	LT	1.00	144	1,600	0.090 *	E-W(1): 0.156
Westbound	RT	0.00	155	0	0.000	E-W(2): 0.279 *
	TH	2.00	687	3,200	0.263 *	V/C: 0.437
	LT	1.00	46	1,600	0.029	Lost Time: 0.100
Northbound	RT	0.00	36	0	0.000	ITS: 0.000
	TH	2.00	182	3,200	0.068 *	ICU: 0.537
	LT	1.00	25	1,600	0.016	LOS: A
Eastbound	RT	0.00	20	0	0.000	
	TH	2.00	386	3,200	0.127	
	LT	1.00	25	1,600	0.016 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 11 - 25th Street & Avenue K
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	46	1,600	0.011	N-S(1): 0.125 * N-S(2): 0.082 E-W(1): 0.332 * E-W(2): 0.299
	TH	1.00	107	1,600	0.067	
	LT	1.00	100	1,600	0.063 *	
Westbound	RT	1.00	43	1,600	0.000	V/C: 0.457 Lost Time: 0.100 ITS: 0.000
	TH	2.00	840	3,200	0.263	
	LT	1.00	27	1,600	0.017 *	
Northbound	RT	0.00	67	0	0.000	ICU: 0.557
	TH	2.00	131	3,200	0.062 *	
	LT	1.00	24	1,600	0.015	
Eastbound	RT	1.00	30	1,600	0.011	LOS: A
	TH	2.00	1,008	3,200	0.315 *	
	LT	1.00	57	1,600	0.036	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	53	1,600	0.019	N-S(1): 0.094 N-S(2): 0.103 * E-W(1): 0.288 E-W(2): 0.289 *
	TH	1.00	134	1,600	0.084 *	
	LT	1.00	74	1,600	0.046	
Westbound	RT	1.00	70	1,600	0.021	V/C: 0.392 Lost Time: 0.100 ITS: 0.000
	TH	2.00	834	3,200	0.261 *	
	LT	1.00	40	1,600	0.025	
Northbound	RT	0.00	42	0	0.000	ICU: 0.492
	TH	2.00	111	3,200	0.048	
	LT	1.00	31	1,600	0.019 *	
Eastbound	RT	1.00	24	1,600	0.005	LOS: A
	TH	2.00	842	3,200	0.263	
	LT	1.00	45	1,600	0.028 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 12 - SR-14 SB Off Ramp & Avenue J
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	152	1,600	0.095	N-S(1):	0.108 *
	TH	0.00	0	0	0.000	N-S(2):	0.095
	LT	1.00	172	1,600	0.108 *	E-W(1):	0.224 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.156
	TH	3.00	751	4,800	0.156	V/C:	0.332
	LT	0.00	0	0	0.000 *	Lost Time:	0.100
Northbound	RT	0.00	0	0	0.000	ITS:	0.000
	TH	0.00	0	0	0.000 *	ICU:	0.432
	LT	0.00	0	0	0.000	LOS:	A
Eastbound	RT	0.00	0	0	0.000		
	TH	3.00	1,075	4,800	0.224 *		
	LT	0.00	0	0	0.000		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	258	1,600	0.161 *	N-S(1):	0.094
	TH	0.00	0	0	0.000	N-S(2):	0.161 *
	LT	1.00	151	1,600	0.094	E-W(1):	0.189
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.228 *
	TH	3.00	1,092	4,800	0.228 *	V/C:	0.389
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	0.00	0	0	0.000	ITS:	0.000
	TH	0.00	0	0	0.000	ICU:	0.489
	LT	0.00	0	0	0.000 *	LOS:	A
Eastbound	RT	0.00	0	0	0.000		
	TH	3.00	906	4,800	0.189		
	LT	0.00	0	0	0.000 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 13 - 20th Street & SR-14 NB Off Ramp
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.080
	TH	3.00	471	4,800	0.098 *	N-S(2): 0.098 *
	LT	0.00	0	0	0.000	E-W(1): 0.172
Westbound	RT	1.00	578	1,600	0.361 *	E-W(2): 0.361 *
	TH	0.00	0	0	0.000	V/C: 0.459
	LT	1.00	275	1,600	0.172	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	3.00	382	4,800	0.080	ICU: 0.559
	LT	0.00	0	0	0.000 *	LOS: A
Eastbound	RT	0.00	0	0	0.000	
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.098
	TH	3.00	875	4,800	0.182 *	N-S(2): 0.182 *
	LT	0.00	0	0	0.000	E-W(1): 0.261
Westbound	RT	1.00	487	1,600	0.304 *	E-W(2): 0.304 *
	TH	0.00	0	0	0.000	V/C: 0.486
	LT	1.00	417	1,600	0.261	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	3.00	469	4,800	0.098	ICU: 0.586
	LT	0.00	0	0	0.000 *	LOS: A
Eastbound	RT	0.00	0	0	0.000	
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 14 - 20th Street & Avenue J-8
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	418	3,200	0.101 *	N-S(1): 0.130
	TH	2.00	245	3,200	0.077	N-S(2): 0.140 *
	LT	1.00	71	1,600	0.044	E-W(1): 0.238 *
Westbound	RT	0.00	29	0	0.000	E-W(2): 0.211
	TH	2.00	455	3,200	0.151	V/C: 0.378
	LT	1.00	102	1,600	0.064 *	Lost Time: 0.100
Northbound	RT	1.00	145	1,600	0.059	ITS: 0.000
	TH	2.00	276	3,200	0.086	ICU: 0.478
	LT	1.00	62	1,600	0.039 *	LOS: A
Eastbound	RT	0.00	78	0	0.000	
	TH	2.00	480	3,200	0.174 *	
	LT	1.00	96	1,600	0.060	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	750	3,200	0.212 *	N-S(1): 0.164
	TH	2.00	419	3,200	0.131	N-S(2): 0.287 *
	LT	1.00	80	1,600	0.050	E-W(1): 0.186
Westbound	RT	0.00	52	0	0.000	E-W(2): 0.263 *
	TH	2.00	645	3,200	0.218 *	V/C: 0.550
	LT	1.00	144	1,600	0.090	Lost Time: 0.100
Northbound	RT	1.00	116	1,600	0.028	ITS: 0.000
	TH	2.00	365	3,200	0.114	ICU: 0.650
	LT	1.00	120	1,600	0.075 *	LOS: B
Eastbound	RT	0.00	63	0	0.000	
	TH	2.00	245	3,200	0.096	
	LT	1.00	72	1,600	0.045 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 15 - 20th Street & Avenue K
Description: Existing with Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	87	1,600	0.001	N-S(1):	0.135 *
	TH	2.00	168	3,200	0.053	N-S(2):	0.080
	LT	2.00	97	2,880	0.034 *	E-W(1):	0.243
Westbound	RT	0.00	47	0	0.000	E-W(2):	0.273 *
	TH	3.00	751	4,800	0.166 *	V/C:	0.408
	LT	1.00	78	1,600	0.049	Lost Time:	0.100
Northbound	RT	0.00	80	0	0.000	ITS:	0.000
	TH	2.00	244	3,200	0.101 *	ICU:	0.508
	LT	2.00	78	2,880	0.027	LOS:	A
Eastbound	RT	1.00	80	1,600	0.036		
	TH	3.00	931	4,800	0.194		
	LT	1.00	171	1,600	0.107 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	112	1,600	0.020	N-S(1):	0.160 *
	TH	2.00	289	3,200	0.090	N-S(2):	0.126
	LT	2.00	163	2,880	0.057 *	E-W(1):	0.266
Westbound	RT	0.00	102	0	0.000	E-W(2):	0.292 *
	TH	3.00	814	4,800	0.191 *	V/C:	0.452
	LT	1.00	155	1,600	0.097	Lost Time:	0.100
Northbound	RT	0.00	94	0	0.000	ITS:	0.000
	TH	2.00	234	3,200	0.103 *	ICU:	0.552
	LT	2.00	105	2,880	0.036	LOS:	A
Eastbound	RT	1.00	64	1,600	0.022		
	TH	3.00	811	4,800	0.169		
	LT	1.00	161	1,600	0.101 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 16 - 17th Street & Avenue K
Description: Existing with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	31	1,600	0.004	N-S(1): 0.162 * N-S(2): 0.047 E-W(1): 0.259 * E-W(2): 0.219
	TH	1.00	28	1,600	0.018	
	LT	1.00	151	1,600	0.094 *	
Westbound	RT	0.00	72	0	0.000	V/C: 0.421 Lost Time: 0.100 ITS: 0.000
	TH	3.00	831	4,800	0.188	
	LT	1.00	75	1,600	0.047 *	
Northbound	RT	1.00	147	1,600	0.068 *	ICU: 0.521
	TH	1.00	47	1,600	0.029	
	LT	1.00	46	1,600	0.029	
Eastbound	RT	0.00	59	0	0.000	LOS: A
	TH	3.00	957	4,800	0.212 *	
	LT	1.00	50	1,600	0.031	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	38	1,600	0.008	N-S(1): 0.148 * N-S(2): 0.056 E-W(1): 0.317 * E-W(2): 0.272
	TH	1.00	43	1,600	0.027	
	LT	1.00	178	1,600	0.111 *	
Westbound	RT	0.00	138	0	0.000	V/C: 0.465 Lost Time: 0.100 ITS: 0.000
	TH	3.00	1,018	4,800	0.241	
	LT	1.00	153	1,600	0.096 *	
Northbound	RT	1.00	132	1,600	0.035	ICU: 0.565
	TH	1.00	59	1,600	0.037 *	
	LT	1.00	46	1,600	0.029	
Eastbound	RT	0.00	63	0	0.000	LOS: A
	TH	3.00	1,000	4,800	0.221 *	
	LT	1.00	50	1,600	0.031	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 17 - SR-14 SB Ramps & Avenue K
Description: Existing with Project

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	10 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:	EBR,		

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.87	161	1,389	0.115	N-S(1): 0.129 *
	TH	0.00	0	0	0.000	N-S(2): 0.115
	LT	1.13	210	1,630	0.129 *	E-W(1): 0.266 *
Westbound	RT	0.00	279	0	0.000	E-W(2): 0.237
	TH	3.00	850	4,800	0.235	V/C: 0.395
	LT	0.00	0	0	0.000 *	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	0.00	0	0	0.000 *	
	LT	0.00	0	0	0.000	
Eastbound	RT	0.00	338	0	0.000	ICU: 0.495
	TH	3.00	935	4,800	0.266 *	
	LT	0.00	3	1,600	0.002	LOS: A

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.99	217	1,589	0.134	N-S(1): 0.152 *
	TH	0.00	0	0	0.000	N-S(2): 0.134
	LT	1.01	220	1,450	0.152 *	E-W(1): 0.275
Westbound	RT	0.00	529	0	0.000	E-W(2): 0.356 *
	TH	3.00	1,160	4,800	0.352 *	V/C: 0.508
	LT	0.00	0	0	0.000	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	0.00	0	0	0.000 *	
	LT	0.00	0	0	0.000	
Eastbound	RT	0.00	402	0	0.000	ICU: 0.608
	TH	3.00	912	4,800	0.275	
	LT	0.00	7	1,600	0.004 *	LOS: B

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 18 - 15th St/SR-14 NB Ramps & Ave K
Description: Existing with Project

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	10 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	207	1,600	0.092	N-S(1): 0.350 *
	TH	0.07	7	112	0.062	N-S(2): 0.283
	LT	1.93	193	2,779	0.069 *	E-W(1): 0.188
Westbound	RT	1.00	180	1,600	0.113	E-W(2): 0.228 *
	TH	3.00	733	4,800	0.153 *	V/C: 0.578
	LT	0.00	0	0	0.000	Lost Time: 0.100
Northbound	RT	1.00	355	1,600	0.222	ITS: 0.000
	TH	1.00	449	1,600	0.281 *	ICU: 0.678
	LT	1.00	306	1,600	0.191	LOS: B
Eastbound	RT	0.00	102	0	0.000	
	TH	3.00	800	4,800	0.188	
	LT	2.00	217	2,880	0.075 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	462	1,600	0.263 *	N-S(1): 0.371
	TH	0.12	22	192	0.114	N-S(2): 0.490 *
	LT	1.88	344	2,707	0.127	E-W(1): 0.207
Westbound	RT	1.00	210	1,600	0.131	E-W(2): 0.264 *
	TH	3.00	1,018	4,800	0.212 *	V/C: 0.754
	LT	0.00	0	0	0.000	Lost Time: 0.100
Northbound	RT	1.00	386	1,600	0.241	ITS: 0.000
	TH	1.00	391	1,600	0.244	ICU: 0.854
	LT	1.00	363	1,600	0.227 *	LOS: D
Eastbound	RT	0.00	113	0	0.000	
	TH	3.00	882	4,800	0.207	
	LT	2.00	149	2,880	0.052 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 1 - 40th Street & Avenue K
Description: Future with Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.14	32	231	0.128	N-S(1):	0.150
	TH	0.86	190	1,369	0.139 *	N-S(2):	0.203 *
	LT	1.00	115	1,600	0.072	E-W(1):	0.307 *
Westbound	RT	1.00	49	1,600	0.000	E-W(2):	0.215
	TH	1.00	311	1,600	0.194	V/C:	0.510
	LT	1.00	46	1,600	0.029 *	Lost Time:	0.100
Northbound	RT	1.00	147	1,600	0.078	ITS:	0.000
	TH	2.00	193	3,200	0.060	ICU:	0.610
	LT	1.00	103	1,600	0.064 *	LOS:	B
Eastbound	RT	0.00	103	0	0.000		
	TH	2.00	787	3,200	0.278 *		
	LT	1.00	34	1,600	0.021		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.19	50	307	0.154	N-S(1):	0.096
	TH	0.81	211	1,293	0.163 *	N-S(2):	0.206 *
	LT	1.00	54	1,600	0.034	E-W(1):	0.198
Westbound	RT	1.00	61	1,600	0.021	E-W(2):	0.304 *
	TH	1.00	458	1,600	0.286 *	V/C:	0.510
	LT	1.00	100	1,600	0.063	Lost Time:	0.100
Northbound	RT	1.00	83	1,600	0.021	ITS:	0.000
	TH	2.00	199	3,200	0.062	ICU:	0.610
	LT	1.00	69	1,600	0.043 *	LOS:	B
Eastbound	RT	0.00	47	0	0.000		
	TH	2.00	385	3,200	0.135		
	LT	1.00	28	1,600	0.018 *		

* - Denotes critical movement

Intersection	
Intersection Delay, s/veh	75.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↶		↵	↶		↵	↑	↶	↵	↶	
Traffic Vol, veh/h	19	416	34	14	274	107	29	20	7	292	43	68
Future Vol, veh/h	19	416	34	14	274	107	29	20	7	292	43	68
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	22	473	39	16	311	122	33	23	8	332	49	77
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	125.1	65.6	14.5	35.3
HCM LOS	F	F	B	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	92%	0%	72%	0%	39%
Vol Right, %	0%	0%	100%	0%	8%	0%	28%	0%	61%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	20	7	19	450	14	381	292	111
LT Vol	29	0	0	19	0	14	0	292	0
Through Vol	0	20	0	0	416	0	274	0	43
RT Vol	0	0	7	0	34	0	107	0	68
Lane Flow Rate	33	23	8	22	511	16	433	332	126
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.096	0.063	0.021	0.053	1.181	0.039	0.977	0.82	0.279
Departure Headway (Hd)	11.199	10.671	9.932	8.88	8.313	9.269	8.551	9.441	8.474
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	322	338	363	404	440	389	429	385	426
Service Time	8.899	8.371	7.632	6.63	6.063	6.969	6.251	7.141	6.174
HCM Lane V/C Ratio	0.102	0.068	0.022	0.054	1.161	0.041	1.009	0.862	0.296
HCM Control Delay	15.1	14.1	12.8	12.1	129.9	12.3	67.6	43.2	14.4
HCM Lane LOS	C	B	B	B	F	B	F	E	B
HCM 95th-tile Q	0.3	0.2	0.1	0.2	19.5	0.1	11.8	7.4	1.1

Intersection	
Intersection Delay, s/veh	59.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵		↵	↑	↵	↵	↵	
Traffic Vol, veh/h	24	264	21	6	495	107	18	16	18	120	12	19
Future Vol, veh/h	24	264	21	6	495	107	18	16	18	120	12	19
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	281	22	6	527	114	19	17	19	128	13	20
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	18.7	96.3	11.5	14
HCM LOS	C	F	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	93%	0%	82%	0%	39%
Vol Right, %	0%	0%	100%	0%	7%	0%	18%	0%	61%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	16	18	24	285	6	602	120	31
LT Vol	18	0	0	24	0	6	0	120	0
Through Vol	0	16	0	0	264	0	495	0	12
RT Vol	0	0	18	0	21	0	107	0	19
Lane Flow Rate	19	17	19	26	303	6	640	128	33
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.046	0.038	0.039	0.053	0.582	0.012	1.116	0.29	0.067
Departure Headway (Hd)	9.04	8.523	7.8	7.736	7.175	6.904	6.274	8.613	7.654
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	398	423	462	466	506	518	583	420	471
Service Time	6.74	6.223	5.5	5.436	4.875	4.647	4.016	6.313	5.354
HCM Lane V/C Ratio	0.048	0.04	0.041	0.056	0.599	0.012	1.098	0.305	0.07
HCM Control Delay	12.2	11.6	10.8	10.9	19.4	9.7	97.2	14.8	10.9
HCM Lane LOS	B	B	B	B	C	A	F	B	B
HCM 95th-tile Q	0.1	0.1	0.1	0.2	3.7	0	20.1	1.2	0.2

Project Title: AVCCD FMP EIR
Intersection: 3 - 32nd St/Driveway & Avenue K
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.76	28	1,211	0.000	N-S(1):	0.174 *
	TH	0.24	9	389	0.023	N-S(2):	0.050
	LT	1.00	125	1,600	0.078 *	E-W(1):	0.251
Westbound	RT	0.00	250	0	0.000	E-W(2):	0.303 *
	TH	3.00	442	3,200	0.216 *	V/C:	0.477
	LT	1.00	58	1,600	0.036	Lost Time:	0.100
Northbound	RT	0.84	129	1,340	0.078	ITS:	0.000
	TH	0.16	25	260	0.096 *	ICU:	0.577
	LT	1.00	43	1,600	0.027	LOS:	A
Eastbound	RT	0.00	25	0	0.000		
	TH	3.00	1,006	4,800	0.215		
	LT	1.00	139	1,600	0.087 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.84	37	1,345	0.005	N-S(1):	0.160 *
	TH	0.16	7	255	0.028	N-S(2):	0.034
	LT	1.00	119	1,600	0.074 *	E-W(1):	0.212 *
Westbound	RT	0.00	96	0	0.000	E-W(2):	0.206
	TH	3.00	683	4,800	0.162	V/C:	0.372
	LT	1.00	149	1,600	0.093 *	Lost Time:	0.100
Northbound	RT	0.94	129	1,507	0.039	ITS:	0.000
	TH	0.06	8	93	0.086 *	ICU:	0.472
	LT	1.00	10	1,600	0.006	LOS:	A
Eastbound	RT	0.00	11	0	0.000		
	TH	3.00	561	4,800	0.119 *		
	LT	1.00	71	1,600	0.044		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 4 - 30th Street & Avenue J
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	116	0	0.000	N-S(1):	0.131
	TH	3.00	484	4,800	0.125 *	N-S(2):	0.226 *
	LT	1.00	54	1,600	0.034	E-W(1):	0.381 *
Westbound	RT	1.00	36	1,600	0.006	E-W(2):	0.254
	TH	2.00	499	3,200	0.156	V/C:	0.607
	LT	1.00	231	1,600	0.144 *	Lost Time:	0.100
Northbound	RT	0.00	145	0	0.000	ITS:	0.000
	TH	3.00	320	4,800	0.097	ICU:	0.707
	LT	1.00	162	1,600	0.101 *	LOS:	C
Eastbound	RT	0.00	212	0	0.000		
	TH	3.00	925	4,800	0.237 *		
	LT	1.00	157	1,600	0.098		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	216	0	0.000	N-S(1):	0.181
	TH	3.00	305	3,200	0.163 *	N-S(2):	0.209 *
	LT	1.00	18	1,600	0.011	E-W(1):	0.275 *
Westbound	RT	1.00	42	1,600	0.021	E-W(2):	0.254
	TH	2.00	585	3,200	0.183	V/C:	0.484
	LT	1.00	257	1,600	0.161 *	Lost Time:	0.100
Northbound	RT	0.00	187	0	0.000	ITS:	0.000
	TH	3.00	356	3,200	0.170	ICU:	0.584
	LT	1.00	74	1,600	0.046 *	LOS:	A
Eastbound	RT	0.00	59	0	0.000		
	TH	3.00	487	4,800	0.114 *		
	LT	1.00	114	1,600	0.071		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 5 - 30th Street & Avenue J-8
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	133	1,600	0.062	N-S(1):	0.231
	TH	2.00	750	3,200	0.234 *	N-S(2):	0.315 *
	LT	1.00	142	1,600	0.089	E-W(1):	0.347 *
Westbound	RT	0.00	53	0	0.000	E-W(2):	0.201
	TH	2.00	452	3,200	0.158	V/C:	0.662
	LT	1.00	177	1,600	0.111 *	Lost Time:	0.100
Northbound	RT	1.00	141	1,600	0.033	ITS:	0.000
	TH	2.00	455	3,200	0.142	ICU:	0.762
	LT	1.00	130	1,600	0.081 *	LOS:	C
Eastbound	RT	0.00	113	0	0.000		
	TH	2.00	641	3,200	0.236 *		
	LT	1.00	69	1,600	0.043		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	63	1,600	0.017	N-S(1):	0.193
	TH	2.00	552	3,200	0.173 *	N-S(2):	0.256 *
	LT	1.00	54	1,600	0.034	E-W(1):	0.272 *
Westbound	RT	0.00	81	0	0.000	E-W(2):	0.263
	TH	2.00	614	3,200	0.217	V/C:	0.528
	LT	1.00	190	1,600	0.119 *	Lost Time:	0.100
Northbound	RT	1.00	135	1,600	0.025	ITS:	0.000
	TH	2.00	508	3,200	0.159	ICU:	0.628
	LT	1.00	132	1,600	0.083 *	LOS:	B
Eastbound	RT	0.00	130	0	0.000		
	TH	2.00	361	3,200	0.153 *		
	LT	1.00	73	1,600	0.046		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 6 - 30th Street & Ave J-12/New Driveway
Description: Future with Project

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	10 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	119	0	0.000	N-S(1): 0.183
	TH	3.00	696	4,800	0.170 *	N-S(2): 0.291 *
	LT	1.00	21	1,600	0.013	E-W(1): 0.009
Westbound	RT	1.00	19	1,600	0.005 *	E-W(2): 0.023 *
	TH	0.00	0	0	0.000	V/C: 0.314
	LT	1.00	15	1,600	0.009	Lost Time: 0.100
Northbound	RT	0.00	19	0	0.000	ITS: 0.000
	TH	3.00	797	4,800	0.170	
	LT	1.00	193	1,600	0.121 *	
Eastbound	RT	1.00	45	1,600	0.000	ICU: 0.414
	TH	0.00	0	0	0.000	
	LT	1.00	28	1,600	0.018 *	LOS: A

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	83	0	0.000	N-S(1): 0.163
	TH	3.00	682	4,800	0.159 *	N-S(2): 0.243 *
	LT	1.00	25	1,600	0.016	E-W(1): 0.029
Westbound	RT	1.00	18	1,600	0.003 *	E-W(2): 0.044 *
	TH	0.00	0	0	0.000	V/C: 0.287
	LT	1.00	9	1,600	0.006	Lost Time: 0.100
Northbound	RT	0.00	23	0	0.000	ITS: 0.000
	TH	3.00	684	4,800	0.147	
	LT	1.00	134	1,600	0.084 *	
Eastbound	RT	1.00	103	1,600	0.023	ICU: 0.387
	TH	0.00	0	0	0.000	
	LT	1.00	65	1,600	0.041 *	LOS: A

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 7 - 30th Street & Avenue K
Description: Future with Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	177	1,600	0.081	N-S(1):	0.284 *
	TH	2.00	444	3,200	0.139	N-S(2):	0.237
	LT	2.00	175	2,880	0.061 *	E-W(1):	0.228
Westbound	RT	0.00	352	0	0.000	E-W(2):	0.331 *
	TH	3.00	519	3,200	0.272 *	V/C:	0.615
	LT	2.00	58	2,880	0.020	Lost Time:	0.100
Northbound	RT	1.00	159	1,600	0.089	ITS:	0.000
	TH	2.00	713	3,200	0.223 *	ICU:	0.715
	LT	2.00	281	2,880	0.098	LOS:	C
Eastbound	RT	0.00	193	0	0.000		
	TH	3.00	805	4,800	0.208		
	LT	2.00	170	2,880	0.059 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	136	1,600	0.064	N-S(1):	0.270 *
	TH	2.00	557	3,200	0.174	N-S(2):	0.230
	LT	2.00	288	2,880	0.100 *	E-W(1):	0.187
Westbound	RT	0.00	217	0	0.000	E-W(2):	0.212 *
	TH	3.00	604	4,800	0.171 *	V/C:	0.482
	LT	2.00	115	2,880	0.040	Lost Time:	0.100
Northbound	RT	1.00	126	1,600	0.059	ITS:	0.000
	TH	2.00	543	3,200	0.170 *	ICU:	0.582
	LT	2.00	162	2,880	0.056	LOS:	A
Eastbound	RT	0.00	173	0	0.000		
	TH	3.00	532	4,800	0.147		
	LT	2.00	119	2,880	0.041 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 8 - 30th Street & Avenue K-8
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	54	1,600	0.004	N-S(1): 0.328 * N-S(2): 0.189 E-W(1): 0.175 * E-W(2): 0.158
	TH	2.00	551	3,200	0.172	
	LT	1.00	113	1,600	0.071 *	
Westbound	RT	0.00	157	1,600	0.098	V/C: 0.503 Lost Time: 0.100 ITS: 0.000
	TH	2.00	89	1,600	0.056	
	LT	1.00	87	1,600	0.054 *	
Northbound	RT	1.00	88	1,600	0.028	ICU: 0.603
	TH	2.00	823	3,200	0.257 *	
	LT	1.00	27	1,600	0.017	
Eastbound	RT	1.00	37	1,600	0.015	LOS: B
	TH	1.00	194	1,600	0.121 *	
	LT	1.00	96	1,600	0.060	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	81	1,600	0.030	N-S(1): 0.259 * N-S(2): 0.231 E-W(1): 0.133 E-W(2): 0.157 *
	TH	2.00	623	3,200	0.195	
	LT	1.00	82	1,600	0.051 *	
Westbound	RT	0.00	132	0	0.000	V/C: 0.416 Lost Time: 0.100 ITS: 0.000
	TH	2.00	240	3,200	0.116 *	
	LT	1.00	125	1,600	0.078	
Northbound	RT	1.00	128	1,600	0.041	ICU: 0.516
	TH	2.00	667	3,200	0.208 *	
	LT	1.00	57	1,600	0.036	
Eastbound	RT	1.00	63	1,600	0.022	LOS: A
	TH	1.00	88	1,600	0.055	
	LT	1.00	66	1,600	0.041 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 9 - 25th Street & Avenue J
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	144	1,600	0.028	N-S(1): 0.108
	TH	1.00	134	1,600	0.084 *	N-S(2): 0.115 *
	LT	1.00	21	1,600	0.013	E-W(1): 0.294
Westbound	RT	1.00	37	1,600	0.017	E-W(2): 0.347 *
	TH	2.00	711	3,200	0.222 *	V/C: 0.462
	LT	1.00	103	1,600	0.064	Lost Time: 0.100
Northbound	RT	1.00	129	1,600	0.048	ITS: 0.000
	TH	1.00	152	1,600	0.095	
	LT	1.00	49	1,600	0.031 *	
Eastbound	RT	0.00	121	0	0.000	ICU: 0.562
	TH	3.00	983	4,800	0.230	
	LT	1.00	200	1,600	0.125 *	LOS: A

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	87	1,600	0.003	N-S(1): 0.154 *
	TH	1.00	160	1,600	0.100	N-S(2): 0.123
	LT	1.00	40	1,600	0.025 *	E-W(1): 0.254
Westbound	RT	1.00	68	1,600	0.030	E-W(2): 0.354 *
	TH	2.00	806	3,200	0.252 *	V/C: 0.508
	LT	1.00	209	1,600	0.131	Lost Time: 0.100
Northbound	RT	1.00	124	1,600	0.012	ITS: 0.000
	TH	1.00	207	1,600	0.129 *	
	LT	1.00	36	1,600	0.023	
Eastbound	RT	0.00	54	0	0.000	ICU: 0.608
	TH	3.00	537	4,800	0.123	
	LT	1.00	163	1,600	0.102 *	LOS: B

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 10 - 25th Street & Avenue J-8
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	20	0	0.000	N-S(1): 0.228 *
	TH	2.00	179	3,200	0.062	N-S(2): 0.111
	LT	1.00	232	1,600	0.145 *	E-W(1): 0.267 *
Westbound	RT	0.00	76	0	0.000	E-W(2): 0.241
	TH	2.00	626	3,200	0.219	V/C: 0.495
	LT	1.00	23	1,600	0.014 *	Lost Time: 0.100
Northbound	RT	0.00	102	0	0.000	ITS: 0.000
	TH	2.00	164	3,200	0.083 *	ICU: 0.595
	LT	1.00	79	1,600	0.049	LOS: A
Eastbound	RT	0.00	57	0	0.000	
	TH	2.00	753	3,200	0.253 *	
	LT	1.00	35	1,600	0.022	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	31	0	0.000	N-S(1): 0.173 *
	TH	2.00	234	3,200	0.083	N-S(2): 0.103
	LT	1.00	161	1,600	0.101 *	E-W(1): 0.161
Westbound	RT	0.00	161	0	0.000	E-W(2): 0.292 *
	TH	2.00	722	3,200	0.276 *	V/C: 0.465
	LT	1.00	49	1,600	0.031	Lost Time: 0.100
Northbound	RT	0.00	36	0	0.000	ITS: 0.000
	TH	2.00	194	3,200	0.072 *	ICU: 0.565
	LT	1.00	32	1,600	0.020	LOS: A
Eastbound	RT	0.00	24	0	0.000	
	TH	2.00	392	3,200	0.130	
	LT	1.00	26	1,600	0.016 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 11 - 25th Street & Avenue K
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	50	1,600	0.012	N-S(1): 0.138 *
	TH	1.00	116	1,600	0.073	N-S(2): 0.091
	LT	1.00	104	1,600	0.065 *	E-W(1): 0.347 *
Westbound	RT	1.00	47	1,600	0.000	E-W(2): 0.309
	TH	2.00	866	3,200	0.271	V/C: 0.485
	LT	1.00	36	1,600	0.023 *	Lost Time: 0.100
Northbound	RT	0.00	93	0	0.000	ITS: 0.000
	TH	2.00	140	3,200	0.073 *	ICU: 0.585
	LT	1.00	28	1,600	0.018	LOS: A
Eastbound	RT	1.00	34	1,600	0.013	
	TH	2.00	1,038	3,200	0.324 *	
	LT	1.00	61	1,600	0.038	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	57	1,600	0.020	N-S(1): 0.104
	TH	1.00	155	1,600	0.097 *	N-S(2): 0.119 *
	LT	1.00	78	1,600	0.049	E-W(1): 0.317 *
Westbound	RT	1.00	74	1,600	0.022	E-W(2): 0.301
	TH	2.00	864	3,200	0.270	V/C: 0.436
	LT	1.00	57	1,600	0.036 *	Lost Time: 0.100
Northbound	RT	0.00	55	0	0.000	ITS: 0.000
	TH	2.00	120	3,200	0.055	ICU: 0.536
	LT	1.00	35	1,600	0.022 *	LOS: A
Eastbound	RT	1.00	28	1,600	0.007	
	TH	2.00	898	3,200	0.281 *	
	LT	1.00	49	1,600	0.031	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 12 - SR-14 SB Off Ramp & Avenue J
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	170	1,600	0.106	N-S(1):	0.121 *
	TH	0.00	0	0	0.000	N-S(2):	0.106
	LT	1.00	193	1,600	0.121 *	E-W(1):	0.367 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.252
	TH	2.00	806	3,200	0.252	V/C:	0.488
	LT	0.00	0	0	0.000 *	Lost Time:	0.100
Northbound	RT	0.00	0	0	0.000	ITS:	0.000
	TH	0.00	0	0	0.000 *	ICU:	0.588
	LT	0.00	0	0	0.000	LOS:	A
Eastbound	RT	0.00	0	0	0.000		
	TH	2.00	1,175	3,200	0.367 *		
	LT	0.00	0	0	0.000		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	281	1,600	0.176 *	N-S(1):	0.098
	TH	0.00	0	0	0.000	N-S(2):	0.176 *
	LT	1.00	157	1,600	0.098	E-W(1):	0.306
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.380 *
	TH	2.00	1,217	3,200	0.380 *	V/C:	0.556
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	0.00	0	0	0.000	ITS:	0.000
	TH	0.00	0	0	0.000	ICU:	0.656
	LT	0.00	0	0	0.000 *	LOS:	B
Eastbound	RT	0.00	0	0	0.000		
	TH	2.00	978	3,200	0.306		
	LT	0.00	0	0	0.000 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 13 - 20th Street & SR-14 NB Off Ramp
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.082
	TH	3.00	486	4,800	0.101 *	N-S(2): 0.101 *
	LT	0.00	0	0	0.000	E-W(1): 0.184
Westbound	RT	1.00	639	1,600	0.399 *	E-W(2): 0.399 *
	TH	0.00	0	0	0.000	V/C: 0.500
	LT	1.00	295	1,600	0.184	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	3.00	392	4,800	0.082	ICU: 0.600
	LT	0.00	0	0	0.000 *	LOS: A
Eastbound	RT	0.00	0	0	0.000	
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.101
	TH	3.00	899	4,800	0.187 *	N-S(2): 0.187 *
	LT	0.00	0	0	0.000	E-W(1): 0.278
Westbound	RT	1.00	543	1,600	0.339 *	E-W(2): 0.339 *
	TH	0.00	0	0	0.000	V/C: 0.526
	LT	1.00	444	1,600	0.278	Lost Time: 0.100
Northbound	RT	0.00	0	0	0.000	ITS: 0.000
	TH	3.00	484	4,800	0.101	ICU: 0.626
	LT	0.00	0	0	0.000 *	LOS: B
Eastbound	RT	0.00	0	0	0.000	
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 14 - 20th Street & Avenue J-8
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	460	3,200	0.114	N-S(1): 0.182 * N-S(2): 0.153 E-W(1): 0.264 * E-W(2): 0.218
	TH	2.00	260	3,200	0.081	
	LT	1.00	75	1,600	0.047 *	
Westbound	RT	0.00	30	0	0.000	V/C: 0.446 Lost Time: 0.100 ITS: 0.000
	TH	2.00	477	3,200	0.158	
	LT	1.00	120	1,600	0.075 *	
Northbound	RT	1.00	276	1,600	0.135 *	ICU: 0.546
	TH	2.00	302	3,200	0.094	
	LT	1.00	62	1,600	0.039	
Eastbound	RT	0.00	81	0	0.000	LOS: A
	TH	2.00	523	3,200	0.189 *	
	LT	1.00	96	1,600	0.060	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	774	3,200	0.219 *	N-S(1): 0.171 N-S(2): 0.308 * E-W(1): 0.304 * E-W(2): 0.284
	TH	2.00	437	3,200	0.137	
	LT	1.00	82	1,600	0.051	
Westbound	RT	0.00	60	0	0.000	V/C: 0.612 Lost Time: 0.100 ITS: 0.000
	TH	2.00	705	3,200	0.239	
	LT	1.00	307	1,600	0.192 *	
Northbound	RT	1.00	195	1,600	0.026	ICU: 0.712
	TH	2.00	383	3,200	0.120	
	LT	1.00	142	1,600	0.089 *	
Eastbound	RT	0.00	66	0	0.000	LOS: C
	TH	2.00	293	3,200	0.112 *	
	LT	1.00	72	1,600	0.045	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 15 - 20th Street & Avenue K
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	88	1,600	0.000	N-S(1): 0.159 * N-S(2): 0.087 E-W(1): 0.261 E-W(2): 0.292 *
	TH	2.00	188	3,200	0.059	
	LT	2.00	117	2,880	0.041 *	
Westbound	RT	0.00	65	0	0.000	V/C: 0.451 Lost Time: 0.100 ITS: 0.000
	TH	3.00	810	4,800	0.182 *	
	LT	1.00	84	1,600	0.053	
Northbound	RT	0.00	83	0	0.000	ICU: 0.551
	TH	2.00	295	3,200	0.118 *	
	LT	2.00	82	2,880	0.028	
Eastbound	RT	1.00	86	1,600	0.040	LOS: A
	TH	3.00	999	4,800	0.208	
	LT	1.00	176	1,600	0.110 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	118	1,600	0.022	N-S(1): 0.185 * N-S(2): 0.153 E-W(1): 0.296 E-W(2): 0.312 *
	TH	2.00	354	3,200	0.111	
	LT	2.00	178	2,880	0.062 *	
Westbound	RT	0.00	127	0	0.000	V/C: 0.497 Lost Time: 0.100 ITS: 0.000
	TH	3.00	872	4,800	0.208 *	
	LT	1.00	176	1,600	0.110	
Northbound	RT	0.00	111	0	0.000	ICU: 0.597
	TH	2.00	284	3,200	0.123 *	
	LT	2.00	120	2,880	0.042	
Eastbound	RT	1.00	74	1,600	0.025	LOS: A
	TH	3.00	891	4,800	0.186	
	LT	1.00	167	1,600	0.104 *	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 16 - 17th Street & Avenue K
Description: Future with Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	31	3,200	0.000	N-S(1): 0.154
	TH	0.16	31	262	0.118 *	N-S(2): 0.158 *
	LT	0.84	158	1,338	0.118	E-W(1): 0.311 *
Westbound	RT	0.00	72	0	0.000	E-W(2): 0.232
	TH	3.00	892	4,800	0.201	V/C: 0.469
	LT	1.00	128	1,600	0.080 *	Lost Time: 0.100
Northbound	RT	2.00	193	3,200	0.020	ITS: 0.000
	TH	0.86	50	1,379	0.036	ICU: 0.569
	LT	1.14	66	1,639	0.040 *	LOS: A
Eastbound	RT	0.00	80	0	0.000	
	TH	3.00	1,029	4,800	0.231 *	
	LT	1.00	50	1,600	0.031	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	2.00	41	3,200	0.000	N-S(1): 0.193
	TH	0.20	46	317	0.145 *	N-S(2): 0.198 *
	LT	0.80	186	1,283	0.145	E-W(1): 0.391 *
Westbound	RT	0.00	144	0	0.000	E-W(2): 0.286
	TH	3.00	1,074	4,800	0.254	V/C: 0.589
	LT	1.00	237	1,600	0.148 *	Lost Time: 0.100
Northbound	RT	2.00	246	3,200	0.003	ITS: 0.000
	TH	0.81	62	1,288	0.048	ICU: 0.689
	LT	1.19	92	1,721	0.053 *	LOS: B
Eastbound	RT	0.00	100	0	0.000	
	TH	3.00	1,068	4,800	0.243 *	
	LT	1.00	51	1,600	0.032	

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 17 - SR-14 SB Ramps & Avenue K
Description: Future with Project

Thru Lane: 1600 vph
Left Lane: 1600 vph
Double Lt Penalty: 10 %
ITS: 0 %

N-S Split Phase : N
E-W Split Phase : N
Lost Time (% of cycle) : 10
V/C Round Off (decs.) : 3

OLA Movements :
FF Movements: EBR,

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.38	180	2,204	0.081	N-S(1):	0.091 *
	TH	0.00	0	0	0.000	N-S(2):	0.081
	LT	1.62	212	2,336	0.091 *	E-W(1):	0.294 *
Westbound	RT	1.00	288	1,600	0.180	E-W(2):	0.206
	TH	3.00	980	4,800	0.204	V/C:	0.385
	LT	0.00	0	0	0.000 *	Lost Time:	0.100
Northbound	RT	0.00	0	0	0.000	ITS:	0.000
	TH	0.00	0	0	0.000 *	ICU:	0.485
	LT	0.00	0	0	0.000	LOS:	A
Eastbound	RT	0.00	410	0	0.000		
	TH	3.00	997	4,800	0.294 *		
	LT	0.00	3	1,600	0.002		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.51	229	2,416	0.093	N-S(1):	0.105 *
	TH	0.00	0	0	0.000	N-S(2):	0.093
	LT	1.49	226	2,146	0.105 *	E-W(1):	0.315
Westbound	RT	1.00	540	1,600	0.338 *	E-W(2):	0.342 *
	TH	3.00	1,294	4,800	0.270	V/C:	0.447
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	0.00	0	0	0.000	ITS:	0.000
	TH	0.00	0	0	0.000 *	ICU:	0.547
	LT	0.00	0	0	0.000	LOS:	A
Eastbound	RT	0.00	481	0	0.000		
	TH	3.00	1,022	4,800	0.315		
	LT	0.00	7	1,600	0.004 *		

* - Denotes critical movement

Project Title: AVCCD FMP EIR
Intersection: 18 - 15th St/SR-14 NB Ramps & Ave K
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.92	231	3,067	0.037	N-S(1):	0.250 *
	TH	0.08	10	133	0.075	N-S(2):	0.194
	LT	2.00	199	2,880	0.069 *	E-W(1):	0.178
Westbound	RT	1.00	210	1,600	0.131	E-W(2):	0.250 *
	TH	3.00	834	4,800	0.174 *	V/C:	0.500
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	1.41	409	2,259	0.181	ITS:	0.000
	TH	1.59	460	2,541	0.181 *	ICU:	0.600
	LT	2.00	343	2,880	0.119	LOS:	A
Eastbound	RT	1.00	109	1,600	0.009		
	TH	3.00	852	4,800	0.178		
	LT	2.00	219	2,880	0.076 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.91	471	3,057	0.127	N-S(1):	0.293
	TH	0.09	22	143	0.154 *	N-S(2):	0.296 *
	LT	2.00	353	2,880	0.123	E-W(1):	0.203
Westbound	RT	1.00	228	1,600	0.143	E-W(2):	0.292 *
	TH	3.00	1,143	4,800	0.238 *	V/C:	0.588
	LT	0.00	0	0	0.000	Lost Time:	0.100
Northbound	RT	1.52	413	2,432	0.170	ITS:	0.000
	TH	1.48	402	2,368	0.170	ICU:	0.688
	LT	2.00	410	2,880	0.142 *	LOS:	B
Eastbound	RT	1.00	124	1,600	0.006		
	TH	3.00	975	4,800	0.203		
	LT	2.00	156	2,880	0.054 *		

* - Denotes critical movement

Appendix C

California Emissions Estimator Model (CalEEMod) Results

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Annual

AVCCD 2016 FMP - 2030 Future Conditions
Los Angeles-Mojave Desert County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	68.49	1000sqft	1.57	68,485.00	0
High School	133.87	1000sqft	3.07	133,871.00	0
Library	51.15	1000sqft	1.17	51,146.00	0
Recreational Swimming Pool	3.00	1000sqft	0.07	3,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	7			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Annual

Project Characteristics -

Land Use - Note 1

Construction Phase - Note 2

Demolition -

Grading - Note 3

Architectural Coating - Note 4

Vehicle Trips - Note 5

Road Dust - Note 6

Area Coating - Note 7

Solid Waste - Note 8

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - AVAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Annual

tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	1/28/2019	2/25/2019
tblConstructionPhase	PhaseEndDate	2/25/2019	4/22/2019
tblConstructionPhase	PhaseEndDate	1/13/2020	6/15/2020
tblConstructionPhase	PhaseEndDate	2/10/2020	8/10/2020
tblConstructionPhase	PhaseEndDate	3/9/2020	12/28/2020
tblConstructionPhase	PhaseStartDate	1/29/2019	2/26/2019
tblConstructionPhase	PhaseStartDate	2/26/2019	4/23/2019
tblConstructionPhase	PhaseStartDate	1/14/2020	6/16/2020
tblConstructionPhase	PhaseStartDate	2/11/2020	8/11/2020
tblGrading	MaterialExported	0.00	11,172.96
tblGrading	MaterialImported	0.00	10,617.41
tblRoadDust	MeanVehicleSpeed	40	15
tblSolidWaste	SolidWasteGenerationRate	17.10	0.00
tblVehicleTrips	CC_TTP	48.00	17.20
tblVehicleTrips	CNW_TTP	19.00	5.00
tblVehicleTrips	CW_TTP	33.00	77.80
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	46.55	0.00

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Annual

tblVehicleTrips	ST_TR	9.10	1,078.67
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	SU_TR	13.60	1,078.67
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	56.24	0.00
tblVehicleTrips	WD_TR	33.82	1,078.67

2.0 Emissions Summary

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	1.5105	1.5105
2	4-1-2019	6-30-2019	1.1347	1.1347
3	7-1-2019	9-30-2019	0.9626	0.9626
4	10-1-2019	12-31-2019	0.9655	0.9655
5	1-1-2020	3-31-2020	0.8689	0.8689
6	4-1-2020	6-30-2020	0.8068	0.8068
7	7-1-2020	9-30-2020	0.9065	0.9065
		Highest	1.5105	1.5105

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2840	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.5800e-003	4.5800e-003	1.0000e-005	0.0000	4.8900e-003
Energy	0.0187	0.1701	0.1428	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	754.2092	754.2092	0.0270	8.2500e-003	757.3452
Mobile	1.0647	5.4848	14.5968	0.0502	4.0287	0.0430	4.0717	1.0800	0.0401	1.1201	0.0000	4,632.1279	4,632.1279	0.2483	0.0000	4,638.3362
Waste						0.0000	0.0000		0.0000	0.0000	57.8159	0.0000	57.8159	3.4168	0.0000	143.2364
Water						0.0000	0.0000		0.0000	0.0000	5.8356	152.4278	158.2635	0.6057	0.0155	178.0106
Total	2.3674	5.6548	14.7420	0.0512	4.0287	0.0559	4.0846	1.0800	0.0530	1.1330	63.6515	5,538.7695	5,602.4210	4.2979	0.0237	5,716.9333

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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	1.1665	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.5800e-003	4.5800e-003	1.0000e-005	0.0000	4.8900e-003
Energy	0.0187	0.1701	0.1428	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	754.2092	754.2092	0.0270	8.2500e-003	757.3452
Mobile	1.0647	5.4848	14.5968	0.0502	4.0287	0.0430	4.0717	1.0800	0.0401	1.1201	0.0000	4,632.1279	4,632.1279	0.2483	0.0000	4,638.3362
Waste						0.0000	0.0000		0.0000	0.0000	57.8159	0.0000	57.8159	3.4168	0.0000	143.2364
Water						0.0000	0.0000		0.0000	0.0000	5.4505	142.7482	148.1986	0.5657	0.0144	166.6438
Total	2.2499	5.6548	14.7420	0.0512	4.0287	0.0559	4.0846	1.0800	0.0530	1.1330	63.2664	5,529.0899	5,592.3562	4.2579	0.0227	5,705.5665

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.17	0.18	0.93	4.26	0.20

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	2/25/2019	5	40	
2	Grading	Grading	2/26/2019	4/22/2019	5	40	
3	Building Construction	Building Construction	4/23/2019	6/15/2020	5	300	
4	Paving	Paving	6/16/2020	8/10/2020	5	40	
5	Architectural Coating	Architectural Coating	8/11/2020	12/28/2020	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 380,253; Non-Residential Outdoor: 126,751; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Excavators	3	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
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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	15.00	0.00	505.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,724.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	101.00	42.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0546	0.0000	0.0546	8.2700e-003	0.0000	8.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0703	0.7157	0.4412	7.8000e-004		0.0359	0.0359		0.0334	0.0334	0.0000	69.2527	69.2527	0.0193	0.0000	69.7343
Total	0.0703	0.7157	0.4412	7.8000e-004	0.0546	0.0359	0.0905	8.2700e-003	0.0334	0.0417	0.0000	69.2527	69.2527	0.0193	0.0000	69.7343

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-003	0.0799	0.0170	2.0000e-004	4.3400e-003	2.9000e-004	4.6300e-003	1.1900e-003	2.7000e-004	1.4700e-003	0.0000	19.6618	19.6618	1.3900e-003	0.0000	19.6965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1900e-003	9.5000e-004	0.0104	3.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.3387	2.3387	8.0000e-005	0.0000	2.3407
Total	3.5900e-003	0.0809	0.0274	2.3000e-004	6.7600e-003	3.1000e-004	7.0700e-003	1.8300e-003	2.9000e-004	2.1300e-003	0.0000	22.0005	22.0005	1.4700e-003	0.0000	22.0372

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					0.0546	0.0000	0.0546	8.2700e-003	0.0000	8.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0703	0.7157	0.4412	7.8000e-004		0.0359	0.0359		0.0334	0.0334	0.0000	69.2526	69.2526	0.0193	0.0000	69.7342
Total	0.0703	0.7157	0.4412	7.8000e-004	0.0546	0.0359	0.0905	8.2700e-003	0.0334	0.0417	0.0000	69.2526	69.2526	0.0193	0.0000	69.7342

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-003	0.0799	0.0170	2.0000e-004	4.3400e-003	2.9000e-004	4.6300e-003	1.1900e-003	2.7000e-004	1.4700e-003	0.0000	19.6618	19.6618	1.3900e-003	0.0000	19.6965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1900e-003	9.5000e-004	0.0104	3.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.3387	2.3387	8.0000e-005	0.0000	2.3407
Total	3.5900e-003	0.0809	0.0274	2.3000e-004	6.7600e-003	3.1000e-004	7.0700e-003	1.8300e-003	2.9000e-004	2.1300e-003	0.0000	22.0005	22.0005	1.4700e-003	0.0000	22.0372

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1323	0.0000	0.1323	0.0675	0.0000	0.0675	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0516	0.5670	0.3259	5.9000e-004		0.0280	0.0280		0.0257	0.0257	0.0000	53.2845	53.2845	0.0169	0.0000	53.7060
Total	0.0516	0.5670	0.3259	5.9000e-004	0.1323	0.0280	0.1602	0.0675	0.0257	0.0933	0.0000	53.2845	53.2845	0.0169	0.0000	53.7060

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3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0129	0.4311	0.0916	1.0800e-003	0.0234	1.5400e-003	0.0250	6.4300e-003	1.4800e-003	7.9000e-003	0.0000	106.0570	106.0570	7.4800e-003	0.0000	106.2439
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1900e-003	9.5000e-004	0.0104	3.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.3387	2.3387	8.0000e-005	0.0000	2.3407
Total	0.0141	0.4320	0.1020	1.1100e-003	0.0258	1.5600e-003	0.0274	7.0700e-003	1.5000e-003	8.5600e-003	0.0000	108.3956	108.3956	7.5600e-003	0.0000	108.5847

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					0.1323	0.0000	0.1323	0.0675	0.0000	0.0675	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0516	0.5670	0.3259	5.9000e-004		0.0280	0.0280		0.0257	0.0257	0.0000	53.2845	53.2845	0.0169	0.0000	53.7059
Total	0.0516	0.5670	0.3259	5.9000e-004	0.1323	0.0280	0.1602	0.0675	0.0257	0.0933	0.0000	53.2845	53.2845	0.0169	0.0000	53.7059

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3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0129	0.4311	0.0916	1.0800e-003	0.0234	1.5400e-003	0.0250	6.4300e-003	1.4800e-003	7.9000e-003	0.0000	106.0570	106.0570	7.4800e-003	0.0000	106.2439
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1900e-003	9.5000e-004	0.0104	3.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.3387	2.3387	8.0000e-005	0.0000	2.3407
Total	0.0141	0.4320	0.1020	1.1100e-003	0.0258	1.5600e-003	0.0274	7.0700e-003	1.5000e-003	8.5600e-003	0.0000	108.3956	108.3956	7.5600e-003	0.0000	108.5847

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2137	1.9076	1.5533	2.4400e-003		0.1167	0.1167		0.1098	0.1098	0.0000	212.7693	212.7693	0.0518	0.0000	214.0651
Total	0.2137	1.9076	1.5533	2.4400e-003		0.1167	0.1167		0.1098	0.1098	0.0000	212.7693	212.7693	0.0518	0.0000	214.0651

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0167	0.4615	0.1261	1.0300e-003	0.0253	2.9800e-003	0.0283	7.3100e-003	2.8500e-003	0.0102	0.0000	99.4009	99.4009	6.5100e-003	0.0000	99.5636
Worker	0.0363	0.0289	0.3175	7.9000e-004	0.0736	6.6000e-004	0.0743	0.0196	6.1000e-004	0.0202	0.0000	71.2556	71.2556	2.4900e-003	0.0000	71.3179
Total	0.0529	0.4904	0.4436	1.8200e-003	0.0989	3.6400e-003	0.1026	0.0269	3.4600e-003	0.0303	0.0000	170.6565	170.6565	9.0000e-003	0.0000	170.8815

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	0.2137	1.9076	1.5533	2.4400e-003		0.1167	0.1167		0.1098	0.1098	0.0000	212.7690	212.7690	0.0518	0.0000	214.0649
Total	0.2137	1.9076	1.5533	2.4400e-003		0.1167	0.1167		0.1098	0.1098	0.0000	212.7690	212.7690	0.0518	0.0000	214.0649

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0167	0.4615	0.1261	1.0300e-003	0.0253	2.9800e-003	0.0283	7.3100e-003	2.8500e-003	0.0102	0.0000	99.4009	99.4009	6.5100e-003	0.0000	99.5636
Worker	0.0363	0.0289	0.3175	7.9000e-004	0.0736	6.6000e-004	0.0743	0.0196	6.1000e-004	0.0202	0.0000	71.2556	71.2556	2.4900e-003	0.0000	71.3179
Total	0.0529	0.4904	0.4436	1.8200e-003	0.0989	3.6400e-003	0.1026	0.0269	3.4600e-003	0.0303	0.0000	170.6565	170.6565	9.0000e-003	0.0000	170.8815

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1261	1.1416	1.0025	1.6000e-003		0.0665	0.0665		0.0625	0.0625	0.0000	137.8079	137.8079	0.0336	0.0000	138.6485
Total	0.1261	1.1416	1.0025	1.6000e-003		0.0665	0.0665		0.0625	0.0625	0.0000	137.8079	137.8079	0.0336	0.0000	138.6485

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3.4 Building Construction - 2020

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	9.3700e-003	0.2779	0.0753	6.7000e-004	0.0167	1.3300e-003	0.0180	4.8000e-003	1.2700e-003	6.0800e-003	0.0000	64.9181	64.9181	4.0500e-003	0.0000	65.0193
Worker	0.0220	0.0169	0.1891	5.0000e-004	0.0484	4.2000e-004	0.0488	0.0129	3.9000e-004	0.0133	0.0000	45.4249	45.4249	1.4600e-003	0.0000	45.4613
Total	0.0313	0.2948	0.2644	1.1700e-003	0.0651	1.7500e-003	0.0668	0.0177	1.6600e-003	0.0193	0.0000	110.3430	110.3430	5.5100e-003	0.0000	110.4806

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	0.1261	1.1416	1.0025	1.6000e-003		0.0665	0.0665		0.0625	0.0625	0.0000	137.8078	137.8078	0.0336	0.0000	138.6483
Total	0.1261	1.1416	1.0025	1.6000e-003		0.0665	0.0665		0.0625	0.0625	0.0000	137.8078	137.8078	0.0336	0.0000	138.6483

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3.4 Building Construction - 2020

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	9.3700e-003	0.2779	0.0753	6.7000e-004	0.0167	1.3300e-003	0.0180	4.8000e-003	1.2700e-003	6.0800e-003	0.0000	64.9181	64.9181	4.0500e-003	0.0000	65.0193
Worker	0.0220	0.0169	0.1891	5.0000e-004	0.0484	4.2000e-004	0.0488	0.0129	3.9000e-004	0.0133	0.0000	45.4249	45.4249	1.4600e-003	0.0000	45.4613
Total	0.0313	0.2948	0.2644	1.1700e-003	0.0651	1.7500e-003	0.0668	0.0177	1.6600e-003	0.0193	0.0000	110.3430	110.3430	5.5100e-003	0.0000	110.4806

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0271	0.2813	0.2930	4.6000e-004		0.0151	0.0151		0.0139	0.0139	0.0000	40.0564	40.0564	0.0130	0.0000	40.3803
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0271	0.2813	0.2930	4.6000e-004		0.0151	0.0151		0.0139	0.0139	0.0000	40.0564	40.0564	0.0130	0.0000	40.3803

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3.5 Paving - 2020

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	1.1000e-003	8.5000e-004	9.4400e-003	3.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2677	2.2677	7.0000e-005	0.0000	2.2695
Total	1.1000e-003	8.5000e-004	9.4400e-003	3.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2677	2.2677	7.0000e-005	0.0000	2.2695

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	0.0271	0.2813	0.2930	4.6000e-004		0.0151	0.0151		0.0139	0.0139	0.0000	40.0564	40.0564	0.0130	0.0000	40.3803
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0271	0.2813	0.2930	4.6000e-004		0.0151	0.0151		0.0139	0.0139	0.0000	40.0564	40.0564	0.0130	0.0000	40.3803

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3.5 Paving - 2020

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	1.1000e-003	8.5000e-004	9.4400e-003	3.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2677	2.2677	7.0000e-005	0.0000	2.2695
Total	1.1000e-003	8.5000e-004	9.4400e-003	3.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2677	2.2677	7.0000e-005	0.0000	2.2695

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7625					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.0842	0.0916	1.5000e-004		5.5500e-003	5.5500e-003		5.5500e-003	5.5500e-003	0.0000	12.7663	12.7663	9.9000e-004	0.0000	12.7910
Total	1.7746	0.0842	0.0916	1.5000e-004		5.5500e-003	5.5500e-003		5.5500e-003	5.5500e-003	0.0000	12.7663	12.7663	9.9000e-004	0.0000	12.7910

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3.6 Architectural Coating - 2020

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	3.6500e-003	2.8200e-003	0.0315	8.0000e-005	8.0500e-003	7.0000e-005	8.1200e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	7.5588	7.5588	2.4000e-004	0.0000	7.5649
Total	3.6500e-003	2.8200e-003	0.0315	8.0000e-005	8.0500e-003	7.0000e-005	8.1200e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	7.5588	7.5588	2.4000e-004	0.0000	7.5649

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	1.7625					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.0842	0.0916	1.5000e-004		5.5500e-003	5.5500e-003		5.5500e-003	5.5500e-003	0.0000	12.7663	12.7663	9.9000e-004	0.0000	12.7910
Total	1.7746	0.0842	0.0916	1.5000e-004		5.5500e-003	5.5500e-003		5.5500e-003	5.5500e-003	0.0000	12.7663	12.7663	9.9000e-004	0.0000	12.7910

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3.6 Architectural Coating - 2020

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	3.6500e-003	2.8200e-003	0.0315	8.0000e-005	8.0500e-003	7.0000e-005	8.1200e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	7.5588	7.5588	2.4000e-004	0.0000	7.5649
Total	3.6500e-003	2.8200e-003	0.0315	8.0000e-005	8.0500e-003	7.0000e-005	8.1200e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	7.5588	7.5588	2.4000e-004	0.0000	7.5649

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0647	5.4848	14.5968	0.0502	4.0287	0.0430	4.0717	1.0800	0.0401	1.1201	0.0000	4,632.1279	4,632.1279	0.2483	0.0000	4,638.3362
Unmitigated	1.0647	5.4848	14.5968	0.0502	4.0287	0.0430	4.0717	1.0800	0.0401	1.1201	0.0000	4,632.1279	4,632.1279	0.2483	0.0000	4,638.3362

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Library	0.00	0.00	0.00		
Recreational Swimming Pool	3,236.01	3,236.01	3,236.01	10,614,832	10,614,832
Total	3,236.01	3,236.01	3,236.01	10,614,832	10,614,832

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12
Recreational Swimming Pool	9.50	7.30	7.30	77.80	17.20	5.00	100	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
High School	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Library	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Recreational Swimming Pool	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	569.0939	569.0939	0.0235	4.8600e-003	571.1299
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	569.0939	569.0939	0.0235	4.8600e-003	571.1299
NaturalGas Mitigated	0.0187	0.1701	0.1428	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	185.1153	185.1153	3.5500e-003	3.3900e-003	186.2153
NaturalGas Unmitigated	0.0187	0.1701	0.1428	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	185.1153	185.1153	3.5500e-003	3.3900e-003	186.2153

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	1.17726e+006	6.3500e-003	0.0577	0.0485	3.5000e-004		4.3900e-003	4.3900e-003		4.3900e-003	4.3900e-003	0.0000	62.8229	62.8229	1.2000e-003	1.1500e-003	63.1963
High School	1.43242e+006	7.7200e-003	0.0702	0.0590	4.2000e-004		5.3400e-003	5.3400e-003		5.3400e-003	5.3400e-003	0.0000	76.4394	76.4394	1.4700e-003	1.4000e-003	76.8936
Library	859253	4.6300e-003	0.0421	0.0354	2.5000e-004		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	45.8530	45.8530	8.8000e-004	8.4000e-004	46.1255
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0187	0.1701	0.1428	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	185.1153	185.1153	3.5500e-003	3.3900e-003	186.2153

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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					
General Office Building	1.17726e+006	6.3500e-003	0.0577	0.0485	3.5000e-004		4.3900e-003	4.3900e-003		4.3900e-003	4.3900e-003	0.0000	62.8229	62.8229	1.2000e-003	1.1500e-003	63.1963
High School	1.43242e+006	7.7200e-003	0.0702	0.0590	4.2000e-004		5.3400e-003	5.3400e-003		5.3400e-003	5.3400e-003	0.0000	76.4394	76.4394	1.4700e-003	1.4000e-003	76.8936
Library	859253	4.6300e-003	0.0421	0.0354	2.5000e-004		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	45.8530	45.8530	8.8000e-004	8.4000e-004	46.1255
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0187	0.1701	0.1428	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	185.1153	185.1153	3.5500e-003	3.3900e-003	186.2153

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	682795	217.5533	8.9800e-003	1.8600e-003	218.3316
High School	982613	313.0816	0.0129	2.6700e-003	314.2017
Library	120705	38.4591	1.5900e-003	3.3000e-004	38.5967
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		569.0939	0.0235	4.8600e-003	571.1299

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	682795	217.5533	8.9800e-003	1.8600e-003	218.3316
High School	982613	313.0816	0.0129	2.6700e-003	314.2017
Library	120705	38.4591	1.5900e-003	3.3000e-004	38.5967
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		569.0939	0.0235	4.8600e-003	571.1299

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1665	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.5800e-003	4.5800e-003	1.0000e-005	0.0000	4.8900e-003
Unmitigated	1.2840	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.5800e-003	4.5800e-003	1.0000e-005	0.0000	4.8900e-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	0.2938					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9901					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.5800e-003	4.5800e-003	1.0000e-005	0.0000	4.8900e-003
Total	1.2840	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.5800e-003	4.5800e-003	1.0000e-005	0.0000	4.8900e-003

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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	0.1763					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9901					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.5800e-003	4.5800e-003	1.0000e-005	0.0000	4.8900e-003
Total	1.1665	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.5800e-003	4.5800e-003	1.0000e-005	0.0000	4.8900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	148.1986	0.5657	0.0144	166.6438
Unmitigated	158.2635	0.6057	0.0155	178.0106

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	12.1712 / 7.45977	80.7636	0.3998	0.0100	93.7444
High School	4.44511 / 11.4303	60.3138	0.1473	3.9200e-003	65.1648
Library	1.60043 / 2.50323	16.0087	0.0528	1.3600e-003	17.7349
Recreational Swimming Pool	0.177429 / 0.108747	1.1774	5.8300e-003	1.5000e-004	1.3666
Total		158.2635	0.6057	0.0155	178.0106

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	11.3679 / 7.00473	75.5653	0.3734	9.3600e-003	87.6897
High School	4.15173 / 10.733	56.5354	0.1376	3.6700e-003	61.0669
Library	1.4948 / 2.35054	14.9964	0.0493	1.2700e-003	16.6088
Recreational Swimming Pool	0.165719 / 0.102113	1.1016	5.4400e-003	1.4000e-004	1.2783
Total		148.1987	0.5657	0.0144	166.6438

8.0 Waste Detail

8.1 Mitigation Measures Waste

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	57.8159	3.4168	0.0000	143.2364
Unmitigated	57.8159	3.4168	0.0000	143.2364

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	63.69	12.9285	0.7641	0.0000	32.0298
High School	174.03	35.3265	2.0877	0.0000	87.5200
Library	47.1	9.5609	0.5650	0.0000	23.6867
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		57.8159	3.4168	0.0000	143.2364

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	63.69	12.9285	0.7641	0.0000	32.0298
High School	174.03	35.3265	2.0877	0.0000	87.5200
Library	47.1	9.5609	0.5650	0.0000	23.6867
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		57.8159	3.4168	0.0000	143.2364

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Annual

Equipment Type	Number
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11.0 Vegetation

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

AVCCD 2016 FMP - 2030 Future Conditions
Los Angeles-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	68.49	1000sqft	1.57	68,485.00	0
High School	133.87	1000sqft	3.07	133,871.00	0
Library	51.15	1000sqft	1.17	51,146.00	0
Recreational Swimming Pool	3.00	1000sqft	0.07	3,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	7			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

Project Characteristics -

Land Use - Note 1

Construction Phase - Note 2

Demolition -

Grading - Note 3

Architectural Coating - Note 4

Vehicle Trips - Note 5

Road Dust - Note 6

Area Coating - Note 7

Solid Waste - Note 8

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - AVAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	1/28/2019	2/25/2019
tblConstructionPhase	PhaseEndDate	2/25/2019	4/22/2019
tblConstructionPhase	PhaseEndDate	1/13/2020	6/15/2020
tblConstructionPhase	PhaseEndDate	2/10/2020	8/10/2020
tblConstructionPhase	PhaseEndDate	3/9/2020	12/28/2020
tblConstructionPhase	PhaseStartDate	1/29/2019	2/26/2019
tblConstructionPhase	PhaseStartDate	2/26/2019	4/23/2019
tblConstructionPhase	PhaseStartDate	1/14/2020	6/16/2020
tblConstructionPhase	PhaseStartDate	2/11/2020	8/11/2020
tblGrading	MaterialExported	0.00	11,172.96
tblGrading	MaterialImported	0.00	10,617.41
tblRoadDust	MeanVehicleSpeed	40	15
tblSolidWaste	SolidWasteGenerationRate	17.10	0.00
tblVehicleTrips	CC_TTP	48.00	17.20
tblVehicleTrips	CNW_TTP	19.00	5.00
tblVehicleTrips	CW_TTP	33.00	77.80
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	46.55	0.00

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

tblVehicleTrips	ST_TR	9.10	1,078.67
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	SU_TR	13.60	1,078.67
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	56.24	0.00
tblVehicleTrips	WD_TR	33.82	1,078.67

2.0 Emissions Summary

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

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	7.0370	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Energy	0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522
Mobile	6.1629	28.8437	83.2105	0.2860	22.5716	0.2358	22.8074	6.0408	0.2201	6.2609		29,074.9366	29,074.9366	1.5153		29,112.8179
Total	13.3024	29.7757	84.0195	0.2916	22.5716	0.3067	22.8783	6.0408	0.2910	6.3318		30,193.1006	30,193.1006	1.5368	0.0205	30,237.6300

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	6.3931	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Energy	0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522
Mobile	6.1629	28.8437	83.2105	0.2860	22.5716	0.2358	22.8074	6.0408	0.2201	6.2609		29,074.9366	29,074.9366	1.5153		29,112.8179
Total	12.6586	29.7757	84.0195	0.2916	22.5716	0.3067	22.8783	6.0408	0.2910	6.3318		30,193.1006	30,193.1006	1.5368	0.0205	30,237.6300

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert 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	N2O	CO2e
Percent Reduction	4.84	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	1/1/2019	2/25/2019	5	40	
2	Grading	Grading	2/26/2019	4/22/2019	5	40	
3	Building Construction	Building Construction	4/23/2019	6/15/2020	5	300	
4	Paving	Paving	6/16/2020	8/10/2020	5	40	
5	Architectural Coating	Architectural Coating	8/11/2020	12/28/2020	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 380,253; Non-Residential Outdoor: 126,751; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert 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	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Excavators	3	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
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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	15.00	0.00	505.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,724.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	101.00	42.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7304	0.0000	2.7304	0.4134	0.0000	0.4134			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.899 4	3,816.899 4	1.0618		3,843.445 1
Total	3.5134	35.7830	22.0600	0.0388	2.7304	1.7949	4.5253	0.4134	1.6697	2.0831		3,816.899 4	3,816.899 4	1.0618		3,843.445 1

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1186	3.8668	0.8244	0.0101	0.2207	0.0142	0.2349	0.0605	0.0136	0.0741		1,091.446 1	1,091.446 1	0.0752		1,093.325 3
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0418	0.5492	1.3500e-003	0.1232	1.0900e-003	0.1243	0.0327	1.0000e-003	0.0337		134.6227	134.6227	4.6900e-003		134.7401
Total	0.1786	3.9086	1.3736	0.0114	0.3440	0.0153	0.3592	0.0932	0.0146	0.1078		1,226.068 8	1,226.068 8	0.0799		1,228.065 3

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					2.7304	0.0000	2.7304	0.4134	0.0000	0.4134			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.899 4	3,816.899 4	1.0618		3,843.445 1
Total	3.5134	35.7830	22.0600	0.0388	2.7304	1.7949	4.5253	0.4134	1.6697	2.0831	0.0000	3,816.899 4	3,816.899 4	1.0618		3,843.445 1

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1186	3.8668	0.8244	0.0101	0.2207	0.0142	0.2349	0.0605	0.0136	0.0741		1,091.4461	1,091.4461	0.0752		1,093.3253
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0418	0.5492	1.3500e-003	0.1232	1.0900e-003	0.1243	0.0327	1.0000e-003	0.0337		134.6227	134.6227	4.6900e-003		134.7401
Total	0.1786	3.9086	1.3736	0.0114	0.3440	0.0153	0.3592	0.0932	0.0146	0.1078		1,226.0688	1,226.0688	0.0799		1,228.0653

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6139	0.0000	6.6139	3.3768	0.0000	3.3768			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	6.6139	1.3974	8.0113	3.3768	1.2856	4.6624		2,936.8068	2,936.8068	0.9292		2,960.0361

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6399	20.8579	4.4471	0.0544	1.1907	0.0765	1.2672	0.3264	0.0732	0.3996		5,887.3250	5,887.3250	0.4055		5,897.4614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0418	0.5492	1.3500e-003	0.1232	1.0900e-003	0.1243	0.0327	1.0000e-003	0.0337		134.6227	134.6227	4.6900e-003		134.7401
Total	0.6999	20.8997	4.9963	0.0558	1.3139	0.0776	1.3915	0.3591	0.0742	0.4333		6,021.9478	6,021.9478	0.4101		6,032.2014

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					6.6139	0.0000	6.6139	3.3768	0.0000	3.3768			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	6.6139	1.3974	8.0113	3.3768	1.2856	4.6624	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6399	20.8579	4.4471	0.0544	1.1907	0.0765	1.2672	0.3264	0.0732	0.3996		5,887.3250	5,887.3250	0.4055		5,897.4614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0418	0.5492	1.3500e-003	0.1232	1.0900e-003	0.1243	0.0327	1.0000e-003	0.0337		134.6227	134.6227	4.6900e-003		134.7401
Total	0.6999	20.8997	4.9963	0.0558	1.3139	0.0776	1.3915	0.3591	0.0742	0.4333		6,021.9478	6,021.9478	0.4101		6,032.2014

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1808	4.9916	1.3268	0.0115	0.2844	0.0327	0.3171	0.0819	0.0313	0.1131		1,224.0227	1,224.0227	0.0770		1,225.9481
Worker	0.4035	0.2813	3.6978	9.1100e-003	0.8297	7.3300e-003	0.8370	0.2201	6.7600e-003	0.2268		906.4598	906.4598	0.0316		907.2497
Total	0.5843	5.2729	5.0246	0.0206	1.1141	0.0400	1.1541	0.3020	0.0380	0.3400		2,130.4825	2,130.4825	0.1086		2,133.1978

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1808	4.9916	1.3268	0.0115	0.2844	0.0327	0.3171	0.0819	0.0313	0.1131		1,224.0227	1,224.0227	0.0770		1,225.9481
Worker	0.4035	0.2813	3.6978	9.1100e-003	0.8297	7.3300e-003	0.8370	0.2201	6.7600e-003	0.2268		906.4598	906.4598	0.0316		907.2497
Total	0.5843	5.2729	5.0246	0.0206	1.1141	0.0400	1.1541	0.3020	0.0380	0.3400		2,130.4825	2,130.4825	0.1086		2,133.1978

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

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3.4 Building Construction - 2020

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	0.1545	4.5805	1.2037	0.0114	0.2844	0.0222	0.3066	0.0819	0.0212	0.1031		1,216.0514	1,216.0514	0.0729		1,217.8744
Worker	0.3714	0.2507	3.3560	8.8300e-003	0.8297	7.1100e-003	0.8368	0.2201	6.5500e-003	0.2266		878.9428	878.9428	0.0281		879.6455
Total	0.5260	4.8311	4.5597	0.0202	1.1141	0.0293	1.1434	0.3020	0.0278	0.3297		2,094.9942	2,094.9942	0.1010		2,097.5199

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

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3.4 Building Construction - 2020

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	0.1545	4.5805	1.2037	0.0114	0.2844	0.0222	0.3066	0.0819	0.0212	0.1031		1,216.0514	1,216.0514	0.0729		1,217.8744
Worker	0.3714	0.2507	3.3560	8.8300e-003	0.8297	7.1100e-003	0.8368	0.2201	6.5500e-003	0.2266		878.9428	878.9428	0.0281		879.6455
Total	0.5260	4.8311	4.5597	0.0202	1.1141	0.0293	1.1434	0.3020	0.0278	0.3297		2,094.9942	2,094.9942	0.1010		2,097.5199

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

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3.5 Paving - 2020

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	0.0552	0.0372	0.4984	1.3100e-003	0.1232	1.0600e-003	0.1243	0.0327	9.7000e-004	0.0337		130.5361	130.5361	4.1700e-003		130.6404
Total	0.0552	0.0372	0.4984	1.3100e-003	0.1232	1.0600e-003	0.1243	0.0327	9.7000e-004	0.0337		130.5361	130.5361	4.1700e-003		130.6404

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

3.5 Paving - 2020

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	0.0552	0.0372	0.4984	1.3100e-003	0.1232	1.0600e-003	0.1243	0.0327	9.7000e-004	0.0337		130.5361	130.5361	4.1700e-003		130.6404
Total	0.0552	0.0372	0.4984	1.3100e-003	0.1232	1.0600e-003	0.1243	0.0327	9.7000e-004	0.0337		130.5361	130.5361	4.1700e-003		130.6404

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	35.2495					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	35.4916	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

3.6 Architectural Coating - 2020

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	0.0736	0.0496	0.6646	1.7500e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3000e-003	0.0449		174.0481	174.0481	5.5700e-003		174.1872
Total	0.0736	0.0496	0.6646	1.7500e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3000e-003	0.0449		174.0481	174.0481	5.5700e-003		174.1872

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	35.2495					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	35.4916	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

3.6 Architectural Coating - 2020

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	0.0736	0.0496	0.6646	1.7500e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3000e-003	0.0449		174.0481	174.0481	5.5700e-003		174.1872
Total	0.0736	0.0496	0.6646	1.7500e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3000e-003	0.0449		174.0481	174.0481	5.5700e-003		174.1872

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.1629	28.8437	83.2105	0.2860	22.5716	0.2358	22.8074	6.0408	0.2201	6.2609		29,074.93 66	29,074.93 66	1.5153		29,112.81 79
Unmitigated	6.1629	28.8437	83.2105	0.2860	22.5716	0.2358	22.8074	6.0408	0.2201	6.2609		29,074.93 66	29,074.93 66	1.5153		29,112.81 79

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Library	0.00	0.00	0.00		
Recreational Swimming Pool	3,236.01	3,236.01	3,236.01	10,614,832	10,614,832
Total	3,236.01	3,236.01	3,236.01	10,614,832	10,614,832

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12
Recreational Swimming Pool	9.50	7.30	7.30	77.80	17.20	5.00	100	0	0

4.4 Fleet Mix

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
High School	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Library	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Recreational Swimming Pool	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522
NaturalGas Unmitigated	0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	3225.36	0.0348	0.3162	0.2656	1.9000e-003		0.0240	0.0240		0.0240	0.0240		379.4544	379.4544	7.2700e-003	6.9600e-003	381.7093
High School	3924.44	0.0423	0.3848	0.3232	2.3100e-003		0.0292	0.0292		0.0292	0.0292		461.6985	461.6985	8.8500e-003	8.4600e-003	464.4422
Library	2354.12	0.0254	0.2308	0.1939	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.9550	276.9550	5.3100e-003	5.0800e-003	278.6008
Recreational Swimming Pool	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		0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

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					
General Office Building	3.22536	0.0348	0.3162	0.2656	1.9000e-003		0.0240	0.0240		0.0240	0.0240		379.4544	379.4544	7.2700e-003	6.9600e-003	381.7093
High School	3.92444	0.0423	0.3848	0.3232	2.3100e-003		0.0292	0.0292		0.0292	0.0292		461.6985	461.6985	8.8500e-003	8.4600e-003	464.4422
Library	2.35412	0.0254	0.2308	0.1939	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.9550	276.9550	5.3100e-003	5.0800e-003	278.6008
Recreational Swimming Pool	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		0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.3931	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Unmitigated	7.0370	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599

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	1.6096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.4249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4600e-003	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Total	7.0370	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

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	0.9657					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.4249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4600e-003	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Total	6.3931	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

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
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AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Summer

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

AVCCD 2016 FMP - 2030 Future Conditions
Los Angeles-Mojave Desert County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	68.49	1000sqft	1.57	68,485.00	0
High School	133.87	1000sqft	3.07	133,871.00	0
Library	51.15	1000sqft	1.17	51,146.00	0
Recreational Swimming Pool	3.00	1000sqft	0.07	3,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	7			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

Project Characteristics -

Land Use - Note 1

Construction Phase - Note 2

Demolition -

Grading - Note 3

Architectural Coating - Note 4

Vehicle Trips - Note 5

Road Dust - Note 6

Area Coating - Note 7

Solid Waste - Note 8

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - AVAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

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tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	1/28/2019	2/25/2019
tblConstructionPhase	PhaseEndDate	2/25/2019	4/22/2019
tblConstructionPhase	PhaseEndDate	1/13/2020	6/15/2020
tblConstructionPhase	PhaseEndDate	2/10/2020	8/10/2020
tblConstructionPhase	PhaseEndDate	3/9/2020	12/28/2020
tblConstructionPhase	PhaseStartDate	1/29/2019	2/26/2019
tblConstructionPhase	PhaseStartDate	2/26/2019	4/23/2019
tblConstructionPhase	PhaseStartDate	1/14/2020	6/16/2020
tblConstructionPhase	PhaseStartDate	2/11/2020	8/11/2020
tblGrading	MaterialExported	0.00	11,172.96
tblGrading	MaterialImported	0.00	10,617.41
tblRoadDust	MeanVehicleSpeed	40	15
tblSolidWaste	SolidWasteGenerationRate	17.10	0.00
tblVehicleTrips	CC_TTP	48.00	17.20
tblVehicleTrips	CNW_TTP	19.00	5.00
tblVehicleTrips	CW_TTP	33.00	77.80
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	46.55	0.00

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

tblVehicleTrips	ST_TR	9.10	1,078.67
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	SU_TR	13.60	1,078.67
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	56.24	0.00
tblVehicleTrips	WD_TR	33.82	1,078.67

2.0 Emissions Summary

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

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	7.0370	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Energy	0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522
Mobile	5.9881	29.5815	79.0831	0.2719	22.5716	0.2370	22.8086	6.0408	0.2213	6.2621		27,665.1629	27,665.1629	1.5097		27,702.9050
Total	13.1276	30.5135	79.8921	0.2775	22.5716	0.3079	22.8795	6.0408	0.2922	6.3330		28,783.3269	28,783.3269	1.5313	0.0205	28,827.7171

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	6.3931	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Energy	0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522
Mobile	5.9881	29.5815	79.0831	0.2719	22.5716	0.2370	22.8086	6.0408	0.2213	6.2621		27,665.1629	27,665.1629	1.5097		27,702.9050
Total	12.4837	30.5135	79.8921	0.2775	22.5716	0.3079	22.8795	6.0408	0.2922	6.3330		28,783.3269	28,783.3269	1.5313	0.0205	28,827.7171

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert 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	N2O	CO2e
Percent Reduction	4.90	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	1/1/2019	2/25/2019	5	40	
2	Grading	Grading	2/26/2019	4/22/2019	5	40	
3	Building Construction	Building Construction	4/23/2019	6/15/2020	5	300	
4	Paving	Paving	6/16/2020	8/10/2020	5	40	
5	Architectural Coating	Architectural Coating	8/11/2020	12/28/2020	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 380,253; Non-Residential Outdoor: 126,751; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert 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	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Excavators	3	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
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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	15.00	0.00	505.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,724.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	101.00	42.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7304	0.0000	2.7304	0.4134	0.0000	0.4134			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.899 4	3,816.899 4	1.0618		3,843.445 1
Total	3.5134	35.7830	22.0600	0.0388	2.7304	1.7949	4.5253	0.4134	1.6697	2.0831		3,816.899 4	3,816.899 4	1.0618		3,843.445 1

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1216	3.9184	0.8802	9.9200e-003	0.2207	0.0145	0.2352	0.0605	0.0138	0.0743		1,072.9352	1,072.9352	0.0780		1,074.8860
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0656	0.0463	0.5089	1.2700e-003	0.1232	1.0900e-003	0.1243	0.0327	1.0000e-003	0.0337		126.7988	126.7988	4.4400e-003		126.9099
Total	0.1872	3.9647	1.3890	0.0112	0.3440	0.0156	0.3595	0.0932	0.0148	0.1080		1,199.7340	1,199.7340	0.0825		1,201.7959

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					2.7304	0.0000	2.7304	0.4134	0.0000	0.4134			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	2.7304	1.7949	4.5253	0.4134	1.6697	2.0831	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1216	3.9184	0.8802	9.9200e-003	0.2207	0.0145	0.2352	0.0605	0.0138	0.0743		1,072.9352	1,072.9352	0.0780		1,074.8860
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0656	0.0463	0.5089	1.2700e-003	0.1232	1.0900e-003	0.1243	0.0327	1.0000e-003	0.0337		126.7988	126.7988	4.4400e-003		126.9099
Total	0.1872	3.9647	1.3890	0.0112	0.3440	0.0156	0.3595	0.0932	0.0148	0.1080		1,199.7340	1,199.7340	0.0825		1,201.7959

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6139	0.0000	6.6139	3.3768	0.0000	3.3768			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	6.6139	1.3974	8.0113	3.3768	1.2856	4.6624		2,936.8068	2,936.8068	0.9292		2,960.0361

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6560	21.1362	4.7476	0.0535	1.1907	0.0780	1.2686	0.3264	0.0746	0.4010		5,787.4763	5,787.4763	0.4209		5,797.9989
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0656	0.0463	0.5089	1.2700e-003	0.1232	1.0900e-003	0.1243	0.0327	1.0000e-003	0.0337		126.7988	126.7988	4.4400e-003		126.9099
Total	0.7215	21.1824	5.2565	0.0548	1.3139	0.0791	1.3929	0.3591	0.0756	0.4347		5,914.2751	5,914.2751	0.4254		5,924.9089

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					6.6139	0.0000	6.6139	3.3768	0.0000	3.3768			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	6.6139	1.3974	8.0113	3.3768	1.2856	4.6624	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6560	21.1362	4.7476	0.0535	1.1907	0.0780	1.2686	0.3264	0.0746	0.4010		5,787.4763	5,787.4763	0.4209		5,797.9989
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0656	0.0463	0.5089	1.2700e-003	0.1232	1.0900e-003	0.1243	0.0327	1.0000e-003	0.0337		126.7988	126.7988	4.4400e-003		126.9099
Total	0.7215	21.1824	5.2565	0.0548	1.3139	0.0791	1.3929	0.3591	0.0756	0.4347		5,914.2751	5,914.2751	0.4254		5,924.9089

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1883	5.0033	1.4583	0.0112	0.2844	0.0332	0.3176	0.0819	0.0318	0.1136		1,192.365 2	1,192.365 2	0.0820		1,194.415 4
Worker	0.4414	0.3114	3.4263	8.5800e-003	0.8297	7.3300e-003	0.8370	0.2201	6.7600e-003	0.2268		853.7787	853.7787	0.0299		854.5268
Total	0.6297	5.3148	4.8846	0.0198	1.1141	0.0405	1.1546	0.3020	0.0385	0.3405		2,046.143 9	2,046.143 9	0.1119		2,048.942 2

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1883	5.0033	1.4583	0.0112	0.2844	0.0332	0.3176	0.0819	0.0318	0.1136		1,192.365 2	1,192.365 2	0.0820		1,194.415 4
Worker	0.4414	0.3114	3.4263	8.5800e-003	0.8297	7.3300e-003	0.8370	0.2201	6.7600e-003	0.2268		853.7787	853.7787	0.0299		854.5268
Total	0.6297	5.3148	4.8846	0.0198	1.1141	0.0405	1.1546	0.3020	0.0385	0.3405		2,046.143 9	2,046.143 9	0.1119		2,048.942 2

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.4 Building Construction - 2020

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	0.1614	4.5841	1.3238	0.0111	0.2844	0.0225	0.3069	0.0819	0.0215	0.1034		1,184.2338	1,184.2338	0.0776		1,186.1735
Worker	0.4069	0.2775	3.1031	8.3100e-003	0.8297	7.1100e-003	0.8368	0.2201	6.5500e-003	0.2266		827.8458	827.8458	0.0266		828.5101
Total	0.5683	4.8615	4.4269	0.0194	1.1141	0.0296	1.1437	0.3020	0.0281	0.3300		2,012.0796	2,012.0796	0.1042		2,014.6836

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

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3.4 Building Construction - 2020

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	0.1614	4.5841	1.3238	0.0111	0.2844	0.0225	0.3069	0.0819	0.0215	0.1034		1,184.2338	1,184.2338	0.0776		1,186.1735
Worker	0.4069	0.2775	3.1031	8.3100e-003	0.8297	7.1100e-003	0.8368	0.2201	6.5500e-003	0.2266		827.8458	827.8458	0.0266		828.5101
Total	0.5683	4.8615	4.4269	0.0194	1.1141	0.0296	1.1437	0.3020	0.0281	0.3300		2,012.0796	2,012.0796	0.1042		2,014.6836

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.5 Paving - 2020

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	0.0604	0.0412	0.4609	1.2300e-003	0.1232	1.0600e-003	0.1243	0.0327	9.7000e-004	0.0337		122.9474	122.9474	3.9500e-003		123.0461
Total	0.0604	0.0412	0.4609	1.2300e-003	0.1232	1.0600e-003	0.1243	0.0327	9.7000e-004	0.0337		122.9474	122.9474	3.9500e-003		123.0461

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.5 Paving - 2020

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	0.0604	0.0412	0.4609	1.2300e-003	0.1232	1.0600e-003	0.1243	0.0327	9.7000e-004	0.0337		122.9474	122.9474	3.9500e-003		123.0461
Total	0.0604	0.0412	0.4609	1.2300e-003	0.1232	1.0600e-003	0.1243	0.0327	9.7000e-004	0.0337		122.9474	122.9474	3.9500e-003		123.0461

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	35.2495					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	35.4916	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.6 Architectural Coating - 2020

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	0.0806	0.0549	0.6145	1.6500e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3000e-003	0.0449		163.9299	163.9299	5.2600e-003		164.0614
Total	0.0806	0.0549	0.6145	1.6500e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3000e-003	0.0449		163.9299	163.9299	5.2600e-003		164.0614

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	35.2495					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	35.4916	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

3.6 Architectural Coating - 2020

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	0.0806	0.0549	0.6145	1.6500e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3000e-003	0.0449		163.9299	163.9299	5.2600e-003		164.0614
Total	0.0806	0.0549	0.6145	1.6500e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3000e-003	0.0449		163.9299	163.9299	5.2600e-003		164.0614

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.9881	29.5815	79.0831	0.2719	22.5716	0.2370	22.8086	6.0408	0.2213	6.2621		27,665.16 29	27,665.16 29	1.5097		27,702.90 50
Unmitigated	5.9881	29.5815	79.0831	0.2719	22.5716	0.2370	22.8086	6.0408	0.2213	6.2621		27,665.16 29	27,665.16 29	1.5097		27,702.90 50

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Library	0.00	0.00	0.00		
Recreational Swimming Pool	3,236.01	3,236.01	3,236.01	10,614,832	10,614,832
Total	3,236.01	3,236.01	3,236.01	10,614,832	10,614,832

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12
Recreational Swimming Pool	9.50	7.30	7.30	77.80	17.20	5.00	100	0	0

4.4 Fleet Mix

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
High School	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Library	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Recreational Swimming Pool	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522
NaturalGas Unmitigated	0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	3225.36	0.0348	0.3162	0.2656	1.9000e-003		0.0240	0.0240		0.0240	0.0240		379.4544	379.4544	7.2700e-003	6.9600e-003	381.7093
High School	3924.44	0.0423	0.3848	0.3232	2.3100e-003		0.0292	0.0292		0.0292	0.0292		461.6985	461.6985	8.8500e-003	8.4600e-003	464.4422
Library	2354.12	0.0254	0.2308	0.1939	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.9550	276.9550	5.3100e-003	5.0800e-003	278.6008
Recreational Swimming Pool	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		0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

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					
General Office Building	3.22536	0.0348	0.3162	0.2656	1.9000e-003		0.0240	0.0240		0.0240	0.0240		379.4544	379.4544	7.2700e-003	6.9600e-003	381.7093
High School	3.92444	0.0423	0.3848	0.3232	2.3100e-003		0.0292	0.0292		0.0292	0.0292		461.6985	461.6985	8.8500e-003	8.4600e-003	464.4422
Library	2.35412	0.0254	0.2308	0.1939	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.9550	276.9550	5.3100e-003	5.0800e-003	278.6008
Recreational Swimming Pool	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		0.1025	0.9318	0.7827	5.5900e-003		0.0708	0.0708		0.0708	0.0708		1,118.1079	1,118.1079	0.0214	0.0205	1,124.7522

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.3931	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Unmitigated	7.0370	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599

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	1.6096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.4249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4600e-003	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Total	7.0370	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599

AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

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	0.9657					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.4249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4600e-003	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599
Total	6.3931	2.4000e-004	0.0263	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0561	0.0561	1.5000e-004		0.0599

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

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
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AVCCD 2016 FMP - 2030 Future Conditions - Los Angeles-Mojave Desert County, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Greenhouse Gas Emission Worksheet

N₂O Mobile Emissions

2016 FMP

From CalEEMod v.2016.3.2 Vehicle Fleet Mix Output:

Annual VMT: 10,614,832

Vehicle Type	Percent Type	CH ₄ Emission Factor (g/mile)*	CH ₄ Emissions (g/mile)**	N ₂ O Emission Factor (g/mile)*	N ₂ O Emissions (g/mile)**
Light Auto	54.7%	0.04	0.02188768	0.04	0.02188768
Light Truck < 3750 lbs	4.5%	0.05	0.00225885	0.06	0.00271062
Light Truck 3751-5750 lbs	20.3%	0.05	0.01013715	0.06	0.01216458
Med Truck 5751-8500 lbs	12.2%	0.12	0.0145812	0.2	0.024302
Lite-Heavy Truck 8501-10,000 lbs	1.6%	0.12	0.00193764	0.2	0.0032294
Lite-Heavy Truck 10,001-14,000 lbs	0.6%	0.09	0.00055287	0.125	0.000767875
Med-Heavy Truck 14,001-33,000 lbs	2.0%	0.06	0.00118458	0.05	0.00098715
Heavy-Heavy Truck 33,001-60,000 lbs	3.0%	0.06	0.0017967	0.05	0.00149725
Other Bus	0.2%	0.06	0.00014874	0.05	0.00012395
Urban Bus	0.2%	0.06	0.0001362	0.05	0.0001135
Motorcycle	0.5%	0.09	0.00045702	0.01	0.00005078
School Bus	0.1%	0.06	0.00004092	0.05	0.0000341
Motor Home	0.1%	0.09	0.00008019	0.125	0.000111375
Total	100.0%		0.05519974		0.06798026

Total Emissions (metric tons) =

Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g

Conversion to Carbon Dioxide Equivalency (CO₂e) Units based on Global Warming Potential (GWP)

CH₄ 21 GWP
 N₂O 310 GWP
 1 ton (short, US) = 0.90718474 metric ton

Annual Mobile Emissions:

	Total Emissions	Total CO ₂ e units
N ₂ O Emissions:	0.7216 metric tons N ₂ O	223.70 metric tons CO ₂ e
Project Total:		223.70 metric tons CO₂e

References

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).
 in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
 Assume Model year 2000-present, gasoline fueled.
 ** Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
 *** CalEEMod v.2016.3.2 results for mobile sources.

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Los Angeles-Mojave Desert County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	13.97	1000sqft	0.32	13,973.00	0
High School	81.57	1000sqft	1.87	81,567.00	0
Library	15.41	1000sqft	0.35	15,412.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	7			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - Note 9

Construction Phase - Note 10

Off-road Equipment -

Demolition -

Grading - Note 3

Architectural Coating -

Vehicle Trips - Note 11

Road Dust - Note 6

Area Coating - Note 7

Solid Waste - Note 8

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	46.55	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	56.24	0.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	0.2507	0.2507
		Highest	0.2507	0.2507

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	0.5620	1.0000e-005	1.0200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9800e-003	1.9800e-003	1.0000e-005	0.0000	2.1100e-003
Energy	7.4000e-003	0.0673	0.0565	4.0000e-004		5.1100e-003	5.1100e-003		5.1100e-003	5.1100e-003	0.0000	319.9446	319.9446	0.0116	3.4500e-003	321.2624
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	27.0425	0.0000	27.0425	1.5982	0.0000	66.9965
Water						0.0000	0.0000		0.0000	0.0000	1.8000	56.2494	58.0494	0.1872	4.8500e-003	64.1733
Total	0.5694	0.0673	0.0575	4.0000e-004	0.0000	5.1100e-003	5.1100e-003	0.0000	5.1100e-003	5.1100e-003	28.8424	376.1960	405.0384	1.7970	8.3000e-003	452.4343

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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	0.5620	1.0000e-005	1.0200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9800e-003	1.9800e-003	1.0000e-005	0.0000	2.1100e-003
Energy	7.4000e-003	0.0673	0.0565	4.0000e-004		5.1100e-003	5.1100e-003		5.1100e-003	5.1100e-003	0.0000	319.9446	319.9446	0.0116	3.4500e-003	321.2624
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	27.0425	0.0000	27.0425	1.5982	0.0000	66.9965
Water						0.0000	0.0000		0.0000	0.0000	1.6812	52.7005	54.3817	0.1749	4.5300e-003	60.1020
Total	0.5694	0.0673	0.0575	4.0000e-004	0.0000	5.1100e-003	5.1100e-003	0.0000	5.1100e-003	5.1100e-003	28.7236	372.6471	401.3707	1.7846	7.9800e-003	448.3630

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.94	0.91	0.69	3.86	0.90

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	1/28/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Demolition	Rubber Tired Dozers	1	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

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3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	0.0230	0.2268	0.1489	2.4000e-004	0.0000	0.0129	0.0129	0.0000	0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.1000e-004	4.5100e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0134	1.0134	4.0000e-005	0.0000	1.0143
Total	5.2000e-004	4.1000e-004	4.5100e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0134	1.0134	4.0000e-005	0.0000	1.0143

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3.2 Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	0.0230	0.2268	0.1489	2.4000e-004	0.0000	0.0129	0.0129	0.0000	0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.1000e-004	4.5100e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0134	1.0134	4.0000e-005	0.0000	1.0143
Total	5.2000e-004	4.1000e-004	4.5100e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0134	1.0134	4.0000e-005	0.0000	1.0143

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Library	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12

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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
High School	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Library	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

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	246.7356	246.7356	0.0102	2.1100e-003	247.6183
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	246.7356	246.7356	0.0102	2.1100e-003	247.6183
NaturalGas Mitigated	7.4000e-003	0.0673	0.0565	4.0000e-004		5.1100e-003	5.1100e-003		5.1100e-003	5.1100e-003	0.0000	73.2090	73.2090	1.4000e-003	1.3400e-003	73.6440
NaturalGas Unmitigated	7.4000e-003	0.0673	0.0565	4.0000e-004		5.1100e-003	5.1100e-003		5.1100e-003	5.1100e-003	0.0000	73.2090	73.2090	1.4000e-003	1.3400e-003	73.6440

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	240196	1.3000e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.8178	12.8178	2.5000e-004	2.3000e-004	12.8939
High School	872767	4.7100e-003	0.0428	0.0359	2.6000e-004		3.2500e-003	3.2500e-003		3.2500e-003	3.2500e-003	0.0000	46.5742	46.5742	8.9000e-004	8.5000e-004	46.8509
Library	258922	1.4000e-003	0.0127	0.0107	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.8170	13.8170	2.6000e-004	2.5000e-004	13.8992
Total		7.4100e-003	0.0672	0.0565	4.1000e-004		5.1000e-003	5.1000e-003		5.1000e-003	5.1000e-003	0.0000	73.2090	73.2090	1.4000e-003	1.3300e-003	73.6440

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	240196	1.3000e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.8178	12.8178	2.5000e-004	2.3000e-004	12.8939
High School	872767	4.7100e-003	0.0428	0.0359	2.6000e-004		3.2500e-003	3.2500e-003		3.2500e-003	3.2500e-003	0.0000	46.5742	46.5742	8.9000e-004	8.5000e-004	46.8509
Library	258922	1.4000e-003	0.0127	0.0107	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.8170	13.8170	2.6000e-004	2.5000e-004	13.8992
Total		7.4100e-003	0.0672	0.0565	4.1000e-004		5.1000e-003	5.1000e-003		5.1000e-003	5.1000e-003	0.0000	73.2090	73.2090	1.4000e-003	1.3300e-003	73.6440

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	139311	44.3874	1.8300e-003	3.8000e-004	44.5462
High School	598702	190.7592	7.8800e-003	1.6300e-003	191.4417
Library	36372.3	11.5890	4.8000e-004	1.0000e-004	11.6305
Total		246.7356	0.0102	2.1100e-003	247.6183

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	139311	44.3874	1.8300e-003	3.8000e-004	44.5462
High School	598702	190.7592	7.8800e-003	1.6300e-003	191.4417
Library	36372.3	11.5890	4.8000e-004	1.0000e-004	11.6305
Total		246.7356	0.0102	2.1100e-003	247.6183

6.0 Area Detail

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Annual

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5620	1.0000e-005	1.0200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9800e-003	1.9800e-003	1.0000e-005	0.0000	2.1100e-003
Unmitigated	0.5620	1.0000e-005	1.0200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9800e-003	1.9800e-003	1.0000e-005	0.0000	2.1100e-003

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Annual

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	0.1286					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4333					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9800e-003	1.9800e-003	1.0000e-005	0.0000	2.1100e-003
Total	0.5620	1.0000e-005	1.0200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9800e-003	1.9800e-003	1.0000e-005	0.0000	2.1100e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1286					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4333					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9800e-003	1.9800e-003	1.0000e-005	0.0000	2.1100e-003
Total	0.5620	1.0000e-005	1.0200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9800e-003	1.9800e-003	1.0000e-005	0.0000	2.1100e-003

7.0 Water Detail

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Annual

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	54.3817	0.1749	4.5300e-003	60.1020
Unmitigated	58.0494	0.1872	4.8500e-003	64.1733

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.48294 / 1.5218	16.4759	0.0816	2.0400e-003	19.1240
High School	2.7085 / 6.96472	36.7505	0.0897	2.3900e-003	39.7064
Library	0.482162 / 0.754151	4.8230	0.0159	4.1000e-004	5.3430
Total		58.0494	0.1872	4.8400e-003	64.1733

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.31907 / 1.42897	15.4154	0.0762	1.9100e-003	17.8888
High School	2.52974 / 6.53987	34.4483	0.0838	2.2300e-003	37.2095
Library	0.450339 / 0.708148	4.5180	0.0149	3.8000e-004	5.0038
Total		54.3817	0.1748	4.5200e-003	60.1020

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Annual

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.0425	1.5982	0.0000	66.9965
Unmitigated	27.0425	1.5982	0.0000	66.9965

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	12.99	2.6369	0.1558	0.0000	6.5327
High School	106.04	21.5252	1.2721	0.0000	53.3277
Library	14.19	2.8804	0.1702	0.0000	7.1362
Total		27.0425	1.5982	0.0000	66.9965

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	12.99	2.6369	0.1558	0.0000	6.5327
High School	106.04	21.5252	1.2721	0.0000	53.3277
Library	14.19	2.8804	0.1702	0.0000	7.1362
Total		27.0425	1.5982	0.0000	66.9965

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

AVCCD 2016 FMP - 2018 Existing Conditions
Los Angeles-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	13.97	1000sqft	0.32	13,973.00	0
High School	81.57	1000sqft	1.87	81,567.00	0
Library	15.41	1000sqft	0.35	15,412.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	7			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

Project Characteristics -

Land Use - Note 9

Construction Phase - Note 10

Off-road Equipment -

Demolition -

Grading - Note 3

Architectural Coating -

Vehicle Trips - Note 11

Road Dust - Note 6

Area Coating - Note 7

Solid Waste - Note 8

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	46.55	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	56.24	0.00

2.0 Emissions Summary

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

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	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259
Energy	0.0405	0.3685	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4800e-003	8.1100e-003	444.8144
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.1204	0.3686	0.3209	2.2100e-003	0.0000	0.0281	0.0281	0.0000	0.0281	0.0281		442.2110	442.2110	8.5400e-003	8.1100e-003	444.8403

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	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259
Energy	0.0405	0.3685	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4800e-003	8.1100e-003	444.8144
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.1204	0.3686	0.3209	2.2100e-003	0.0000	0.0281	0.0281	0.0000	0.0281	0.0281		442.2110	442.2110	8.5400e-003	8.1100e-003	444.8403

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert 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	N2O	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	1/1/2019	1/28/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Demolition	Rubber Tired Dozers	1	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
Total	2.2950	22.6751	14.8943	0.0241	0.0000	1.2863	1.2863	0.0000	1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0519	0.0362	0.4760	1.1700e-003	0.1068	9.4000e-004	0.1077	0.0283	8.7000e-004	0.0292		116.6730	116.6730	4.0700e-003		116.7747
Total	0.0519	0.0362	0.4760	1.1700e-003	0.1068	9.4000e-004	0.1077	0.0283	8.7000e-004	0.0292		116.6730	116.6730	4.0700e-003		116.7747

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
Total	2.2950	22.6751	14.8943	0.0241	0.0000	1.2863	1.2863	0.0000	1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0519	0.0362	0.4760	1.1700e-003	0.1068	9.4000e-004	0.1077	0.0283	8.7000e-004	0.0292		116.6730	116.6730	4.0700e-003		116.7747
Total	0.0519	0.0362	0.4760	1.1700e-003	0.1068	9.4000e-004	0.1077	0.0283	8.7000e-004	0.0292		116.6730	116.6730	4.0700e-003		116.7747

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Library	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12

4.4 Fleet Mix

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
High School	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Library	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

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	0.0405	0.3685	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4800e-003	8.1100e-003	444.8144
NaturalGas Unmitigated	0.0405	0.3685	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4800e-003	8.1100e-003	444.8144

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	658.071	7.1000e-003	0.0645	0.0542	3.9000e-004		4.9000e-003	4.9000e-003		4.9000e-003	4.9000e-003		77.4201	77.4201	1.4800e-003	1.4200e-003	77.8802
High School	2391.14	0.0258	0.2344	0.1969	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.3109	281.3109	5.3900e-003	5.1600e-003	282.9825
Library	709.374	7.6500e-003	0.0696	0.0584	4.2000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003		83.4558	83.4558	1.6000e-003	1.5300e-003	83.9517
Total		0.0405	0.3685	0.3095	2.2200e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4700e-003	8.1100e-003	444.8144

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.658071	7.1000e-003	0.0645	0.0542	3.9000e-004		4.9000e-003	4.9000e-003		4.9000e-003	4.9000e-003		77.4201	77.4201	1.4800e-003	1.4200e-003	77.8802
High School	2.39114	0.0258	0.2344	0.1969	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.3109	281.3109	5.3900e-003	5.1600e-003	282.9825
Library	0.709374	7.6500e-003	0.0696	0.0584	4.2000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003		83.4558	83.4558	1.6000e-003	1.5300e-003	83.9517
Total		0.0405	0.3685	0.3095	2.2200e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4700e-003	8.1100e-003	444.8144

6.0 Area Detail

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259
Unmitigated	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

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	0.7045					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3744					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0600e-003	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259
Total	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259

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	0.7045					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3744					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0600e-003	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259
Total	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259

7.0 Water Detail

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Summer

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

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
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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11.0 Vegetation

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

AVCCD 2016 FMP - 2018 Existing Conditions
Los Angeles-Mojave Desert County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	13.97	1000sqft	0.32	13,973.00	0
High School	81.57	1000sqft	1.87	81,567.00	0
Library	15.41	1000sqft	0.35	15,412.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	7			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

Project Characteristics -

Land Use - Note 9

Construction Phase - Note 10

Off-road Equipment -

Demolition -

Grading - Note 3

Architectural Coating -

Vehicle Trips - Note 11

Road Dust - Note 6

Area Coating - Note 7

Solid Waste - Note 8

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	46.55	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	56.24	0.00

2.0 Emissions Summary

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

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	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259
Energy	0.0405	0.3685	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4800e-003	8.1100e-003	444.8144
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.1204	0.3686	0.3209	2.2100e-003	0.0000	0.0281	0.0281	0.0000	0.0281	0.0281		442.2110	442.2110	8.5400e-003	8.1100e-003	444.8403

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	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259
Energy	0.0405	0.3685	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4800e-003	8.1100e-003	444.8144
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.1204	0.3686	0.3209	2.2100e-003	0.0000	0.0281	0.0281	0.0000	0.0281	0.0281		442.2110	442.2110	8.5400e-003	8.1100e-003	444.8403

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert 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	N2O	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	1/1/2019	1/28/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Demolition	Rubber Tired Dozers	1	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
Total	2.2950	22.6751	14.8943	0.0241	0.0000	1.2863	1.2863	0.0000	1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0568	0.0401	0.4410	1.1000e-003	0.1068	9.4000e-004	0.1077	0.0283	8.7000e-004	0.0292		109.8923	109.8923	3.8500e-003		109.9886
Total	0.0568	0.0401	0.4410	1.1000e-003	0.1068	9.4000e-004	0.1077	0.0283	8.7000e-004	0.0292		109.8923	109.8923	3.8500e-003		109.9886

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
Total	2.2950	22.6751	14.8943	0.0241	0.0000	1.2863	1.2863	0.0000	1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0568	0.0401	0.4410	1.1000e-003	0.1068	9.4000e-004	0.1077	0.0283	8.7000e-004	0.0292		109.8923	109.8923	3.8500e-003		109.9886
Total	0.0568	0.0401	0.4410	1.1000e-003	0.1068	9.4000e-004	0.1077	0.0283	8.7000e-004	0.0292		109.8923	109.8923	3.8500e-003		109.9886

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Library	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12

4.4 Fleet Mix

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
High School	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Library	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

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	0.0405	0.3685	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4800e-003	8.1100e-003	444.8144
NaturalGas Unmitigated	0.0405	0.3685	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4800e-003	8.1100e-003	444.8144

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	658.071	7.1000e-003	0.0645	0.0542	3.9000e-004		4.9000e-003	4.9000e-003		4.9000e-003	4.9000e-003		77.4201	77.4201	1.4800e-003	1.4200e-003	77.8802
High School	2391.14	0.0258	0.2344	0.1969	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.3109	281.3109	5.3900e-003	5.1600e-003	282.9825
Library	709.374	7.6500e-003	0.0696	0.0584	4.2000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003		83.4558	83.4558	1.6000e-003	1.5300e-003	83.9517
Total		0.0405	0.3685	0.3095	2.2200e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4700e-003	8.1100e-003	444.8144

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.658071	7.1000e-003	0.0645	0.0542	3.9000e-004		4.9000e-003	4.9000e-003		4.9000e-003	4.9000e-003		77.4201	77.4201	1.4800e-003	1.4200e-003	77.8802
High School	2.39114	0.0258	0.2344	0.1969	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.3109	281.3109	5.3900e-003	5.1600e-003	282.9825
Library	0.709374	7.6500e-003	0.0696	0.0584	4.2000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003		83.4558	83.4558	1.6000e-003	1.5300e-003	83.9517
Total		0.0405	0.3685	0.3095	2.2200e-003		0.0280	0.0280		0.0280	0.0280		442.1867	442.1867	8.4700e-003	8.1100e-003	444.8144

6.0 Area Detail

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005			0.0259
Unmitigated	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005			0.0259

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

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	0.7045					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3744					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0600e-003	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259
Total	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259

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	0.7045					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3744					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0600e-003	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259
Total	3.0799	1.0000e-004	0.0114	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0243	0.0243	6.0000e-005		0.0259

7.0 Water Detail

AVCCD 2016 FMP - 2018 Existing Conditions - Los Angeles-Mojave Desert County, Winter

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

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
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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11.0 Vegetation

AVCCD 2016 FMP CalEEMod (Version 2016.3.2) Notes

Note 1

- High School Land Use Subtype was used for the following buildings: Sage Hall, Cedar Hall, Joshua Hall, Marauder Complex, and Discovery Hall.
- Library Land Use Subtype was used for the following building: Academic Commons.
- General Office Building Land Use Subtype was used for the following buildings: Student Services and Campus Security.
- The Tennis and Volleyball Courts were not included in the construction land use model as they would not generate independent operational demand for vehicle trips or energy/water requirements under normal circumstances that can be captured by any specific subtype in CalEEMod Version 2016.3.2. Excavation requirements for these land uses are captured in the overall excavation requirements for the 2016 FMP.
- Recreational Swimming Pool Land Use Subtype was used for the adaptive pool described in the 2016 FMP.

Note 2

Demolition and Construction phases adjusted to fill two full years with the following days per phase:

- Demolition 40 days
- Grading 40 days
- Construction 300 days
- Paving 40 days
- Architectural Coating 100 days

Note 3

See this Appendix for square footage and cut/fill material calculations.

Note 4

Incorporation of AVAQMD Rule 1113, which requires the use of low VOC paint 50 g/L for interior residential, 100 g/L exterior residential, and 150 g/L interior and exterior commercial/institutional.

Note 5

Vehicle trips generated by operation of the project were adjusted to reflect the vehicle trips generated as contained in the Fehr & Peers Traffic Impact Analysis (2018). As the Adaptive PE Pool contains only 3,000 square feet, the Recreational Pool Land Use Subtype was used as a simplified way of inserting the anticipated additional trips generated by the project (3,236) in a 'per 1,000 square feet' format. To show daily vehicle trips of 3,236 in the model, 1,078.67 daily trips were used for the trip rate coefficients.

Because the total increase in trips resulting from the 2016 FMP (3,236) are applied to the Recreational Pool Land Use Subtype, non-residential trip distribution from the High School Land Use Subtype was carried over. One hundred percent of trips are considered "Primary Trips" as 100 percent of added trips are generated by the 2016 FMP; "Diverted Trips" and "Pass-By Trips" were set to zero percent.

Note 6

Incorporation of AVAQMD Rule 403, which requires dust control measures and 15 mph off-road vehicle speeds.

Note 7

Incorporation of AVAQMD Rule 1113, which requires the use of low VOC paint 50 g/L for interior residential, 100 g/L exterior residential, and 150 g/L interior and exterior commercial/institutional.

Note 8

Recreational Swimming Pool Land Use is set to zero for solid waste generation due to the Adaptive PE Pool being part of an existing campus. The default Recreational Swimming Pool solid waste generation in CalEEMod assumes that the swimming pool is a stand-alone facility that generates solid waste from patrons that would travel there just to use the pool.

Note 9

- High School Land Use Subtype was used for the following buildings: SSV, LS1, LS2, ME, TE1, TE2, T503, T504, T100, T850, and T851.
- Library Land Use Subtype was used for the following buildings: LC.
- General Office Building Land Use Subtype was used for the following buildings: OF2, OF1, OF3, and T800.
- The purpose of running a 2018 CalEEMod iteration using the land uses planned for demolition is to identify the change in operational emissions between existing (2018) and future (2030) conditions.

Note 10

Construction emissions are irrelevant for this iteration of CalEEMod as it is intended to identify the change in operational emissions between 2018 and 2030 conditions.

Note 11

All trip generation coefficients are set to zero due to all additional trips generated by the 2016 FMP from 2018 to 2030 conditions are captured in the 2030 CalEEMod iteration. Values here are therefore set to zero to avoid inaccurately adding to total additional mobile emissions.

Square Footage (SF) of Structures Planned for Construction

Structure Name	Square Footage
Campus Security	5,741
Academic Commons	51,146
Student Services	62,744
Sage Hall	34,295
Cedar Hall	27,000
Joshua Hall	27,000
Marauder Complex	15,288
Discovery Hall	30,288
Adaptive PE Pool	3,000
TOTAL Construction SF	256,502
TOTAL Demolition SF	110,952
Net Change in Square Footage	145,550

CalEEMod Construction Entries:

High School Land Use (Sage Hall, Cedar Hall, Joshua Hall, Marauder Complex, Discovery Hall)	133,871
Library Land Use (Academic Commons)	51,146
General Office Land Use (Student Services, Campus Security)	68,485
Recreational Swimming Pool Land Use (Adaptive PE Pool)	3,000
Total	256,502

Square Footage (SF) of Structures Planned for Demolition

Structure Name	Square Footage
SSV - Student Services	29,302
LC - Learning Center	15,412
OF2 - Faculty Office	3,483
LS1 - Liberal Studies - SS	8,944
LS2 - Liberal Studies - LANG	7,997
OF1 - Faculty Office	2,803
ME - Math & Engineering	9,319
TE1 - Tech Ed - ELECTR	4,118
TE2 - Tech Ed - WELD/FIRE	10,127
OF3 - Faculty Office	4,887
T503	2,160
T504	2,160
T800 - Campus Security	2,800
T100	3,840
T850	2,160
T851	1,440

Total **110,952**

CalEEMod Demolition Entries:

High School Land Use (SSV, LS1, LS2, ME, TE1, TE2, T503, T504, T100, T850, T851)	81,567
Library Land Use (LC)	15,412
General Office Land Use (OF2, OF1, OF3, T800)	13,973
Total	110,952

Appendix D

Geotechnical Reports

Supporting Geotechnical Reports

Final 10-17664PW Academic Commons Geotechnical Report

Section 1.2, Proposed Development, on page 1 of the report reads...

“Based on the Preliminary Site Plans by KPFF Consulting Engineers, Antelope Valley College plans to build a new two story Academic Commons building at the subject site. We understand that the building structure is a steel frame construction. The building footprint of the proposed structure is about 18,000 square feet. We understand that the building will be supported by typical slab-on-grade and shallow foundation system.”

Section 4.1.2, Excavation/Overexcavation, on page 14 of the report reads...

“Existing fill soils within the proposed building area should be overexcavated to a depth of 2 feet below existing grade or to a sufficient depth to remove all of the undocumented fill materials in their entirety from within the proposed building area. Deeper undocumented fill layers may be present locally at the site and the depth and extent of the fill should be verified during the grading operation.”

Final 10-17664PW Community Center Geotechnical Report

Section 1.2, Proposed Development, on page 1 of the report reads...

“Based on the Preliminary Site Plans by KPFF Consulting Engineers, Antelope Valley College plans to build a new single-story Community Center building at the subject site. We understand that the building structure is a steel frame and CMU shear wall construction. The building footprint of the proposed structure is about 34,000 square feet. We understand that the building will be supported on typical slab-on-grade and shallow foundation system.”

Section 4.1.2, Excavation/Overexcavation, on page 14 of the report reads...

“Existing fill soils within the proposed building area should be overexcavated to a depth of 1 feet below existing grade or to a sufficient depth to remove all of the undocumented fill materials in their entirety from within the proposed building area. Deeper undocumented fill layers may be present locally at the site and the depth and extent of the fill should be verified during the grading operation.”

Final 10-17664PW CTE Building Geotechnical Report

Section 1.2, Proposed Development, on page 1 of the report reads...

“Based on the Preliminary Site Plans by KPFF Consulting Engineers, Antelope Valley College plans to build a new single story CTE building at the subject site. We understand that the building structure is a steel frame building. The building footprint of the proposed structure is about 26,300 square feet. We understand that the building will be supported on typical slab-on-grade and shallow foundation system.”

Section 4.1.2, Excavation/Overexcavation, on page 14 of the report reads...

“Existing fill soils within the proposed building area should be overexcavated to a depth of 2 feet below existing grade or to a sufficient depth to remove all of the undocumented fill materials in their entirety from within the proposed building area. Deeper undocumented fill layers may be present locally at the site and the depth and extent of the fill should be verified during the grading operation.”

Final 10-17664PW Security Building Geotechnical Report

Section 1.2, Proposed Development, on page 1 of the report reads...

“Based on the Preliminary Site Plans by KPFF Consulting Engineers, Antelope Valley College plans to build a new single story campus security building at the subject site. We understand that the building structure is a bare-metal deck structure using load bearing CMU walls and steel frames construction. The building footprint of the proposed structure is about 3,000 square feet. We understand that the building will be supported on typical slab-on-grade and shallow foundation system.”

Section 4.1.2, Excavation/Overexcavation, on page 14 of the report reads...

“Existing fill soils within the proposed building area should be overexcavated to a depth of 2 feet below existing grade or to a sufficient depth to remove all of the undocumented fill materials in their entirety from within the proposed building area. Deeper undocumented fill layers may be present locally at the site and the depth and extent of the fill should be verified during the grading operation.”

Final 10-17664PW Student Center Geotechnical Report

Section 1.2, Proposed Development, on page 1 of the report reads...

“Based on the Preliminary Site Plans by KPFF Consulting Engineers, Antelope Valley College plans to build a new two-story Student Services building at the subject site. We understand that the building structure is a concrete/metal deck building with steel frame construction. The building footprint of the proposed structure is about 34,000 square feet. We understand that the building will be supported on typical slab-on-grade and shallow foundation system.”

Section 4.1.2, Excavation/Overexcavation, on page 14 of the report reads...

“Existing fill soils within the proposed building area should be overexcavated to a depth of 2 feet below existing grade or to a sufficient depth to remove all of the undocumented fill materials in their entirety from within the proposed building area. Deeper undocumented fill layers may be present locally at the site and the depth and extent of the fill should be verified during the grading operation.”

Final 10-17664PW Student Services Geotechnical Report

Section 1.2, Proposed Development, on page 1 of the report reads...

“Based on the Preliminary Site Plans by KPFF Consulting Engineers, Antelope Valley College plans to build a new two-story Student Services building at the subject site. We understand that the building structure is a concrete/metal deck building with steel frame construction. The building footprint of the proposed structure is about 34,000 square feet. We understand that the building will be supported on typical slab-on-grade and shallow foundation system.”

Section 4.1.2, Excavation/Overexcavation, on page 14 of the report reads...

“Existing fill soils within the proposed building area should be overexcavated to a depth of 2 feet below existing grade or to a sufficient depth to remove all of the undocumented fill materials in their entirety from within the proposed building area. Deeper undocumented fill layers may be present locally at the site and the depth and extent of the fill should be verified during the grading operation.”

Final 10-17664PW Tennis Courts Geotechnical Report

Section 4.1.2, Excavation/Overexcavation, on page 14 of the report reads...

“Existing fill soils within the proposed building area should be overexcavated to a depth of 1 feet below existing grade or to a sufficient depth to remove all of the undocumented fill materials in their entirety from within the proposed building area. Deeper undocumented fill layers may be present locally at the site and the depth and extent of the fill should be verified during the grading operation.”

Appendix E

Ambient Noise Monitoring Sheets

Ambient Noise Survey Data Sheet

Instructions: Document noise measurement locations with a photo of the site, including the noise meter. Additionally, take notes on general and secondary noise sources, including the instantaneous noise level if possible. As a reminder, A/C weighting should be set to "A" and generally response time should be set to "fast." For additional information, please review the *Noise Measurement Protocol* in the pelican case.

Project Name: AVC Job Number: 17-05233
 Date: 6/20/18 Operator Name: Vanessa V.

Measurement #1

Location: 3 Begin time: 8:08 Finish time: 8:18
 Measurement No.: 3 Wind (mph): _____ Direction: _____
 Cloud Cover Class: Overcast (>80%) Light (20-80%) Sunny (<20%)
 Calibration (dB): Start: 94 End: _____
 Primary Noise Sources: Avenue J & traffic Distance: _____
 Secondary Noise Sources: _____
 Notes: 4 lanes total, one motorcycle @ 8:14

Traffic Count: Passenger Cars: |||||
 Medium to Heavy Duty Trucks (3 axles): _____ Heavy Duty Trucks (4+ axles): 1

Instantaneous Noise Sources/Levels (e.g., airplane, bus airbrake, etc.): _____
 Leq: 68.2 SEL: 95.9 Lmax: 88.0 Lmin: 42.9 PK: 100.0
 L(05): _____ L(10): _____ L(50): _____ L(90): _____ L(95): _____
 Response: Slow Fast Peak Impulse

Measurement #2

Location: 4 Begin time: 8:40 Finish time: 8:50
 Measurement No.: 4 Wind (mph): _____ Direction: _____
 Cloud Cover Class: Overcast (>80%) Light (20-80%) Sunny (<20%)
 Calibration (dB): Start: 94 End: _____
 Primary Noise Sources: birds (loud crows) Distance: _____
 Secondary Noise Sources: walking/talking students/staff, campus karts
 Notes: some landscaping maintenance

Traffic Count: Passenger Cars: 0
 Medium to Heavy Duty Trucks (3 axles): 0 Heavy Duty Trucks (4+ axles): 0

Instantaneous Noise Sources/Levels (e.g., airplane, bus airbrake, etc.): _____
 Leq: 49.7 SEL: 77.4 Lmax: 69.8 Lmin: 40.6 PK: 86.4
 L(05): _____ L(10): _____ L(50): _____ L(90): _____ L(95): _____
 Response: Slow Fast Peak Impulse

Ambient Noise Survey Data Sheet

Instructions: Document noise measurement locations with a photo of the site, including the noise meter. Additionally, take notes on general and secondary noise sources, including the instantaneous noise level if possible. As a reminder, A/C weighting should be set to "A" and generally response time should be set to "fast." For additional information, please review the *Noise Measurement Protocol* in the pelican case.

Project Name: AVC Job Number: 17-05233
 Date: 6/20/18 Operator Name: Vanessa V.

Measurement #1

Location: 15 Begin time: 8:57 Finish time: 9:07
 Measurement No.: 5 Wind (mph): _____ Direction: _____
 Cloud Cover Class: Overcast (>80%) Light (20-80%) Sunny (<20%)
 Calibration (dB): Start: 94 End: _____
 Primary Noise Sources: 30th Street traffic Distance: _____
 Secondary Noise Sources: _____
 Notes: _____

Traffic Count: Passenger Cars: |||||
 Medium to Heavy Duty Trucks (3 axles): _____ Heavy Duty Trucks (4+ axles): _____

Instantaneous Noise Sources/Levels (e.g., airplane, bus airbrake, etc.): _____
 Leq: 65.1 SEL: 92.8 Lmax: 78.7 Lmin: 41.5 PK: 90.5
 L(05): _____ L(10): _____ L(50): _____ L(90): _____ L(95): _____
 Response: Slow Fast Peak Impulse

Measurement #2

Location: 56 Begin time: 4:20 Finish time: 9:30
 Measurement No.: 6 Wind (mph): _____ Direction: _____
 Cloud Cover Class: Overcast (>80%) Light (20-80%) Sunny (<20%)
 Calibration (dB): Start: 94 End: _____
 Primary Noise Sources: birds Distance: _____
 Secondary Noise Sources: Avenue K traffic (minimal)
 Notes: _____

Traffic Count: Passenger Cars: 0
 Medium to Heavy Duty Trucks (3 axles): 0 Heavy Duty Trucks (4+ axles): 0

Instantaneous Noise Sources/Levels (e.g., airplane, bus airbrake, etc.): _____
 Leq: 45.3 SEL: 73.0 Lmax: 63.8 Lmin: 35.7 PK: 83.8
 L(05): _____ L(10): _____ L(50): _____ L(90): _____ L(95): _____
 Response: Slow Fast Peak Impulse

Appendix F

Roadway Construction Noise Model (RCNM) Phasing Noise Calculations

Demolition_20180611
Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 06/11/2018
Case Description: AVCCD 2016 FMP - Demolition Phase

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residential	Residential	65.0	65.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	50.0	0.0
Concrete Saw	No	20		89.6	50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Dozer	No	40		81.7	50.0	0.0

Results

Noise Limit Exceedance (dBA) Noise Limits (dBA)

Night	Day	Calculated (dBA)		Day		Evening		Lmax	
		Evening	Night	Evening	Night				
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Excavator	N/A	N/A	80.7	76.7	N/A	N/A	N/A	N/A	N/A
Concrete Saw	N/A	N/A	89.6	82.6	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	81.7	77.7	N/A	N/A	N/A	N/A	N/A
Excavator	N/A	N/A	80.7	76.7	N/A	N/A	N/A	N/A	N/A
Excavator	N/A	N/A	80.7	76.7	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	81.7	77.7	N/A	N/A	N/A	N/A	N/A
		Total	89.6	86.4	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residential	Residential	65.0	65.0	45.0

Demolition_20180611

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	100.0	0.0
Concrete Saw	No	20		89.6	100.0	0.0
Dozer	No	40		81.7	100.0	0.0
Excavator	No	40		80.7	100.0	0.0
Excavator	No	40		80.7	100.0	0.0
Dozer	No	40		81.7	100.0	0.0

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day	Calculated (dBA)			Day		Evening		
		Evening	Day	Night	Evening	Day	Night	Evening	Day
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	N/A	N/A	74.7	70.7	N/A	N/A	N/A	N/A	N/A
Concrete Saw	N/A	N/A	83.6	76.6	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	75.6	71.7	N/A	N/A	N/A	N/A	N/A
Excavator	N/A	N/A	74.7	70.7	N/A	N/A	N/A	N/A	N/A
Excavator	N/A	N/A	74.7	70.7	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	75.6	71.7	N/A	N/A	N/A	N/A	N/A
		Total	83.6	80.4	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Church and School	Commercial	65.0	65.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	165.0	0.0
Concrete Saw	No	20		89.6	165.0	0.0
Dozer	No	40		81.7	165.0	0.0
Excavator	No	40		80.7	165.0	0.0
Excavator	No	40		80.7	165.0	0.0
Dozer	No	40		81.7	165.0	0.0

Demolition_20180611

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day		Calculated (dBA) Evening		Day Night		Evening			
	Equipment Leq	Lmax	Leq	Lmax	Lmax	Leq	Lmax	Leq	Lmax	
Excavator	N/A	N/A	N/A	70.3	66.4	N/A	N/A	N/A	N/A	N/A
Concrete Saw	N/A	N/A	N/A	79.2	72.2	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	N/A	71.3	67.3	N/A	N/A	N/A	N/A	N/A
Excavator	N/A	N/A	N/A	70.3	66.4	N/A	N/A	N/A	N/A	N/A
Excavator	N/A	N/A	N/A	70.3	66.4	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	N/A	71.3	67.3	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	Total	79.2	76.1	N/A	N/A	N/A	N/A	N/A
	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #4 ****

Description	Land Use	Daytime	Baselines (dBA)	
			Evening	Night
Church	Commercial	65.0	65.0	45.0

Description	Impact Device	Usage (%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Excavator	No	40		80.7	350.0	0.0
Concrete Saw	No	20		89.6	350.0	0.0
Dozer	No	40		81.7	350.0	0.0
Excavator	No	40		80.7	350.0	0.0
Excavator	No	40		80.7	350.0	0.0
Dozer	No	40		81.7	350.0	0.0

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day		Calculated (dBA) Evening		Day Night		Evening		
	Equipment Leq	Lmax	Leq	Lmax	Lmax	Leq	Lmax	Leq	Lmax

Demolition_20180611

Equipment	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator			63.8	59.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw			72.7	65.7	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer			64.8	60.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator			63.8	59.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator			63.8	59.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer			64.8	60.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	72.7	69.5	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Grading_20180611
Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 06/11/2018
Case Description: AVCCD 2016 FMP - Demolition Phase

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residential	Residential	65.0	65.0	45.0

Description	Impact Device	Usage (%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Excavator	No	40		80.7	50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Tractor	No	40	84.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Tractor	No	40	84.0		50.0	0.0

Results

Noise Limit Exceedance (dBA)					Noise Limits (dBA)				
Night	Day	Calculated (dBA)			Day Night	Evening			
		Lmax	Leq	Evening		Lmax	Leq	Lmax	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	N/A	N/A	80.7	76.7	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	81.7	77.7	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	N/A	N/A	85.0	81.0	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	N/A	N/A	84.0	80.0	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	N/A	N/A	77.6	73.6	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	N/A	N/A	84.0	80.0	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	Total	85.0	86.6	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residential	Residential	65.0	65.0	45.0

Grading_20180611
Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	100.0	0.0
Dozer	No	40		81.7	100.0	0.0
Grader	No	40	85.0		100.0	0.0
Tractor	No	40	84.0		100.0	0.0
Backhoe	No	40		77.6	100.0	0.0
Tractor	No	40	84.0		100.0	0.0

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Equipment	Day	Calculated (dBA)		Day		Evening		
			Lmax	Leq	Day	Leq	Lmax	Leq	Lmax
	Leq	Lmax	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
	Excavator		74.7	70.7	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Dozer		75.6	71.7	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Grader		79.0	75.0	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tractor		78.0	74.0	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Backhoe		71.5	67.6	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tractor		78.0	74.0	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total		79.0	80.6	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Church and School	Commercial	65.0	65.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	165.0	0.0
Dozer	No	40		81.7	165.0	0.0
Grader	No	40	85.0		165.0	0.0
Tractor	No	40	84.0		165.0	0.0
Backhoe	No	40		77.6	165.0	0.0
Tractor	No	40	84.0		165.0	0.0

Grading_20180611

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day	Calculated (dBA)				Day		Evening		
		Evening		Night		Night		Evening		
Equipment	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	N/A	N/A	70.3	66.4	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	71.3	67.3	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	N/A	N/A	74.6	70.7	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	N/A	N/A	73.6	69.7	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	N/A	N/A	67.2	63.2	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	N/A	N/A	73.6	69.7	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	74.6	76.2	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #4 ****

Description	Land Use	Daytime	Baselines (dBA)	
			Evening	Night
Church	Commercial	65.0	65.0	45.0

Description	Impact Device	Usage (%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Excavator	No	40		80.7	350.0	0.0
Dozer	No	40		81.7	350.0	0.0
Grader	No	40	85.0		350.0	0.0
Tractor	No	40	84.0		350.0	0.0
Backhoe	No	40		77.6	350.0	0.0
Tractor	No	40	84.0		350.0	0.0

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day	Calculated (dBA)				Day		Evening		
		Evening		Night		Night		Evening		

Grading_20180611

Equipment	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	N/A	N/A	63.8	59.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	64.8	60.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	N/A	N/A	68.1	64.1	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	N/A	N/A	67.1	63.1	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	N/A	N/A	60.7	56.7	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	N/A	N/A	67.1	63.1	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	68.1	69.7	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Buildi ng Constructi on_20180611
Roadway Constructi on Noi se Model (RCNM), Versi on 1. 1

Report date: 06/11/2018
Case Descri pti on: AVCCD 2016 FMP - Buildi ng Constructi on Phase

**** Receptor #1 ****

Descri pti on	Land Use	Basel i nes (dBA)			Receptor	(dBA)
		Dayti me	Eveni ng	Ni ght		
Si ngl e-Fami l y Resi denti al	Resi denti al	65. 0	65. 0	45. 0		
----- Equi pment -----						
Esti mated		Spec	Actual			
Shi el di ng Descri pti on	Impact Devi ce	Usage (%)	Lmax (dBA)	Lmax (dBA)	Di stance (feet)	
-----	-----	-----	-----	-----	-----	-----
Tractor 0. 0	No	40	84. 0		50. 0	
Backhoe 0. 0	No	40		77. 6	50. 0	
Tractor 0. 0	No	40	84. 0		50. 0	
Crane 0. 0	No	16		80. 6	50. 0	
All Other Equi pment > 5 HP 0. 0	No	50	85. 0		50. 0	
All Other Equi pment > 5 HP 0. 0	No	50	85. 0		50. 0	
All Other Equi pment > 5 HP 0. 0	No	50	85. 0		50. 0	
Generator 0. 0	No	50		80. 6	50. 0	
Welder / Torch 0. 0	No	40		74. 0	50. 0	

Resul ts

Noi se Li mi t Exceedance (dBA)

Noi se Li mi ts (dBA)

Ni ght	Day	Cal cul ated (dBA)				Day		Eveni ng	
		Eveni ng		Ni ght					
-----	-----	-----		-----		-----		-----	
Equi pment		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Lmax Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tractor		84. 0	80. 0	N/A	N/A	N/A	N/A	N/A	N/A
N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		77. 6	73. 6	N/A	N/A	N/A	N/A	N/A	N/A
N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		84. 0	80. 0	N/A	N/A	N/A	N/A	N/A	N/A
N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane		80. 6	72. 6	N/A	N/A	N/A	N/A	N/A	N/A

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N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment	> 5 HP	85.0	82.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment	> 5 HP	85.0	82.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment	> 5 HP	85.0	82.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator		80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch		74.0	70.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	85.0	88.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA)			Receptor Distance (feet)	(dBA)
		Daytime	Evening	Night		
Single-Family Residential	Residential	65.0	65.0	45.0		
<u>Equipment</u>						
Estimated	Impact	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	(dBA)
Shelding Description	Device	(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor 0.0	No	40	84.0		100.0	
Backhoe 0.0	No	40		77.6	100.0	
Tractor 0.0	No	40	84.0		100.0	
Crane 0.0	No	16		80.6	100.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		100.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		100.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		100.0	
Generator 0.0	No	50		80.6	100.0	
Welder / Torch 0.0	No	40		74.0	100.0	

Results

Noise Limit Exceedance (dBA) Noise Limits (dBA)

Night	Day	Calculated (dBA)			Day Night	Evening	
		Evening	Day	Night		Lmax	Leq
Equipment Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq

Bui l di ng Constructi on_20180611

Tractor				78.0	74.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe				71.5	67.6	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor				78.0	74.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane				74.5	66.6	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP				79.0	76.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP				79.0	76.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP				79.0	76.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator				74.6	71.6	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch				68.0	64.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			Total	79.0	82.9	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Church and School	Commercial	65.0	65.0	45.0

Estimated Shielding Description	Equipment		Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	(dBA)
	Impact Device	Usage (%)				
Tractor 0.0	No	40	84.0		165.0	
Backhoe 0.0	No	40		77.6	165.0	
Tractor 0.0	No	40	84.0		165.0	
Crane 0.0	No	16		80.6	165.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		165.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		165.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		165.0	
Generator 0.0	No	50		80.6	165.0	
Welder / Torch 0.0	No	40		74.0	165.0	

Results

Noise Limit Exceedance (dBA)
Page 3

Noise Limits (dBA)

Bui l di ng Constructi on_20180611

Ni ght		Day	Cal cul ated (dBA) Eveni ng				Day Ni ght		Eveni ng	
Equi pment Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Tractor N/A	N/A	N/A	N/A	73.6	69.7	N/A	N/A	N/A	N/A	
Backhoe N/A	N/A	N/A	N/A	67.2	63.2	N/A	N/A	N/A	N/A	
Tractor N/A	N/A	N/A	N/A	73.6	69.7	N/A	N/A	N/A	N/A	
Crane N/A	N/A	N/A	N/A	70.2	62.2	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP N/A	N/A	N/A	N/A	74.6	71.6	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP N/A	N/A	N/A	N/A	74.6	71.6	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP N/A	N/A	N/A	N/A	74.6	71.6	N/A	N/A	N/A	N/A	
Generator N/A	N/A	N/A	N/A	70.3	67.2	N/A	N/A	N/A	N/A	
Welder / Torch N/A	N/A	N/A	N/A	63.6	59.7	N/A	N/A	N/A	N/A	
		Total	N/A	74.6	78.6	N/A	N/A	N/A	N/A	

**** Receptor #4 ****

Descri pti on	Land Use	Dayti me	Basel i nes (dBA)		Receptor Di stance (feet)	(dBA)
			Eveni ng	Ni ght		
Church	Commerci al	65.0	65.0	45.0		
Equi pment						
Esti mated		Impact	Usage	Spec	Actual	
Shi el di ng Descri pti on		Devi ce	(%)	Lmax (dBA)	Lmax (dBA)	
Tractor 0.0		No	40	84.0		350.0
Backhoe 0.0		No	40		77.6	350.0
Tractor 0.0		No	40	84.0		350.0
Crane 0.0		No	16		80.6	350.0
All Other Equipment > 5 HP 0.0		No	50	85.0		350.0
All Other Equipment > 5 HP 0.0		No	50	85.0		350.0
All Other Equipment > 5 HP 0.0		No	50	85.0		350.0
Generator		No	50		80.6	350.0

Bui l di ng Constructi on_20180611

0.0
Welder / Torch
0.0

No 40 74.0 350.0

Resul ts

Noi se Li mi t Exceedance (dBA)

Noi se Li mi ts (dBA)

Ni ght		Day		Cal cul ated (dBA) Eveni ng				Day Ni ght		Eveni ng	
Equi pment Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Tractor	N/A	N/A	N/A	67.1	63.1	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Backhoe	N/A	N/A	N/A	60.7	56.7	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Tractor	N/A	N/A	N/A	67.1	63.1	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Crane	N/A	N/A	N/A	63.6	55.7	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
All Other Equipment > 5 HP	N/A	N/A	N/A	68.1	65.1	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
All Other Equipment > 5 HP	N/A	N/A	N/A	68.1	65.1	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
All Other Equipment > 5 HP	N/A	N/A	N/A	68.1	65.1	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Generator	N/A	N/A	N/A	63.7	60.7	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Welder / Torch	N/A	N/A	N/A	57.1	53.1	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		Total		68.1	72.0	N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

Paving_20180611
Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 06/11/2018
Case Description: AVCCD 2016 FMP - Paving Phase

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)				
		Daytime	Evening	Night		
Single-Family Residential	Residential	65.0	65.0	45.0		
Equipment						
Estimated	Impact	Usage	Spec Lmax	Actual Lmax	Receptor Distance	(dBA)
Shielding Description	Device	(%)	(dBA)	(dBA)	(feet)	(dBA)
All Other Equipment > 5 HP 0.0	No	50	85.0		50.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		50.0	
Paver 0.0	No	50		77.2	50.0	
Roller 0.0	No	20		80.0	50.0	
Roller 0.0	No	20		80.0	50.0	

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day	Calculated (dBA)				Day Night		Evening	
		Evening		Night		Lmax	Leq	Lmax	Leq
Equipment Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	Lmax Leq	
All Other Equipment > 5 HP N/A N/A	N/A N/A	85.0 82.0	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
All Other Equipment > 5 HP N/A N/A	N/A N/A	85.0 82.0	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
Paver N/A N/A	N/A N/A	77.2 74.2	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
Roller N/A N/A	N/A N/A	80.0 73.0	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
Roller N/A N/A	N/A N/A	80.0 73.0	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
Total		85.0 85.8	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	

**** Receptor #2 ****

Paving_20180611

Description	Land Use	Baselines (dBA)				
		Daytime	Evening	Night		
Single-Family Residential	Residential	65.0	65.0	45.0		
Equipment						
Estimated	Impact	Usage	Spec	Actual	Receptor	
Shelding Description	Device	(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	(dBA)
All Other Equipment > 5 HP 0.0	No	50	85.0		100.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		100.0	
Paver 0.0	No	50		77.2	100.0	
Roller 0.0	No	20		80.0	100.0	
Roller 0.0	No	20		80.0	100.0	

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day	Calculated (dBA)						Day		Evening	
		Evening		Day		Night		Lmax	Leq	Lmax	Leq
Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
All Other Equipment > 5 HP N/A	N/A	N/A	N/A	79.0	76.0	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP N/A	N/A	N/A	N/A	79.0	76.0	N/A	N/A	N/A	N/A	N/A	N/A
Paver N/A	N/A	N/A	N/A	71.2	68.2	N/A	N/A	N/A	N/A	N/A	N/A
Roller N/A	N/A	N/A	N/A	74.0	67.0	N/A	N/A	N/A	N/A	N/A	N/A
Roller N/A	N/A	N/A	N/A	74.0	67.0	N/A	N/A	N/A	N/A	N/A	N/A
Total		N/A	N/A	79.0	79.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Church and School	Commercial	65.0	65.0	45.0

Equipment

Estimated Shiel ding Descri ption	Pavi ng_20180611		Spec	Actual	Receptor	(dBA)
	Impact	Usage	Lmax	Lmax	Di stance	
-----	Devi ce	(%)	(dBA)	(dBA)	(feet)	
All Other Equipment > 5 HP 0.0	No	50	85.0		165.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		165.0	
Paver 0.0	No	50		77.2	165.0	
Roller 0.0	No	20		80.0	165.0	
Roller 0.0	No	20		80.0	165.0	

Resul ts

Noi se Li mi t Exceedance (dBA)

Noi se Li mi ts (dBA)

Ni ght	Day	Cal cul ated (dBA)				Day		Eveni ng	
		Eveni ng		Ni ght		Ni ght		Eveni ng	
-----	-----	-----		-----		-----		-----	
Equi pment		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Lmax Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Leq
All Other Equipment > 5 HP N/A N/A	N/A	74.6	71.6	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP N/A N/A	N/A	74.6	71.6	N/A	N/A	N/A	N/A	N/A	N/A
Paver N/A N/A	N/A	66.8	63.8	N/A	N/A	N/A	N/A	N/A	N/A
Roller N/A N/A	N/A	69.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A
Roller N/A N/A	N/A	69.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A
	Total	74.6	75.5	N/A	N/A	N/A	N/A	N/A	N/A
N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #4 ****

Descri ption	Land Use	Basel i nes (dBA)		
		Dayti me	Eveni ng	Ni ght
Church	Commerci al	65.0	65.0	45.0

Equi pment

Estimated Shiel ding Descri ption	Impact	Usage	Spec	Actual	Receptor	(dBA)
			Lmax	Lmax	Di stance	
-----	Devi ce	(%)	(dBA)	(dBA)	(feet)	

		Paving_20180611		
All Other Equipment > 5 HP	No	50	85.0	350.0
0.0				
All Other Equipment > 5 HP	No	50	85.0	350.0
0.0				
Paver	No	50	77.2	350.0
0.0				
Roller	No	20	80.0	350.0
0.0				
Roller	No	20	80.0	350.0
0.0				

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night		Day		Calculated (dBA) Evening				Day Night		Evening	
Equipment				Lmax		Leq		Lmax		Leq	
Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
All Other Equipment > 5 HP	N/A	N/A	N/A	68.1	65.1	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	N/A	N/A	N/A	68.1	65.1	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	N/A	N/A	N/A	60.3	57.3	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	N/A	N/A	N/A	63.1	56.1	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	N/A	N/A	N/A	63.1	56.1	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total		68.1	68.9	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Architectural Coating_20180611
Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 06/11/2018
Case Description: AVCCD 2016 FMP - Architectural Coating Phase

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)				
		Daytime	Evening	Night		
Single-Family Residential	Residential	65.0	65.0	45.0		
Equipment						
Estimated		Spec	Actual	Receptor		
Shielding Description	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Receptor Distance (feet)	(dBA)
Compressor (air) 0.0	No	40		77.7	50.0	

Results

Noise Limit Exceedance (dBA) Noise Limits (dBA)

Night	Day	Calculated (dBA)				Day		Evening	
		Evening		Night		Night		Evening	
Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
N/A	N/A	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA)				
		Daytime	Evening	Night		
Single-Family Residential	Residential	65.0	65.0	45.0		
Equipment						
Estimated		Spec	Actual	Receptor		
Shielding Description	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Receptor Distance (feet)	(dBA)
Compressor (air) 0.0	No	40		77.7	100.0	

Architectural Coating_20180611

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day	Calculated (dBA)				Day		Evening		
		Evening				Night				
Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Compressor (air)			71.6	67.7			N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	71.6	67.7			N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Baselines (dBA)

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Church and School	Commercial	65.0	65.0	45.0

Equipment

Estimated Shielding Description	Impact Device	Usage (%)	Spec	Actual	Receptor	(dBA)
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	
Compressor (air)	No	40		77.7	165.0	
0.0						

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day	Calculated (dBA)				Day		Evening		
		Evening				Night				
Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Compressor (air)			67.3	63.3			N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	67.3	63.3			N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #4 ****

Architectural Coating_20180611

Description	Land Use	Baselines (dBA)	
		Daytime	Evening Night
Church	Commercial	65.0	45.0

Estimated Shielding Description	Equipment		Spec	Actual	Receptor
	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)
Compressor (air) 0.0	No	40		77.7	350.0

		Results				Noise Limits (dBA)			
		Noise Limit Exceedance (dBA)							
Night	Day	Calculated (dBA)				Day Night		Evening	
		Evening							
Equipment		Lmax		Leq		Lmax		Leq	
Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	N/A	60.8	56.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		60.8	56.8	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix G

United States Department of Housing and Urban Development (HUD) Day/Night Noise Level (DNL) Modeling Results

Noise Measurement Location 1

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	AVCCD Noise Measurement Location 1 - Existing
Record Date	6/27/18
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	W Avenue K
-----------------------	------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	57	57	57
Distance to Stop Sign	316	316	316
Average Speed	50	50	50
Average Daily Trips (ADT)	18363	580	387
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	66.7805	71.7754	72.3166
Calculate Road #1 DNL	75.6468	Reset	

Add Road Source	Add Rail Source
Airport Noise Level	

Loud Impulse Sounds?

 Yes No

Combined DNL for all Road and Rail sources	75.6468
Combined DNL including Airport	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - **Contact your Field or Regional Environmental Officer** (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide](/resource/3822/day-night-noise-level-assessment-tool-user-guide/) (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

[Day/Night Noise Level Assessment Tool Flowcharts](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/) (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

Noise Measurement Locations 2 and 5

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	AVCCD Noise Measurement Location 2 & 5 - Existing
Record Date	6/27/18
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	30th Street W
-----------------------	---------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	59	59	59
Distance to Stop Sign			
Average Speed	50	50	50
Average Daily Trips (ADT)	16777	530	353
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	68.5744	63.5701	69.1399
Calculate Road #1 DNL	72.4567	Reset	

Add Road Source	Add Rail Source
Airport Noise Level	

Loud Impulse Sounds?

 Yes No

Combined DNL for all Road and Rail sources	72.4567
Combined DNL including Airport	N/A
Site DNL with Loud Impulse Sound	

[Calculate](#)

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - **Contact your Field or Regional Environmental Officer** (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide](/resource/3822/day-night-noise-level-assessment-tool-user-guide/) (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

[Day/Night Noise Level Assessment Tool Flowcharts](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/) (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

Noise Measurement Location 3

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	AVCCD Noise Measurement Location 3 - Existing
Record Date	6/27/18
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	W Avenue J 8
-----------------------	--------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	42	42	42
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	11476	362	242
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	68.2241	63.2133	69.7143
Calculate Road #1 DNL	72.5681	Reset	

Add Road Source **Add Rail Source**

Airport Noise Level

Loud Impulse Sounds?

Yes No

Combined DNL for all Road and Rail sources	72.5681
Combined DNL including Airport	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - **Contact your Field or Regional Environmental Officer** (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide](/resource/3822/day-night-noise-level-assessment-tool-user-guide/) (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

[Day/Night Noise Level Assessment Tool Flowcharts](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/) (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

Noise Measurement Location 6

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	AVCCD Noise Measurement Location 6 - Existing
Record Date	6/27/18
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	35th Street W
-----------------------	---------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	588	588	588
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	1144	24	12
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	39.9955	33.2133	39.476
Calculate Road #1 DNL	43.1938	Reset	

Add Road Source	Add Rail Source
Airport Noise Level	

Loud Impulse Sounds?

 Yes No

Combined DNL for all Road and Rail sources	43.1938
Combined DNL including Airport	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - **Contact your Field or Regional Environmental Officer** (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide](/resource/3822/day-night-noise-level-assessment-tool-user-guide/) (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

[Day/Night Noise Level Assessment Tool Flowcharts](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/) (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

Noise Measurement Location 1

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	AVCCD Noise Measurement Location 1 - Existing plus Project
Record Date	6/27/18
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	W Avenue K
-----------------------	------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	57	57	57
Distance to Stop Sign	316	316	316
Average Speed	50	50	50
Average Daily Trips (ADT)	19437	614	409
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	67.0274	72.0228	72.5567
Calculate Road #1 DNL	75.8904	Reset	

Add Road Source	Add Rail Source
Airport Noise Level	

Loud Impulse Sounds?

 Yes No

Combined DNL for all Road and Rail sources	75.8904
Combined DNL including Airport	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - **Contact your Field or Regional Environmental Officer** (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide](/resource/3822/day-night-noise-level-assessment-tool-user-guide/) (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

[Day/Night Noise Level Assessment Tool Flowcharts](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/) (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

Noise Measurement Locations 2 and 5

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	AVCCD Noise Measurement Location 2 & 5 - Existing plus Project
Record Date	6/27/18
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	30th Street W
-----------------------	---------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	59	59	59
Distance to Stop Sign			
Average Speed	50	50	50
Average Daily Trips (ADT)	18240	576	384
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	68.9375	63.9315	69.5054
Calculate Road #1 DNL	72.8209	Reset	

Add Road Source	Add Rail Source
Airport Noise Level	

Loud Impulse Sounds?

 Yes No

Combined DNL for all Road and Rail sources	72.8209
Combined DNL including Airport	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - **Contact your Field or Regional Environmental Officer** (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide](/resource/3822/day-night-noise-level-assessment-tool-user-guide/) (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

[Day/Night Noise Level Assessment Tool Flowcharts](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/) (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

Noise Measurement Location 3

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	AVCCD Noise Measurement Location 3 - Existing plus Project
Record Date	6/27/18
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	W Avenue J 8
-----------------------	--------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	42	42	42
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	11885	375	250
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	68.3762	63.3665	69.8556
Calculate Road #1 DNL	72.7149	Reset	

Add Road Source	Add Rail Source
Airport Noise Level	

Loud Impulse Sounds?

 Yes No

Combined DNL for all Road and Rail sources	72.7149
Combined DNL including Airport	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - **Contact your Field or Regional Environmental Officer** (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide](/resource/3822/day-night-noise-level-assessment-tool-user-guide/) (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

[Day/Night Noise Level Assessment Tool Flowcharts](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/) (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

Noise Measurement Location 6

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	AVCCD Noise Measurement Location 6 - Existing plus Project
Record Date	6/27/18
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	35th Street W
-----------------------	---------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	588	588	588
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	1144	24	12
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	39.9955	33.2133	39.476
Calculate Road #1 DNL	43.1938	Reset	

Add Road Source **Add Rail Source**

Airport Noise Level

Loud Impulse Sounds?

Yes No

Combined DNL for all Road and Rail sources	43.1938
Combined DNL including Airport	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - **Contact your Field or Regional Environmental Officer** (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide](/resource/3822/day-night-noise-level-assessment-tool-user-guide/) (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

[Day/Night Noise Level Assessment Tool Flowcharts](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/) (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

Appendix H

Individual Construction Equipment Average Noise Levels

Table 9.1 RCNM Default Noise Emission Reference Levels and Usage Factors

Equipment Description	Impact Device?	Acoustical Usage Factor (%)	Spec. 721.560 L _{max} @ 50 feet (dBA, slow) ¹	Actual Measured L _{max} @ 50 feet (dBA, slow) (Samples Averaged)	Number of Actual Data Samples (Count)
All Other Equipment > 5 HP	No	50	85	N/A	0
Auger Drill Rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar Bender	No	20	80	N/A	0
Blasting	Yes	N/A	94	N/A	0
Boring Jack Power Unit	No	50	80	83	1
Chain Saw	No	20	85	84	46
Clam Shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	N/A	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Concrete Saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill Rig Truck	No	20	84	79	22
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Front End Loader	No	40	80	79	96

Generator	No	50	82	81	19
Generator (<25KVA, VMS Signs)	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	N/A	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal Boring Hydraulic Jack	No	25	80	82	6
Hydra Break Ram	Yes	10	90	N/A	0
Impact Pile Driver	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Man Lift	No	20	85	75	23
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	212
Pavement Scarifier	No	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	40	55	75	1
Pneumatic Tools	No	50	85	85	90
Pumps	No	50	77	81	17
Refrigerator Unit	No	100	82	73	3
Rivit Buster/Chipping Gun	Yes	20	85	79	19
Rock Drill	No	20	85	81	3
Roller	No	20	85	80	16
Sand Blasting (single nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Sheers (on backhoe)	No	40	85	96	5
Slurry Plant	No	100	78	78	1
Slurry Trenching	No	50	82	80	75

Machine						
Soil Mix Drill Rig	No	50	80	N/A		0
Tractor	No	40	84	N/A		0
Vacuum Excavator (Vac-Truck)	No	40	85	85		149
Vacuum Street Sweeper	No	10	80	82		19
Ventilation Fan	No	100	85	79		13
Vibrating Hopper	No	50	85	87		1
Vibratory Concrete Mixer	No	20	80	80		1
Vibratory Pile Driver	No	20	95	101		44
Warning Horn	No	5	85	83		12
Welder/Torch	No	40	73	74		5

¹ At a reference distance of 50 foot from the loudest side of the equipment

Source: Federal Highway Administration. 2006. *Construction Noise Handbook*. August 2006.
https://www.fhwa.dot.gov/ENVIRONMENT/noise/construction_noise/handbook/handbook09.cfm

Appendix I

Native American Heritage Commission (NAHC) Tribal Consultation List and Notification Letters

**Local Government Tribal Consultation List Request
Native American Heritage Commission**

1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

CEQA Tribal Consultation List (AB 52) – Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2

General Plan (SB 18) - Per Government Code § 65352.3.

Local Action Type:

General Plan **General Plan Element** **General Plan Amendment**

Specific Plan **Specific Plan Amendment** **Pre-planning Outreach Activity**

Required Information

Project Title: Antelope Valley Community College District 2016 Facilities Master Plan

Local Government/Lead Agency: Antelope Valley Community College District

Contact Person: Doug Jensen, Executive Director, Facilities Services Department

Street Address: 3041 West Avenue K

City: Lancaster **Zip:** 93536

Phone: (661) 722-6300

Email: djensen@avc.edu

Specific Area Subject to Proposed Action

County: Los Angeles **City/Community:** Lancaster

Project Description: The proposed project is an update of the Antelope Valley Community College District Facilities Master Plan (2016 FMP). The 2016 FMP is a guide for the future development of the District's Lancaster campus, also known as Antelope Valley College.

Additional Request

Sacred Lands File Search - Required Information:

USGS Quadrangle Name(s): _____

Township: _____ **Range:** _____ **Section(s):** _____

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710



March 30, 2018

Doug Jensen
Antelope Valley Community College District

Sent via e-mail: djensen@avc.edu
Cc: mszromba@rinconconsultants.com

RE: Proposed Antelope Valley Community College District 2016 Facilities Master Plan Project, City of Lancaster;
Los Angeles County, California

Dear Mr. Jensen:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent of the reference codes below is to avoid or mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects under AB-52.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and

- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
2. The results of any archaeological inventory survey that was conducted, including:
 - Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.
 3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. The request form can be found at <http://nahc.ca.gov/wp-content/uploads/2015/04/Sacred-Lands-File-NA-Contact-Form.pdf>.
 4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
 5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,



Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

**Native American Heritage Commission
Tribal Consultation List
Los Angeles County
3/29/2018**

**Fernandeno Tataviam Band of
Mission Indians**

Jairo Avila, Tribal Historic and
Cultural Preservation Officer
1019 Second Street, Suite 1 Tataviam
San Fernando, CA, 91340
Phone: (818) 837 - 0794
Fax: (818) 837-0796
jairo.avila@tataviam-nsn.us

Lynn Valbuena, Chairwoman
26569 Community Center Drive Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
jcoin@sanmanuel-nsn.gov

**Serrano Nation of Mission
Indians**

Goldie Walker, Chairperson
P.O. Box 343 Serrano
Patton, CA, 92369
Phone: (909) 528 - 9027

**Fernandeno Tataviam Band of
Mission Indians**

Rudy Ortega, Tribal President
1019 Second Street, Suite 1 Tataviam
San Fernando, CA, 91340
Phone: (818) 837 - 0794
Fax: (818) 837-0796
rortega@tataviam-nsn.us

**Morongo Band of Mission
Indians**

Robert Martin, Chairperson
12700 Pumarra Rroad Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

**San Fernando Band of Mission
Indians**

Donna Yocum, Chairperson
P.O. Box 221838 Kitanemuk
Newhall, CA, 91322 Serrano
Phone: (503) 539 - 0933 Tataviam
Fax: (503) 574-3308
ddyocum@comcast.net

**San Manuel Band of Mission
Indians**

Lee Clauss, Director of Cultural
Resources
26569 Community Center Drive Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
Fax: (909) 864-3370
lclauss@sanmanuel-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 6097.98 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Antelope Valley Community College District 2016 Facilities Master Plan Project, Los Angeles County.



AB 52 Correspondence Tracking Table: Antelope Valley Community College District 2016 Facilities Master Plan Project

Contact List Received from NAHC on March 29, 2018	Date Letter Sent to Contact	Date of Response	Comments/Concerns
Fernandeno Tataviam Band of Mission Indians Rudy Ortega, Tribal President 1019 Second Street, Suite 1 San Fernando, California 91340 (818) 837-0794 rortega@tataviam.nsn.us Additional contact: Jairo Avila, Tribal Historic and Cultural Preservation Officer, jairo.avila@tataviam.nsn.us	April 12, 2018		
Morongo Band of Mission Indians Robert Martin, Chairperson 12700 Pumarra Road Banning, California 92220 (951) 849-8807 dtorres@morongo-nsn.gov	April 12, 2018		
San Fernando Band of Mission Indians Donna Yocum, Chairperson P.O. Box 221838 Newhall, California 91322 (503) 539-0933 ddyocum@comcast.net	April 12, 2018		
San Manuel Band of Mission Indians Lynn Valbuena, Chairwoman 26569 Community Center Drive Highland, California 92346 (909) 864-8933 jcoin@sanmanuel.nsn.gov Additional contact: Lee Clauss, Director of Cultural Resources, lclauss@sanmanuel-nsn.gov	April 12, 2018	May 15, 2018	Due to the nature and location of the proposed project, SMBMI does not have any concerns with the project's implementation, as planned, at this time. SMBMI requests that language be made a part of the project/permit/plan conditions addressing proper procedures in the event of discovery of human remains or funerary objects or Native American cultural resources. Lastly, SMBMI requests that they be provided with the final copy of the project/permit/plan conditions so that they may review the included language.



Contact List Received from NAHC on March 29, 2018	Date Letter Sent to Contact	Date of Response	Comments/Concerns
Serrano Nation of Mission Indians Goldie Walker, Chairperson P.O. Box 343 Patton, California 92369 (909) 528-9027	April 12, 2018		

April 12, 2018

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road
Banning, California 92220

RE: Assembly Bill 52 Consultation for the Antelope Valley Community College District 2016 Facilities Master Plan Project, City of Lancaster, Los Angeles County, California

Dear Chairperson Martin:

The Antelope Valley Community College District (AVCCD) is preparing an environmental impact report as part of an update to the AVCCD 2016 Facilities Master Plan (2016 FMP). The 2016 FMP is a guide for the future development of the Antelope Valley College's Lancaster campus to accommodate growth and change over the next 30 years, including recommendations for new construction, building renovation, change of use, and site development. These improvements would allow for an increase in full-time students at both the AVCCD's Lancaster campus and Palmdale Center.

The proposed project is subject to the California Environmental Quality Act and thus must comply with California Public Resources Code § 21080.3.1, or Assembly Bill 52 (AB 52; 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified about projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Morongo Band of Mission Indians is important to the AVCCD's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at (661) 722-6526 or via e-mail at djensen@avc.edu. Thank you for your assistance.

Sincerely,



Doug R. Jensen
Executive Director
Antelope Valley College, Facilities Services
3041 West Avenue K
Lancaster, California 93536

Attached: Project Site Map



Project Site Map



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April 12, 2018

San Fernando Band of Mission Indians
Donna Yocum, Chairperson
P.O. Box 221838
Newhall, California 91322

RE: Assembly Bill 52 Consultation for the Antelope Valley Community College District 2016 Facilities Master Plan Project, City of Lancaster, Los Angeles County, California

Dear Chairperson Yocum:

The Antelope Valley Community College District (AVCCD) is preparing an environmental impact report as part of an update to the AVCCD 2016 Facilities Master Plan (2016 FMP). The 2016 FMP is a guide for the future development of the Antelope Valley College's Lancaster campus to accommodate growth and change over the next 30 years, including recommendations for new construction, building renovation, change of use, and site development. These improvements would allow for an increase in full-time students at both the AVCCD's Lancaster campus and Palmdale Center.

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The input of the San Fernando Band of Mission Indians is important to the AVCCD's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at (661) 722-6526 or via e-mail at djensen@avc.edu. Thank you for your assistance.

Sincerely,



Doug R. Jensen
Executive Director
Antelope Valley College, Facilities Services
3041 West Avenue K
Lancaster, California 93536

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Project Site Map



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April 12, 2018

Serrano Nation of Mission Indians
Goldie Walker, Chairperson
P.O. Box 343
Patton, California 92369

RE: Assembly Bill 52 Consultation for the Antelope Valley Community College District 2016 Facilities Master Plan Project, City of Lancaster, Los Angeles County, California

Dear Chairperson Walker:

The Antelope Valley Community College District (AVCCD) is preparing an environmental impact report as part of an update to the AVCCD 2016 Facilities Master Plan (2016 FMP). The 2016 FMP is a guide for the future development of the Antelope Valley College's Lancaster campus to accommodate growth and change over the next 30 years, including recommendations for new construction, building renovation, change of use, and site development. These improvements would allow for an increase in full-time students at both the AVCCD's Lancaster campus and Palmdale Center.

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The input of the Serrano Nation of Mission Indians is important to the AVCCD's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at (661) 722-6526 or via e-mail at djensen@avc.edu. Thank you for your assistance.

Sincerely,



Doug R. Jensen
Executive Director
Antelope Valley College, Facilities Services
3041 West Avenue K
Lancaster, California 93536

Attached: Project Site Map



Project Site Map



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April 12, 2018

San Manuel Band of Mission Indians
Lynn Valbuena, Chairwoman
26569 Community Center Drive
Highland, California 92346

RE: Assembly Bill 52 Consultation for the Antelope Valley Community College District 2016 Facilities Master Plan Project, City of Lancaster, Los Angeles County, California

Dear Chairwoman Valbuena:

The Antelope Valley Community College District (AVCCD) is preparing an environmental impact report as part of an update to the AVCCD 2016 Facilities Master Plan (2016 FMP). The 2016 FMP is a guide for the future development of the Antelope Valley College's Lancaster campus to accommodate growth and change over the next 30 years, including recommendations for new construction, building renovation, change of use, and site development. These improvements would allow for an increase in full-time students at both the AVCCD's Lancaster campus and Palmdale Center.

The proposed project is subject to the California Environmental Quality Act and thus must comply with California Public Resources Code § 21080.3.1, or Assembly Bill 52 (AB 52; 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified about projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the San Manuel Band of Mission Indians is important to the AVCCD's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at (661) 722-6526 or via e-mail at djensen@avc.edu. Thank you for your assistance.

Sincerely,



Doug R. Jensen
Executive Director
Antelope Valley College, Facilities Services
3041 West Avenue K
Lancaster, California 93536

Attached: Project Site Map



Project Site Map



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April 12, 2018

Fernandeno Tataviam Band of Mission Indians
Rudy Ortega, Tribal President
1019 Second Street, Suite 1
San Fernando, California 91340

RE: Assembly Bill 52 Consultation for the Antelope Valley Community College District 2016 Facilities Master Plan Project, City of Lancaster, Los Angeles County, California

Dear President Ortega:

The Antelope Valley Community College District (AVCCD) is preparing an environmental impact report as part of an update to the AVCCD 2016 Facilities Master Plan (2016 FMP). The 2016 FMP is a guide for the future development of the Antelope Valley College's Lancaster campus to accommodate growth and change over the next 30 years, including recommendations for new construction, building renovation, change of use, and site development. These improvements would allow for an increase in full-time students at both the AVCCD's Lancaster campus and Palmdale Center.

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The input of the Fernandeno Tataviam Band of Mission Indians is important to the AVCCD's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at (661) 722-6526 or via e-mail at djensen@avc.edu. Thank you for your assistance.

Sincerely,



Doug R. Jensen
Executive Director
Antelope Valley College, Facilities Services
3041 West Avenue K
Lancaster, California 93536

Attached: Project Site Map



Antelope Valley Community College District
3041 West Avenue K, Lancaster, CA 93536-5426 | 661.722.6300 | www.avc.edu

Project Site Map



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[REDACTED]

----- Forwarded message -----

From: **Jessica Mauck** <JMauck@sanmanuel-nsn.gov>

Date: Tue, May 15, 2018 at 11:52 AM

Subject: Antelope Valley Community College District 2016 Facilities Master Plan Project

To: "djensen@avc.edu" <djensen@avc.edu>

Hello Doug,

Thank you for contacting the San Manuel Band of Mission Indians (SMBMI) regarding the above referenced project. SMBMI appreciates the opportunity to review the project documentation, which was received by our Cultural Resources Management Department on 30 April 2018, pursuant to CEQA (as amended, 2015) and CA PRC 21080.3.1. The proposed project area exists within Serrano ancestral territory and, therefore, is of interest to the Tribe. However, due to the nature and location of the proposed project, and given the CRM Department's present state of knowledge, SMBMI does not have any concerns with the project's implementation, as planned, at this time. As a result, SMBMI requests that the following language be made a part of the project/permit/plan conditions:

1. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.
2. In the event that Native American cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, San Manuel Band of Mission Indians will be contacted if any such find occurs and be provided information and permitted/invited to perform a site visit when the archaeologist makes his/her assessment, so as to provide Tribal input. The archaeologist shall complete an isolate record for the find and submit this document to the applicant and Lead Agency for dissemination to the San Manuel Band of Mission Indians.

3. If significant Native American historical resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, an SOI-qualified archaeologist shall be retained to develop a cultural resources Treatment Plan, as well as a Discovery and Monitoring Plan, the drafts of which shall be provided to San Manuel Band of Mission Indians for review and comment.

a. All in-field investigations, assessments, and/or data recovery enacted pursuant to the finalized Treatment Plan shall be monitored by a San Manuel Band of Mission Indians Tribal Participant(s).

b. The Lead Agency and/or applicant shall, in good faith, consult with San Manuel Band of Mission Indians on the disposition and treatment of any artifacts or other cultural materials encountered during the project.

Note: San Manuel Band of Mission Indians realizes that there may be additional tribes claiming cultural affiliation to the area; however, San Manuel Band of Mission Indians can only speak for itself. The Tribe has no objection if the agency, developer, and/or archaeologist wishes to consult with other tribes in addition to SMBMI and if the Lead Agency wishes to revise the conditions to recognize additional tribes.

Please provide the final copy of the project/permit/plan conditions so that SMBMI may review the included language. This communication concludes SMBMI's input on this project, at this time, and no additional consultation pursuant to CEQA is required unless there is an unanticipated discovery of cultural resources during project implementation. If you should have any further questions with regard to this matter, please do not hesitate to contact me at your convenience, as I will be your Point of Contact (POC) for SMBMI with respect to this project.

Respectfully,

Jessica Mauck

CULTURAL RESOURCES ANALYST

O: (909) 864-8933 x3249

M: (909) 725-9054

[26569 Community Center Drive, Highland California 92346](https://www.sanmanuelband.com/)



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--

Doug R. Jensen

Executive Director

Antelope Valley College | Facilities Services

3041 West Avenue K

Lancaster, CA 93536

Phone: 661-722-6526 | fax: 661-722-6514 | email: djensen@avc.edu

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